

**MISSISSIPPI DEPARTMENT OF WILDLIFE, FISHERIES, AND PARKS** 

# Deer Program Report Prepared by Committee

# Bow hunting is a Mississippi tradition. Take aim at one of 1.75 million white-tailed deer in the magnolia state.

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# Mississippi Deer Program Report 2010



MISSISSIPPI DEPARTMENT OF WILDLIFE, FISHERIES, AND PARKS 1505 Eastover Drive • Jackson, MS 39211

# Deer hunt for youth with disabilities

En

# Wheelin' Sportsmen

ississippi Department of Wildlife, Fisheries and Parks, National Wild Turkey Federation, Bass Pro Shops, Primos Hunting Calls and the Mississippi Braves co-hosted the 2009 Deer Hunt for Youth with Disabilities on Nov. 6-8. This was the fourth year for the event.

On Friday, all the kids traveled to Magnolia Rifle and Pistol Club to shoot their weapons. Activities at Bass Pro ranged from shooting paintball guns and crossbows to fishing in the ponds.

On display in the Trustmark Park parking lot were Metro One helicopter and a LifeFlight helicopter. An airboat used by MDWFP's alligator program was also present, along with Rankin

Lynn Dacus

County Sheriff's Department

motorcycle officers, Mississippi Highway Patrol, Pearl Fire Department's trucks and rescue vehicles, and the D.A.R.E. car.

Friday night activities included a banquet at Trustmark Park for all of the hunters, families, guides, landowners and supporters. Santa even made a surprise appearance to give the hunters a goodie bag.

The kids hunted all day Saturday and spent time at the hunting camps doing a variety of planned activities. Sunday concluded with a lunch at Trustmark Park where the kids, parents and guides gave their testimonials of the fun-filled weekend activities.



- Harvest totals:
  - Total Deer: 58
  - Bucks: 22 Does: 36
- 6 hogs
- 1 coyote
- 9 hunters harvested their 1st Deer

NU/TE

37 landowners/hunting clubs donated the use of their properties



THE LANGUAGE





# Dedication



In Memory of Bill Lunceford

1945-2007

This and all future Deer Data Books are dedicated to Bill Lunceford.

On September 20, 2007, the Mississippi Department of Wildlife, Fisheries, and Parks and the sportsmen of Mississippi lost a hero. William (Bill) Lunceford passed away as a result of complications due to a previous injury. Bill became a quadriplegic after a diving accident in 1979. After rehabilitation, he came back to work with the MDWFP as the Deer Management Assistance Program (DMAP) Coordinator. He filled this role until his retirement on June 30, 2006. The work he completed in his position is immeasurable. Using a mouthpiece, wooden dowel, and large eraser, he typed faster than most of the staff. His knowledge of computer programs combined with deer management experience made the rest of the staff's roles easier. He combined the DMAP data for the entire state annually and produced reports to assist field biologists in making better deer management decisions. The data and reports eventually became the Deer Program Report. His work has impacted millions of acres of deer habitat in the state. He also assisted other states with the implementation of DMAP programs.

Bill was a man of Christian values, strong work ethic, and immense knowledge. It was impossible to not make friends with him. After his accident, he continued his passion of hunting deer. He designed a rifle mounted on a football helmet, with trigger activation by solenoid from a mouthpiece. He was a crack shot with this weapon, bagging several deer, and designed several versions in different calibers.

Bill traveled the state to give motivational speeches. He proved that adversity can be overcome. You just have to want to. Many lives have been touched, and changed, by Bill's time on Earth. As a firm believer, Bill can now walk again.

You will be missed.

#### 2010

#### Governor of Mississippi *Haley Barbour* Lieutenant Governor *Phil Bryant*



Senate Wildlife, Fisheries, and Parks Committee Tommy A. Gollott, Chairman, Biloxi Billy Hudson, Vice-Chairman, Purvis Sidney Albritton, Picayune Bob M. Dearing, Natchez Merle Flowers, Southaven Cindy Hyde-Smith, Brookhaven Ezell Lee, Picayune Chris McDaniel, Ellisville

**Eric Powell**, Corinth **Bill Stone**, Ashland **Gray Tollison**, Oxford

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Numerous people are responsible for the information presented in this report. The vision and work of Mississippi Game and Fish Commission patriarchs like Fannie Cook and Bill Turcotte initiated plans in the 1930's that ultimately provided Mississippi Sportsmen with the deer population we enjoy today.

Leaf River Refuge Manager Quinton Breeland, Upper Sardis Refuge Manager Garald Mize, and other dedicated Commission employees protected, trapped, and relocated hundreds of deer throughout the state during the days of Mississippi's deer restoration. In addition, game wardens of the deer restoration era protected a growing deer population through the early period of wildlife conservation. During this time in the history of Mississippi's Wildlife Management Agency, game wardens provided their own gun and vehicle. Mobile communication with other officers was little more than a futuristic dream. Wildlife enforcement, or the game warden that interfered with the "jacklighting" of deer and illegal harvest of game, was not a welcome sight to some hunters at that time. Refuge managers and game wardens of the restoration era are pioneers of the deer population restoration success of today.

Today the conservation officer is considered differently. Most men and women who enjoy the bountiful wildlife that exist today regard the conservation officer as a partner in wildlife conservation. As those who are responsible for the deer populations we treasure are remembered, the conservation officers of today should not be forgotten.

The Mississippi Legislature is also to be thanked for their historic and sustained funding of this agency. Since the establishment of the Game and Fish Commission in the days of the Great Depression, the Mississippi Legislature has funded efforts necessary for the wildlife conservation success story of the white-tailed deer.

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Mississippi landowners have made deer in the Magnolia State a reality. Without landowner desire to have deer, most agency efforts would have proved ineffective. Those of us who hunt, study, or admire the white-tailed deer truly thank you.

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Look for this information on www.mdwfp.com/deer. If you have any questions, feel free to contact us.

Cover photo courtesy of Michael A. Kelly (www.wildexposures.net).

Special thanks and recognition goes out to Bill Lunceford. Bill had the vision and foresight to put the first DMAP Annual Report together in 1988. In 1993 the report changed to the Mississippi Deer Data book. Without Bill's vision of the DMAP program and the Deer Data Book, today's report would not have been possible.

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# White-tailed Deer Program Report 2009-2010



Brian Berkley (Jefferson County)

The first Deer Management Assistance Program (DMAP) report was completed in 1982. The DMAP report evolved into the Mississippi Deer Program Report in 1992. Since its inception, the purpose of this report was to consolidate all deer-related information obtained by the Mississippi Department of Wildlife, Fisheries, and Parks (MDWFP) personnel. Compilation of these data provides managers the opportunity to analyze trends in deer harvest and physiological condition. In the future, managers will have a chronicled reference to more effectively critique effects of changes in season framework, hunter success, and climatic conditions on the deer population.

Decision makers such as the Mississippi Legislature and the Mississippi Commission on Wildlife, Fisheries, and Parks have served the sportsmen of the state well. Deer harvest and management opportunities exist today that were considered far-fetched thirty years ago.

Deer hunting regulations are subject to change each year, and often do. This was the first year of new antler criteria for legal bucks and the creation of three deer management zones.

Annual mail surveys are used to monitor trends in hunter harvest and effort in Mississippi. There was no mail survey conducted following the 2009 - 2010 hunting season. The last survey was conducted following the 2008 - 2009 hunting season and data from the previous 2 seasons (2006 - 2007 and 2007 - 2008) were collected during the summer of 2008. Because a survey was not conducted for this season, the mail survey section has been omitted from this report. Hopefully a survey will be conducted following the 2010 - 2011 season so this trend data can continue to be reported.

The MDWFP began using a computer summary program (XtraNet) to enter and analyze all DMAP and WMA data in 2004 – 2005. Data from 2001 – 2010 was analyzed using XtraNet, while data prior to 2001 was analyzed using DeerTrax. This may be the cause for differences in some numbers between 2000 and 2001. Statewide Compiled DMAP summary tables and graphs include harvest reports from WMAs that collect deer harvest data. Soil region summary tables only include data from private lands on DMAP to give managers a better representation of expectations for their property.

Sample methods were unchanged for the following data sets:

- Hunter effort and harvest information collected on state-operated WMAs
- Employee observations of deer mortality due to motor vehicle collisions
- Enforcement Bureau monitoring of deer hunting-related citations
- Disease monitoring and data collection
- Deer research projects conducted in cooperation with Mississippi State University Forest and Wildlife Research Center

Department wildlife biologists continue to inform and educate sportsmen relative to deer management needs and issues. Our goals are to provide insight into current deer management needs while providing the leadership to identify and guide future issues. All known media sources were utilized in this process. In addition, public presentations were made to hunting, civic, and conservation groups throughout the state. This report captures a portion of the informational and educational efforts.

# **Wildlife Management Areas**



# Wildlife Management Areas 2009-2010

summary of Wildlife Management Area (WMA) deer harvest and hunter activity is presented in **Figure 1**. The majority of data was collected from self-service permit stations. Mandatory check-in and harvest reporting is required from all hunters on most WMAs.

Throughout the year, conservation officers monitor compliance of hunters completing and returning permit cards on WMAs. Differences in compliance rates among WMAs are seen each year. These differences are mainly due to the degree of hunter acceptance of the check-in system. Some conservation officers assigned to WMAs have more aggressively informed hunters of the importance of accurate check-in than those on other areas. Also, some officers have enforced the mandatory checkin regulation more diligently. The size of a WMA and control of hunter access also affects compliance rates.

Some WMAs provide more restrictive hunting opportunities due to area size, habitat type, and management objectives. Location and soil region in which a WMA occurs impacts deer productivity. Because of these factors, as well as other unique differences among areas, caution should be exercised in comparing data between WMAs (**Table 2**).

Reported hunter man-days for the 2009 – 2010 season increased by 1,891 man-days compared to last year. Reported man-days have been increasing since the 2005 – 2006 season. Hurricane Katrina significantly affected man-days during the 2005 – 2006 season. However, man-days appear to have rebounded and stabilized.

Total reported harvest decreased by 285 deer compared to last season (**Figure 1**). Beginning with the 2007 – 2008 season, all WMAs had a minimum inside spread antler restriction in addition to a minimum main beam length restriction. A legal buck must meet either the minimum inside spread or the minimum main beam length. See **Table 1** to determine the antler criteria for each WMA.

Average success rate also decreased slightly across WMAs. This decrease is likely a result of decreased deer movement due to good mast crops, behavioral changes, and extreme weather conditions.



#### Figure 1. Wildlife Management Area Reported Deer Harvest and Hunter Man-days

# Table 1. Wildlife Management AreaAntler Criteria for the 2009-2010 Season

| Wildlife<br>Management<br>Area | Minimum<br>Antler<br>Criteria | Wildlife<br>Management<br>Area | Minimum<br>Antler<br>Criteria     |
|--------------------------------|-------------------------------|--------------------------------|-----------------------------------|
| Bienville                      | 12/15                         | Natchez State Park             | 12/15                             |
| Black Prairie                  | 12/15                         | Okatibbee                      | 12/15                             |
| <b>Calhoun County</b>          | 12/15                         | O'Keefe                        | 15/18                             |
| Canal/John Bell                | 12/15                         | Old River                      | 12/15                             |
| Caney Creek                    | 12/15                         | Pascagoula                     | 12/15                             |
| Caston Creek                   | 12/15                         | Pearl River                    | 12/15                             |
| <b>Charles Ray Nix</b>         | 15/18                         | Red Creek                      | 12/15                             |
| Chickasaw                      | 12/15                         | Sandy Creek                    | 12/15                             |
| Chickasawhay                   | 12/15                         | Sardis Waterfowl               | Hardened Antler<br>Above Hairline |
| Choctaw                        | 12/15                         | Shipland                       | 15/18                             |
| Copiah County                  | 12/15                         | Sky Lake                       | 15/18                             |
| <b>Divide Section</b>          | 12/15                         | Stoneville                     | 15/18                             |
| Hell Creek                     | 12/15                         | Sunflower                      | 15/18                             |
| John Starr                     | 12/15                         | Tallahala                      | 12/15                             |
| Lake George                    | 15/18                         | Theodore A. Mars, Jr.          | Hardened Antler<br>Above Hairline |
| Leaf River                     | 12/15                         | Trim Cane                      | 12/15                             |
| Leroy Percy                    | 15/18                         | Tuscumbia                      | 12/15                             |
| Little Biloxi                  | 12/15                         | Twin Oaks                      | 15/18                             |
| Mahannah                       | 16/20                         | Upper Sardis                   | 12/15                             |
| Malmaison                      | 15/18                         | Ward Bayou                     | 12/15                             |
| <b>Marion County</b>           | 12/15                         | Wolf River                     | 12/15                             |
| Mason Creek                    | 12/15                         | Yockanookany                   | 12/15                             |
| Nanih Waiya                    | 12/15                         |                                |                                   |

# Table 2. Wildlife Management Area Harvest Informationfor the 2009-2010 Season

| Wildlife<br>Management Area | Acreage | Total<br>Harvest | Acres/<br>Deer | Buck<br>Harvest | Acres/<br>Buck | Doe<br>Harvest | Acres/<br>Doe | Total<br>Man-days | Man-days/<br>Deer | Man-days/<br>Acre |
|-----------------------------|---------|------------------|----------------|-----------------|----------------|----------------|---------------|-------------------|-------------------|-------------------|
| Bienville                   | 26,136  | 161              | 162            | 85              | 307            | 76             | 344           | 2,755             | 17                | 0.11              |
| Black Prairie               | 5,673   | 31               | 183            | 13              | 436            | 18             | 315           | 243               | 8                 | 0.04              |
| Calhoun County              | 10,900  | 91               | 120            | 40              | 273            | 51             | 214           | 2,093             | 23                | 0.19              |
| Canal/John Bell             | 28,930  | 108              | 268            | 59              | 490            | 49             | 590           | 4,760             | 44                | 0.16              |
| Caney Creek                 | 28,000  | 130              | 215            | 65              | 431            | 65             | 431           | 2,828             | 22                | 0.10              |
| Caston Creek                | 27,785  | 28               | 992            | 22              | 1,263          | 6              | 4,631         | 4,164             | 149               | 0.15              |
| Charles Ray Nix             | 4,000   | 65               | 62             | 24              | 167            | 41             | 98            | 1,047             | 16                | 0.26              |
| Chickasaw                   | 27,259  | 82               | 332            | 35              | 779            | 47             | 580           | 6,431             | 78                | 0.24              |
| Chickasawhay                | 29,048  | 56               | 519            | 28              | 1,037          | 28             | 1,037         | 3,758             | 67                | 0.13              |
| Choctaw                     | 24,314  | 139              | 175            | 90              | 270            | 49             | 496           | 3,644             | 26                | 0.15              |
| Copiah County               | 6,583   | 150              | 44             | 77              | 85             | 73             | 90            | 3,585             | 24                | 0.54              |
| Divide Section              | 15,337  | 37               | 415            | 11              | 1,394          | 26             | 590           | 2,369             | 64                | 0.15              |
| Hell Creek                  | 2,284   | 16               | 143            | 3               | 761            | 13             | 176           | 202               | 13                | 0.09              |
| John Starr                  | 8,244   | 45               | 183            | 17              | 485            | 28             | 294           | 1,479             | 33                | 0.18              |
| Lake George                 | 8,383   | 17               | 493            | 8               | 1,048          | 9              | 931           | 909               | 53                | 0.11              |
| Leaf River                  | 41,780  | 155              | 270            | 85              | 492            | 70             | 597           | 9,051             | 58                | 0.22              |
| Leroy Percy                 | 1,642   | 11               | 149            | 6               | 274            | 5              | 328           | 356               | 32                | 0.22              |
| Little Biloxi               | 6,923   | 24               | 288            | 13              | 533            | 11             | 629           | 3,620             | 151               | 0.52              |
| Mahannah                    | 12,675  | 159              | 80             | 34              | 373            | 125            | 101           | 1,389             | 9                 | 0.11              |
| Malmaison                   | 9,696   | 88               | 110            | 29              | 334            | 59             | 164           | 2,015             | 23                | 0.21              |
| Marion County               | 7,200   | 104              | 69             | 52              | 138            | 52             | 138           | 2,384             | 23                | 0.33              |
| Mason Creek                 | 28,000  | 49               | 571            | 33              | 848            | 16             | 1,750         | 2,654             | 54                | 0.09              |
| Nanih Waiya                 | 7,295   | 48               | 152            | 12              | 608            | 36             | 203           | 1,264             | 26                | 0.17              |
| Natchez State Park          | 3,425   | 59               | 58             | 27              | 127            | 32             | 107           | 954               | 16                | 0.28              |
| Okatibbee                   | 6,883   | 20               | 344            | 8               | 860            | 12             | 574           | 801               | 40                | 0.12              |
| O'Keefe                     | 6,239   | 71               | 88             | 32              | 195            | 39             | 160           | 1,817             | 26                | 0.29              |
| Old River                   | 14,764  | 36               | 410            | 22              | 671            | 14             | 1,055         | 1,543             | 43                | 0.10              |
| Pascagoula River            | 36,994  | 44               | 841            | 32              | 1,156          | 12             | 3,083         | 5,251             | 119               | 0.14              |
| Pearl River                 | 6,925   | 13               | 533            | 4               | 1,731          | 9              | 769           | 1,298             | 100               | 0.19              |
| Red Creek                   | 22,954  | 22               | 1,043          | 6               | 3,826          | 16             | 1,435         | 1,551             | 71                | 0.07              |
| Sandy Creek                 | 16,407  | 98               | 167            | 66              | 249            | 32             | 513           | 4,014             | 41                | 0.24              |
| Sardis Waterfowl            | 4,000   | 44               | 91             | 22              | 182            | 21             | 190           | 160               | 4                 | 0.04              |
| Shipland                    | 3,642   | 18               | 202            | 11              | 331            | 7              | 520           | 594               | 33                | 0.16              |
| Sky Lake                    | 4,306   | 6                | 718            | 5               | 861            | 1              | 4,306         | 123               | 21                | 0.03              |
| Stoneville                  | 2,500   | 15               | 167            | 7               | 357            | 8              | 313           | 613               | 41                | 0.25              |
| Sunflower                   | 58,480  | 104              | 562            | 57              | 1,026          | 47             | 1,244         | 4,936             | 47                | 0.08              |
| Tallahala                   | 28,120  | 149              | 189            | 84              | 335            | 65             | 433           | 2,848             | 19                | 0.10              |
| Theodore A. Mars, Jr.       | 900     | 1                | 900            | 0               | 0              | 1              | 900           | 27                | 27                | 0.03              |
| Trim Cane                   | 891     | 4                | 223            | 1               | 891            | 3              | 297           | 14                | 4                 | 0.02              |
| Tuscumbia                   | 2,436   | 18               | 135            | 8               | 305            | 10             | 244           | 319               | 18                | 0.13              |
| Twin Oaks                   | 5,675   | 73               | 78             | 14              | 405            | 59             | 96            | 739               | 10                | 0.13              |
| Upper Sardis                | 42,274  | 123              | 344            | 47              | 899            | 76             | 556           | 7,438             | 60                | 0.18              |
| Ward Bayou                  | 13,234  | 10               | 1,323          | 5               | 2,647          | 5              | 2,647         | 1,466             | 147               | 0.11              |
| Wolf River                  | 10,194  | 86               | 119            | 42              | 243            | 44             | 232           | 3,296             | 38                | 0.32              |
| Yockanookany                | 2,379   | 10               | 238            | 4               | 595            | 6              | 397           | 253               | 25                | 0.11              |
| TOTAL                       | 661,709 | 2,818            |                | 1,345           |                | 1,472          |               | 103,055           |                   |                   |
| AVERAGE                     | 16,139  | 69               | 328            | 33              | 683            | 36             | 773           | 2,514             | 44                | 0.17              |

#### Bienville WMA Written by: Scott Baker

Bienville WMA is 26,136 acres within the Bienville National Forest located north of Morton. For the 2009 - 2010 season, bucks were required to have an inside spread of at least 12 inches or one main beam length of at least 15 inches to be legal for harvest. The 2009 - 2010 season was the fifth year where antlerless deer were legal for harvest during gun season.

Deer harvest numbers consisted of 85 bucks and 76 does. Total harvest increased 83% from the previous year and hunter effort increased by 57%. Total harvest and man-days have been erratic over the last several years.

Habitat conditions on Bienville WMA have improved over the years due to management for the Red-cockaded woodpecker, which is an endangered species that resides on the WMA. However, in 2005, Hurricane Katrina damaged much of the hardwoods along creeks across the area. The MDWFP has proposed new openings in timber thinning/harvest areas which will provide additional food sources for wildlife.

| Season     | Harvest | Man-days |
|------------|---------|----------|
| 2007-2008. |         |          |
| 2008-2009. |         |          |
| 2009-2010. |         |          |

As deer populations continue to grow in response to habitat improvements on the area, it has become necessary to increase antlerless hunting opportunities. For the 2010 - 2011 season, antlerless hunting opportunities on Bienville WMA will include archery season, a portion of the opening week of gun season, primitive weapon season, gun season without dogs, and the January archery season.

#### Black Prairie WMA Written by: Chad Masley

Black Prairie WMA is a 5,673-acre area located in Lowndes County. Black Prairie offers an October gun hunt opportunity by special permit through a random drawing. This hunt has provided very high success rates during the past several years. Hunter effort and harvest both increased significantly from the previous year, with a harvest in 2009 – 2010 of 13 bucks and 18 does.

| Season    | Harvest M | an-days |
|-----------|-----------|---------|
| 2007-2008 |           | 244     |
| 2008-2009 |           | 162     |
| 2009-2010 |           |         |

Man-days of effort increased 50% and harvest increased 24%. The only change in deer hunting opportunity was the addition of an eight day either sex archery season in late January.

Hunters who desire a quality buck are passing up young bucks and waiting for an opportunity to harvest an older buck. As a result, fewer young bucks are being harvested and buck quality has increased because bucks are allowed to

grow older. Habitat quality is maintained by keeping the deer population below carrying capacity, planting supplemental food plots, prescribed burning, and planting summer agricultural grain crops on approximately 1,800 acres.

#### Calhoun County WMA Written by: Brad Holder

Calhoun County WMA consists of 10,900 acres located near Bruce in Calhoun County. The 2009 – 2010 season saw a drastic departure from normal harvest ratios and a significant increase in total deer harvested. Fifty one does and 40 bucks were harvested. Harvested buck and doe totals were almost equal. This may be due in part to regulations that increased opportunity for

| Season    | Harvest | Man-days |
|-----------|---------|----------|
| 2007-2008 |         |          |
| 2008-2009 |         |          |
| 2009-2010 |         |          |

doe harvest. Recorded weights of harvested bucks and does were down when compared to average weights for the WMA. MDWFP managers are encouraged by this year's harvest and hope these trends continue. The area is unique because it offers extensive opportunity to those who hunt deer with dogs. The WMA offers archery, rifle, and primitive weapon seasons as well as a season exclusive to youth hunters.

Privately managed loblolly pine plantations cover much of Calhoun County WMA. Large clear-cuts and a few hardwood draws dot the WMA's landscape. Timber thins, clear-cuts, and hardwood drains provide some seasonal food and cover. How-ever, quality of deer habitat across the WMA is slightly below average because of dense pine stands and canopy closure which reduces sunlight penetration and browse growth. Old logging decks and logging roads are managed as wildlife openings and kept in either native vegetation or planted in wheat, oats, and/or clover.

2009-2010 Mississippi Deer Program Report

#### Canal Section and John Bell Williams WMAs Written by: Justin Hughes

Canal Section WMA (26,000 ac.) and John Bell Williams WMA (2,930 ac.) share common boundaries and deer harvest data are combined. These areas stretch approximately 54 linear miles along the west side of the Tennessee-Tombigbee Waterway from MS Hwy. 4 at Bay Springs Lake to five miles south of MS Hwy. 45 at Aberdeen. These WMAs lie in Tishomingo, Prentiss, Itawamba, and Monroe counties.

During the past deer season, a total of 4,760 man-days were recorded for deer hunting with a harvest of 108 deer, consisting of 59 bucks and 49 does. The majority of usage and harvest occurred during the gun seasons with 2,734 man-days and 46 bucks harvested (doe harvest was not allowed during gun season). The man-day usage total increased 30% and harvest decreased 7%. There were no changes in regulations or habitat to explain these decreases.

Approximately 250 acres of the area are handicapped hunting only, 200 acres are archery only, and 100 acres are primitive weapon only for deer hunting. The WMAs have 164 winter food plots and 79 summer food plots. The winter food plots did well due to the mild weather and adequate rainfall. Acorn production throughout the WMA was good.

#### Caney Creek WMA Written by: Scott Baker

Caney Creek WMA is 28,000 acres within the Bienville National Forest located near Forest. For the 2009 – 2010 season, bucks were required to have an inside spread of at least 12 inches or one main beam length of at least 15 inches to be legal for harvest. Deer harvest numbers consisted of 65 bucks and 65 does. Total harvest increased by 110% from last year and hunter effort increased by 47%.

As deer populations continue to grow in response to habitat improvements on the area, it has become necessary to increase antlerless hunting opportunities. For the 2010 – 2011 season, antlerless hunting opportunities on Caney Creek WMA will include archery season, a portion of opening week of gun season with dogs, primitive weapon season, the gun season without dogs, and January archery season.

Measures are being taken to improve habitat conditions on the area. The U.S. Forest Service conducted timber harvest operations on Caney Creek WMA and continue spring prescribed burns, which should increase available browse for deer and other wildlife. As a result of the timber harvest operation, the MDWFP will be allowed to maintain several areas as permanent wildlife openings, which will improve habitat conditions on the area for years to come.

#### Caston Creek WMA Written by: Josh Moree

Caston Creek WMA is a 27,785-acre WMA located within the Homochitto National Forest near Meadville, in Franklin and Amite counties. The fire-maintained pine stands combined with mixed pine-hardwood and hardwood stands provide good deer

habitat. Total reported deer harvest decreased 60% for the 2009 – 2010 hunting season, with 28 deer harvested, which consisted of 22 bucks and six does. Buck harvest decreased by 25 and doe harvest decreased by 17 compared to the previous season. Deer hunters accounted for 4,164 man-days, a decrease from the previous season by 3%. Annual prescribed burns conducted by the U.S. Forest Service will continue to improve habitat on the WMA.

| munis  |                         |
|--------|-------------------------|
| Buck   | Season Harvest Man-days |
| previ- | 2007-2008               |
| m the  | 2008-2009               |
| Forest | 2009-2010               |

| Season    | Harvest | Man-days |
|-----------|---------|----------|
| 2007-2008 |         |          |
| 2008-2009 |         |          |
| 2009-2010 |         |          |

Harvest Man-days

2009-2010 ...... 108 ......

Season

6

# WMA NARRATIVE

#### Charles Ray Nix WMA Written by: Brad Holder

Charles Ray Nix WMA is a 4,000-acre tract located near the town of Sardis in Panola County. This WMA offers extensive opportunity to archery hunters. There are also primitive weapon hunts and a week-long youth rifle season. Participation in the primitive weapon hunt is allowed by special permit through a random drawing.

| Season     | Harvest | Man-days |
|------------|---------|----------|
| 2007-2008. | 50      |          |
| 2008-2009. |         |          |
| 2009-2010. |         |          |

Twenty-four bucks and 41 does were harvested during the 2009 – 2010 season. Weights and lactation rates from harvested does were generally below average when compared to averages for the WMA and Upper Thick Loess soil region. Also, weights from harvested bucks continue to be below average when compared to averages for the soil region. These parameters indicate a deer herd too large to be supported at optimum levels of health by existing habitat. Doe

harvest must be increased to bring the herd into balance with available habitat which is steadily improving under current management objectives. New for the 2010 - 2011 season is an extended permitted primitive weapon season. The area also has a designated area for handicapped hunters.

Charles Ray Nix WMA has a large amount of open ground and stands of upland hardwoods. Management on the WMA is focused on providing annual habitat for small game (Northern bobwhite, Eastern cottontail, and mourning dove). Habitat management for those species benefits deer tremendously. Prescribed burning is used to a large extent on the WMA and a series of habitat improvement timber thins have been completed in the upland hardwood stands. These practices will increase browse quantity and fawn cover. Designated areas are planted in supplemental forages such as wheat, oats, and/or clovers. Acorns were slightly less abundant this past fall and winter but provided some additional forage.

#### Chickasaw WMA Written by: Josh Nunley

| Season    | Harvest | Man-days |
|-----------|---------|----------|
| 2007-2008 | 124     | 6,305    |
| 2008-2009 | 124     | 6,864    |
| 2009-2010 |         | 6,431    |

Chickasaw WMA is 27,259 acres located within the Tombigbee National Forest near Houston in Chickasaw and Pontotoc counties. This area offers extensive opportunity to still hunters and dog hunters. Dog hunting is allowed on the designated area north of Hwy 32.

A total of 35 bucks and 47 does were harvested this past season. Man-

days shifted from the rising trend and fell approximately 6% this year. However, man-days during the 2009 – 2010 season still hovered around the 4-year average. Hunter success was down 34% from the past two years. A deer herd health evaluation was conducted on Chickasaw WMA during March 2010. A total of 10 mature does were collected. Overall herd health indices on Chickasaw WMA were consistent with historical values for the WMA but slightly less than historical values for the Interior Flatwoods soil region. The kidney fat index varied highly among mature does but the overall average was consistent with past values for the WMA. Kidney fat index was slightly below the average for the soil region. Reproductive timing was consistent with historical values for the area with a mean conception date of January 15. However, the range of conception varied greatly from December 22 to February 15. The reproductive potential was about average.

As late winter burning and thinning of designated pine stands continues to be conducted by the U.S. Forest Service, habitat conditions such as browse and cover should continually improve. An average acorn crop this past winter provided additional forage.

#### Chickasawhay WMA Written by: Josh Moree

Chickasawhay WMA is a large U.S. Forest Service area spanning across 29,048 acres in Jones County. The fire-maintained pine stands combined with scattered creeks and drains on the area attract many outdoor types. Total reported deer harvest de-

| Season     | Harvest | Man-days |
|------------|---------|----------|
| 2007-2008. |         |          |
| 2008-2009. | 59      |          |
| 2009-2010. |         |          |

creased 5% for the 2009 – 2010 hunting season, with 56 deer harvested, which consisted of 28 bucks and 28 does. Buck harvest decreased by 16 and doe harvest increased by 13 compared to the previous season. Deer hunters accounted for 3,758 man-days, an increase from the previous season by 39%. Annual prescribed burns conducted by the U.S. Forest Service will continue to improve habitat on the WMA.

#### **Choctaw WMA** Written by: Chad Masley

Choctaw WMA is 24,314 acres located within the Tombigbee National Forest near Ackerman in Choctaw County. The 2009 -2010 season harvest consisted of 90 bucks and 49 does. Buck and doe harvest has exhibited an increasing trend over the past 12 seasons. Increased harvest of does is particularly positive for Choctaw WMA. There is still a large percentage of older aged

does being harvested, which indicates that an increased doe harvest is needed to improve herd health parameters. The week of December 26 through January 1 is likely the peak rut for the area based on a weekly harvest of 41 bucks and 6 does.

Choctaw WMA is predominantly forested with stands of hardwoods and loblolly pines. Old logging roads, logging decks, and power line right-of-ways are managed as wildlife openings. The U.S Forest Service conducts extensive

| Season    | Harvest | Man-days |
|-----------|---------|----------|
| 2007-2008 | 106     |          |
|           |         |          |
|           | 139     |          |
|           |         |          |

late-winter burning and some timber thinning operations annually. These techniques have improved deer habitat by increasing browse and cover on the WMA. The good acorn crop along with quality winter supplemental forage plantings provided excellent hunting conditions this past year.

#### **Copiah County WMA** Written by: Josh Moree

Copiah County WMA is comprised of 6,583 acres owned by the State of Mississippi. The WMA consists of pine stands with mixed pine-hardwoods along the creeks and drains. Numerous permanent openings throughout the WMA are maintained with

native vegetation and supplemental plantings. Annual prescribed burns will continue to improve habitat on the WMA.

Total reported deer harvest decreased 6% to 150 (77 bucks and 73 does) for the 2009 – 2010 hunting season. Buck harvest increased by 13 and doe harvest decreased by 22 compared to the previous season. Deer hunting accounted for 3,585 man-days, a decrease from the previous season by 9%.

#### **Divide Section WMA** Written by: Justin Hughes

Divide Section WMA (15,337 ac.) lies along both sides of the Tennessee-Tombigbee Waterway from the northwest side of Bay Springs Lake northward to MS Hwy. 25 near Pickwick Lake. A small portion of the area is in Prentiss County and the remainder is in Tishomingo County. This WMA annually undergoes intense habitat management in order to increase the value

to wildlife and provide a quality hunting experience. The WMA has 141 winter food plots and 78 summer food plots. The food plots range in size from onehalf acre to two acres. The winter food plots on the area did well due to mild weather and adequate rainfall. Approximately one-third of the WMA is spoil area, which is material excavated during the construction of the Tennessee-Tombigbee Waterway. This acreage has very low soil fertility and is still in early stages of plant succession.

| Divide Section WMA is a primitive weapon-only area for deer with a season bag limit of two antlerless deer and one legal    |
|---|
| antlered buck. Regulations state that a buck must have a minimum inside spread of 12 inches or one main beam of at least 15 |
| inches to be legal for harvest. Approximately 950 acres of this area is devoted to youth and handicapped-only deer hunting. |
| Youth and handicapped hunters may use modern firearms.  |

There were 11 bucks harvested during the 2009 – 2010 season, a decrease from the previous season. There were 26 does harvested, a decrease of 13 from the previous season. Man-days decreased 2% from the previous year. The poor state of the economy and high gasoline prices may have been factors causing the decrease in usage of the area.

| Season    | Harvest | Man-days |
|-----------|---------|----------|
| 2007-2008 | 136     |          |
| 2008-2009 | 159     |          |
| 2009-2010 | 150     |          |

Season

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Harvest Man-days

#### Hell Creek WMA Written by: Josh Nunley

| Season    | Harvest | Man-days |
|-----------|---------|----------|
| 2007-2008 |         |          |
| 2008-2009 |         |          |
| 2009-2010 |         |          |

Hell Creek WMA is 2,284 acres located near New Albany in Tippah and Union counties. The only significant change this past season was the addition of an archery season during December. Very few hunters took advantage of the opportunity this year but participation should increase as hunters become more aware. Deer hunting opportunity with gun on this area is allowed only by special permit through a random drawing. The total deer harvest consisted of 16 deer (3 bucks and 13 does). The total harvest is down slightly from last year and

man-days increased 38%. The number of quality bucks should increase as hunters continue to harvest a smaller proportion of bucks to does. Deer hunting should continue to become more popular on the area resulting in more harvest.

For the 2010 – 2011 season, an additional week of archery opportunity will be available to hunters. Youth hunters will also be able to harvest deer with a rifle during the second archery season which begins January 22.

Habitat conditions have improved over the last few years due to timber thinning and intense prescribed fire management. The use of prescribed fire continues to improve fawning cover and browse conditions resulting in an increase in population size. The agricultural farming on the area is also beneficial in providing supplemental forage for deer.

#### John Starr Forest WMA Written by: Chad Masley

John Starr Forest WMA is 8,244 acres located near Starkville in Oktibbeha and Winston counties. Total deer harvest has exhibited a decreasing trend over the past four seasons, this past year being the most significant. Harvest decreased by 36% and man-days decreased by 21%. The decrease in number of man-days resulted in a substantial decrease in harvest. The habitat quality on the area is remaining somewhat constant with the continuation of timber thinnings and small clear-cuts. Seventeen bucks and 28 does were harvested during the 2009 – 2010 season.

John Starr Forest WMA is predominantly forested with stands of loblolly pine and hardwoods. Old logging roads, logging decks, and power line right-of-ways are managed as wildlife openings. Some prescribed burning and a great deal of timber thinning, conducted by Mississippi State University, has helped to enhance deer habitat. There are several timber harvest operations

| Season    | Harvest | Man-days |
|-----------|---------|----------|
| 2007-2008 |         |          |
| 2008-2009 |         | 1,879    |
| 2009-2010 |         | 1,479    |

already in progress that will improve the habitat quality for deer in the upcoming seasons. Hopefully, prescribed fire will be used to a greater extent in the future to enhance the habitat quality on the area. There was a good acorn crop this year, which kept the deer from using the supplemental plantings as often. The deer seemed to target the wildlife openings early in the season and again toward the end of the season.

#### Lake George WMA Written by: Jackie Fleeman

Lake George WMA is an 8,383-acre tract located near Holly Bluff in Yazoo County. This area consists primarily of 18 year old replanted bottomland hardwood timber. The 2009 – 2010 season was the third year that area regulations required a legal buck to have an minimum 18-inch main beam or a minimum 15-inch inside spread. This regulation appears to be supported by the majority of the deer hunters in the area. Deer hunting man-days increased from 548 during the 2008 – 2009 season to 909 during the 2009 – 2010 season, continuing the trend of increased deer hunter man-days on the area. Buck harvest decreased to eight, and doe harvest increased to nine. Body weights were excellent on bucks and does, and antler indices were outstanding as well.

Flooding occurred on the area in the spring and early summer causing some stress on the deer herd and caused poor lacta-

| Season     | Harvest | Man-days |
|------------|---------|----------|
| 2007-2008. |         |          |
| 2008-2009. | 19      |          |
| 2009-2010. |         |          |

tion rates. Rainfall was consistent until late summer which resulted in good browse availability. This allowed the deer herd to recover from flood stress and have good body weights and antler production. Mast production was good where available, but most of the trees are not old enough to produce mast. This area has a fairly low deer density, but the herd is growing in numbers and in buck quality because of excellent habitat.

#### Leaf River WMA Written by: Josh Moree

Leaf River is one of, if not the most, storied WMAs in Mississippi. The rich history and excellent hunting make this area a popular draw for south Mississippi hunters. The 41,780-acre WMA, located within the Desoto National Forest in Perry County, is a mix of fire-maintained pine stands and scattered creeks and drains. Annual prescribed burns conducted by the U.S. Forest Service continue to improve habitat on the WMA.

| Season    | Harvest | Man-days |
|-----------|---------|----------|
| 2007-2008 |         |          |
| 2008-2009 | 135     |          |
| 2009-2010 | 155     |          |

Total reported deer harvest increased 15% for the 2009 – 2010 hunting season, with 155 deer harvested, which consisted of 85 bucks and 70 does. Buck harvest increased by eight and doe harvest increased by 12 compared to the previous season. Deer hunting accounted for 9,051 man-days, a decrease from the previous season by 7%.

#### Leroy Percy WMA Written by: Jackie Fleeman

Leroy Percy WMA is a 1,642-acre tract located about five miles west of Hollandale on MS Hwy. 12. Only primitive weapons and archery equipment are allowed for deer hunting. Deer harvest consisted of six bucks and five does, which is up slightly from the 10 deer harvested during the 2008 - 2009 season. This was the third year that area regulations required a legal buck to have a minimum 18-inch main beam or a minimum 15-inch inside spread.

Hunting pressure this season was down to 356 man-days compared to 382 man-days last season. All harvested bucks were between 2.5 and 5.5 years old with very good antler development. Average rainfall during the summer resulted in good browse conditions. The amount of browse is diminishing due to shading from canopy closure. Acorn production was good during the 2009 – 2010 season. Timber harvest in the form of thinning is needed.

| Season    | Harvest | Man-days |
|-----------|---------|----------|
| 2007-2008 |         |          |
| 2008-2009 | 10      |          |
| 2009-2010 | 11      |          |

#### Little Biloxi WMA Written by: Josh Moree

The 15,622-acre Little Biloxi WMA, located in Stone and Harrison Counties, is a popular hunting destination for many coastal county residents. The WMA is located on lands owned by the U.S. Forest Service and Weyerhaeuser Company. Total reported deer harvest decreased 25% for the 2009 – 2010 hunting season, with 24 deer harvested, which consisted of 13 bucks and 11 does. Buck harvest remained at 13 and doe harvest decreased by eight compared to the previous season. Deer hunting accounted for 3,620 man-days, an increase from the previous season by 38%.

| Season    | Harvest | Man-days |
|-----------|---------|----------|
| 2007-2008 |         | 1,965    |
| 2008-2009 |         | 2,619    |
| 2009-2010 |         | 3,620    |

#### Mahannah WMA Written by: Jackie Fleeman

Mahannah WMA is 12,675 acres located approximately 12 miles north of Vicksburg. Deer hunting is only allowed with a special permit through a random drawing except for the January archery hunt which is open to the public. This was the third year that area regulations required legal bucks to have a 16-inch minimum inside spread or a 20-inch minimum main beam. Also, hunters could obtain a tag that would allow them to harvest a buck with at least one unforked antler and 12 were used. Both of these regulations appear to be supported by the majority of deer hunters on the area. Deer man-days decreased to 1,389 due to a reduction in the number of hunters drawn for each hunt. This was done because of the poor lactation rates the last two years. Deer harvest decreased to 159. Doe harvest was steady at 125. Buck harvest decreased from 73 to 34 mostly due to a decreased use of the special buck tags. Extensive flooding occurred on the area from March through August resulting in stress on the deer herd. Lactation rates improved from 2008 – 2009 and buck antler and body indices were up somewhat. Acorn production was excellent.

A deer herd health evaluation was conducted on Mahannah WMA on February 17, 2010. A total of ten 2.5+ year old does

| Season    | Harvest | Man-days |
|-----------|---------|----------|
| 2007-2008 | 125     |          |
|           |         |          |
| 2009-2010 | 159     | 1,389    |

were collected. Overall, current herd health indices on Mahannah WMA are better than the expected values for the WMA and the Delta soil region. Dressed weight, kidney fat index, reproductive potential, and conception date indices are all slightly better than the expected values. Conception dates ranged from November 24 through February 3.

Selective timber harvest, increased antlerless deer harvest, and good mast

crops have brought herd health indices on Mahannah above historic figures for the WMA and the soil region. However, high water during early to late summer continues to cause stress on the herd.

#### Malmaison WMA Written by: Brad Holder

Malmaison WMA is 9,696 acres located between Grenada and Greenwood in Carroll, Grenada, and Leflore counties. This area is unique because it encompasses parts of the loess hills and Mississippi delta.

| Season    | Harvest | Man-days |
|-----------|---------|----------|
| 2007-2008 | 97      |          |
| 2008-2009 | 120     |          |
| 2009-2010 |         |          |

Twenty-nine bucks and 59 does were harvested during the 2009 – 2010 season. Weights and lactation for all doe age classes were slightly below averages for the Upper Thick Loess and Delta soil regions. Buck weights for all age classes were also below average. Increased doe harvest coupled with continued habitat management is critical to bring the local herd in balance with available forage and improve health indices. Fortunately doe harvest has exhibited an

increasing trend over the past five seasons. MDWFP managers hope the trend will continue. The WMA offers archery, rifle, and primitive weapon seasons as well as a deer season exclusive to youth hunters.

Malmaison WMA is predominantly forested. Many wildlife openings exist and are maintained in natural vegetation or planted in winter forages such as clovers, wheat, and/or oats. Forest habitat improvement thins will be implemented in designated forest stands on Malmaison WMA in 2011. These thins will increase natural browse, fawning cover, acorn production, and promote hardwood regeneration.

#### Marion County WMA Written by: Josh Moree

Marion County WMA, located southeast of Columbia, is comprised of 7,200 acres owned by the State of Mississippi. The WMA consists mainly of fire-maintained longleaf pine stands with mixed pine-hardwood stands along the creeks and drains. Numerous permanent openings throughout the WMA are maintained with native vegetation and supplemental plantings. An-

| Season    | Harvest | Man-days |
|-----------|---------|----------|
| 2007-2008 |         |          |
| 2008-2009 |         |          |
| 2009-2010 | 104     |          |

nual prescribed burns continue to improve habitat on the WMA.

Total reported deer harvest increased 18% to 104 (52 bucks and 52 does) for the 2009 – 2010 hunting season. Buck harvest increased by 23 while doe harvest decreased by seven compared to the previous season. Deer hunting accounted for 2,384 man-days, a decrease from the previous season by 9%.

#### Mason Creek WMA Written by: Josh Moree

Mason Creek WMA consists of over 28,000 acres located within the Desoto National Forest in Greene County. The firemaintained pine stands combined with scattered creeks and drains on the area attract many visitors to the WMA. There has been no check-in station on Mason Creek WMA and hunters are required to record harvests on the daily permit card. However, a check-in station will be in place prior to the 2010 – 2011 hunting season. Hunters will be required to check harvested deer in

| Season    | Harvest | Man-days |
|-----------|---------|----------|
| 2007-2008 |         |          |
| 2008-2009 | 53      |          |
| 2009-2010 |         | 2,654    |

addition to recording harvests on the daily permit card. Total reported deer harvest decreased 7.5% for the 2009 – 2010 hunting season, with 49 deer harvested, which consisted of 33 bucks and 16 does. Buck harvest remained at 33 and doe harvest decreased by four compared to the previous season. Deer hunting accounted for 2,654 man-days, a decrease from the previous season by 4%.

#### Nanih Waiya WMA Written by: Jeff Mangrum

Nanih Waiya WMA consists of 8,040 acres located near Philadelphia in Neshoba County. Man-days of deer hunting effort for the 2009 – 2010 season decreased 34.5% from the previous year. Total deer harvest included 12 bucks and 36 does. The

significant decrease in hunter use and harvest during the season was attributed to heavy rains which caused persistent flooding on the WMA throughout most of the deer season. After 11 hunting seasons, deer hunting potential remains largely untapped, particularly in the more remote areas throughout the WMA. The early successional habitat, which comprises most of the WMA, has provided an abundant food supply for deer. Populations continue to remain at higher levels than when mature hardwood timber dominated the area. This early suc-

2009-2010 WMA Deer Harvest Narratives

| -  | Season    | Harvest | Man-days |
|----|-----------|---------|----------|
| \$ | 2007-2008 | 100     | 1,794    |
| •  |           |         |          |
| -  |           |         |          |
| L  |           |         |          |

cessional habitat is disappearing, as young, regenerating hardwood forests are beginning to reach a closed-canopy stage over a large portion of the WMA. The openings created by Hurricane Katrina and smaller isolated storms have provided a short-term increase in the amount of deer browse available. In an effort to manage deer populations, doe harvest opportunity extends throughout the entire length of the deer season.

#### **Natchez State Park** Written by: Josh Moree

Natchez State Park consists of approximately 3,425 acres located in Adams County near Natchez. The park consists mainly of upland mixed pine/hardwoods. Approximately 2,200 acres of the park are open to limited deer hunting. Hunters are allowed only by special permit through a random drawing held each fall. Currently, youth gun, handicapped gun, archery, and muzzleloader hunts are available. Hunters will have more opportunity for deer hunting at Natchez State Park as the hunt dates were expanded for the 2010 – 2011 season.

Total reported deer harvest increased 9% for the 2009 - 2010 hunting season, with 59 deer harvested, which consisted of 27 bucks and 32 does. Buck harvest increased by six and doe harvest decreased by one compared to the previous hunting season. Deer hunters accounted for 954 man-days, an increase from the previous season by 75%.

# Harvest Man-days Season

#### **Okatibbee WMA** Written by: Jeff Mangrum

Okatibbee WMA consists of 6,883 acres located near Collinsville in Lauderdale County. Man-days decreased 14% from the previous year. A total of 20 deer were harvested, which included eight bucks and 12 does.

| Season    | Harvest | Man-days |
|-----------|---------|----------|
| 2007-2008 |         |          |
| 2008-2009 |         |          |
| 2009-2010 |         | 801      |

Hurricane Katrina and isolated storm damage has had a lasting impact on the WMA. Timber damage has opened many of the previously closed canopy

stands. This has resulted in an abundance of deer browse. Some of the areas have been so severely damaged that reforestation in hardwoods was the best option to reclaim the areas. High winds damaged stands of mature, bottomland hardwood more than upland stands of mixed pine and hardwood. Downed timber from the storms is still scattered throughout much of the WMA and hunter access through the woods is limited, but roads and trails have been cleared.

Winter food plots did well in spite of an extremely wet fall which hampered planting operations. Acorn production was good on the area. Timber management practices are being implemented to increase production of deer browse. Most of the mature, upland pine stands have been thinned and burned.

#### O'Keefe WMA Written by: Brad Holder

O'Keefe WMA is 6,239 acres located near Lambert in Quitman County. This area is unique because it is one of largest contiguous tracts of timber in the north Mississippi Delta outside the main line Mississippi River levee. This WMA offers archery, rifle, and primitive weapon seasons as well as a season exclusive to youth hunters.

Thirty-two bucks and 39 does were harvested on O'Keefe WMA during the 2009 - 2010 deer season. Buck weights continue to be average or slightly above average when compared to historical data. Doe weights and lactation rates were down significantly.

O'Keefe WMA is predominantly forested with stands of mature bottomland hardwoods. Open areas on the WMA include farmed fields and CRP or WRP fields. The WMA is surrounded by crop land which provides abundant, high-quality summer and winter forage in the form of soybeans and wheat. Winter supplemental forages such as oats, wheat, and/or clovers are

| Season    | Harvest | Man-days |
|-----------|---------|----------|
| 2007-2008 |         |          |
| 2008-2009 |         |          |
| 2009-2010 |         |          |

I wheat. Winter supplemental forages such as oats, wheat, and/or clovers are planted in wildlife openings within the WMA. Acorn production was fair again during 2009. A habitat and forest improvement thin will take place in 2010 on the southwest side of the WMA. This thin is one in a series that will be implemented in designated forest stands to improve habitat. Thinning will increase seasonal browse, fawning cover, acorn production, and promote hardwood regeneration.

#### Old River WMA Written by: Josh Moree

Old River WMA, located in Pearl River County near Poplarville, is owned by the State of Mississippi. It is a mix of bottomland hardwoods and few upland areas covering 14,764 acres in the Pearl River Basin. The WMA was in the direct path of Hurricane Katrina as it roared through south Mississippi in August 2005. Increased sunlight from downed timber increased browse

| Season    | Harvest | Man-days |
|-----------|---------|----------|
| 2007-2008 |         |          |
| 2008-2009 |         |          |
| 2009-2010 |         |          |

#### Pascagoula River WMA Written by: Josh Moree

| Season     | Harvest | Man-days |
|------------|---------|----------|
| 2007-2008. | 100     |          |
|            | 122     |          |
|            |         |          |

production and created dense cover for many wildlife species. Timber salvage operations conducted after the hurricane improved hunter access to the WMA. Total reported deer harvest increased by two to 36 (22 bucks and 14 does) for the 2009 – 2010 hunting season. Buck harvest remained stable and doe harvest increased by two compared to the previous season. Deer hunting accounted for 1,543 man-days, a decrease from the previous season by 1%.

Pascagoula River WMA, located in George and Jackson counties, is owned by the State of Mississippi. It is a mix of bottomland hardwoods covering 36,994 acres of the Pascagoula River Basin. Total reported deer harvest decreased 64% for the 2009 – 2010 hunting season, with 44 deer harvested, which consisted of 32 bucks and 12 does. Buck harvest decreased by 71 and doe harvest decreased by seven compared to the previous season. Deer hunting accounted for 5,251

man-days, a decrease from the previous season by 19%. The WMA was closed to deer hunting for many days during the 2009 -2010 season due to flooding.

#### Pearl River WMA Written by: Jackie Fleeman

Pearl River WMA is 6,925 acres along the Ross Barnett Reservoir north of MS Hwy. 43, near Canton. There is a 1,500-acre Youth and Handicap Only area within the waterfowl refuge. This was the second year that regulations required bucks to have a minimum inside spread of 12 inches or a minimum main beam of at least 15 inches. Reported harvest consisted of four bucks

| Season    | Harvest | Man-days |
|-----------|---------|----------|
| 2007-2008 |         |          |
|           |         |          |
| 2009-2010 |         |          |

and nine does. Three new self service deer check stations were constructed on the area in 2007, which should result in better harvest data collection. Reported man-days decreased from 1,602 to 1,298.

Habitat conditions on the WMA were favorable for deer and improvements will continue. A carbon dioxide well was drilled in the Youth and Handicap Only Area in the summers of 2007 and 2008. As a result of this operation,

Denbury Onshore has made improvements to a 30-acre cutover area within Hurricane Lake that is now a special handicapped area with three handicapped accessible blinds. Once the drilling is completed, the drill pad will be maintained as a permanent wildlife opening.

#### Red Creek WMA Written by: Josh Moree

Red Creek WMA, located within the Desoto National Forest, is a 22,954acre area spanning across Stone, George, and Jackson Counties. The WMA consists of fire-maintained pine stands combined with scattered creeks and drains. Akin to Little Biloxi WMA, the area is a popular draw for many coastal county residents. Total reported deer harvest increased 57% to 22 (6 bucks and 16 does) for the 2009 – 2010 hunting season. Buck harvest remained at six while doe

| Season    | Harvest | Man-days |
|-----------|---------|----------|
| 2007-2008 | 15      |          |
| 2008-2009 |         |          |
| 2009-2010 |         | 1,551    |

harvest increased by eight compared to the previous season. Deer hunting accounted for 1,551 man-days, an increase from the previous season by 16%.

#### Sandy Creek WMA Written by: Josh Moree

Sandy Creek WMA, located near Natchez in Adams and Franklin counties, is a 16,407-acre WMA located within the Ho-

mochitto National Forest. The WMA consists mainly of upland mixed pinehardwood and bottomland hardwood forests. Total reported deer harvest decreased by one to 98 (66 bucks and 32 does) for the 2009 – 2010 hunting season. Buck harvest increased by seven while doe harvest decreased by eight compared to the previous season. Deer hunting accounted for 4,014 man-days, a decrease from the previous season by 3%.

| Season    | Harvest | Man-days |
|-----------|---------|----------|
| 2007-2008 |         |          |
| 2008-2009 |         | 4,137    |
| 2009-2010 |         |          |

#### Sardis Waterfowl WMA Written by: Brad Holder

Sardis Waterfowl WMA is 4,000 acres located north of Oxford in Lafayette County. This WMA provides deer hunting opportunity to youth only. The WMA's permitted hunts provide youth hunters a unique opportunity to hunt an unpressured, high-density deer herd.

Twenty-two bucks and 21 does were harvested during the 2009 - 2010 season. Harvest increased 131% over last year and marks a five season high. Weights and lactation rates for does this past season remain below average for the Upper Coastal Plain soil region. This coupled with a high percentage (57%) of 3.5+ year old does in the harvest continue to indicate overpopulation. This past season's increase in participation from youth hunters was needed to harvest a greater number of deer so that the health of the remaining deer will improve. Managers hope increased harvest will continue. More of the WMA will be open to hunting during the 2010 - 2011 season. MDWFP managers intend to provide additional deer hunting opportunity on the WMA to obtain adequate annual harvest.

Sardis Waterfowl WMA is predominantly forested with stands of hardwoods and loblolly pine. Large fields are maintained in grass and forb communities. Sardis Lake Corps of Engineers personnel assisted MDWFP managers with extensive late-winter prescribed burning in 2009. This practice helped to maintain habitat quality within the large fields. Clovers, wheat, and oats are

maintained in supplemental forage plots. Future timber thinning for habitat improvement will be coordinated by Sardis Lake Corps of Engineers resource managers and will be implemented in designated hardwood stands on Sardis Waterfowl WMA. Thinning, coupled with prescribed burning, will increase seasonal browse, fawning cover, acorn production, and promote hardwood regeneration.

#### Shipland WMA Written by: Jackie Fleeman

Shipland WMA consists of 3,642 acres and is the only state-owned land in the Batture soil region. The west boundary is the Mississippi River. Only primitive weapons and archery equipment are allowed for deer hunting. The WMA consists of bottomland hardwoods and an approximately 100-acre sand field. Timber thinning in the recent past has greatly increased browse and escape

| Season    | Harvest | Man-days |
|-----------|---------|----------|
| 2007-2008 | 18      |          |
| 2008-2009 |         | 1,079    |
| 2009-2010 | 18      |          |

**Harvest Man-days** 

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cover on the WMA. Hunting pressure decreased to 594 man-days during the 2009 – 2010 season due to high water on the Mississippi River cutting off access to the area during much of the deer season. Harvest included 11 bucks and seven does, which was down from the 23 deer harvested in 2008. Mast production was good and normal rainfall during the summer resulted in adequate browse quality. Lactation rates, body weights, and antler development were all good despite the extensive flooding along the Mississippi River in 2009.

#### Sky Lake WMA Written by: Jackie Fleeman

Sky Lake WMA is a 4,306-acre parcel located in Humphreys and Leflore Counties, between Belzoni and Itta Bena on MS Hwy. 7. The area is dominated by regenerated bottomland hardwood forest with abundant browse and escape cover. Only primitive weapons and archery equipment are allowed for deer hunting and all hunts are by preseason draw only. This is the

| Season    | Harvest | Man-days |
|-----------|---------|----------|
| 2009-2010 | 6       |          |

first year that Sky Lake was open for hunting and limited harvest data was collected because no personnel are assigned to this WMA. Five bucks and one doe were harvested. Normal rainfall during the summer resulted in good browse conditions.

#### Stoneville WMA Written by: Jackie Fleeman

| Season    | Harvest | Man-days |
|-----------|---------|----------|
| 2007-2008 |         |          |
| 2008-2009 |         |          |
| 2009-2010 | 15      |          |

Stoneville WMA (2,500 acres) is located about four miles north of Leland, MS. Most of the timber on the area was cut in the mid to late 1990s. This WMA has abundant browse and escape cover. Only primitive weapons and archery equipment are allowed for deer hunting. This was the third year that area regulations required a legal buck to have a minimum 18-inch main beam or a minimum 15-inch inside spread. Hunting pressure increased to 613 man-

days during the 2009 – 2010 season. Deer harvest increased to 15 which included seven bucks and eight does. Limited harvest data was collected because no personnel are assigned to this WMA. Acorn production was good and normal rainfall during the summer resulted in good browse conditions.

#### Sunflower WMA Written by: Jackie Fleeman

| Season    | Harvest | Man-days |
|-----------|---------|----------|
| 2007-2008 |         |          |
| 2008-2009 |         |          |
| 2009-2010 | 104     |          |

Sunflower WMA is a 58,480-acre U.S. Forest Service area in Sharkey County. This was the third year that area regulations required a legal buck to have a minimum 18-inch main beam or a minimum 15-inch inside spread. This regulation appears to be supported by the majority of deer hunters on the area. Spring and summer flooding caused stress on the deer herd and resulted in poor lactation rates. Body weights and antler development were similar to last year's

figures. Normal rainfall during summer and fall resulted in good browse quality. Acorn production was excellent. Buck harvest increased from 44 in the 2008 - 2009 season to 57 in the 2009 - 2010 season. Doe harvest decreased slightly from 54 to 47. Man-days increased to 4,936.

#### Tallahala WMA Written by: Scott Baker

Tallahala WMA is 28,120 acres within the Bienville National Forest located near Montrose. For the 2009 – 2010 season,

| Season    | Harvest | Man-days |
|-----------|---------|----------|
| 2007-2008 | 139     |          |
| 2008-2009 | 119     |          |
| 2009-2010 | 149     |          |

bucks were required to have an inside spread of at least 12 inches or one main beam length of at least 15 inches to be legal for harvest.

Deer harvest consisted of 84 bucks and 65 does. Total harvest increased 25% from last year. Deer hunters accounted for 2,871 man-days which were similar to the previous year.

For the 2010 – 2011 season, antlerless hunting opportunities on Tallahala WMA will include archery season, a portion of opening week of gun season with dogs, primitive weapon season, gun season without dogs, and January archery season.

The U.S. Forest Service continues to conduct spring prescribed burns on the WMA. This helps to encourage browse production during the spring and fall.

#### Theodore A. Mars Jr. WMA Written by: Josh Moree

Theodore A. Mars Jr. WMA is a 900-acre WMA located south of Poplarville in Pearl River County. The property was recently acquired by MDWFP, and public hunting opportunity began in 2007. The property consists of upland pine stands with scattered hardwood bottoms. The property was severely damaged by Hurricane Katrina. Plans are underway to convert the current loblolly pine stands back to a native longleaf pine ecosystem, which will improve the overall

| Season    | Harvest | Man-days |
|-----------|---------|----------|
| 2007-2008 | N/A     | N/A      |
| 2008-2009 |         |          |
|           |         |          |

habitat across the WMA. MDWFP began harvesting timber and replanting longleaf pine seedlings in 2008. Additional habitat improvements include implementing a prescribed fire regime and controlling invasive cogongrass that is frequent across the WMA.

Deer hunting on Theodore A. Mars Jr. WMA is limited to youth hunters by a special permit draw. Deer hunting is allowed on weekends only throughout deer season. One doe was reported as harvested for the 2009 – 2010 hunting season with 27 reported man-days.

#### Trim Cane WMA Written by: Chad Masley

Trim Cane is an 891-acre tract located in Oktibbeha County about 4 miles north of Starkville. The area has been developed primarily for waterfowl hunting. This was the second year this area has been open to deer hunting. Due to the small size of the area, deer hunting is restricted to wheelchair bound hunters using a random drawing for special permits. Three wheelchair ac-

cessible shooting houses are placed on winter food plots across the area. Hunting is limited to eight Saturday afternoon hunts, where three hunters are drawn per day. The hunters are transported to and picked up from their stands by area personnel. Success rates decreased from last year due to a decrease in man-days and hunters being more selective on what they choose to harvest. The quality of hunt is exceptional with about a 90% probability of seeing deer. One buck

| Season    | Harvest Man-days |
|-----------|------------------|
| 2008-2009 |                  |
| 2009-2010 |                  |

and three does were harvested during the 2009 - 2010 season. The plans are to add one more shooting house to the area to allow for an alternate hunting location. The handicapped hunters are very appreciative of the unique opportunity and hospitality by the managers.

#### Tuscumbia WMA Written by: Josh Nunley

Tuscumbia WMA, located in Alcorn County, is a relatively new WMA. The area comprises 2,436 acres, which consists primarily of abandoned agricultural fields and swamp bottomland. The area is divided geographically into two separate units. Unit 1(1,400 ac.) is located north of County Rd. 750 consisting of primarily flooded slash. The wet conditions make the area complicated for hunters to access. Unit 2 (1,200 ac.) is located south of County Rd. 750 and is made up of abandoned agricultural fields and waterfowl impoundments. This unit also floods frequently during the winter months.

Archery hunting on Unit 2 is allowed October 1 until just prior to the first waterfowl draw hunt. Limited hunting pressure on this unit has led to a steady increase in the deer population. Until this year, hunter participation was on a rise; however, man-days fell 15% this hunting season. This could be related to economical

man-days fell 15% this nunting season. This could be related to economical conditions. Although man-days were slightly down, harvest continues to increase due to an expanding deer population. A total of 18 deer were reported harvested (8 bucks and 10 does). Overall, effort and harvest numbers continue to be low due to periodical flooding, limited access, and habitat conditions.

| Season     | Harvest | Man-days |
|------------|---------|----------|
| 2007-2008. | 10      |          |
| 2008-2009. |         |          |
| 2009-2010. |         |          |

#### Twin Oaks WMA Written by: Jackie Fleeman

Twin Oaks WMA is 5,675 acres of bottomland hardwoods five miles southeast of Rolling Fork. Deer hunting is allowed using archery equipment and primitive weapons. Hunters are allowed by special permit only through a random drawing except for the January archery hunt, which is open to the public. This was the third year that area regulations required a legal buck to have a minimum 18-inch main beam or a minimum 15-inch inside spread minimum. Also, hunters could apply for a tag that would allow them to harvest a buck with at least one unforked antler, and eight were reported as being used. Hunter effort decreased to 739 man-days during the 2009 – 2010 season due to a reduction in the number of hunters drawn for each hunt. This

| Season    | Harvest | Man-days |
|-----------|---------|----------|
| 2007-2008 |         |          |
| 2008-2009 |         | 1,060    |
| 2009-2010 | 73      | 739      |

was done because of poor lactation rates during the last two years. Buck harvest decreased from 30 to 14 mostly due to a decreased use of the special buck tags. Doe harvest increased from 53 to 59. Spring flooding on the area caused stress on the deer herd, resulting in fair lactation rates and average body condition and antler development. Normal rainfall during the summer resulted in good browse conditions in late summer and fall. Acorn production was excellent.

A deer herd health evaluation was conducted on Twin Oaks WMA on February 18, 2010. A total of eight adult does were collected. Dressed weight, reproductive effort, and kidney fat indices were all at expected values for the WMA and the Delta soil region. The mean conception date was January 1 with dates ranging from December 21 – January 10. Even on a year with extensive flooding, all indices were either average or slightly above historical averages for Twin Oaks and the Delta soil region. Browse quantity and quality was good after flood waters receded. Acorn production was also good. Harvest data and herd health evaluation data suggest that harvest on Twin Oaks WMA has kept the deer population in balance with existing habit conditions.

#### Upper Sardis WMA Written by: Brad Holder

| Season    | Harvest | Man-days |
|-----------|---------|----------|
| 2007-2008 | 154     |          |
| 2008-2009 | 136     | 8,055    |
| 2009-2010 | 123     |          |

Upper Sardis WMA is 42,274 acres located within the Holly Springs National Forest near Oxford in Lafayette County. Upper Sardis WMA also encompasses portions of the Tallahatchie River bottoms owned by the Sardis Lake Corps of Engineers. The WMA offers archery, rifle, and primitive weapon seasons as well as a season exclusive to youth hunters.

Forty-seven bucks and 76 does were harvested during the 2009 - 2010 season. Total harvest continues to exhibit a decreasing trend when compared to the past three seasons. Average weights appear to be increasing over time among all age classes. However, harvest data suggests a doe age structure that primarily consists of older does. Forest habitat improvements are needed to improve the local herd's health.

Upper Sardis WMA is predominantly forested with stands of hardwoods and loblolly pines. Old logging roads, logging decks, and power line right-of-ways are managed as wildlife openings. Late-winter burning, conducted by the U.S. Forest Service, helped to improve deer habitat on the WMA by stimulating the growth of food and cover. Clovers, wheat, and oats are maintained in supplemental forage plots. Current plans between the U.S. Forest Service and the Department of Wildlife, Fisheries, and Parks are to implement habitat improvement timber thinnings in designated forest stands on the WMA using the new U.S. Forest Service Stewardship Program. These timber thinnings will increase seasonal browse, fawning cover, acorn production, and promote hardwood regeneration. Funds generated from timber harvests will be used to improve habitat across the WMA.

#### Ward Bayou WMA Written by: Josh Moree

Ward Bayou WMA is a 13,234-acre parcel of bottomland hardwoods and some upland areas nestled within the Pascagoula River Basin. Many of the low-lying areas are boat accessible through navigable waters off the main river channel. Hunting

| Season    | Harvest Man-days |
|-----------|------------------|
| 2007-2008 | 12 1,571         |
| 2008-2009 | 16 1,893         |
| 2009-2010 | 10 1,466         |

access is often dependent upon rainfall and river levels. Total reported deer harvest decreased by six to 10 (5 bucks and 5 does) for the 2009 – 2010 hunting season. Buck harvest decreased by four and doe harvest decreased by two compared to the previous season. Deer hunting accounted for 1,466 man-days, a decrease from the previous season by 23%. The WMA was closed to deer hunting for many days during the 2009 – 2010 season due to flooding.

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#### Wolf River WMA Written by: Josh Moree

Wolf River WMA, located in Lamar and Pearl River counties near Poplarville, consists of 10,194 acres owned by Weyerhaeus-

er Company. The WMA consists of various aged pine plantations interspersed with minor stream bottoms. Total reported deer harvest increased by three for the 2009 – 2010 hunting season, with 86 deer harvested (42 bucks and 44 does). Buck harvest decreased by one and doe harvest increased by four compared to the previous season. Deer hunting accounted for 3,296 man-days, a decrease from the previous season by 16%.

| Season    | Harvest | Man-days |
|-----------|---------|----------|
| 2007-2008 | 50      |          |
| 2008-2009 |         |          |
| 2009-2010 |         |          |

#### Yockanookany WMA Written by: Chad Masley

Yockanookany WMA is 2,379 acres located in Attala County along the Yockanookany River approximately 12 miles east of Kosciusko. Archery and primitive weapon opportunities are by draw only.

The 2009 – 2010 harvest consisted of four bucks and six does. The Yockanookany River system is prone to frequent flooding and this season it remained flooded extensively. The consistent high water limited hunter access, which impacted success. There has been an increasing man-day trend over the past four years, but har-

vest numbers have been decreasing for the past two seasons. Frequent flooding over the past two years is one reason for the decrease in harvest. Weights of harvested bucks and does were generally below average for the Upper Coastal Plain soil region. This indicates a herd to large for the local habitat to support at optimal levels of health. An increase in harvest is needed to improve the herd health.

| Season    | Harvest | Man-days |
|-----------|---------|----------|
| 2007-2008 |         | 199      |
| 2008-2009 |         |          |
| 2009-2010 | 10      |          |

Yockanookany WMA is predominantly forested with stands of bottomland hardwoods. Existing wildlife openings are maintained in either native vegetation or planted in summer and winter supplemental forages such as oats, wheat, and clovers. Some winter supplemental forage plots could not be planted or were failed plantings this past year due to the large amounts of rainfall. The acorn crop was excellent, but competition is fierce for acorns between deer and wild hogs. Future plans are to enhance the habitat by creating more openings, improving accessibility and opening the forest up through timber thinnings.



George Holliman (Choctaw WMA)

#### North Region Written by: Lann M. Wilf

Deer herds in the North Region are expanding at some of the fastest rates in the state. Sentiment against antlerless harvest is still strong in some of the North Region, but seems to be changing as management interest spreads. Overall, the herd has appeared relatively healthy over the past five years. However, site visits within this region have revealed grossly

overpopulated deer herds on lands that continue to refrain from antlerless harvest. These areas are in desperate need of a change in management. Fortunately, overpopulated deer herds in this region are much easier to control than in other areas of the state. Also, the soil fertility is high enough to allow the habitat quality to be restored after deer numbers are reduced. Therefore, management potential in the North Region is almost as high as any region of the state.

Deer harvest in the North Region was down significantly this year. This reduction was from 100 acres per deer to 123 acres per deer. This reduction is most likely associated with extremely cold temperatures especially during late December and early January. These conditions limited deer movement until temperatures climbed into the thirties and deer felt comfortable moving consistently. Also, abundant rainfall in early fall limited food plot planting and germination. Most plots were unsuccessful, and about the only food plots that presented hunting opportunity were perennial clover plots that had been established before the rainy fall. Another factor impacting hunter success was that the continuous summer rains of 2009 resulted in a good mast crop that adequate provided food into January in some areas. These factors combined to create an extremely challenging season for hunters. During

the holiday season, when many hunters were off work, there was widespread concern about deer numbers and significantly reduced deer sightings. The vast majority of hunters were unsuccessful during that time, but harvest improved somewhat in mid-January when temperatures increased. Data were collected from 987 deer on 117,812 acres under the Deer Management Assistance Program (DMAP). Harvest continues to be skewed towards females, with over 65% of the harvest being does. Mature buck harvest (4.5+ year olds) increased slightly from 16% in the 2008 – 2009 season to 19% in the 2009 – 2010 season. Harvest percentages decreased on 1.5 and 2.5 year old bucks by 7% and 8% and increased on 3.5 year old bucks by 10%. This shift in buck harvest age structure is encouraging to deer managers because it shows a change in harvest to older age

North

North Central

East Central

Southeast

G

Delta

Southwest

classes. Fawn crops throughout most of the region were below historical averages. This is most likely due to widespread Hemorrhagic Disease which likely caused a reduction in fawn recruitment. Most areas had lactation percentages in the 50s and 60s while other areas had lactation percentages that soared into the 80s. Average lactation rates decreased by 2% in adult does and body weights decreased slightly by two pounds in the 1.5 and 2.5 year old age classes. The percentage of 3.5+ year old does in the harvest increased to 51%, which indicates an expanding herd.

Buck harvest is changing due to increasing management interest. Hunters are realizing that age is a major limiting factor in their harvest and are choosing to pass up state legal bucks. The percentage of 4.5+ year old bucks in the harvest is on an increasing trend, but is still lower than most of the state.

#### North Central Region Written by: William T. McKinley

Another deer season is behind us and now we look at the fruit of our efforts. Overall, it was a season of extremes for the North Central Region. For those hunters who always wish it would get real cold during deer season, it did. So cold, that contrary to popular belief, deer movement practically shut down. Most people think that deer activity increases during extremely cold weather but, actually, just the opposite is true. Radio collared deer have shown us that when the weather is very cold for that region, the deer just lay down. They get sluggish, and go into a sort of torpor, in which breathing, heart rate, and digestion slow. They can stay that way for days before having to get up. This happened in the 2009 - 2010season, and it just happened to coincide with the time when most hunters were off work. Deer sightings went to almost zero on many properties. Hunters who braved the low temperatures got cold and had little to show for it. Young bucks moved, but does and older bucks tended to stay put. Thus, deer sightings and harvest went down during this time.

Another major factor affecting the deer herd last year was water, and plenty of it. River and creek bottoms flooded frequently throughout spring, summer, fall, and winter. Browse was negatively impacted. Because no sooner would the water levels fall, plants begin to recover, and the water would come up again, in turn inundating all the new growth. Food was lacking or absent in the bottoms. The moderate to good mast crop in the bottoms was quickly swept away.

Also, the frequent rains caused much of the seed in food plots to rot, whether planted in a bottom or on a hill. My best description of the food plots were "muddy fields with a green haze." As a whole, food plots were terrible, no matter the farming ability of the planter. With the excessive rain, the native plants also suffered.

Hemorrhagic Disease (HD) occurred at a high rate in the North Central Region during 2009. Many hunters reported sick deer and sloughing hooves. See the Hemorrhagic Disease section of this book for a description and reported statewide coverage.

The high HD occurrence, combined with extremely cold temps and excessive rain and flooding led to decreased body conditions on the North Central Region deer herd. Body weights were down, and on some clubs dropped by 20+ pounds per age class. There were several 1.5 year old bucks mistakenly shot for does which grew no visible antlers. One and a half year old doe weights dropped by 6 lbs region-wide, which is the largest decrease ever recorded. Lactation rates fell, continuing a slow decline. Antler shedding was much earlier, with several shed bucks shot in January.

Many deer herds in the North Central Region of Mississippi are teetering on the edge of catastrophe, as evidenced by this year. Herd numbers shouldn't be so high as to suffer during a wet year. This region has more mature bucks now than 10 years ago, but many deer managers have sacrificed nutrition for age and numbers. The percent of 3.5+ year old does continues to increase, supporting the fact that the herd is growing. Exceptions exist, but the majority of clubs have more deer now than any time in the past.

There is some good news. Conditions are shaping up very well for the deer herd to recover somewhat this year. Summer rain, in most areas, has been adequate but not excessive. The acorn crop is predicted to be good. Body weights should increase this year. Conditions for antler growth have been good, and deer that may have dropped a bit in antler last year, due to the wet conditions, should increase this year. We can hope for average cold temperatures and enough rain to grow the plots.

#### East Central Region Written by: Amy C. Blaylock

The 2009 – 2010 hunting season began as one of the wettest falls on record and ended with record cold temperatures during January. Large amounts of rainfall in September and October prohibited many food plots from being planted on time, if planted at all. Although the rain had a negative effect on food plot plantings, it benefited the natural browse. The late rains gave natural browse an extra growth spurt and provided additional forage late in the year. Below average temperatures in late December and January seemed to decrease deer movement when many hunters expected it to increase.

With another bumper acorn crop, food plot hunters were again disappointed with deer movement. The 2009 – 2010 season was the third season that we have had an excellent acorn crop. Areas with good acorn crops dispersed deer away from food plots into hardwood bottoms and therefore decreased deer movement and visibility.

Most areas of the east-central region are planted in pine plantations. Many of the pine plantations are beginning to be thinned for the first time. Once thinned, sunlight will be able to reach the forest floor and an abundance of deer browse will be available for many years to come, if the hardwood competition is controlled by prescribed fire and/or herbicides.

Overall, deer harvest seemed to decrease slightly for the 2009 – 2010 season. Acres per deer harvested have remained relatively stable around 1 deer per 100 acres. The percentage of 1.5 year old bucks harvested increased slightly. This is likely due to hunters adjusting to the new antler criteria. Approximately 45% of the bucks harvested were 3.5+ years old. Buck body weights remained about average compared to previous years. Doe lactation rates were down slightly this year, however doe body weights remained about average. The percentage of 3.5+ year old does harvested remained around 50%. Overall, all biological parameters have remained constant over the past several years.

Reports of hemorrhagic disease in east-central Mississippi remained about the same as last season. Hemorrhagic Disease was found in 6 counties in east-central Mississippi. Samples were taken from hunter harvested and road killed deer for chronic wasting disease (CWD) testing. No occurrence of CWD was found.

#### Delta Region Written by: Lann M. Wilf

The past two deer seasons have proved challenging for hunters in the Delta Region. Harvest in the 2009 – 2010 deer season was lower than that of the previous season, which had the lowest harvest in three years. The reduction in fawn crops and deer density is a direct result of two consecutive spring floods that stressed does during pregnancy. Flooding during spring 2009 was less extensive than during spring 2008, but was still enough to stress the deer herd, especially those in the Batture soil region west of the mainline Mississippi River Levee.

Up to 2008, analysis of harvest data for the past 10 years shows an increasing trend in the total number of deer harvested on DMAP properties in the Delta region. However, the harvest fell in the 2008 - 2009 season, and this trend continued through the 2009 – 2010 season. The highest harvest occurred in the 2006 - 2007 hunting season with a deer harvested per 57 acres or 9,436 total deer taken (3,727 bucks and 5,709 does). The harvest decreased significantly this year to a deer taken per 69 acres or 7,752 deer (3,209 bucks and 4,543 does). The lowest harvest in the last ten years occurred in the 2001 – 2002 season with a deer harvested per 74 acres or 7,087 total deer taken. The expansion of deer populations and subsequent harvest is a direct result of the enrollment of approximately 500,000 acres of farmland in CRP and WRP, which has increased available deer habitat. The population in the Delta region was expanding rapidly prior to the 2008 flood, and this trend should continue once normal spring weather patterns resume. The herd in the Delta Region should once again be extremely productive once previous fawn production levels are reached. At that point, intense harvest should be implemented to control the deer density and maintain herd health.

Mast crops were fair to good throughout most of the Delta Region. Abundant mast in conjunction with extremely cold temperatures inhibited deer movement on many properties. Poor food plot performance because of the extremely wet fall also hindered hunter success.

For the past several hunting seasons, average body weights for bucks and does has remained stable. However, weights decreased in 2008 by two pounds on average. Weights in 2009 -2010 in the 1.5 and 2.5 year old doe age classes were the same as last year. The 3.5+ year old does weighed two pounds less than in 2008 – 2009. During the 2009 – 2010 season, antler measurements for 2.5+ year old bucks increased slightly, which may be related to the reduced intensity of flooding in the spring of 2009. The harvest percentage of 3.5+ year old bucks remained high at 73%. The percentage of 3.5+ year old does in the harvest increased slightly to 51%. This suggests the need to increase harvest on many areas, but the percentage of older does in the harvest was also influenced by the near loss of one fawn crop. The 2009 – 2010 lactation rates were slightly better than last years, but they were not up to previous averages. This year's percentage of 2.5+ year olds lactating was 63%, which is about 10% below the previous average.

Reports of HD throughout the region were sporadic. Samples were collected once again for CWD. All samples tested negative for the disease and CWD has not been found in Mississippi.

Most of the Delta Region has had intermittent rainfall through summer and this spring's flooding was not as extensive as the past two seasons. Hopefully, this year's fawn crop will be excellent and steady rains will keep browse production high through late summer. Steady rainfall should also provide a strong mast crop that will provide ample food for deer. However, dry conditions in late summer and early fall could limit mast production.

#### Southwest Region Written by: Chris McDonald

Environmental events leading up to the 2009 – 2010 season can be summed up in one word: wet. Abundant rainfall was seen throughout most of the year except for June, which was very dry. As a result of high rainfall during most of the year, abundant vegetation was observed until the first frost. Excessive rainfall affected fall food plots negatively during the planting season. The excess rainfall caused seed to wash away or rot under standing water. Many people had to replant their food plots during November to get a good stand of forage for the upcoming winter months.

Below average temperatures were observed during midhunting season. Daily temperatures did not get out of the 20s during some days. These extreme temperatures limited deer movement. During this time, many deer simply bedded down to conserve nutritional reserves.

A good acorn crop (mainly red oaks) increased carbohydrate intake for needed fat reserves during this period.

Deer hunting on many properties along the Mississippi River were affected by fall and winter floods. Some hunting clubs were not able to hunt during the opening gun season due to high water. Although deer herds along the Mississippi River have been affected by floods since 2008, fawn recruitment appears to have responded well. Some properties along the river observed historically high lactation rates during this past hunting season and many fawns were observed by hunters. On properties that implemented a conservative deer harvest due to the floods, an increase in deer numbers should be observed during the 2010 – 2011 hunting season.

Analysis of DMAP harvest data indicated that deer harvest within the Southwest Region was consistent with the 2008 – 2009 season with 1 deer per 66 acres harvested. Lactation rates for 2.5 and 3.5+ year old does were higher compared to the 2008 – 2009 season. Decreased lactation rates for the region during the 2008 – 2009 season was mostly due to flooding along the Mississippi River. Lactation rates for 3.5+ year old does has been 70% or greater for 4 out of the past 5 years. Average body weights for bucks and does have been consistent for the past 5 years. Harvest of 3.5+ year old bucks was a 5 year high with 65% of the buck harvest being 3.5 years old or older.

Reports of HD were moderate and consistent with reports from 2008. Samples were collected once again for CWD testing. All samples tested negative for the disease and CWD has not been found in Mississippi.

#### Southeast Region Written by: Amy Blaylock and Chris McDonald

The Southeast Region saw a 10-year low in total deer harvest during the 2005 – 2006 hunting season due to Hurricane Katrina. However, harvest data now indicate that total deer harvest in the Southeast Region has rebounded to pre-Hurricane Katrina levels.

Above average rainfall was seen in this region during 2009. The amount of rainfall benefited natural browse and mast but negatively impacted fall food plots. Excessive rainfall during the fall food plot planting time caused a lot of seed to wash away or rot in standing water. Overall, quality of food plots was below average. Many food plots were established late in the year or not established at all.

Southeast Mississippi has had three years of exceptional acorn crops. The 2007 – 2008 season marked the best acorn crop in several years and the 2008 and 2009 seasons have been bumper crops as well.

DMAP harvest data indicates that most biological parameters for the deer population in the Southeast Region have remained constant for the past 5 years. This can be attributed to habitat improvement caused by past hurricanes along this region. Age structure of harvested bucks has improved since the implementation of inside spread and main beam restrictions.

Reports of HD in Southeast Mississippi remained about the same as last season. Hemorrhagic Disease was found in 5 counties in Southeast Mississippi. Samples were taken from hunter harvested and road killed deer for CWD testing. No occurrence of CWD was found.

The Southeast Region has the fewest acres enrolled in DMAP out of all 6 deer regions. This is largely due to the Regional Deer Program Biologist position being vacant. Interest in deer management is high in this region. However, personnel constraints limits time devoted to this region. The people and the deer population in this region would benefit greatly from filling the Deer Program Biologist vacancy.





Eddie Peterson (Mahannah WMA)

# Road Kill Survey Report 2009-2010

**M**DWFP personnel have monitored statewide deer road kill since January 1997. All dead deer observed on or adjacent to roads and highways are recorded during the personnel's regular course of travel from October 1 – January 31. The cause of death of these animals is assumed to be a vehicle collision. The specific location by county is recorded for every deer observed. Personnel also record their monthly mileage. In the past the average number of deer observed per 10,000 miles was calculated by district. However, with changing district lines and MDWFP personnel routinely traveling outside their home district, we have changed this to a statewide average and not district averages (**Table 3**).

Graphical monthly statewide summaries of these data are presented in **Figure 2**. The precise value and accuracy of this method of data collection have not been critically evaluated. No evaluation has been made to determine if number of vehicles on the highways has increased, decreased, or remained constant. Therefore, any inferences or interpretation of these data should be approached cautiously. Every effort has been made to standardize sampling protocol.

When these data are examined graphically, fluctuations over time are apparent. Certain assumptions may be logical. For example, an increase in observed deer vehicular related mortality is a result of an increase in deer activity. Data are currently collected from October – January. Activity peaked during the fall and winter around breeding seasons, when deer activity is at its highest.

A second assumption is if deer numbers are fluctuating annually and the number of deer observed is density dependent, then in lower population years, fewer road-killed deer will be observed. Conversely, during high population years, a greater number of road-killed deer

will be observed. In addition to increasing or expanding deer herds, road kill observations may be heavily influenced by weather conditions and mast availability. During the 2009-2010 deer season, observed road kills were higher than that of any year that data was collected. This year's observed road kill season average was 2.7 deer higher than that of 2008-2009, which was an all time high prior to this year. Observed road kills increased substantially in all months, but the most sigstate. This could have also been weather related because deer movement was moderate to good in December throughout most of the state, but deer movement was poor in January because of the extreme cold weather.

Observed road kill has increased consistently since data collection began in 1997. The data from 2009-2010 showed the highest observed road kill average ever recorded. These data suggest that the deer herd may be at an all time high.

We also collect road-kill data from State Farm Insurance Company. According to State Farm's estimates there were 14,738 deer-vehicle collisions in Mississippi during 2009 – 2010, which is an increase from 14,327 in 2008 – 2009 and 13,954 in 2007 – 2008. These estimates fit the increasing trend from MDWFP personnel's road-kill observations. Also, Mississippi was 26th in the nation in total deer-vehicle collisions. Pennsylvania had the highest with 102,165 total deer-vehicle collisions, and Michigan followed having 101,174. The deervehicle collisions in these states are a result of exceedingly high deer densities and a high number of vehicles on the roads.



#### **Figure 2**

The data from State Farm has been projected for the whole insurance industry, based on State Farm's known auto insurance market share within each state. This data is based on actual comprehensive and collision claims, and as such, would not include deer-vehicle collisions where the policy holder had only liability insurance coverage, which is typically carried on older vehicles in some states.

nificant increase was in December, which increased by 4.3 deer. This is most likely due to increased deer numbers because of mast availability was moderate to high throughout most regions of the

| Table 3. Statewide Averages | (Deer/10,000 Miles Driven) |
|-----------------------------|----------------------------|
|-----------------------------|----------------------------|

| Month       | 2004-2005 | 2005-2006 | 2006-2007 | 2007-2008 | 2008-2009 | 2009-2010 | Avg. all Years |
|-------------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|
| October     | 6.6       | 6.5       | 8.4       | 8.8       | 7.4       | 9.5       | 7.5            |
| November    | 7.3       | 9.2       | 11.1      | 9.3       | 11.1      | 14.0      | 9.6            |
| December    | 10.1      | 13.0      | 12.8      | 12.0      | 13.1      | 17.4      | 12.2           |
| January     | 9.5       | 11.2      | 11.8      | 11.2      | 14.3      | 15.8      | 11.6           |
| Season Avg. | 8.4       | 10.0      | 11.0      | 10.3      | 11.5      | 14.2      |                |

# **Chronic Wasting Disease**

Chronic wasting disease (CWD) is a progressively degenerative fatal disease that attacks the central nervous system of members of the deer family. To date, it has been diagnosed in elk, mule deer, black-tailed deer, white-tailed deer, and moose. CWD is one of a group of diseases known as transmissible spongiform encephalopathies (TSEs). These diseases are characterized as *transmissible* because they can be transmitted from one infected animal to another. They are further classified as spongiform due to the "spongy-like" areas which form in the brain of the infected animal, hence the encephalopathy portion of the name.

The scientific community generally accepts that the infectious agents of CWD are prions. Prions are abnormal proteins that seem to have the ability to alter the structure of normal proteins found in the body of the animal they enter. Logical natural methods of prion transmission include, but may not be limited to, secretions and excretions from infected animals. A study conducted at Colorado State University found that CWD can be transmitted experimentally from saliva and blood. Also, human activity contributes to environmental prion contamination. Prions are hideously durable and imper-

vious to most disinfectants and natural conditions, remaining in the environment for years.

Animals suffering from CWD typically behave abnormally by separating themselves from their usual social group. They often stand alone, with a drooped posture, and may not respond to human presence. As the disease progresses, they will appear very skinny on close examination and will salivate, drink, and urinate excessively.



A deer from Wisconsin with CWD

The goal for the 2009 – 2010 monitoring period was to test approximately 1,500 deer statewide. Routine testing involved Mississippi hunters in this disease monitoring effort. Hunters throughout the state were asked to voluntarily submit the heads of harvested deer for CWD testing. Additionally, samples were obtained from taxidermists and deer processing facilities. Most of these samples came from wildlife management areas, national wildlife refuges, Choctaw Tribal Lands, and Deer Management Assistance Program (DMAP) cooperators.

A total of 1,015 samples were taken from free-ranging white-tailed deer in Mississippi during the 2009 – 2010 sampling period. Samples were obtained from hunter-harvested

animals, spring herd health evaluations, target animal surveillance, and road-killed animals. Samples were obtained from 71 counties (**Figure 4**). The samples were submitted to the Southeastern Cooperative Wildlife Disease Study at the University of Georgia following the 2009 – 2010 hunting season and 1,015 of those samples were tested for evidence of the CWD agent using immunohistochemistry. The remaining 11 samples were not tested because the containers did not contain testable specimens. Evidence of CWD was not detected in any of the tested samples.

Additionally, 98 samples were taken from white-tailed deer within high-fenced enclosures and submitted to the National Veterinary Services Laboratories for testing. Evidence of CWD was not detected in any of the enclosure samples. See **page 35** for more information regarding CWD surveillance for high-fenced enclosures.

The MDWFP, in cooperation with the Mississippi Board of Animal Health and the U.S. Department of Agriculture/Veterinary Services will continue target animal surveillance. A target profile animal is any adult cervid that is emaciated and

> shows some neurological disorder. These target animals should be reported to the local county conservation officer, who has been trained to properly handle them and coordinate their transport to the appropriate laboratory for CWD testing. Most deer exhibiting symptoms of CWD are actually suffering from other conditions or diseases common to white-tailed deer in Mississippi. Malnutrition, hemorrhagic disease, brain abscesses, and other conditions may cause some of the same symptoms. However, due to the seriousness

of CWD and the importance of early detection and control, it is necessary to test target animals for infection. The ability to diagnose disease is dependent on quick reporting because deer carcasses deteriorate rapidly in Mississippi's climate.

As of July 2010, CWD has been diagnosed in 18 states and 2 Canadian Providences. CWD is currently present in wild cervid populations in Colorado, Wyoming, South Dakota, Nebraska, Wisconsin, New Mexico, Illinois, Utah, New York, West Virginia, Kansas, Virginia, Missouri, North Dakota, Saskatchewan, and Alberta. CWD is only present in captive cervid populations in Minnesota, Oklahoma, Michigan, and Montana. **All public health officials maintain that venison is safe for human consumption.** However, hunters who wish to take additional steps to avoid potential unnecessary contact with prions or environmental contamination can do the following:

- Avoid shooting, handling, or consuming any animal that appears sick. Contact the MDWFP at 601-432-2199 if you see or harvest an animal that appears sick.
- Wear latex gloves when field dressing or processing deer.
- Avoid eating or contact with brain, spinal cord, spleen, lymph nodes, or eyes.
- Cut through the spinal cord only when removing the head. Use a knife designated solely for this purpose.
- Bone out meat to avoid cutting into or through bones. Remove all fat and connective tissue to avoid lymph nodes.
- Dispose of all carcass material, including the head, in a landfill or pit dug for carcass disposal purposes.
- Either process your animal individually or request that it be processed without adding meat from other animals.
- Disinfect knives and other processing equipment in a 50% bleach solution for a minimum of one hour.
- Discontinue baiting and feeding which unnaturally concentrate deer.



## **Hemorrhagic Disease**

Hemorrhagic Disease (HD), sometimes referred to as Epizootic Hemorrhagic Disease (EHD) or Bluetongue (BT), is considered the most important viral disease of white-tailed deer in the United States. Different subtypes of two closely related viruses cause HD: EHD and BT. Technically, there are five subtypes of BT virus and two subtypes of EHD virus. A distinguishable difference does not visually exist between these diseases, so wildlife managers normally group the symptoms into one category and refer to the condition as HD.

Biting midges of the genus *Culicoides* transmit HD; therefore the disease is seasonal, based on the abundance of midge vectors. Normal occurrence of HD is late summer through fall (approximately late July – November). Deer that become infected with the HD virus may exhibit a variety of outward symptoms. Some mildly infected deer will exhibit few symptoms. Others which contract a more potent form of the virus, will appear depressed, become feverish, have swollen areas around the head or neck, and may have trouble breathing. However, others which become infected with a particularly potent form of the virus can die within 1 to 3 days. Normal mortality rates from HD are usually less than 25 percent. However, rates greater than 50 percent of the population have been documented. On a brighter note, HD has destroyed no freeranging deer population.

HD is first suspected when unexplained deer mortality is observed in late summer or early fall. Typically, archery hunters who are scouting during late September are the first to observe carcasses in the woods. On some occasions, HD deer are found dead during the late summer in or adjacent to water. The fever produced by the disease causes the sick deer to seek water. These deer subsequently succumb to the disease in creeks and ponds.



Hunters will most frequently encounter the evidence of HD while observing harvested deer during the winter months. During the high fever produced by HD, an interruption in hoof growth occurs. This growth interruption causes a distinctive ring around the hoof, which is readily identifiable on close examination. Hoof injury, as well as bacterial or fungal infection can cause a "damaged" appearance on a single hoof. HD is not considered unless involvement is noticed on two or more hooves.

Fortunately, people are not at risk by HD. Handling infected deer or eating the venison from infected deer is not a public health factor. Even being bitten by the biting midge that is a carrier of the virus is not a cause of concern for humans. Deer which develop bacterial infections or abscesses secondary to HD may not be suitable for consumption.

The case is not as clear regarding domestic livestock. A small percentage of BT infected cattle can become lame, have reproductive problems, or develop sore mouths. Variations exist between BT and EHD virus infection in cattle and domestic sheep. Sheep are usually unaffected by EHD but can develop serious disease symptoms with the BT virus.

Occasionally over-population of the deer herd has been blamed for outbreaks of HD. Abnormally high deer populations are expected to have greater mortality rates because the deer are in sub-optimal condition. The spread of the virus would be expected to be greater in dense deer herds. However, an outbreak of HD cannot be directly attributed to an overpopulated deer herd.

HD can be diagnosed several ways. A reliable tentative diagnosis can be made after necropsy by a trained biologist or veterinarian. A confirmed diagnosis can only be made by isolating one of the viruses from refrigerated whole blood, spleen, lymph node, or lung from a fresh carcass.

MDWFP biologists have been monitoring the presence of HD in Mississippi by several methods: sudden, unexplained high deer mortality during late summer and early fall, necropsy diagnosis, isolation of EHD or BT virus, and observation of hoof lesions on hunter-harvested deer. HD or previous HD exposure is always present in Mississippi deer herds. Previous HD exposure is good. Exposure yields antibodies to future outbreaks of the disease. Without the antibody presence, significant mortality would occur. See **Table 4** for the virus isolation results from the 2009 deer herd health evaluations.

A moderately high occurrence of HD was observed during the 2009 – 2010 hunting season. Evidence of HD was reported in 198 deer scattered across 35 counties during the 2009 – 2010 hunting season (**Figure 5**). The virus appeared to be more virulent than usual, as many of the properties where HD occurred reported numerous sick or dead animals and several harvested deer had sloughing hooves. Researchers have documented a distinctive 2 - 3 year cycle in HD outbreaks. Assuming that these cyclic outbreaks occur, we can expect a higher occurrence of HD during the 2010 – 2011 hunting season in north and south MS. Central MS should see a lower occurrence.

# **Hemorrhagic Disease**



# **Depredation by Deer**

onservation officers annually deal with agricultural depredation by deer. Landowners who experience deer depredation problems are required to apply for a permit before any action is taken to harass or remove problem animals. The process for permit issuance includes an on-site evaluation by an MDWFP officer to verify the occurrence of depredation. Permits are issued primarily for agricultural damage, but ornamental vegetation is

included. Miscellaneous problems such as deer on airport runways also occur and are handled on a case-by-case basis. Property owners should know that permits are not issued in every situation.

A total of 156 depredation permits were issued in 40 counties during 2009, which was greater than the number of permits issued during 2008. This is the second consecutive year that the number of permits issued has increased. The number of counties that had reported depredation permits decreased from 42 to 40. Counties where depredation permits were issued and the number of permits issued by county are shown in **Figure 3**. The high number of permits can be attributed to rising deer populations throughout most of the state. Counties with the most depredation problems are generally counties with the most rapidly expanding deer populations. Cases of deer depredation included damage to soybeans, corn, cotton, peas, sweet potatoes, watermelons, pumpkins, gourds, peanuts, strawberries, numerous garden and truck crops, flowers, pine trees, ornamental trees and shrubs, and interference on airports.

The preferred method of controlling deer depredation problems is adequate hunter harvest. This lowers the deer population to levels that are in balance with the environmental carrying capacity of the habitat. Normally this involves cooperation with adjoining landowners and hunting clubs.

Alternative direct methods used to solve depredation problems include scare or harassment tactics, assorted chemical applications, electric fencing, and traditional fencing at a height that eliminates deer access. High fencing around gardens and small problem areas is costly but provides assured control on a long-term basis with little or no maintenance.

In some instances, after other control measures have been exhausted, deer will be lethally removed. This process seldom provides a long-term solution but is used in some problem situations.

Depredation problems will continue to occur in Mississippi as long as abundant deer populations exist. Extensive problems with agricultural depredation can be controlled with adequate antlerless harvest during the hunting season. Instances of urban depredation are increasing due to escalating deer numbers and urban sprawl. Urban deer problems are magnified in cities where bowhunting has been banned.

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# HERD HEALTH

# **2010 Deer Herd Health Evaluations**

Deer herd health evaluations are conducted by MDWFP biologists annually. Evaluation sites are selected each year based on a specific need for additional information which cannot be obtained from hunter-harvested deer. These sites may be DMAP cooperator lands, WMAs, open public lands, or areas with a special deer management concern. Some sites are sampled annually, others on a rotational schedule of two – three years and some locations on an as-needed basis.

Time constraints normally limit the number of locations biologists sample each year. Deer collections are conducted during the months of February, March, and April. Collection timing must be late enough to insure that all does have been bred, but early enough to precede the spring green-up when foliage density reduces the ability to readily observe and identify deer. The sampling window is most critical in the southern portion of the state where late breeding is a chronic problem and early green-up of native vegetation occurs.

Biologists complete an application for approval to conduct each herd health evaluation during a specific time period. The MDWFP Deer Committee reviews these applications and denies or grants approval. Other agency personnel assist the biologist in charge of the deer collection. When non-agency personnel are participating in the process, specific prior approval is obtained on the application.

During a typical herd health evaluation, biological data regarding reproduction, body condition, and disease are collected from mature females. A minimum of 10 mature females are desired to obtain an adequate sample size to assess herd parameters. Mature does are collected during the late afternoon on existing food plots or at night with the aid of a light and truck platform, which has been designed specifically for this purpose. Other deer are occasionally taken by mistake during the collection process. Data are obtained from all deer but the purpose of the evaluation is to obtain reproductive, physical condition, and disease data from mature females. All measurements and data are obtained from the deer on site or at a convenient nearby location. All deer are donated to a charitable institution or to an individual determined needy by agency personnel. Neither deer nor portions thereof are utilized by any MDWFP employees. Receipts are obtained from every deer donated. Rarely, instances have occurred where deer had to be disposed of in a manner where human utilization was not possible.

### Reproduction

Reproductive data collected during herd health evaluations include conception dates, fawning dates, number of corpus lutea per doe, and number of fetuses per doe. Conception dates and fawning dates are determined using a fetal aging scale. Fetal length is measured on the fetal aging scale and the length is used to calculate conception date and fawning date. Breeding date ranges for Mississippi are presented in **Figure 6**. Data from the 2010 statewide deer herd health evaluations are given in **Table 5**. Data were collected from 155 deer on 18 sites across the state.

In **Table 5**, conception date ranges, averages, and corresponding fawning dates are given for each collection site.

The earliest conception date (November 24th) was detected at Ashbrook Island in Washington County and Mahannah WMA in Warren and Issaquena Counties. The latest conception date (February 15th) was detected on Chickasaw WMA in Chickasaw County. Mean fawning dates based on the conception dates ranged from June 24th on Ashbrook Island in Washington County to July 29th on Chickasaw WMA in Chickasaw County. The statewide average conception date was December 30th and the corresponding state average fawning date was July 14th.

Sample sizes for each collection site are given as N1 or N2. Different groupings by age and sex are mandatory to accurately interpret condition and reproductive data. Total 1.5 year old fecund (capable of breeding) does are represented as N1. Mature 2.5 year old does are represented as N2. Both N1 and N2 deer are utilized to calculate conception dates, but only N2 deer are considered in the sample when reproductive rates and condition data are compared.

Data comparing conception ranges and mean conception dates are self-explanatory. Average number of corpus lutea (CLs) is determined by examination of the ovaries of each N2 deer in the sample and counting the number of CLs present at the time of collection. A CL is a structure in the ovary which forms when an egg is released. The CL functions to maintain pregnancy by the release of hormones. As in domestic livestock, healthy deer on a high plane of nutrition will produce more eggs than deer in poor condition. Therefore, CL data provide a quantitative index to gauge not only reproductive performance at a specific site but also provide a general index to overall herd condition. CL data ranged from a low of 1.4 CLs per doe on Caston Creek WMA in Franklin and Amite Counties to a high of 2.2 CLs per doe on Strong Hunting Club in Monroe County.

Average number of fetuses are also self-explanatory, but will, in most instances, be a lower number than average number of CLs because all CLs do not represent a viable fetus. As the average number of CLs provides an index to reproductive rates and herd condition, the average number of fetuses per doe provides an additional index to determine site-specific herd health. Average number of fetuses per doe ranged from a low of 1.5 on Caston Creek WMA in Franklin and Amite Counties, Chickasaw WMA in Chickasaw County, and Old Pearl Game Management in Simpson County, to a high of 2.2 on Strong Hunting Club in Monroe County.

### **Body Condition**

Body condition data collected during herd health evaluations include dressed weight and kidney fat index (KFI). Average dressed weight only includes N2 deer. A wide range of weights are apparent due to soil type, deer herd condition, and habitat type. In general, dressed weight is a reliable indicator to help gauge herd condition but should not be used to compare different sites unless all soil and habitat types are uniform.

KFI provides a quantitative index to energy levels within a deer herd. KFI is calculated by expressing the weight of the kidney fat as a percentage of the kidney weight. Substandard kidney fat levels were found at several areas. The highest value during 2010 was seen on Twin Oaks WMA in Sharkey County.

### Disease

During deer herd health evaluations, blood serum samples are collected from each deer. The serum samples are tested for antibodies to the various sub-types of Hemorrhagic Disease (HD). HD can be caused by several different strains of either the epizootic hemorrhagic disease (EHD) virus or the bluetongue (BT) virus. The presence of antibodies indicates previous exposure, not current infection. Due to time constraints, the serotype information described is for the 2009 Deer Herd Health Evaluations. Deer from 23 of the 25 collection sites tested positive for the EHD virus, and deer from 23 of the 25 collection sites tested positive for the BT virus. The specific serotypes are found in **Table 4**.

Chronic Wasting Disease (CWD) samples were also taken on most of the deer collected during the 2009 herd health evaluations. There was no incidence of CWD found in any samples.

| Natchez State ParkAdams119%E1, E2Box BCarroll888%E1, E2, B10, BCamp ShelbyForrest1362%E1, E2, B10, BCamp McCainGrenada1060%E1, E2, B10, BWilderness WestHolmes967%E1, E2, B10, BBlack BearIssaquena333%E1, E2, B10, BMahannah WMAIssaquena850%E1, E2, B10, BPascagoula WMAJackson/George650%E1, E2, B10, BChickasawhay WMAJones1182%E1, E2, B10, BChickasawhay WMAJones1145%E1, E2, B10, BDry CreekMadison6650%E1, E2, B10, BBozeman FarmsMadison1182%E1, E2, B10, BChrick Say Nix WMAJones1182%E1, E2, B10, BChrie MMadison6633%E1, E2, B10, BBozeman FarmsMadison1182%E1, E2, B10, BChrie MNoxubee1267%E1, E2, B10, BChrie MNoxubee1267%E1, E2, B10, BChrie MNoxubee1267%E1, E2, B10, BChrie MSharkey633%E1, E2, B10, BChrie MSharkey633%E1, E2, B10, BChrie MSharkey633%E1, E2, B10, BChrie MSharkey633%E1, E2, B10, BChrie Stean Nix WMASharkey6 <th>to EH</th> <th>UV and BIV in Missi</th> <th>ssippi white</th> <th>e-tallea De</th> <th>er</th>  | to EH                   | UV and BIV in Missi      | ssippi white | e-tallea De | er                    |
|--|-------------------------|--------------------------|--------------|-------------|-----------------------|
| Box BCarroll888%E1, E2, B10, ICamp ShelbyForrest1362%E1, E2, B10, ICamp McCainGrenada1060%E1, E2, B10, IWilderness WestHolmes967%E1, E2, B10, IBlack BearIssaquena333%E1, E2, B10, IMahannah WMAIssaquena850%E1, E2, B10, IPascagoula WMAIawamba/Monroe/Prentiss1182%E1, E2, B10, ICanal Section WMAJackson/George650%E1, E2, B10, IPascagoula WMAJones1145%E1, E2, B10, IChickasawhay WMAJones1182%E1, E2, B10, IDry CreekMadison650%E1, E2, B10, IBozeman FarmsMadison1182%E1, E2, B10, IVates InsideNoxubee1267%E1, E2, B10, IChircle MNoxubee1257%E1, E2, B10, ITwin Oaks WMASharkey633%E1, E2, B10, ISunflower WMASharkey633%E1, E2, B10, IOxbowMaren3100%E1, E2, B10, IAllen StationWarren3100%E1, E2, B10, I  | Location                | County                   | # of Samples | Prevalence  | Serotypes             |
| Camp Shelby         Forrest         13         62%         E1, E2, B10, T           Camp McCain         Grenada         10         60%         E1, E2, B10, T           Wilderness West         Holmes         9         67%         E1, E2, B10, T           Black Bear         Issaquena         3         33%         E1, E2, B10, T           Mahannah WMA         Issaquena         8         50%         E1, E2, B10, T           Canal Section WMA         Isaaquena         8         50%         E1, E2, B10, T           Pascagoula WMA         Jackson/George         6         50%         E1, E2, B10, T           Pascagoula WMA         Jones         11         82%         E1, E2, B10, T           Kemper Cooperative         Kemper         15         33%         E1, E2, B10, T           Interstate Hunting Club         Lauderdale         8         38%         E1, E2, B10, T           Dry Creek         Madison         11         82%         E1, E2, B10, T           Vates Inside         Noxubee         12         67%         E1, E2, B10, T           Chrcle M         Noxubee         12         67%         E1, E2, B10, T           Sunflower WMA         Sharkey         6         33% | Natchez State Park      | Adams                    | 11           | 9%          | E1, E2                |
| Camp McCain         Grenada         10         60%         E1, E2, B10, B           Wilderness West         Holmes         9         67%         E1, E2, B10, B           Black Bear         Issaquena         3         33%         E1, E2, B10, B           Mahannah WMA         Issaquena         8         50%         E1, E2, B10, B           Canal Section WMA         Issaquena         8         50%         E1, E2, B10, B           Pascagoula WMA         Jackson/George         6         50%         E1, E2, B10, B           Chickasawhay WMA         Jones         11         82%         E1, E2, B10, B           Chickasawhay WMA         Jones         11         45%         E1, E2, B10, B           Interstate Hunting Club         Lauderdale         8         38%         E1, E2, B10, B           Dry Creek         Madison         6         50%         E1, E2, B10, B           Yates Inside         Noxubee         12         67%         E1, E2, B10, B           Circle M         Noxubee         12         75%         E1, E2, B10, B           Sunflower WMA         Sharkey         6         33%         E1, E2, B10, B           Sunflower WMA         Sharkey         10         50% | Box B                   | Carroll                  | 8            | 88%         | E1, E2, B10, B11      |
| Wilderness WestHolmes967%E1, E2, B10, B1Black BearIssaquena333%E1, E2, B10, B1Mahannah WMAIssaquena850%E1, E2, B10, B1Canal Section WMAItawamba/Monroe/Prentiss11182%E1, E2, B10, B1Pascagoula WMAJackson/George650%E1, E2, B10, B1Chickasawhay WMAJones11145%E1, E2, B10, B1Kemper CooperativeKemper1533%E1, E2, B10, B1Interstate Hunting ClubLauderdale838%E1, E2, B10, B1Dry CreekMadison650%E1, E2, B10, B1Bozeman FarmsMadison1182%E1, E2, B10, B1Yates InsideNoxubee1267%E1, E2, B10, B1Charles Ray Nix WMAPanola1182%E1, E2, B10, B1Sunflower WMASharkey633%E1, E2, B10, B1Allen StationMakananaSharken5100%E1, E2, B10, B1  | Camp Shelby             | Forrest                  | 13           | 62%         | E1, E2, B10, B11      |
| Black BearIssaquena333%E1, E2, B10Mahannah WMAIssaquena850%E1, E2, B10Canal Section WMAItawamba/Monroe/Prentiss1182%E1, E2, B10Pascagoula WMAJackson/George650%E1, E2, B10Chickasawhay WMAJones11145%E1, E2, B10Kemper CooperativeKemper11533%E1, E2, B10Interstate Hunting ClubLauderdale838%E1, E2, B10Dry CreekMadison650%E1, E2, B10100Bozeman FarmsMadison1182%E1, E2, B10100Circle MNoxubee11267%E1, E2, B10100Charles Ray Nix WMAPanola11267%E1, E2, B10100Sunflower WMASharkey633%E1, E2, B10100OxbowMalen Station3361, E2, B10, B1100%E1, E2, B10, B1   | Camp McCain             | Grenada                  | 10           | 60%         | E1, E2, B10, B11      |
| Mahannah WMAIssaquena850%E1, E2, B10Canal Section WMAItawamba/Monroe/Prentiss11182%E1, E2, B10Pascagoula WMAJackson/George650%E1, E2, B10Chickasawhay WMAJones11145%E1, E2, B10Chickasawhay WMAMagnes11533%E1, E2, B10Kemper CooperativeKemper1533%E1, E2, B10Interstate Hunting ClubLauderdale838%E1, E2, B10Dry CreekMadison650%E1, E2, B101Bozeman FarmsMadison11182%E1, E2, B101Yates InsideNoxubee1267%E1, E2, B101Charles Ray Nix WMAPanola11182%E1, E2, B101Sunflower WMASharkey633%E1, E2, B101Cypress BendMaren3100%E1, E2, B10, B11Allen StationWarren5100%E1, E2, B10, B1   | Wilderness West         | Holmes                   | 9            | 67%         | E1, E2, B10, B11      |
| Canal Section WMAItawamba/Monroe/Prentiss1182%E1, E2, B10, TPascagoula WMAJackson/George650%E1, E2, B10, TChickasawhay WMAJones1145%E1, E2, B10, TKemper CooperativeKemper1145%E1, E2, B10, TInterstate Hunting ClubLauderdale838%E1, E2, B10, TDry CreekMadison650%E1, E2, B10, TBozeman FarmsMadison1182%E1, E2, B10, TYates InsideNoxubee1267%E1, E2, B10, TCircle MNoxubee1267%E1, E2, B10, TCharles Ray Nix WMAPanola1182%E1, E2, B10, TSunflower WMASharkey633%E1, E2, B10, TCypress BendTallahatchie911%B10Allen StationWarren3100%E1, E2, B10, B1  | Black Bear              | Issaquena                | 3            | 33%         | E1, E2, B10           |
| Pascagoula WMAJackson/George650%E1, E2, B1Chickasawhay WMAJones1145%E1, E2, B10, TKemper CooperativeKemper1533%E1, E2, B10, TInterstate Hunting ClubLauderdale838%E1, E2, B10, TDry CreekMadison650%E1, E2, B10, TBozeman FarmsMadison1182%E1, E2, B10, TYates InsideNoxubee1267%E1, E2, B10, TCircle MNoxubee1275%E1, E2, B10, TCharles Ray Nix WMAPanola1182%E1, E2, B10, TSunflower WMASharkey633%E1, E2, B10, TCypress BendTallahatchie911%B10Allen StationWarren5100%E1, E2, B10, T   | Mahannah WMA            | Issaquena                | 8            | 50%         | E1, E2, B10           |
| Chickasawhay WMAJones1145%E1, E2, B10, TKemper CooperativeKemper1533%E1, E2, B10, TInterstate Hunting ClubLauderdale838%E1, E2, B10, TDry CreekMadison650%E1, E2, B10, TBozeman FarmsMadison1182%E1, E2, B10, TYates InsideNoxubee1267%E1, E2, B10, TCircle MNoxubee1267%E1, E2, B10, TCharles Ray Nix WMAPanola1182%E1, E2, B10, TSunflower WMASharkey633%E1, E2, B10, TCypress BendTallahatchie911%B10Allen StationWarren3100%E1, E2, B10, T   | Canal Section WMA       | Itawamba/Monroe/Prentiss | 11           | 82%         | E1, E2, B10, B11      |
| Kemper CooperativeKemper1533%E1, E2, B10, TInterstate Hunting ClubLauderdale838%E1, E2, B10, TDry CreekMadison650%E1, E2, B10, TBozeman FarmsMadison1182%E1, E2, B10, TYates InsideMadison1267%E1, E2, B10, TCircle MNoxubee1275%E1, E2, B10, TCharles Ray Nix WMAPanola1182%E1, E2, B10, TSunflower WMASharkey633%E1, E2, B10, TCypress BendTallahatchie911%B10OxbowWarren3100%E1, E2, B10, TAllen StationWarren5100%E1, E2, B10, T   | Pascagoula WMA          | Jackson/George           | 6            | 50%         | E1, E2, B11           |
| Interstate Hunting ClubLauderdale838%E1, E2, B10, TDry CreekMadison650%E1, E2, B10, TBozeman FarmsMadison1182%E1, E2, B10, TYates InsideNoxubee1267%E1, E2, B10, TCircle MNoxubee1257%E1, E2, B10, TCharles Ray Nix WMAPanola1182%E1, E2, B10, TTwin Oaks WMASharkey633%E1, E2, B10, TSunflower WMASharkey633%E1, E2, B10, TCypress BendIallahatchie911%B10OxbowWarren3100%E1, E2, B10, B1Allen StationWarren5100%E1, E2, B10, B1  | Chickasawhay WMA        | Jones                    | 11           | 45%         | E1, E2, B10, B11      |
| Dry CreekMadison650%E1, E2, B10, TBozeman FarmsMadison1182%E1, E2, B10, TYates InsideNoxubee1267%E1, E2, B10, TCircle MNoxubee1275%E1, E2, B10, TCharles Ray Nix WMAPanola1182%E1, E2, B10, TTwin Oaks WMASharkey633%E1, E2, B10, TSunflower WMASharkey1050%E1, E2, B10, TCypress BendMaren3100%E1, E2, B10, B1Allen StationWarren5100%E1, E2, B10, B1   | Kemper Cooperative      | Kemper                   | 15           | 33%         | E1, E2, B10, B11      |
| Bozeman FarmsMadison1182%E1, E2, B10, TYates InsideNoxubee1267%E1, E2, B10, TCircle MNoxubee1275%E1, E2, B10, TCharles Ray Nix WMAPanola1182%E1, E2, B10, TTwin Oaks WMASharkey633%E1, E2, B10, TSunflower WMASharkey633%E1, E2, B10, TCypress BendIallahatchie911%B10OxbowWarren3100%E1, E2, B10, B1Allen StationWarren5100%E1, E2, B10, B1   | Interstate Hunting Club | Lauderdale               | 8            | 38%         | E1, E2, B10, B11      |
| Yates InsideNoxubee1267%E1, E2, B10, TCircle MNoxubee1275%E1, E2, B10, TCharles Ray Nix WMAPanola1182%E1, E2, B10, TTwin Oaks WMASharkey633%E1, E2, B10, TSunflower WMASharkey1050%E1, E2, B10, TCypress BendTallahatchie911%B10OxbowWarren3100%E1, E2, B10, B1Allen StationWarren5100%E1, E2, B10, B1   | Dry Creek               | Madison                  | 6            | 50%         | E1, E2, B10, B11      |
| Circle MNoxubee1275%E1, E2, B10, TCharles Ray Nix WMAPanola1182%E1, E2, B10, TTwin Oaks WMAMarkey633%E1, E2, B10, TSunflower WMASharkey1050%E1, E2, B10, TCypress BendTallahatchie911%B10OxbowWarren3100%E1, E2, B10, B1Allen StationWarren5100%E1, E2, B10, B1  | Bozeman Farms           | Madison                  | 11           | 82%         | E1, E2, B10, B11      |
| Charles Ray Nix WMAPanola1182%E1, E2, B10, TTwin Oaks WMASharkey633%E1, E2, B10, TSunflower WMASharkey1050%E1, E2, B10, TCypress BendTallahatchie911%B10OxbowWarren3100%E1, E2, B10, B1Allen StationWarren5100%E1, E2, B10, B1   | Yates Inside            | Noxubee                  | 12           | 67%         | E1, E2, B10, B11      |
| Twin Oaks WMASharkey633%E1, E2, B10, TSunflower WMASharkey1050%E1, E2, B10, TCypress BendTallahatchie911%B10OxbowWarren3100%E1, E2, B10, B1Allen StationWarren5100%E1, E2, B10, B1   | Circle M                | Noxubee                  | 12           | 75%         | E1, E2, B10, B11      |
| Sunflower WMASharkey1050%E1, E2, B10, TCypress BendTallahatchie911%B10OxbowWarren3100%E1, E2, B10, B1Allen StationWarren5100%E1, E2, B10, B1   | Charles Ray Nix WMA     | Panola                   | 11           | 82%         | E1, E2, B10, B11      |
| Cypress BendTallahatchie911%B10OxbowWarren3100%E1, E2, B10, B1Allen StationWarren5100%E1, E2, B10, B1  | Twin Oaks WMA           | Sharkey                  | 6            | 33%         | E1, E2, B10, B11      |
| Oxbow         Warren         3         100%         E1, E2, B10, B1           Allen Station         Warren         5         100%         E1, E2, B10, B1  | Sunflower WMA           | Sharkey                  | 10           | 50%         | E1, E2, B10, B11      |
| Allen Station         Warren         5         100%         E1, E2, B10, I   | Cypress Bend            | Tallahatchie             | 9            | 11%         | B10                   |
|  | Oxbow                   | Warren                   | 3            | 100%        | E1, E2, B10, B11, B13 |
| Ashbrook Island Washington 10 00/  | Allen Station           | Warren                   | 5            | 100%        | E1, E2, B10, B11      |
| ASHOLOOK ISIAHA WASHINGton 10 0%   | Ashbrook Island         | Washington               | 10           | 0%          |                       |
| WoodlawnWilkinson367%E1, E2, B1  | Woodlawn                | Wilkinson                | 3            | 67%         | E1, E2, B11           |
| Panther Swamp NWR         Yazoo         10         100%         E1, E2, B1   | Panther Swamp NWR       | Yazoo                    | 10           | 100%        | E1, E2, B10           |

# Table 4. 2009 Serologic Test Results for Antibodiesto EHDV and BTV in Mississippi White-tailed Deer

E1 = EHDV-1, E2 = EHDV-2, B2 = BTV-2, B10 = BTV-10, B11 = BTV-11, B13 = BTV-13, B17 = BTV-17 From the Southeastern Cooperative Wildlife Disease Study College of Veterinary Medicine,

The University of Georgia, Athens, GA

# **2010 Deer Herd Health Evaluations**

|    |                       | lable 5.   | 2010 Dee                 | r Herc               | 1 H               | eal           | th Eva            | luatio                 | n Sum       | mary   |     |     |       |       |
|----|-----------------------|--|--------------------------|----------------------|-------------------|---------------|-------------------|------------------------|-------------|--------|-----|-----|-------|-------|
| #  | Soil<br>Area          | Image: Collection SiteCountyImage: CollectionImage: CollectionCollectionSiteSiteSite |                          | Mean Conception Date | Mean Fawning Date | Average # CLs | Average # Fetuses | Average Dressed Weight | Average KFI |        |     |     |       |       |
| 1  | Batture               | Ashbrook Island  | Washington               | 8-Feb                | 10                | 10            | 24-Nov            | 29-Dec                 | 10-Dec      | 24-Jun | 1.6 | 1.6 | 86.9  | 130.9 |
| 2  | UThick                | Cameron Plantation   | Madison                  | 22-Feb               | 11                | 11            | 6-Dec             | 25-Jan                 | 30-Dec      | 14-Jul | 2.0 | 1.8 | 91.1  | 132.0 |
| 3  | LThin                 | Caston Creek WMA   | Franklin &<br>Amite      | 15-Mar               | 8                 | 8             | 1-Dec             | 21-Jan                 | 4-Jan       | 19-Jul | 1.4 | 1.5 | 80.0  | 32.5  |
| 4  | UCP                   | Chickasaw WMA  | Chickasaw                | 15-Mar               | 18                | 11            | 22-Dec            | 15-Feb                 | 14-Jan      | 29-Jul | 2.1 | 1.5 | 80.5  | 65.0  |
| 5  | LThin                 | Copiah Co WMA  | Copiah                   | 11-Mar               | 9                 | 9             | 2-Dec             | 19-Jan                 | 25-Dec      | 9-Jul  | 1.8 | 1.9 | 80.6  | 116.1 |
| 6  | UCP                   | Divide Section WMA   | Prentiss &<br>Tishomingo | 8-Mar                | 11                | 9             | 15-Dec            | 8-Feb                  | 12-Jan      | 27-Jul | 1.9 | 1.8 | 80.6  | 65.1  |
| 7  | Delta                 | Mahannah WMA   | Warren &<br>Issaquena    | 17-Feb               | 10                | 10            | 24-Nov            | 3-Feb                  | 27-Dec      | 11-Jul | 2.0 | 2.0 | 94.9  | 172.5 |
| 8  | LThick                | Sandy Creek WMA  | Adams &<br>Franklin      | 16-Mar               | 3                 | 2             | 29-Dec            | 18-Jan                 | 6-Jan       | 21-Jul | 1.5 | 1.0 | 75.0  | 96.7  |
| 9  | Delta                 | Twin Oaks WMA  | Sharkey                  | 18-Feb               | 8                 | 8             | 21-Dec            | 10-Jan                 | 1-Jan       | 16-Jul | 2.1 | 1.9 | 103.1 | 185.4 |
| 10 | LCP                   | Old Pearl Game Mgt   | Simpson                  | 10-Mar               | 3                 | 2             | 23-Dec            | 9-Jan                  | 1-Jan       | 16-Jul | 2.0 | 1.5 | 85.0  | 63.1  |
| 11 | BP                    | Triple Creek Game<br>Farm  | Jasper                   | 18-Mar               | 9                 | 9             | 13-Dec            | 4-Feb                  | 12-Jan      | 27-Jul | 1.9 | 1.8 | 73.0  | 87.5  |
| 12 | Delta                 | Infolab  | Quitman                  | 22-Mar               | 4                 | 4             | 28-Nov            | 9-Jan                  | 16-Dec      | 30-Jun | 2.0 | 2.0 | 104.8 | 69.0  |
| 13 | UCP                   | Smallwood JA Young   | Winston                  | 10-Mar               | 13                | 11            | 19-Dec            | 22-Jan                 | 31-Dec      | 15-Jul | 1.8 | 1.7 | 83.0  | 56.7  |
| 14 | LThick                | Oxbow Hunting Club   | Warren                   | 8-Mar                | 9                 | 8             | 14-Dec            | 22-Jan                 | 2-Jan       | 17-Jul | 2.0 | 1.8 | 95.6  | 103.4 |
| 15 | Delta                 | Panther Swamp NWR  | Yazoo                    | 11-Mar               | 8                 | 7             | 2-Dec             | 31-Dec                 | 14-Dec      | 28-Jun | 2.1 | 2.0 | 90.1  | 182.7 |
| 16 | Delta                 | Hillside NWR   | Holmes                   | 22-Mar               | 11                | 8             | 6-Dec             | 8-Feb                  | 27-Dec      | 11-Jul | 2.1 | 2.1 | 103.1 | 84.1  |
| 17 | UCP                   | Hogan Bottom/<br>McMorrough Camp   | Monroe                   | 11-Mar               | 3                 | 3             | 2-Dec             | 31-Dec                 | 11-Dec      | 25-Jun | 1.7 | 1.7 | 66.0  | 51.3  |
| 18 | BP Strong H.C. Monroe |  | Monroe                   | 10-Mar               | 7                 | 5             | 9-Dec             | 17-Jan                 | 24-Dec      | 8-Jul  | 2.2 | 2.2 | 85.6  | 64.7  |
|    |                       |  |                          | Total:               | 155               | 135           | A                 | verage:                | 30-Dec      | 14-Jul |     |     |       |       |

N1=Number of females 1.5+ years old

N2=Number of females 2.5+ years old

# **2010 Deer Herd Health Evaluations**



# **Mississippi Bowhunter Observations**

he MDWFP began distributing Bowhunter Observation Books for the 2005 – 2006 deer archery season. Efforts to increase distribution of the books increased during the following years. Four prizes were donated for the 2009 – 2010 season to increase participation. Southern Outdoor Technologies donated a Sportsman's Condo, Hunting Solutions donated a Millennium Hang-On stand, Mississippi Bowhunters Association donated a Millennium Hang-On stand and stick ladder, and Longleaf Camo donated a suit of camouflage. The prizes were given away in December through a random drawing of returned observation <5 books. Winners included bowhunters from Cleveland, Tupelo, Bolton, and Covington, LA. To be eligible for the drawing, bowhunters must record the deer they observe during each bowhunt in Mississippi and return the book by the deadline. Bowhunter Observation Books were distributed through sporting goods stores, feed stores, and were available online. Over 1,000 books were distributed during September 2009. A 2 total of 68 books were returned by the December 1st deadline. Participating bowhunters observed 3,833 total deer yielding 0.98 deer per hour. Bowhunters recorded 3,919.5 hours in 63 counties. A description of deer observed is shown in Table 0 7. Total hours of observation by county are presented in Figssaquena ure 6. Data collected was not sufficient to estimate sex ratio S and fawn crop by county.

Bowhunter Observation Books produced very similar statewide estimates for the past five years (**Table 7**). According to this data, Mississippi had about 2.5 does for every buck, and about 1 fawn for every 2 does going into the 2009 hunting season. A 1:2.5 buck to doe ratio is not bad, but it is certainly not great. The goal of most deer managers is to keep the sex ratio between 1:1 and 1:2. A healthy herd should be producing nearly 1 fawn for every doe in the population. According to the observations, Mississippi is producing only about one-half a fawn for every doe.

We plan to continue distributing Bowhunter Observation Books during 2010. If you would like to assist the MDWFP in collecting deer observation data during archery season, and automatically enter into the random drawings, you may download the book from our website (<u>www.mdwfp.com/deer</u>), email williamm@mdwfp.state.ms.us, or call 601-432-2199 to request a book. If calling or emailing, please provide a physical address to mail the book. Thanks to all bowhunters who have assisted in collecting this data.



### Table 6. Total Hours and Deer Observed in 2009

| <b>Total Hours</b> | 2-3 Points | 4-7 Points | 8+ Points | Does  | Fawns | Unknown Deer |
|--------------------|------------|------------|-----------|-------|-------|--------------|
| 3,919.5            | 341        | 249        | 160       | 1,746 | 816   | 521          |

### Table 7. Bowhunter Observation Results 2005-2009

| Year | Total Hours | Total Deer Observed | <b>Buck to Doe Ratio</b> | Fawn to Doe Ratio  | Deer Observed Per Hour |
|------|-------------|---------------------|--------------------------|--------------------|------------------------|
| 2005 | 1,489.25    | 1,262               | 1 Buck : 2.40 Does       | 0.60 Fawns : 1 Doe | 1.06                   |
| 2006 | 3,431.75    | 3,803               | 1 Buck : 2.69 Does       | 0.52 Fawns : 1 Doe | 1.11                   |
| 2007 | 5,669.75    | 6,008               | 1 Buck : 2.92 Does       | 0.43 Fawns : 1 Doe | 1.06                   |
| 2008 | 6,425.25    | 7,343               | 1 Buck : 2.50 Does       | 0.48 Fawns : 1 Doe | 1.14                   |
| 2009 | 3,919.50    | 3,833               | 1 Buck : 2.33 Does       | 0.47 Fawns : 1 Doe | 0.98                   |

# **Antler Regulations**

New antler criteria were implemented in the 2009 – 2010 hunting season. In addition, a new zone, Zone 3, was created and the former Zone 1 was reduced. Zone lines are based on soil regions using highways and interstates as dividing boundaries. See **Figure 8** for zone boundaries.

Within each Deer Management Zone, hunting opportunity was allowed as follows:

1) Zone 1 allowed hunting opportunity from October 1 through January 31. Legal bucks were those having a minimum 10 inch inside spread or a minimum 13 inch main beam.

2) Zone 2 allowed hunting opportunity from October 15 through February 15. Legal bucks were those having a minimum 10 inch inside spread or a minimum 13 inch main beam.

3) Zone 3 allowed hunting opportunity from October 1 through January 31. Legal bucks were those having a minimum 12 inch inside spread or a minimum 15 inch main beam.

The objective of these Deer Management Zones was to protect the majority of 11/2 year old bucks statewide. This protection was intended to prevent over-harvest of young bucks and improve antler size as bucks get older. In order to accomplish this, the antler criteria needed to be easy to use, yet unique for each soil region because some soil regions significantly grow bigger deer than others. Therefore, the three Deer Management Zones were implemented using specific antler criteria and season structure for the respective zone. All three zones had



49

the same season structure as in previous years. Biological data did not warrant changes in season structure. Hunting opportunity was allowed in Zones 1 and 3 from October 1 through January 31. Hunting opportunity was allowed in Zone 2 from October 15 through February 15. Zone 2 opened two weeks later to protect adult does which may have fawns too young to be orphaned. Also, buck hunting opportunity was extended

through February 15 to allow more hunting opportunity during the breeding period. This shifted season is based on Deer Herd Health Evaluation Data which illustrates later breeding during January – mid February.

45

78

BI

49

35

Inside spread antler restrictions placed on many Wildlife Management Areas (WMAs) are in their sixth year of existence. Antler regulations on most WMAs were amended for the 2007 - 2008 hunting season to include a minimum main beam length restriction while dropping the four-point restriction. Under the new antler regulations, legal bucks must meet either the minimum inside spread or the minimum main beam length. Results from studies on the effects of the "four-point law" and apparent over-harvest of bucks on some WMAs support these antler regulations. After the 2008 - 2009 season. Wildlife Management Areas offering exclusive youth opportunity were the only areas not required to have antler restrictions.

Beginning in the 2003 – 2004 hunting season, management buck tags were issued to WMAs and DMAP properties allowing additional harvest of sub-optimal bucks. For more information on management buck tags, see the Deer Tags section of this report on **page 36**.

## High Fenced Enclosures 2009-2010 Permit Year

### Permits

Public Notice W1-3780 requires owners of enclosures containing white-tailed deer to obtain an annual Facility Permit from the MDWFP. The permit is valid from July 1 through June 30. For the 2009 – 2010 permit year, 84 facility permits were issued. Public Notice W1-3780 allows white-tailed deer breeding pens within enclosures of at least 300 acres. For the 2009 – 2010 permit year, 13 white-tailed deer breeder permits were issued. As allowed by Public Notice W1-3780, one intrastate white-tailed deer transport permit was issued, with one doe transferred from one facility to another for stocking purposes.

As described in Section 49-11-3, Mississippi Code of 1972, the MDWFP may issue operating licenses to any person, partnership, association, or corporation for the operation of commercial wildlife enclosures. Each commercial wildlife enclosure shall contain a minimum of 300 acres in one tract of leased or owned land. During the 2009 – 2010 permit year, 17 big game commercial wildlife enclosure licenses were issued.

### **Enclosure Management** Assistance Program

As required by Public Notice W1-3780, all permitted high-fenced enclosures containing white-tailed deer must be enrolled in the Enclosure Management Assistance Program (EMAP). The owner of a permitted high-fenced enclosure must work with an MDWFP approved wildlife biologist to manage the white-tailed deer herd within the enclosure. The wildlife biologist must submit an annual management plan for the permitted high-fenced enclosure, which is incorporated into the Annual Facility Permit Application.

EMAP is a sub-level of DMAP (Deer Management Assistance Program). The starting point of EMAP is goal/objective setting by the enclosure owner to manage the white-tailed deer herd within their enclosure. Once goals and objectives are set, biological data are collected from harvested white-tailed deer, (i.e., weights, antler measurements, lactation data on does, and a jaw-bone pulled to determine the age of each deer harvested). The enclosure owner is responsible for the collection of biological data. The wildlife biologist is responsible for supplying the enclosure owner with harvest data sheets and jawbone tags.

After analyzing the harvest data and evaluating the habitat, the biologist will discuss harvest strategies with the enclosure owner to meet specific goals within limitations of maintaining a healthy herd and habitat. The wildlife biologist must submit EMAP deer harvest data to the MDWFP annually in the same manner as DMAP data are submitted. However, EMAP and DMAP deer harvest data will be maintained separately by the MDWFP. EMAP cooperators receive a harvest summary report after each hunting season. This report contains a detailed analysis of current and historical harvest as well as graphs and charts that show trend directions while facilitating data interpretation. Progress towards the goals and objectives stated in the annual management plan will be continuously evaluated using this report.

For management of deer herds within high-fenced enclosures and upon the request of the wildlife biologist as outlined in the annual management plan, the MDWFP may issue management buck and doe tags to EMAP properties to allow the harvest of does and management bucks in excess of the annual and daily bag limits.

For the 2009 – 2010 hunting season, harvest data were submitted for 43 enclosures, with 391 bucks and 543 does harvested. For management purposes, 290 buck tags were issued to 19 enclosures with 105 buck tags reported as used, and 575 doe tags were issued to 22 enclosures.

### **Chronic Wasting Disease Surveillance**

Regulations adopted by the Mississippi Commission on Wildlife, Fisheries, and Parks (Public Notice W1-3780) allow the movement of captive white-tailed deer from one permitted high-fenced enclosure to another permitted high-fenced enclosure within Mississippi only if the high-fence enclosure from which the deer originate is participating in the Mississippi White-tailed Deer Herd CWD Certification Program. No person may import a live white-tailed deer into Mississippi pursuant to Section §49-7-54, Mississippi Code of 1972.

It is the responsibility of the enclosure/breeding pen owner to obtain sampling supplies and collect samples. Retropharyngeal lymph nodes and obex tissue must be collected for testing.

The MDWFP supplies sampling data sheets to the enclosure/breeding pen owner. Once samples are collected, the MDWFP submits samples to the testing laboratory and supplies test results back to the enclosure/breeding pen owner. The contract laboratory for all captive CWD testing is the National Veterinary Services Laboratories. Visit www.mdwfp.com/deer for more information regarding the *Mississippi White-tailed Deer Herd CWD Certification Program*.

For the 2009 – 2010 permit year, 98 samples were taken from white-tailed deer within 7 high-fenced enclosures and submitted to the National Veterinary Services Laboratories for CWD testing. All samples were tested and evidence of CWD was not detected in any of the samples.

## **Deer Tags**

### **Management Buck Tags**

During the 2003 – 2004 hunting season, sub-4 point bucks were legal for harvest for the first time since 1995. Sub-4 point tags were issued by biologists to DMAP properties on a limited basis for management purposes. During the 2005 – 2006 season, tags were expanded to include management bucks. Management buck tags were issued to DMAP properties allowing additional harvest of sub-optimal bucks. Tagged bucks did not count against the annual bag limit. During the 2006 – 2007 season, tagged bucks did not count against the annual and daily bag limit. The management buck harvest criteria were for an individual property and determined by the DMAP biologist. A written management justification issued by the MDWFP must accompany any request for such a permit. Management bucks harvested under this permit must be identified with a tag immediately upon possession.

Management buck tags were issued to Mahannah and Twin Oaks WMAs for the 2009 - 2010 season. A total of 70 tags were issued to these WMAs and 25 of these tags were used. Since the 2003 - 2004 season, less than 70 tags were used by hunters annually on WMAs statewide, even though many more tags were available to hunters (**Figure 9**). Because of low usage of the tags by hunters, tags were issued only to Mahannah and Twin Oaks WMAs during the 2009 - 2010 season. These two WMAs had the highest usage of tags in the past.

Management buck tags were issued to the following 137 DMAP properties for the 2009 – 2010 season: 11 Shot, 3 Creeks, Archer Island, Arkabutla COE, Ashbrook, Atwood, B & J, Barefoot, Bayou Boyz, Beech Ridge, Bellweather, Berry Farms, Big Black Wildlife, Big O, Big River Farms, Bill Miller, Black Bayou, Black Bear, Black Prairie Outfitters, Black River, Bogue Falia, Bonanza, Box B, Bozeman, Breakwater, Brierfield, Brooksville, Burke, Burl Branch, Cameron Plantation, Canemount Plantation, Casey Jones, Catfish Point, Cedar Ridge, Chad Bradford, Champion Hill, Chesterfield, Chief, Clifton Plantation, Coahoma County Conservation League, Cobb's Crossing, Concordia, Cypress Bend, Cypress Run, Dale Pierce, Dancin' Coyote, Derek White, Deviney Free Range, Dixon Brothers, Dixon Lake, Donaldson Point, Double D, Duck Lake, Eastline, Egypt, Ellislie, Fairview, Gaddis Farm Heifer Pasture, Glasscock, Goat Hill, Goldig Farms, Greasy Bayou, Grimp, H & H, Halifax, Hardtimes, Hartwood, Head Hunters, Higgs, Hogan Bottom, Homewood, Horseshoe, Hutchenson, Independence, Info Lab, Irwin, Jeff H.C., Josh & Curran Carnell, Luckett, Mabry, Magna Vista, Magna Vista Section, Merigold, Melton Properties, Millbrook, Miller Point, Montgomery - Sligo, Montgomery - Whitaker, Moore Farms, Mt. Ararat Plantation, NAS Meridian, Natchez Island, Noxubee NWR, Outback, Oxbow, P & W Farms, Palmer Farms, Palmyra, Paradise, Parker-Gary, Pinecrest, Pinhook, Prewitt, Providence (Hinds Co.), Pushmataha, Red Gate, Refuge, Richard Reid, Riverbend (Clarke Co.), Riverbend (Rankin Co.), Riverside, Rosedale, Russell Sheffield, Sand Hills, Solitude, Strong, Sun Creek, TCP, Thorton, Togo Island, Tri-Lakes, Triple C, Triple Creek, W.F. Anderson, Ward Lake, West Hill, White Oak, Whitetail Reserve, Wilderness West, Wildwood, Williams Farms, Willow Break, Willow Oaks 1, Willow Oaks 2, Wood Burn, Yalobusha Farms, and Yazoo NWR.

A total of 2,312 tags were issued to these properties and 778 of these tags were used. Number of properties issued tags and the number of tags used decreased slightly compared to the 2008 – 2009 season. However, use of these tags remains high. These tags allow the harvest of sub-optimal bucks that would otherwise be passed up by hunters because the deer would count against the daily and annual bag limit if the tags were not available. Removal of these deer aids in maintaining deer herds at or under habitat carrying capacity.

### **DMAP Antlerless Tags**

MDWFP issues antlerless tags to DMAP properties. This allows the harvest of antlerless deer in excess of the annual and daily bag limits. These tags have been issued since the implementation of DMAP. When antlerless seasons were liberalized statewide, the need for antlerless tags was reduced. However, some landowners and managers still have the need for more antlerless harvest than state bag limits allow.

Antlerless tags are issued by DMAP biologists, based on an individual landowner's or manager's need. The tags can only be used on antlerless deer on the property to which they were issued.

DMAP biologists issued 4,936 tags to 182 DMAP clubs during the 2009 – 2010 season, the most tags issued since the 2003 – 2004 season. The increase in tags issued since the 2003 – 2004 season correlates to increased interest in deer management in Mississippi (**Figure 11**).

### Fee Management Assistance Program

The Fee Management Assistance Program (FMAP) was implemented during the 1989 – 1990 season. It began as a pilot program in two north-central counties at the request of local conservation officers to control expanding deer populations. Under this program, doe tags were purchased for \$10 each, at a rate of one per 50 acres. The landowner or club was required to show proof of ownership or hunting control. FMAP allowed the permittee to harvest antlerless deer in addition to the state bag limit. This program was accepted and quickly spread statewide. Sportsmen realized they could properly harvest does and still maintain a huntable population.

Initially, a large number of permits were sold. However, liberalization of antlerless opportunity has occurred throughout the state. This has decreased the need for permits in most areas to the point of considering termination of the program. There were only 49 permits sold during the 2009 – 2010 hunting season. Use of these tags has substantially decreased over the past 3 years.

Continuation of the program is recommended because it provides an opportunity to harvest antlerless deer in excess of the season bag limit on specific areas that are in excess of the environmental carrying capacity.

# **Deer Tags**



Figure 9. Buck Tags Issued and Used on WMAs

Figure 10. Buck Tags Issued and Used on DMAP Properties





Figure 11. Antlerless Deer Tags Issued on DMAP Properties

## **Deer Management Assistance Program (DMAP)**

hrough a cooperative research program with Mississippi State University in 1976, the Mississippi Department of Wildlife, **T**Fisheries and Parks gained information which provided biologists with the ability to evaluate population density relative to carrying capacity, using condition indicators rather than population estimates or browse surveys. This Cooperative Deer Management Assistance Program (DMAP) directly involved hunters in management through the collection of biological data. The interpretation of these data, in consultation with a biologist, is the guiding principle of DMAP. From a two-county pilot project in its first year, DMAP grew steadily until participation peaked in 1994 at almost 1,200 cooperators with over 3.25 million acres under management.

> **SPECIAL NOTE:** Beginning with the 2001 data, the MDWFP began using a new computer summary program (XtraNet). This may be the cause for drastic differences in some numbers. Once all of the historic data is entered into the XtraNet system the numbers are expected to fall along the same trend, thus eliminating the drastic drop currently observed in the graphs and tables. Additionally, the statewide summary table and all graphs include harvest reports from Wildlife Management Areas (WMAs) and National Wildlife Refuges (NWRs) that collect deer harvest data. WMA and NWR data is not included in the soil region summary tables.

Liberalized season structure and bag limits during the mid-1990's allowed land managers the flexibility to meet harvest objectives outside DMAP guidelines, which resulted in a decline in DMAP participation (Figure 13). This decline reduced both total acreage and number of cooperators

in DMAP. Current enrollment includes 641 cooperators on 1,619,342 acres. Total DMAP cooperators have remained relatively stable since 2002. Total DMAP harvest has mirrored the changes in cooperators and acreage in DMAP over the past few years (Figure 14).

The ability to collect and analyze DMAP data has been exceptional. Hundreds of thousands of deer are now part of the statewide DMAP database. In excess of 10,000 deer have annually been available for comparative purposes since 1983 and over 25,000 deer since 2000 (Figure 14). Analysis of these data over time captured the obvious trends and subtle changes in deer herd condition and structure. These trends and changes would have gone undocumented and possibly undetected without DMAP. Clubs and landowners participating in DMAP may or may not be representative of hunter goals and objectives on a statewide basis. Therefore, deer condition and herd structure on DMAP lands may not reflect herds on un-managed lands. However, a data source representing over 1.5 million acres is credible and can be used to examine trend data. The extensive statewide coverage of private lands DMAP at the county level can be seen in **Table** 8 and in Figure 12.

All DMAP data are evaluated based on soil region. These data are presented in Tables 13-23. These summaries allow individual DMAP cooperators to compare their data to soil region averages. In these tables are two sets of averages as well. The first is an average from 1991 – 1994 and the second is of the last five years (2005 – 2009). The 1991 – 1994 average is the four years prior to the 4-point law. Significant differences are obvious when comparing these averages.

A significant trend in DMAP data is obvious. The average age of all harvested bucks has increased from 2.1 years old in 1991 to 3.0 years old in 2009 (Figure 16). In addition, these older age class bucks are being produced and harvested on a declining acreage base (**Figure 17**).

The percentage of harvested bucks in the older age class-

26 - 50 0 1 - 5 🚽

es (4.5+) has remained constant for the last four seasons (Figure 18). Notice in the same graph, the corresponding decline in the percentage of 2.5 year old bucks over the same time period. These changes are very evident when comparing the past 10

### Figure 12.



### **Deer Management Assistance Program (DMAP)**

years to the 1991 – 1994 average. The slight increase in 1.5 year old bucks since 2005 can be attributed to the more wide scale use of management buck tags as well.

Statewide condition data for harvested deer on WMAs, NWRs, and DMAP properties are presented in **Table 12**. This table presents trend data on various antler parameters such as spread, length, circumference, and points. Other information, such as weight and lactation data are also provided in this table.

Soil region condition data for harvested deer on private land DMAP properties only are presented in **Tables 13-23**. These tables also present trend data on various antler parameters such as spread, length, circumference, and points. Other information, such as weight and lactation data are provided in these tables as well. WMA and NWR harvested deer are not included in the soil region tables to give a better representation of the deer herd on private lands on DMAP.

A comparison of WMAs/NWRs to DMAP properties reveals some interesting trends as well (Pages 42-43). On DMAP properties, doe harvest has exceeded buck harvest since the early 1990's, but on WMAs/NWRs doe harvest has only exceeded buck harvest 6 out of the past 9 years. Since 2004, acres per deer harvested have declined on both DMAP and WMAs/NWRs with a slight increase during last season. Since 2003 on WMAs/NWRs, it is taking fewer acres to produce 3.5+ bucks (Table 20). This is most likely due to the implementation of minimum spread/ main beam criteria on these WMAs/ NWRs. Bucks harvested on DMAP properties on average were older, had 2 inch longer main beams, and inside spread was 1.5 inches wider than bucks harvested on WMAs/NWRs. One thing to remember about the harvest data from WMAs/NWRs is that these are minimum harvest numbers. Compliance with turning in data on some WMAs and NWRs is poor.



Rick Sullivan (Claiborne County)





Swayze Bozeman (Madison County)

# **Mississippi DMAP Data**







Figure 16. Average Age All Bucks



Figure 17. Acres/3.5+ Year Old Bucks

Figure 18. Percentage of Bucks by Age Class



# DMAP

# Table 8. DMAP Participation and Harvest by CountyDuring the 2009-2010 Season

|             | SIL         |        |      | Harves | t     |  |
|-------------|-------------|--------|------|--------|-------|--|
| yunty       | Cooperators | Acres  | acks | Does   | Total |  |
| ర           |             |        | ē    |        |       |  |
| Adams       | 20          | 60,708 | 364  | 533    | 897   |  |
| Alcorn      | 0           |        |      |        |       |  |
| Amite       | 6           | 17,942 | 84   | 128    | 212   |  |
| Attala<br>- | 12          | 45,616 | 283  | 368    | 651   |  |
| Benton      | 1           | 1,200  | 10   | 15     | 25    |  |
| Bolivar     | 8           | 60,927 | 274  | 579    | 853   |  |
| Calhoun     | 1           | 1,800  | 8    | 10     | 18    |  |
| Carroll     | 14          | 27,161 | 150  | 320    | 470   |  |
| Chickasaw   | 0           |        |      |        |       |  |
| Choctaw     | 5           | 7,298  | 36   | 57     | 93    |  |
| Claiborne   | 52          | 92,220 | 736  | 1,031  | 1,767 |  |
| Clarke      | 4           | 18,727 | 46   | 107    | 153   |  |
| Clay        | 7           | 18,785 | 87   | 140    | 227   |  |
| Coahoma     | 9           | 48,364 | 200  | 243    | 443   |  |
| Copiah      | 10          | 25,746 | 139  | 227    | 366   |  |
| Covington   | 0           |        |      |        |       |  |
| Desoto      | 2           | 6,537  | 22   | 26     | 48    |  |
| Forrest     | 0           |        |      |        |       |  |
| Franklin    | 3           | 6,741  | 33   | 44     | 77    |  |
| George      | 1           | 750    | 3    | 0      | 3     |  |
| Greene      | 3           | 8,352  | 41   | 18     | 59    |  |
| Grenada     | 6           | 21,685 | 70   | 209    | 279   |  |
| Hancock     | 1           | 5,880  | 0    | 0      | 0     |  |
| Harrison    | 0           |        |      |        |       |  |
| Hinds       | 20          | 34,344 | 229  | 419    | 648   |  |
| Holmes      | 20          | 37,126 | 170  | 353    | 523   |  |
| Humphries   | 6           | 10,856 | 21   | 40     | 61    |  |
| Issaquena   | 43          | 89,265 | 563  | 549    | 1,112 |  |
| Itawamba    | 2           | 14,500 | 77   | 101    | 178   |  |
| Jackson     | 3           | 7,004  | 26   | 28     | 54    |  |
| Jasper      | 6           | 11,389 | 50   | 92     | 142   |  |
| Jefferson   | 25          | 67,842 | 269  | 589    | 858   |  |
| Jeff Davis  | 1           | 1,000  | 6    | 16     | 22    |  |
| Jones       | 0           |        |      |        |       |  |
| Kemper      | 9           | 22,624 | 118  | 182    | 300   |  |
| Lafayette   | 4           | 10,363 | 31   | 81     | 112   |  |
| Lamar       | 3           | 5,008  | 14   | 33     | 47    |  |
| Lauderdale  | 6           | 35,486 | 128  | 183    | 311   |  |
| Lawrence    | 3           | 11,856 | 47   | 76     | 123   |  |
| Leake       | 4           | 9,072  | 55   | 63     | 118   |  |
| Lee         | 0           |        |      |        |       |  |
| Leflore     | 8           | 12,947 | 58   | 132    | 190   |  |

|              | LS.         |           |       | Harvest | :      |
|--------------|-------------|-----------|-------|---------|--------|
| County       | Cooperators | Acres     | Bucks | Does    | Total  |
| Lincoln      | 1           | 3,642     | 0     | 0       | 0      |
| Lowndes      | 15          | 24,157    | 102   | 132     | 234    |
| Madison      | 23          | 44,823    | 293   | 651     | 944    |
| Marion       | 2           | 8,608     | 52    | 31      | 83     |
| Marshall     | 2           | 7,190     | 11    | 33      | 44     |
| Monroe       | 14          | 41,139    | 171   | 343     | 514    |
| Montgomery   | 18          | 34,593    | 168   | 356     | 524    |
| Neshoba      | 0           |           |       |         |        |
| Newton       | 2           | 5,546     | 47    | 42      | 89     |
| Noxubee      | 17          | 45,725    | 192   | 344     | 536    |
| Oktibbeha    | 2           | 3,300     | 8     | 18      | 26     |
| Panola       | 5           | 8,639     | 27    | 123     | 150    |
| Pearl River  | 5           | 16,903    | 38    | 29      | 67     |
| Perry        | 1           | 1,810     | 7     | 4       | 11     |
| Pike         | 0           |           |       |         |        |
| Pontotoc     | 0           |           |       |         |        |
| Prentiss     | 2           | 16,000    | 14    | 21      | 35     |
| Quitman      | 1           | 6,656     | 5     | 57      | 62     |
| Rankin       | 10          | 23,636    | 94    | 161     | 255    |
| Scott        | 5           | 38,647    | 87    | 122     | 209    |
| Sharkey      | 1           | 2,550     | 0     | 0       | 0      |
| Simpson      | 3           | 13,972    | 26    | 36      | 62     |
| Smith        | 2           | 9,467     | 32    | 34      | 66     |
| Stone        | 4           | 5,234     | 23    | 16      | 39     |
| Sunflower    | 1           | 1,585     | 1     | 9       | 10     |
| Tallahatchie | 3           | 3,990     | 12    | 24      | 36     |
| Tate         | 0           |           |       |         |        |
| Tippah       | 5           | 19,348    | 69    | 168     | 237    |
| Tishomingo   | 5           | 16,345    | 50    | 41      | 91     |
| Tunica       | 3           | 9,264     | 29    | 73      | 102    |
| Union        | 4           | 17,690    | 33    | 34      | 67     |
| Walthall     | 1           | 5,600     | 29    | 22      | 51     |
| Warren       | 91          | 149,214   | 1,247 | 1,516   | 2,763  |
| Washington   | 14          | 51,018    | 300   | 388     | 688    |
| Wayne        | 0           |           |       |         |        |
| Webster      | 3           | 9,227     | 64    | 111     | 175    |
| Wilkinson    | 14          | 43,212    | 265   | 344     | 609    |
| Winston      | 6           | 19,837    | 82    | 166     | 248    |
| Yalobusha    | 2           | 7,081     | 17    | 35      | 52     |
| Yazoo        | 26          | 46,573    | 353   | 635     | 988    |
| TOTAL        | 641         | 1,619,342 | 8,396 | 13,111  | 21,507 |

### Mississippi DMAP Data Table 9. Harvest Summary of Bucks by Age Class: WMAs, National Wildlife Refuges, and DMAP

|        |        |       |      | WMA   |      |       |      |       |      |        | <u> </u> | MAP       |            |            |  |
|--------|--------|-------|------|-------|------|-------|------|-------|------|--------|----------|-----------|------------|------------|--|
| Season | Sample | 0.5 B | ucks | 1.5 B | ucks | 2.5 B | ucks | 3.5 B | ucks | 4.5+ I | Bucks    | Avg. Age  | Total      | Acres/     |  |
| Sea    | San    | #     | %    | #     | %    | #     | %    | #     | %    | #      | %        | All Bucks | 3.5+ Bucks | 3.5+ Bucks |  |
| 1991   | 17,850 | 1,250 | 7.0  | 8,392 | 47.0 | 5,280 | 29.6 | 2,200 | 12.3 | 677    | 3.8      | 2.1       | 2,877      | 960        |  |
| 1992   | 17,631 | 1,410 | 8.0  | 8,025 | 45.5 | 5,154 | 29.2 | 2,255 | 12.8 | 831    | 4.7      | 2.1       | 3,086      | 847        |  |
| 1993   | 18,585 | 1,301 | 7.0  | 8,527 | 45.9 | 5,488 | 29.5 | 2,489 | 13.4 | 852    | 4.6      | 2.1       | 3,341      | 740        |  |
| 1994   | 19,128 | 1,530 | 8.0  | 7,063 | 36.9 | 6,529 | 34.1 | 3,020 | 15.8 | 1,045  | 5.5      | 2.2       | 4,065      | 685        |  |
| *1995* | 14,650 | 1,172 | 8.0  | 3,391 | 23.1 | 5,503 | 37.6 | 3,367 | 23.0 | 1,187  | 8.1      | 2.5       | 4,554      | 560        |  |
| 1996   | 16,350 | 1,308 | 8.0  | 3,246 | 19.9 | 6,489 | 39.7 | 3,601 | 22.0 | 1,697  | 10.4     | 2.3       | 5,298      | 500        |  |
| 1997   | 14,405 | 1,296 | 9.0  | 2,737 | 19.0 | 5,474 | 38.0 | 3,601 | 25.0 | 1,585  | 11.0     | 2.4       | 5,186      | 456        |  |
| 1998   | 13,278 | 1,062 | 8.0  | 2,257 | 17.0 | 4,913 | 37.0 | 3,452 | 26.0 | 1,859  | 14.0     | 2.5       | 5,311      | 410        |  |
| 1999   | 12,336 | 740   | 6.0  | 1,974 | 16.0 | 4,441 | 36.0 | 3,454 | 28.0 | 1,727  | 14.0     | 2.9       | 5,181      | 393        |  |
| 2000   | 11,329 | 566   | 5.0  | 1,586 | 14.0 | 3,965 | 35.0 | 3,399 | 30.0 | 1,813  | 16.0     | 3.0       | 5,211      | 379        |  |
| 2001   | 10,639 | 404   | 3.8  | 1,319 | 12.4 | 3,660 | 34.4 | 3,192 | 30.0 | 2,064  | 19.4     | 2.7       | 5,256      | 468        |  |
| 2002   | 11,258 | 394   | 3.5  | 1,396 | 12.4 | 3,411 | 30.3 | 3,580 | 31.8 | 2,466  | 21.9     | 2.8       | 6,046      | 438        |  |
| 2003   | 10,737 | 374   | 3.5  | 1,546 | 14.4 | 2,974 | 27.7 | 3,328 | 31.0 | 2,512  | 23.4     | 2.8       | 5,841      | 456        |  |
| 2004   | 10,100 | 362   | 3.6  | 1,121 | 11.1 | 2,818 | 27.9 | 3,373 | 33.4 | 2,424  | 24.0     | 2.9       | 5,797      | 463        |  |
| 2005   | 9,719  | 452   | 4.7  | 1,205 | 12.4 | 2,196 | 22.6 | 3,285 | 33.8 | 2,576  | 26.5     | 2.9       | 5,861      | 408        |  |
| 2006   | 10,246 | 460   | 4.5  | 1,506 | 14.7 | 2,070 | 20.2 | 3,125 | 30.5 | 3,074  | 30.0     | 3.0       | 6,199      | 387        |  |
| 2007   | 10,026 | 426   | 4.3  | 1,564 | 15.6 | 2,115 | 21.1 | 2,938 | 29.3 | 2,978  | 29.7     | 3.0       | 5,915      | 401        |  |
| 2008   | 10,234 | 438   | 4.3  | 1,750 | 17.1 | 2,129 | 20.8 | 3,142 | 30.7 | 2,763  | 27.0     | 2.9       | 5,905      | 346        |  |
| 2009   | 10,033 | 472   | 4.7  | 1,354 | 13.5 | 2,027 | 20.2 | 3,120 | 31.1 | 3,060  | 30.5     | 3.0       | 6,180      | 401        |  |

\*1995\* Four points or better law initiated and bag limit changed from 5 bucks and 3 antlerless to 3 bucks and 5 antlerless with DMAP and FMAP participants exempt from the annual bag limit; 2 additional antlerless deer may be taken with achery equipment.

| Table 10. Comparison of WMAs and National Wildlife Refuges |
|--|
| vs. Private Lands DMAP                                     |

|      | Acı       | es      | Total   | Deer   | Buc     | : <b>ks</b> | Do      | es     | Acres/Deer |        | Acres/Buck |        | Acres/Doe |        |
|------|-----------|---------|---------|--------|---------|-------------|---------|--------|------------|--------|------------|--------|-----------|--------|
|      | Private   | Public  | Private | Public | Private | Public      | Private | Public | Private    | Public | Private    | Public | Private   | Public |
| 2001 | 1,651,465 | 672,467 | 21,362  | 2,934  | 9,162   | 1,571       | 12,200  | 1,363  | 77         | 229    | 180        | 428    | 135       | 493    |
| 2002 | 1,784,033 | 664,467 | 22,878  | 2,740  | 9,779   | 1,488       | 13,099  | 1,252  | 78         | 243    | 182        | 447    | 136       | 531    |
| 2003 | 1,819,587 | 684,967 | 23,401  | 2,431  | 9,442   | 1,278       | 13,959  | 1,153  | 78         | 282    | 193        | 536    | 130       | 594    |
| 2004 | 1,858,150 | 627,746 | 23,042  | 1,844  | 9,152   | 903         | 13,890  | 941    | 81         | 340    | 203        | 695    | 134       | 667    |
| 2005 | 1,701,621 | 726,346 | 21,585  | 2,310  | 8,912   | 1,148       | 12,673  | 1,162  | 79         | 314    | 191        | 633    | 134       | 625    |
| 2006 | 1,653,780 | 663,991 | 23,768  | 2,365  | 9,336   | 1,145       | 14,432  | 1,220  | 70         | 281    | 177        | 580    | 115       | 544    |
| 2007 | 1,683,145 | 726,071 | 23,202  | 2,873  | 9,255   | 1,599       | 13,947  | 1,274  | 73         | 253    | 182        | 454    | 121       | 570    |
| 2008 | 1,653,845 | 734,189 | 23,250  | 3,535  | 9,299   | 1,734       | 13,951  | 1,801  | 71         | 208    | 178        | 423    | 119       | 408    |
| 2009 | 1,643,896 | 723,198 | 21,810  | 3,141  | 8,512   | 1,524       | 13,298  | 1,617  | 75         | 230    | 193        | 475    | 124       | 447    |

### Table 11. Comparison of Bucks Harvested on WMAs and National Wildlife Refuges vs. Private Lands DMAP —

|      | Averag  | e Age  | Average | Points | Average | Length | Average | Spread | Acres   | /3.5+  |
|------|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|
|      | Private | Public |
| 2001 | 2.7     | 2.4    | 7.2     | 6.8    | 15.9    | 14.1   | 13.0    | 11.3   | 359     | 1,582  |
| 2002 | 2.8     | 2.5    | 7.3     | 6.8    | 16.3    | 14.2   | 13.2    | 11.4   | 346     | 1,359  |
| 2003 | 2.9     | 2.1    | 7.2     | 5.7    | 16.5    | 12.1   | 13.3    | 10.1   | 346     | 2,429  |
| 2004 | 2.9     | 2.6    | 7.2     | 7.1    | 16.4    | 15.1   | 13.4    | 12.6   | 361     | 2,299  |
| 2005 | 3.0     | 2.4    | 7.2     | 6.2    | 16.6    | 13.6   | 13.6    | 11.3   | 300     | 2,249  |
| 2006 | 3.1     | 2.4    | 7.1     | 6.3    | 16.5    | 14.0   | 13.5    | 11.6   | 294     | 1,664  |
| 2007 | 3.0     | 2.7    | 7.1     | 6.6    | 16.5    | 14.2   | 13.6    | 11.5   | 310     | 1,065  |
| 2008 | 2.9     | 2.6    | 7.0     | 6.4    | 16.2    | 14.1   | 13.5    | 11.7   | 309     | 1,077  |
| 2009 | 3.1     | 2.7    | 7.3     | 6.9    | 16.8    | 14.9   | 13.8    | 12.4   | 314     | 1,065  |



### Figure 21. Acres/3.5+ Year Old Buck Harvested: Private vs. Public



Figure 20. Acres/Deer Harvested: Private vs. Public



Figure 22. Average Age All Bucks: Private vs. Public



### - Table 12. Statewide Compiled Data (DMAP, NWR, WMA)

|                | Season                     |             |              |             |             |                     |            |              |              | Average      |              |              |                 |
|----------------|----------------------------|-------------|--------------|-------------|-------------|---------------------|------------|--------------|--------------|--------------|--------------|--------------|-----------------|
| A              |                            | <b>'09</b>  | <b>'08</b>   | <b>'07</b>  | <b>'06</b>  | '05                 | ·04        | <b>'03</b>   | <b>'02</b>   | <b>'01</b>   | <b>'00</b> ' | 491-'94      | 'uge<br>'05-'09 |
|                | Acres                      | 2,366,226   | 2,388,034    | 2,409,216   | 2,317,771   | 2,427,967           | 2,485,896  | 2,504,554    | 2,448,500    | 2,323,932    | 2,602,586    | 3,105,186    | 2,408,590       |
| 0              | Acres<br>Total Deer        | 2,300,220   | 2,388,034    | 2,409,218   | 2,317,771   | 2,427,987<br>23,895 | 2,485,896  | 2,304,334    | 2,448,500    | 2,323,932    | 2,802,388    | 39,138       | 2,408,390       |
| ш              | Bucks                      | 10,033      | 11,033       | 10,854      | 10,481      | 10,060              | 10,055     | 10,720       | 11,267       | 10,733       | 11,329       | 19,562       | 10,434          |
|                | Does                       | 14,908      | 15,752       | 15,221      | 15,652      | 13,835              | 14,831     | 15,112       | 14,351       | 13,563       | 15,228       | 19,502       | 14,953          |
| 3              | Acres/Deer                 | 95          | 89           | 92          | 89          | 13,833              | 14,831     | 97           | 96           | 13,303<br>96 | 98           | 79.5         | 95.2            |
| ш              | Bucks                      | 236         | 216          | 222         | 221         | 241                 | 247        | 234          | 217          | 217          | 230          | 159          | 231.2           |
| A              | Does                       | 159         | 152          | 158         | 148         | 175                 | 168        | 166          | 171          | 171          | 171          | 160          | 161.6           |
| STATEWIDE DMAP | Avg. Age                   |             |              |             |             |                     |            |              |              |              |              |              |                 |
|                | ALL Bucks                  | 3.0         | 2.9          | 3.0         | 3.0         | 2.9                 | 2.9        | 2.8          | 2.8          | 2.7          | 3.0          | 2.2          | 2.9             |
|                | Avg. Points<br>ALL Bucks   | 7.2         | 6.9          | 7.0         | 7.0         | 7.1                 | 7.2        | 7.1          | 7.3          | 7.2          | 6.7          | 4.8          | 7.0             |
|                | Avg. Length<br>ALL Bucks   | 16.6        | 15.9         | 16.2        | 16.3        | 16.4                | 16.4       | 16.0         | 16.0         | 15.7         | 14.6         | 10.4         | 16.2            |
|                | Avg. Spread<br>ALL Bucks   | 13.6        | 13.2         | 13.3        | 13.3        | 13.4                | 13.4       | 13.0         | 13.0         | 12.8         | 11.9         | 8.7          | 13.3            |
|                | Acres/<br>3.5+ Bucks       | 401         | 396          | 394         | 384         | 405                 | 459        | 452          | 434          | 463          | 379          | 808          | 409             |
|                | % 0.5 Yr.<br>Bucks         | 4.7         | 4.3          | 4.3         | 4.5         | 4.7                 | 3.6        | 3.5          | 3.5          | 3.8          | 5.0          | 7.5          | 4.3             |
|                | Weight                     | 61.9        | 63.9         | 67          | 66          | 73                  | 66         | 71           | 75           | 66           | 64           | 63           | 67              |
|                | % 1.5 Yr.                  | 13.5        | 17           | 16          | 15          | 12                  | 11         | 14           | 12           | 12           | 14           | 44           | 14              |
|                | Weight                     | 109.5       | 115          | 113         | 114         | 114                 | 112        | 111          | 118          | 115          | 116          | 115          | 114             |
|                | Points                     | 2.6         | 3.0          | 2.7         | 3.0         | 3.0                 | 3.4        | 3.6          | 4.5          | 4.1          | 4.4          | 3.2          | 3.0             |
|                | Circumf.                   | 2           | 2.2          | 2.0         | 2.2         | 2.2                 | 2.3        | 2.3          | 2.5          | 2.4          | 2.5          | 2.2          | 2.2             |
|                | Length                     | 5.6         | 6.5          | 5.5         | 6.6         | 6.6                 | 7.2        | 7.4          | 9.0          | 8.3          | 8.4          | 6.8          | 6.5             |
|                | Spread                     | 5.7         | 6.2          | 5.5         | 6.0         | 6.2                 | 6.7        | 6.6          | 7.5          | 7.3          | 7.4          | 6.0          | 6.1             |
|                | % 2.5 Yr.                  | 20.2        | 21.1         | 21          | 20          | 23                  | 28         | 28           | 30           | 34           | 35           | 31           | 23              |
|                | Weight                     | 147.3       | 149.5        | 148         | 148         | 149                 | 149        | 148          | 150          | 145          | 147          | 148          | 149             |
|                | Points                     | 6.9         | 6.9          | 6.9         | 6.9         | 6.8                 | 6.8        | 6.8          | 7.0          | 6.9          | 6.9          | 6.6          | 6.9             |
|                | Circumf.                   | 3.5         | 3.5          | 3.4         | 3.4         | 3.4                 | 3.4        | 3.4          | 3.5          | 3.3          | 3.4          | 3.3          | 3.4             |
|                | Length                     | 14.9        | 14.7         | 14.7        | 14.7        | 14.6                | 14.5       | 14.4         | 14.7         | 14.3         | 14.4         | 14.0         | 14.6            |
|                | Spread                     | 12.3        | 12.2         | 12.0        | 12.0        | 11.9                | 12.0       | 11.7         | 11.9         | 11.6         | 11.7         | 11.4         | 12.0            |
|                | % 3.5 Yr.                  | 31.1        | 30.6         | 29          | 31          | 34                  | 33         | 31           | 32           | 30           | 30           | 14           | 32              |
|                | Weight                     | 169.7       | 168.5        | 169         | 169         | 170                 | 169        | 172          | 169          | 166          | 168          | 163          | 169             |
|                | Points                     | 7.9         | 7.8          | 7.8         | 7.8         | 7.7                 | 7.7        | 7.8          | 7.8          | 7.8          | 7.9          | 7.5          | 7.8             |
|                | Circumf.                   | 4.1         | 4.0          | 4.0         | 4.1         | 4.0                 | 4.0        | 4.0          | 4.0          | 3.9          | 4.0          | 3.9          | 4.0             |
|                | Length                     | 17.8        | 17.4         | 17.5        | 17.5        | 17.5                | 17.3       | 17.6         | 17.2         | 17.1         | 17.4         | 16.7         | 17.4            |
|                | Spread                     | 14.4        | 14.2         | 14.1        | 14.1        | 14.1                | 14.0       | 14.1         | 13.9         | 13.8         | 14.1         | 13.5         | 14.1            |
|                | % 4.5+ Yr.                 | 30.5        | 27.1         | 30          | 30          | 27                  | 185        | 23           | 22           | 19           | 16           | 172          | 27              |
|                | Weight                     | 182.6       | 181.5        | 184         | 185         | 185                 | 185        | 186          | 184          | 182          | 182          | 173          | 184             |
|                | Points<br>Circumf.         | 8.4<br>4.6  | 8.3<br>4.5   | 8.4<br>4.5  | 8.3<br>4.5  | 8.3<br>4.5          | 8.3<br>4.5 | 8.3<br>4.5   | 8.3<br>4.5   | 8.3<br>4.4   | 8.3<br>4.5   | 8.1<br>4.3   | 8.3<br>4.5      |
|                | Length                     | 4.6<br>19.8 | 4.5<br>19.4  | 4.5<br>19.9 | 4.5<br>19.7 | 4.5<br>19.7         | 4.5        |              |              |              |              |              | 4.5<br>19.7     |
|                | Length<br>Spread           | 19.8        | 19.4<br>15.5 | 19.9        | 19.7        | 19.7                | 19.7       | 19.7<br>15.6 | 19.5<br>15.5 | 19.4<br>15.4 | 19.6<br>15.6 | 18.6<br>14.9 | 19.7            |
|                | # <b>4.5 Yr.</b>           | 1,776       | 1,720        | 1,840       | 1,672       | 1627                | 1454       | 1508         | 13.5         | 1247         | 1257         | 589          | 1660            |
|                | # <b>4.3 II.</b><br>Weight | 1,778       | 1,720        | 1,840       | 1,672       | 1827                | 1434       | 1308         | 1482         | 1247         | 1237         | 173          | 1800            |
|                | Points                     | 8.4         | 8.2          | 8.3         | 8.2         | 8.3                 | 8.2        | 8.2          | 8.3          | 8.2          | 8.3          | 8.1          | 8.2             |
|                | Circumf.                   | 4.5         | 8.2<br>4.4   | 6.3<br>4.4  | 6.2<br>4.4  | 6.3<br>4.4          | 4.4        | 8.2<br>4.4   | 8.3<br>4.4   | 4.3          | 4.4          | 4.2          | 4.4             |
|                | Length                     | 19.5        | 19           | 19.6        | 19.3        | 19.2                | 19.4       | 19.4         | 19.2         | 19.0         | 19.4         | 18.6         | 19.3            |
|                | Spread                     | 19.3        | 19           | 19.0        | 19.3        | 19.2                | 19.4       | 19.4         | 19.2         | 19.0         | 19.4         | 18.0         | 19.3            |
|                | spread                     | 13.0        | 13.3         | 13.0        | 13.3        | 13.4                | 13.0       | 13.4         | 13.3         | 13.1         | 13.3         | 14.0         | 13.3            |

| <b>Table</b> | <b>12</b> . | continued |
|--------------|-------------|-----------|
|--------------|-------------|-----------|

|   |              |              |              |              | Sea          | son          |              |              |              |             | Ave          | raae         |
|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|--------------|--------------|
|   | <b>'09</b>   | <b>'08</b>   | <b>'07</b>   | <b>'06</b>   | <b>'05</b>   | <b>'04</b>   | <b>'03</b>   | <b>'02</b>   | <b>'01</b>   | <b>'00</b>  | ·91-'94      | '05-'09      |
| # 5.5 Yr.                                   | 727          | 732          | 738          | 835          | 648          | 525          | 571          | 579          | 466          | 395         | 151          | 694          |
| Weight                                      | 184.9        | 181.7        | 186          | 186          | 189          | 189          | 190          | 186          | 185          | 186         | 174          | 186          |
| Points                                      | 8.4          | 8.4          | 8.4          | 8.4          | 8.4          | 8.6          | 8.4          | 8.5          | 8.5          | 8.4         | 7.9          | 8.4          |
| Circumf.                                    | 4.6          | 4.6          | 4.6          | 4.6          | 4.6          | 4.6          | 4.6          | 4.6          | 4.5          | 4.6         | 4.4          | 4.6          |
| Length                                      | 4.0          | 19.8         | 20.1         | 19.9         | 20.4         | 20.2         | 20.2         | 20.0         | 20.1         | 19.9        | 18.9         | 20.1         |
| Spread                                      | 20<br>16     | 15.7         | 16.0         | 15.9         | 16.1         | 16.0         | 15.9         | 15.9         | 15.9         | 15.9        | 15.1         | 16.0         |
| # 6.5 Yr.                                   | 304          | 271          | 351          | 328          | 235          | 193          | 198          | 146          | 15.9         | 125         | 44           | 275          |
| Weight                                      | 181.6        | 187.8        | 188          | 191          | 192          | 192          | 191          | 191          | 187          | 125         | 11           | 190          |
| Points                                      | 8.4          | 8.4          | 8.5          | 8.3          | 8.5          | 8.1          | 8.4          | 8.4          | 8.3          | 8.6         | 8.3          | 8.4          |
| Circumf.                                    | 4.8          | 4.7          | 4.7          | 4.7          | 4.7          | 4.7          | 4.7          | 4.6          | 4.7          | 4.7         | 4.5          | 4.7          |
| Length                                      | 20.2         | 20.3         | 20.7         | 21.0         | 20.7         | 20.4         | 20.4         | 20.6         | 20.6         | 20.4        | 19.4         | 20.6         |
| Spread                                      | 16.1         | 16.2         | 16.4         | 16.4         | 16.4         | 20.4<br>16.1 | 15.8         | 16.4         | 16.3         | 16.1        | 15.2         | 16.3         |
| # 7.5 Yr.                                   | 70           | 61           | 80           | 98           | 77           | 64           | 70           | 45           | 63           | 39          | 13.2         | 76           |
| # 7.3 H.<br>Weight                          | 183.6        | 184          | 189          | 192          | 192          | 189          | 190          | 43<br>192    | 183          | 187         | 168          | 189          |
| Points                                      | 8.3          | 8.2          | 8.6          | 8.6          | 8.3          | 8.7          | 8.3          | 8.6          | 9.0          | 8.1         | 7.4          | 8.5          |
| Circumf.                                    | 6.3<br>4.7   | 4.6          | 4.7          | 4.7          | 4.7          | 4.7          | 4.8          | 4.7          | 9.0<br>4.7   | 4.8         | 4.4          | 4.7          |
| Length                                      | 20.7         | 4.0          | 21.3         | 21.0         | 20.6         | 20.8         | 20.6         | 20.2         | 20.0         | 20.6        | 18.3         | 20.7         |
| Spread                                      | 16.3         | 19.9         | 21.3<br>16.5 | 16.3         | 16.0         | 20.8<br>16.6 | 20.0<br>16.6 | 15.3         | 15.8         | 16.2        | 15.0         | 16.3         |
| # 8.5+ Yr.                                  | 48           | 48           | 63           | 58           | 46           | 27           | 34           | 44           | 36           | 29          | 13.0         | 48           |
|   | 40<br>184.6  | 48<br>180.4  | 03<br>189    | - 36<br>186  | 40<br>195    | 183          | 34<br>185    | 44<br>180    | 30<br>190    | 183         | 171          | 46<br>187    |
| Weight                                      | 164.0        |              |              | 7.7          |              |              |              |              |              |             | 7.5          | 7.9          |
| Points                                      | 8<br>4.8     | 7.9          | 8.3<br>4.7   |              | 7.8          | 8.0          | 7.8          | 8.0          | 8.4          | 7.4         |              |              |
| Circumf.                                    | 4.8<br>20.1  | 4.7<br>19.6  | 4.7<br>20.8  | 4.6<br>20.8  | 4.4<br>19.8  | 4.5<br>18.6  | 4.7<br>19.2  | 4.6<br>20.1  | 4.7<br>19.5  | 4.5<br>19.6 | 4.3<br>18.5  | 4.6<br>19.9  |
| Length                                      |              | 19.6         |              | 20.8<br>16.3 | 19.8         | 18.0         | 19.2         |              |              | 19.6        |              |              |
| Spread                                      | 15.4         | 15.9         | 16.6         | 10.3         | 15.5         | 15.0         | 15.1         | 15.7         | 15.2         | 10.5        | 14.4         | 15.9         |
| Doe Age Classes<br>% 0.5 Yr.                | 7.3          | 7.0          | 6.8          | 6.9          | 7.3          | 6.9          | 6.3          | 6.6          | 5.4          | 7.0         | 11.0         | 7.0          |
| % 0.5 H.<br>% 1.5 Yr.                       | 19.4         | 22.8         | 23.7         | 20.2         | 20.2         | 21.9         | 23.2         | 21.7         | 23.3         | 23.0        | 23.0         | 21.8         |
| % 1.5 H.<br>% 2.5 Yr.                       | 24.4         | 22.8         | 23.7         | 20.2         | 20.2         | 21.9         | 23.2         | 21.7         | 25.5         | 23.0        | 23.0         | 21.6         |
| % 2.5 H.<br>% 3.5+ Yr.                      | 48.8         | 47.7         | 46.8         | 52.4         | 50.3         | 46.6         | 47.7         | 48.3         | 45.5         | 47.0        | 42.0         | 48.8         |
| <sup>%</sup> 3.3+ 11.<br><b>Doe Weights</b> | 40.0         | 4/./         | 40.0         | 52.4         | 30.3         | 40.0         | 4/./         | 40.3         | 43.3         | 47.0        | 42.0         | 40.0         |
| 0.5 Yr.                                     | 61.2         | 61.1         | 66.3         | 64.0         | 65.1         | 63.8         | 66.8         | 66.4         | 64.1         | 63.0        | 60.0         | 64.1         |
| 1.5 Yr.                                     | 94.5         | 97.4         | 97.8         | 98.1         | 97.4         | 95.8         | 96.3         | 99.1         | 96.8         | 96.0        | 96.0         | 97.3         |
| 2.5 Yr.                                     | 109.1        | 109.4        | 110.4        | 109.4        | 110.6        | 108.7        | 108.2        | 109.9        | 108.0        | 107.0       | 108.0        | 109.7        |
| 2.5 H.<br>3.5+ Yr.                          | 109.1        | 109.4        | 116.4        | 116.1        | 116.7        | 115.3        | 116.4        | 115.8        | 116.5        | 107.0       | 115.0        | 116.0        |
| % Doe Lactation                             | 114.5        | 115.5        | 110.4        | 110.1        | 110.7        | 115.5        | 110.4        | 115.0        | 110.5        | 114.0       | 115.0        | 110.0        |
| 1.5 Yr.                                     | 10.2         | 10.4         | 10.9         | 11.4         | 12.5         | 11.3         | 10.1         | 12.3         | 10.2         | 12.0        | 13.0         | 11.3         |
| 2.5 Yr.                                     | 54.0         | 47.0         | 59.0         | 59.0         | 57.0         | 56.0         | 56.0         | 58.0         | 58.0         | 61.0        | 59.0         | 55.6         |
| 2.5 H.<br>2.5+ Yr.                          | 62.0         | 47.0<br>57.5 | 67.7         | 67.6         | 66.1         | 63.3         | 56.0<br>64.0 | 58.0<br>65.4 | 58.0<br>65.5 | 68.0        | 66.0         | 55.6<br>64.5 |
| 2.5+ Yr.<br>3.5+ Yr.                        | 65.6         | 62.4         | 71.7         | 71.1         | 70.0         | 67.3         | 67.9         | 69.2         | 69.6         | 72.0        | 70.0         | 68.5         |
| All Antlerless H'vst                        |              | 02.4         | /1./         | /1.1         | 70.0         | 07.3         | 07.9         | 09.2         | 09.0         | 72.0        | 70.0         | 00.5         |
| % 0.5 Yr. Bk. Fawns                         | 3.0          | 2.9          | 2.8          | 2.9          | 3.2          | 2.3          | 2.4          | 2.7          | 2.9          | 3.0         | 7.0          | 2.8          |
| % 0.5 Yr. Doe Fawns                         | 3.0<br>7.1   | 2.9<br>6.8   | 2.0<br>6.6   | 2.9<br>6.7   | 3.2<br>7.1   | 2.3<br>6.7   | 2.4<br>6.1   | 6.4          | 5.3          | 3.0<br>7.0  | 10.3         | 2.8<br>6.8   |
|   | 18.8         |              |              | 6.7<br>19.7  |              |              |              |              |              |             |              |              |
| % 1.5 Yr. Does<br>% 2.5 Yr. Does            | 18.8<br>23.7 | 22.2<br>23.7 | 23.0<br>23.7 | 23.7         | 19.6<br>23.7 | 21.4<br>21.8 | 22.7<br>21.8 | 21.1<br>21.8 | 22.6<br>21.8 | 22.6        | 22.0<br>22.0 | 21.2<br>21.8 |
|   |              |              |              |              |              |              |              |              |              | 22.0        |              |              |
| % 3.5+ Yr. Does                             | 47.4         | 46.4         | 45.5         | 50.9         | 48.7         | 45.5         | 46.6         | 47.0         | 44.2         | 46.0        | 39.3         | 47.4         |

# **Mississippi Soil Resource Areas**



# Table 13. Batture Soil Resource AreaSummary of DMAP Data

|                                       |           |            |            |            |            | JWIAF      | 0.000      |            |            |            | 3              |            |
|---------------------------------------|-----------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------------|------------|
|                                       | (00       | (00        | (07        |            | Sea        |            | (00        | (00        | (0.1       | (00        | Aver           |            |
|                                       | '09       | '08        | <b>'07</b> | '06        | <b>'05</b> | <b>'04</b> | <b>'03</b> | <b>'02</b> | <b>'01</b> | <b>'00</b> | <b>'91-'94</b> | '05-'09    |
| Acres                                 | 277,976   | 268,302    | 270,863    | 261,765    | 266,932    | 254,436    | 243,717    | 248,120    | 227,150    | 214,242    | 172,527        | 269,168    |
| Total Deer                            | 4,064     | 3,881      | 5,313      | 4,710      | 4,551      | 4,338      | 4,754      | 4,771      | 4,378      | 3,858      | 2,906          | 4,504      |
| Bucks                                 | 1,788     | 1,887      | 2,159      | 1,926      | 1,892      | 1,673      | 1,958      | 1,955      | 1,657      | 1,559      | 1,449          | 1,930      |
| Does                                  | 2,276     | 1,994      | 3,154      | 2,784      | 2,659      | 2,665      | 2,796      | 2,816      | 2,721      | 2,299      | 1,457          | 2,573      |
| Acres/Deer                            | 68<br>155 | 69         | 51<br>125  | 56         | 59<br>141  | 59<br>152  | 51<br>124  | 52         | 52<br>137  | 56<br>137  | 60<br>119      | 60<br>139  |
| Bucks<br>3.5+ Bucks                   | 186       | 142<br>186 | 125        | 136        | 141        | 152<br>207 | 124        | 127        |            |            | 693            | 139        |
| Does                                  | 180       | 135        | 86         | 168<br>94  | 103        | 207<br>95  | 87         | 191<br>88  | 222<br>83  | 240<br>93  | 120            | 177        |
|                                       | 3.7       | 3.4        | 3.6        | 3.7        | 3.5        | 3.5        | 3.4        | 3.2        | 3.1        | 2.9        | 2.4            | 3.5        |
| Avg. Age ALL Bucks<br>% 0.5 Yr. Bucks | 2         | 3.4        | 3.0        | 3.7        | 3.5        | 3.5        | 3.4<br>4   | 3.2        | 3.1        | 2.9        | 2.4<br>6       | 2.7        |
|                                       | 68        | 65         | 71         | 4<br>69    | 68         | 71         | 84         | 73         | 65         | 67         | 73             | 68.3       |
| Weight <b>% 1.5 Yr.</b>               | 1.6       | 8.4        | /1         | 69         | 6          | 5          | 5          | 4          | 03<br>9    | 7          | 28             | 08.3<br>6  |
|                                       | 1.0       | 0.4<br>118 | °<br>124   | 124        | 114        | 116        | 111        | 4<br>117   | 113        | 128        | 134            | 119        |
| Weight<br>Points                      | 2.9       | 2.2        | 2.6        | 2.4        | 2.2        | 2.4        | 2.5        | 2.6        | 2.8        | 4.1        | 3.9            | 2.5        |
| Circumf.                              | 1.8       | 2.2        | 2.0        | 2.4        | 2.2        | 2.4        | 2.3        | 2.0        | 2.8        | 2.8        | 2.4            | 2.5        |
| Length                                | 4.3       | 2.1<br>5.8 | 5.7        | 2.3<br>6.6 | 2.3<br>5.1 | 2.4<br>5.7 | 5.5        | 4.6        | 2.4<br>6.7 | 2.8<br>8.8 | 2.4<br>8.2     | 2.1<br>5.5 |
| Spread                                | 5.1       | 6.1        | 5.7        | 6.0        | 5.4        | 6.0        | 5.8        | 5.5        | 7.2        | 8.3        | 7.1            | 5.7        |
| % 2.5 Yr.                             | 12        | 16         | 13         | 11         | 15         | 14         | 14         | 21         | 24         | 29         | 49             | 13         |
| Weight                                | 167       | 165        | 170        | 166        | 160        | 167        | 167        | 166        | 163        | 168        | 169            | 165        |
| Points                                | 7.3       | 7.3        | 7.3        | 7.4        | 7.3        | 7.4        | 7.8        | 7.7        | 7.7        | 7.7        | 7.5            | 7.3        |
| Circumf.                              | 3.7       | 3.7        | 3.6        | 3.7        | 3.6        | 3.7        | 3.7        | 3.7        | 3.7        | 3.7        | 3.5            | 3.7        |
| Length                                | 16.4      | 16.2       | 16.9       | 16.9       | 16.4       | 17.1       | 16.8       | 16.6       | 16.4       | 16.6       | 15.5           | 16.6       |
| Spread                                | 13.6      | 13.6       | 13.9       | 13.9       | 13.4       | 14.0       | 13.8       | 13.6       | 13.4       | 13.6       | 13.0           | 13.7       |
| % 3.5 Yr.                             | 35        | 34         | 31         | 33         | 35         | 34         | 39         | 39         | 37         | 36         | 13.6           | 34         |
| Weight                                | 188       | 185        | 188        | 183        | 184        | 185        | 188        | 185        | 183        | 189        | 187            | 186        |
| Points                                | 8.3       | 8.2        | 8.0        | 8.0        | 8.1        | 8.2        | 8.3        | 8.3        | 8.3        | 8.4        | 8.2            | 8.1        |
| Circumf.                              | 4.3       | 4.2        | 4.2        | 4.2        | 4.3        | 4.3        | 4.3        | 4.2        | 4.2        | 4.3        | 4.2            | 4.2        |
| Length                                | 19.5      | 19         | 19.3       | 19.4       | 19.8       | 19.6       | 19.6       | 19.1       | 19.0       | 19.8       | 18.7           | 19.4       |
| Spread                                | 15.9      | 15.6       | 15.7       | 15.5       | 15.7       | 15.8       | 15.6       | 15.3       | 15.4       | 16.0       | 15.4           | 15.7       |
| % 4.5+ Yr.                            | 49        | 40         | 45         | 46         | 42         | 44         | 38         | 33         | 27         | 24         | 4              | 45         |
| Weight                                | 194       | 193        | 197        | 193        | 192        | 193        | 196        | 194        | 192        | 202        | 198            | 194        |
| Points                                | 8.6       | 8.6        | 8.5        | 8.3        | 8.5        | 8.5        | 8.6        | 8.5        | 8.4        | 8.5        | 8.5            | 8.5        |
| Circumf.                              | 4.6       | 4.6        | 4.6        | 4.5        | 4.6        | 4.6        | 4.6        | 4.6        | 4.6        | 4.6        | 4.6            | 4.6        |
| Length                                | 20.8      | 20.4       | 21.2       | 20.9       | 21.2       | 20.9       | 20.9       | 20.6       | 20.8       | 21.3       | 20.8           | 20.9       |
| Spread                                | 16.9      | 16.4       | 17.0       | 16.6       | 16.6       | 16.8       | 16.6       | 16.3       | 16.4       | 17.1       | 16.8           | 16.7       |
| % Doe Lactation                       |           |            |            |            |            |            |            |            |            |            |                |            |
| 1.5 Yr.                               | 7         | 5          | 10         | 11         | 6          | 6          | 11         | 6          | 7          | 9          | 14             | 8          |
| 2.5 Yr.                               | 56        | 31         | 69         | 65         | 52         | 58         | 55         | 47         | 57         | 64         | 58             | 55         |
| 3.5+ Yr.                              | 68        | 49         | 77         | 77         | 67         | 69         | 65         | 59         | 65         | 77         | 68             | 68         |
| Doe Age Classes                       |           |            |            |            |            |            |            |            |            |            |                |            |
| % 0.5 Yr.                             | 6         | 3          | 8          | 7          | 6          | 6          | 7          | 6          | 5          | 7          | 11             | 6          |
| % 1.5 Yr.                             | 11        | 29         | 28         | 20         | 19         | 21         | 18         | 21         | 24         | 24         | 20             | 21         |
| % 2.5 Yr.                             | 34        | 28         | 24         | 23         | 27         | 25         | 27         | 31         | 30         | 26         | 30             | 27         |
| % 3.5+ Yr.                            | 49        | 41         | 41         | 50         | 49         | 48         | 47         | 43         | 41         | 44         | 39             | 46         |
| Doe Weights                           |           |            |            |            |            |            |            |            |            |            |                |            |
| 0.5 Yr.                               | 65        | 64         | 71         | 68         | 68         | 66         | 68         | 69         | 64         | 66         | 68             | 67         |
| 1.5 Yr.                               | 100       | 98         | 104        | 104        | 98         | 98         | 101        | 100        | 98         | 104        | 108            | 101        |
| 2.5 Yr.                               | 114       | 113        | 117        | 114        | 114        | 112        | 112        | 114        | 113        | 115        | 121            | 114        |
| 3.5+ Yr.                              | 119       | 122        | 123        | 121        | 121        | 119        | 122        | 123        | 121        | 123        | 126            | 121        |

# Table 14. Delta Soil Resource AreaSummary of DMAP Data

|                             |            |            |            |            | Sea      | son     |            |            |            |            | Aver     | e        |
|-----------------------------|------------|------------|------------|------------|----------|---------|------------|------------|------------|------------|----------|----------|
|                             | <b>'09</b> | <b>'08</b> | <b>'07</b> | <b>'06</b> | ·05      | ·04     | <b>'03</b> | <b>'02</b> | <b>'01</b> | <b>'00</b> | '91-'94  | '05-'09  |
| Acres                       | 210,604    | 199,655    | 182,048    | 194,947    | 194,678  | 207,194 | 179,137    | 180,491    | 138,697    | 138,454    | 254,153  | 196,386  |
| Total Deer                  | 1,918      | 1,913      | 2,066      | 2,356      | 2,204    | 2,381   | 2,378      | 2,203      | 1,930      | 2,040      | 3,909    | 2,091    |
| Bucks                       | 810        | 900        | 801        | 889        | 869      | 897     | 1,000      | 927        | 767        | 783        | 1,830    | 854      |
| Does                        | 1,108      | 1,013      | 1,265      | 1,467      | 1,335    | 1,484   | 1,378      | 1,276      | 1,163      | 1,257      | 1,457    | 1,238    |
| Acres/Deer                  | 110        | 104        | 88         | 83         | 88       | 87      | 75         | 82         | 72         | 68         | 66       | 94       |
| Bucks                       | 260        | 222        | 227        | 219        | 224      | 231     | 179        | 195        | 181        | 177        | 140      | 230      |
| 3.5+ Bucks                  | 377        | 366        | 349        | 358        | 271      | 363     | 290        | 329        | 315        | 344        | 962      | 344      |
| Does                        | 190        | 197        | 144        | 133        | 146      | 140     | 130        | 141        | 119        | 110        | 124      | 159      |
| Avg. Age ALL Bucks          | 3.1        | 3.0        | 3.0        | 3.0        | 3.3      | 3.1     | 3.0        | 3.1        | 3.0        | 2.7        | 2.1      | 3.1      |
| % 0.5 Yr. Bucks             | 4          | 3          | 4          | 7          | 3        | 4       | 4          | 4          | 6          | 6          | 8        | 4.1      |
| Weight                      | 71         | 79         | 76         | 75         | 74       | 74      | 69         | 76         | 67         | 69         | 70       | 74.9     |
| % 1.5 Yr.                   | 12         | 18         | 19         | 18         | 7        | 5       | 6          | 4          | 7          | 8          | 41       | 15       |
| Weight                      | 128        | 127        | 125        | 125        | 123      | 130     | 126        | 133        | 123        | 136        | 134      | 125      |
| Points                      | 2.3        | 2.7        | 2.3        | 2.3        | 2.4      | 3.4     | 3.3        | 3.7        | 3.4        | 4.1        | 3.5      | 2.4      |
| Circumf.                    | 2.0        | 2.1        | 2.0        | 2.1        | 2.2      | 2.5     | 2.4        | 2.6        | 2.3        | 2.3        | 2.4      | 2.1      |
| Length                      | 5.7        | 6.0        | 4.7        | 5.1        | 4.9      | 7.4     | 7.9        | 8.2        | 5.4        | 7.9        | 7.3      | 5.3      |
| Spread                      | 5.7        | 5.9        | 4.8        | 5.0        | 5.7      | 7.5     | 7.3        | 8.2        | 8.3        | 8.5        | 6.4      | 5.4      |
| % 2.5 Yr.                   | 14         | 17         | 15         | 14         | 17       | 26      | 24         | 26         | 27         | 33         | 36       | 15       |
| Weight                      | 170        | 171        | 170        | 172        | 170      | 173     | 175        | 170        | 164        | 170        | 169      | 171      |
| Points                      | 6.6        | 7.0        | 7.4        | 7.4        | 7.3      | 7.5     | 7.7        | 7.5        | 7.6        | 7.3        | 7.3      | 7.2      |
| Circumf.                    | 3.6        | 3.6        | 3.7        | 3.8        | 3.7      | 3.8     | 3.8        | 3.7        | 3.5        | 3.6        | 3.5      | 3.7      |
| Length                      | 15.3       | 15.6       | 16.6       | 16.6       | 16.5     | 16.9    | 16.6       | 16.2       | 16.0       | 15.9       | 15.1     | 16.1     |
| Spread                      | 13.3       | 13.3       | 13.9       | 14.2       | 13.6     | 14.1    | 13.6       | 13.5       | 13.3       | 13.4       | 12.8     | 13.6     |
| % 3.5 Yr.                   | 37         | 29         | 28         | 31         | 38       | 36      | 38         | 39         | 34         | 38         | 12       | 32       |
| Weight                      | 192        | 193        | 194        | 191        | 189      | 190     | 192        | 187        | 183        | 194        | 187      | 192      |
| Points                      | 8.4        | 8.2        | 8.2        | 8.4        | 8.1      | 8.3     | 8.1        | 8.0        | 8.1        | 8.2        | 8.1      | 8.3      |
| Circumf.                    | 4.3        | 4.3        | 4.3        | 4.3        | 4.2      | 4.3     | 4.3        | 4.1        | 4.0        | 4.2        | 4.1      | 4.3      |
| Length                      | 19.2       | 19.0       | 19.5       | 19.4       | 19.0     | 19.1    | 18.9       | 18.4       | 18.4       | 19.1       | 18.0     | 19.2     |
| Spread                      | 15.6       | 15.7       | 16.0       | 15.9       | 15.5     | 15.7    | 15.2       | 14.9       | 14.8       | 15.5       | 14.9     | 15.7     |
| % <b>4</b> .5+ Yr.          | 34         | 34         | 34         | 31         | 35       | 29      | 28         | 28         | 26         | 16         | 4        | 34       |
| Weight                      | 203        | 203        | 204        | 201        | 200      | 199     | 201        | 196        | 197        | 209        | 197      | 202      |
| Points                      | 8.4        | 8.2        | 8.3        | 8.6        | 8.6      | 8.5     | 8.2        | 8.3        | 8.3        | 8.4        | 8.4      | 8.4      |
| Circumf.                    | 4.9        | 4.6        | 4.7        | 4.5        | 4.7      | 4.6     | 4.6        | 4.5        | 4.4        | 4.7        | 4.4      | 4.7      |
| Length                      | 20.5       | 20.2       | 20.9       | 20.5       | 20.6     | 20.8    | 20.1       | 19.9       | 19.8       | 20.9       | 19.5     | 20.5     |
| Spread                      | 16.6       | 16.4       | 17.1       | 16.5       | 16.6     | 16.6    | 15.9       | 16.3       | 15.8       | 16.8       | 15.8     | 16.6     |
| % Doe Lactation             | 10         | 10         | 10         | 17         | 16       | 10      | 11         | 10         | 1.5        | 25         | 16       | 15       |
| 1.5 Yr.                     | 16         | 10         | 18         | 17         | 16       | 12      | 11<br>59   | 12<br>59   | 15         | 25<br>70   | 16       | 15       |
| 2.5 Yr.                     | 61         | 43<br>52   | 64<br>71   | 61<br>71   | 60<br>68 | 57      | 59<br>68   | 59<br>69   | 58<br>70   | 70<br>78   | 58<br>71 | 58       |
| 3.5+ Yr.<br>Doe Age Classes | 66         | 52         | 71         | 71         | 08       | 67      | 08         | 69         | 70         | /8         | 71       | 66       |
| % 0.5 Yr.                   | 5          | 5          | 7          | 10         | 10       | 9       | 9          | 8          | 8          | 9          | 12       | 7        |
| % 0.5 11.<br>% 1.5 Yr.      | 5<br>17    |            | 22         | 21         | 20       | 21      | 25         | 20         | 8<br>24    | 22         | 21       | 21       |
| % 1.5 H.<br>% 2.5 Yr.       | 28         | 20         | 22         | 21         | 20       | 21      | 23         | 20         | 24         | 22         | 21       | 21       |
| % 2.5 11.<br>% 3.5+ Yr.     | 28<br>50   | 43         | 25<br>46   | 20<br>49   | 47       | 43      | 43         | 20<br>46   | 23<br>44   | 47         | 41       | 25<br>47 |
| Doe Weights                 | 50         | - 13       | 40         | -17        | 1/       | 45      | 43         | UF         | 77         | 17         | 11       | 17       |
| 0.5 Yr.                     | 72         | 65         | 70         | 71         | 69       | 67      | 73         | 73         | 70         | 69         | 66       | 69       |
| 1.5 Yr.                     | 109        | 107        | 108        | 109        | 105      | 104     | 106        | 107        | 104        | 109        | 109      | 108      |
| 2.5 Yr.                     | 120        | 120        | 120        | 119        | 119      | 117     | 120        | 107        | 116        | 119        | 121      | 120      |
| 3.5+ Yr.                    | 120        | 120        | 120        | 127        | 126      | 124     | 120        | 121        | 125        | 126h       | 121      | 120      |
| 5.5+ II.                    | 12/        | 126        | 129        | 12/        | 120      | 124     | 128        | 12/        | 123        | 12011      | 129      | 12/      |

# SOIL RESOURCES

# Table 15. Upper Thick Loess Soil Resource AreaSummary of DMAP Data

|                    |            |            | 54         |            |            | JMAP       | Uutu       |            |            |            | 1              |                |
|--------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------------|----------------|
|                    |            |            |            | I          | 1          | son        | I          |            |            |            | Avei           |                |
|                    | <b>'09</b> | <b>'08</b> | <b>'07</b> | <b>'06</b> | <b>'05</b> | <b>'04</b> | <b>'03</b> | <b>'02</b> | <b>'01</b> | <b>'00</b> | <b>'91-'94</b> | <b>'05-'09</b> |
| Acres              | 229,203    | 237,515    | 251,952    | 282,476    | 277,644    | 243,289    | 245,200    | 229,017    | 229,255    | 215,071    | 210,775        | 255,758        |
| Total Deer         | 4,717      | 4,971      | 4,351      | 5,224      | 4,439      | 4,055      | 3,976      | 3,450      | 3,545      | 3,185      | 2,732          | 4,740          |
| Bucks              | 1,696      | 1,688      | 1,640      | 1,935      | 1,712      | 1,532      | 1,455      | 1,350      | 1,363      | 1,258      | 1,443          | 1,734          |
| Does               | 3,021      | 3,283      | 2,711      | 3,289      | 2,727      | 2,523      | 2,521      | 2,100      | 2,182      | 1,927      | 1,457          | 3,006          |
| Acres/Deer         | 49         | 48         | 58         | 54         | 63         | 60         | 62         | 66         | 65         | 68         | 78             | 54             |
| Bucks              | 135        | 141        | 154        | 146        | 162        | 159        | 169        | 170        | 168        | 171        | 146            | 147            |
| 3.5+ Bucks         | 238        | 260        | 280        | 257        | 288        | 275        | 287        | 311        | 342        | 410        | 1,179          | 265            |
| Does               | 76         | 72         | 93         | 86         | 102        | 96         | 97         | 109        | 105        | 112        | 169            | 85             |
| Avg. Age ALL Bucks | 2.9        | 2.8        | 2.8        | 3.0        | 2.8        | 2.8        | 3.0        | 2.8        | 2.8        | 2.5        | 2.4            | 2.9            |
| % 0.5 Yr. Bucks    | 7          | 6          | 6          | 6          | 6          | 4          | 5          | 5          | 6          | 5          | 7              | 6.2            |
| Weight             | 65         | 65         | 66         | 67         | 68         | 69         | 75         | 69         | 70         | 69         | 72             | 66.2           |
| % 1.5 Yr.          | 23         | 22         | 21         | 17         | 15         | 15         | 12         | 9          | 11         | 11         | 53             | 20             |
| Weight             | 115        | 122        | 115        | 115        | 118        | 114        | 113        | 124        | 120        | 118        | 132            | 117            |
| Points             | 2.2        | 2.5        | 2.3        | 2.6        | 2.5        | 2.6        | 2.8        | 4.3        | 3.5        | 4.1        | 3.9            | 2.4            |
| Circumf.           | 2.0        | 2.2        | 2.0        | 2.0        | 2.1        | 2.0        | 2.2        | 2.5        | 2.2        | 2.5        | 2.5            | 2.1            |
| Length             | 4.8        | 6.0        | 4.5        | 5.5        | 5.8        | 5.7        | 5.9        | 8.5        | 7.4        | 7.2        | 8.1            | 5.3            |
| Spread             | 4.9        | 6.0        | 4.9        | 5.1        | 5.6        | 5.4        | 6.0        | 7.4        | 7.3        | 7.0        | 6.9            | 5.3            |
| % 2.5 Yr.          | 12         | 17         | 17         | 19         | 23         | 25         | 23         | 29         | 32         | 40         | 28             | 18             |
| Weight             | 151        | 156        | 151        | 155        | 157        | 154        | 154        | 160        | 154        | 154        | 163            | 154            |
| Points             | 7.1        | 6.8        | 6.9        | 7.0        | 7.0        | 7.0        | 7.2        | 7.4        | 7.2        | 7.2        | 7.0            | 7.0            |
| Circumf.           | 3.5        | 3.6        | 3.5        | 3.6        | 3.6        | 3.5        | 3.5        | 3.7        | 3.5        | 3.5        | 3.5            | 3.5            |
| Length             | 15.0       | 15.0       | 14.7       | 15.0       | 15.1       | 14.7       | 15.0       | 15.3       | 14.8       | 14.7       | 14.9           | 14.9           |
| Spread             | 12.7       | 12.4       | 12.2       | 12.4       | 12.5       | 12.4       | 12.5       | 12.6       | 12.2       | 12.1       | 12.5           | 12.4           |
| % 3.5 Yr.          | 28         | 30         | 28         | 28         | 33         | 34         | 34         | 34         | 31         | 31         | 11             | 29             |
| Weight             | 169        | 175        | 176        | 176        | 179        | 176        | 178        | 177        | 173        | 179        | 190            | 175            |
| Points             | 7.9        | 7.9        | 7.8        | 7.9        | 7.9        | 7.8        | 8.0        | 8.0        | 7.9        | 8.2        | 8.1            | 7.9            |
| Circumf.           | 4.2        | 4.1        | 4.1        | 4.2        | 4.3        | 4.1        | 4.2        | 4.1        | 4.0        | 4.2        | 4.3            | 4.2            |
| Length             | 17.8       | 17.9       | 17.9       | 18.2       | 18.1       | 17.9       | 18.2       | 17.7       | 17.4       | 17.9       | 18.6           | 18.0           |
| Spread             | 14.5       | 14.6       | 14.6       | 14.7       | 14.6       | 14.4       | 14.7       | 14.5       | 14.2       | 14.5       | 15.3           | 14.6           |
| % 4.5+ Yr.         | 31         | 25         | 28         | 30         | 23         | 23         | 26         | 22         | 20         | 13         | 2              | 27             |
| Weight             | 184        | 186        | 189        | 190        | 191        | 189        | 192        | 194        | 189        | 193        | 211            | 188            |
| Points             | 8.3        | 8.3        | 8.3        | 8.3        | 8.5        | 8.2        | 8.2        | 8.3        | 8.3        | 8.6        | 8.6            | 8.3            |
| Circumf.           | 4.7        | 4.7        | 4.7        | 4.7        | 4.7        | 4.6        | 4.6        | 4.7        | 4.5        | 4.6        | 5.0            | 4.7            |
| Length             | 19.8       | 19.7       | 20.1       | 20.1       | 19.9       | 19.8       | 19.9       | 19.9       | 19.7       | 20.3       | 21.1           | 19.9           |
| Spread             | 15.9       | 15.9       | 15.9       | 16.0       | 16.0       | 15.9       | 15.8       | 16.0       | 15.8       | 16.1       | 17.1           | 15.9           |
| % Doe Lactation    |            |            |            |            |            |            |            |            |            |            |                |                |
| 1.5 Yr.            | 8          | 13         | 9          | 12         | 14         | 11         | 10         | 13         | 9          | 9          | 12             | 11             |
| 2.5 Yr.            | 56         | 55         | 56         | 59         | 58         | 57         | 54         | 66         | 62         | 63         | 60             | 57             |
| 3.5+ Yr.           | 67         | 67         | 73         | 71         | 73         | 68         | 66         | 70         | 70         | 72         | 66             | 70             |
| Doe Age Classes    |            |            |            |            |            |            |            |            |            |            |                |                |
| % 0.5 Yr.          | 7          | 7          | 6          | 6          | 7          | 7          | 7          | 7          | 6          | 6          | 12             | 7              |
| % 1.5 Yr.          | 21         | 22         | 22         | 19         | 19         | 20         | 22         | 19         | 21         | 23         | 23             | 21             |
| % 2.5 Yr.          | 20         | 22         | 22         | 21         | 22         | 23         | 20         | 22         | 22         | 23         | 25             | 21             |
| % 3.5+ Yr.         | 52         | 50         | 50         | 54         | 52         | 49         | 52         | 52         | 51         | 49         | 41             | 51             |
| Doe Weights        |            |            |            |            |            |            |            |            |            |            |                |                |
| 0.5 Yr.            | 63         | 63         | 69         | 66         | 65         | 65         | 68         | 65         | 66         | 64         | 66             | 65             |
| 1.5 Yr.            | 99         | 106        | 102        | 101        | 103        | 100        | 99         | 107        | 103        | 102        | 107            | 102            |
| 2.5 Yr.            | 112        | 115        | 115        | 113        | 116        | 113        | 113        | 115        | 114        | 114        | 120            | 114            |
| 3.5+ Yr.           | 119        | 122        | 122        | 120        | 123        | 120        | 122        | 123        | 124        | 121        | 128            | 121            |

# Table 16. Lower Thick Loess Soil Resource AreaSummary of DMAP Data

|                     |            |            |            |            | •          |            | Dutu       |           |            |            |                |                 |
|---------------------|------------|------------|------------|------------|------------|------------|------------|-----------|------------|------------|----------------|-----------------|
|                     | (22        |            | (a=        | 105        | Sea        |            | (00        | 100       |            |            |                | rage            |
|                     | <b>'09</b> | <b>'08</b> | <b>'07</b> | <b>'06</b> | <b>'05</b> | <b>'04</b> | <b>'03</b> | ʻ02       | <b>'01</b> | <b>'00</b> | <b>'91-'94</b> | <b>'05</b> -'09 |
| Acres               | 143,358    | 134,573    | 130,385    | 127,618    | 123,479    | 130,509    | 143,569    | 137,251   | 132,446    | 131,539    | 233,912        | 131,883         |
| Total Deer          | 2,849      | 2,702      | 2,649      | 2,663      | 2,327      | 2,576      | 2,789      | 2,764     | 2,626      | 2,348      | 6,077          | 2,638           |
| Bucks               | 1,141      | 995        | 964        | 1,008      | 1,030      | 1,087      | 1,069      | 1,151     | 1,167      | 983        | 2,776          | 1,028           |
| Does                | 1,708      | 1,707      | 1,685      | 1,655      | 1,297      | 1,489      | 1,720      | 1,613     | 1,459      | 1,365      | 1,457          | 1,610           |
| Acres/Deer          | 50<br>126  | 50<br>135  | 49<br>135  | 48         | 53<br>120  | 51         | 51<br>134  | 50<br>119 | 50<br>113  | 56         | 39             | 50<br>128       |
| Bucks<br>3.5+ Bucks | 120        | 203        | 224        | 127<br>198 | 201        | 120<br>187 | 240        | 205       | 218        | 134<br>272 | 84<br>417      | 202             |
| Does                | 84         | 203<br>79  | 77         | 77         | 201<br>95  | 88         | 83         | 203<br>85 | 218<br>91  | 96         | 417            | 82              |
| Avg. Age ALL Bucks  | 3.4        | 3.2        | 3.1        | 3.3        | 3.2        | 3.1        | 3.0        | 3.0       | 2.8        | 2.8        | 2.4            | 3.2             |
| % 0.5 Yr. Bucks     | 3.4        | 3.2        | 4          | 4          | 5.2        | 3.1        | 2          | 3.0       | 2.0        | 2.0        | 7              | 3.2             |
| Weight              | 60         | 62         | 62         | 61         | 109        | 63         | 64         | 67        | 71         | 66         | 63             | 70.9            |
| % 1.5 Yr.           | 7          | 12         | 12         | 9          | 9          | 9          | 10         | 9         | 13         | 14         | 34             | 10              |
| Weight              | 109        | 108        | 107        | 113        | 111        | 107        | 112        | 120       | 113        | 111        | 117            | 109             |
| Points              | 2.6        | 2.7        | 2.6        | 2.7        | 3.1        | 3.1        | 3.5        | 4.3       | 3.6        | 3.6        | 3.1            | 2.7             |
| Circumf.            | 2.0        | 2.7        | 2.0        | 2.7        | 2.1        | 2.2        | 2.4        | 2.5       | 2.4        | 2.2        | 2.2            | 2.1             |
| Length              | 4.9        | 4.6        | 4.3        | 7.0        | 5.9        | 6.5        | 7.2        | 9.1       | 7.9        | 6.1        | 6.5            | 5.3             |
| Spread              | 5.9        | 5.7        | 5.4        | 6.6        | 6.1        | 6.2        | 6.7        | 7.7       | 7.2        | 6.3        | 6.0            | 5.9             |
| % 2.5 Yr.           | 16         | 17         | 22         | 20         | 19         | 24         | 31         | 28        | 31         | 33         | 38             | 19              |
| Weight              | 148        | 145        | 147        | 147        | 148        | 146        | 152        | 150       | 148        | 148        | 151            | 147             |
| Points              | 7.3        | 6.9        | 7.0        | 7.0        | 7.2        | 6.8        | 7.2        | 7.1       | 7.1        | 7.1        | 6.9            | 7.1             |
| Circumf.            | 3.6        | 3.5        | 3.6        | 3.5        | 3.5        | 3.3        | 3.5        | 3.5       | 3.4        | 3.5        | 3.4            | 3.5             |
| Length              | 15.2       | 14.3       | 14.7       | 14.4       | 14.8       | 14.0       | 14.5       | 14.7      | 14.1       | 14.3       | 14.3           | 14.7            |
| Spread              | 12.4       | 11.9       | 12.2       | 11.7       | 12.0       | 11.8       | 11.9       | 12.0      | 11.2       | 11.7       | 11.8           | 12.1            |
| % 3.5 Yr.           | 32         | 32         | 31         | 29         | 34         | 35         | 26         | 31        | 30         | 28         | 16             | 32              |
| Weight              | 167        | 164        | 165        | 166        | 165        | 165        | 171        | 168       | 164        | 167        | 169            | 166             |
| Points              | 8.0        | 7.8        | 7.8        | 7.7        | 7.7        | 7.8        | 7.9        | 8.0       | 7.7        | 8.1        | 7.9            | 7.8             |
| Circumf.            | 4.1        | 4.2        | 4.0        | 4.3        | 4.0        | 3.9        | 4.1        | 4.1       | 4.0        | 4.0        | 4.0            | 4.1             |
| Length              | 17.6       | 17.2       | 17.5       | 17.5       | 17.2       | 17.2       | 17.5       | 17.1      | 16.8       | 17.4       | 17.1           | 17.4            |
| Spread              | 14.0       | 14.1       | 13.9       | 14.0       | 14.0       | 13.6       | 13.9       | 13.7      | 13.6       | 14.0       | 13.8           | 14.0            |
| % 4.5+ Yr.          | 42         | 36         | 32         | 39         | 32         | 30         | 31         | 29        | 24         | 22         | 5              | 36              |
| Weight              | 178        | 176        | 179        | 181        | 181        | 183        | 185        | 184       | 183        | 183        | 182            | 179             |
| Points              | 8.6        | 8.2        | 8.6        | 8.4        | 8.5        | 8.5        | 8.5        | 8.7       | 8.4        | 8.6        | 8.4            | 8.5             |
| Circumf.            | 4.6        | 4.5        | 4.6        | 4.5        | 4.5        | 4.4        | 4.6        | 4.7       | 4.5        | 4.6        | 4.5            | 4.5             |
| Length              | 19.6       | 18.9       | 19.7       | 19.4       | 19.3       | 19.4       | 20.1       | 19.7      | 19.2       | 19.9       | 19.5           | 19.4            |
| Spread              | 15.3       | 15.0       | 15.4       | 15.4       | 15.2       | 15.3       | 15.5       | 15.6      | 15.4       | 15.6       | 15.4           | 15.2            |
| % Doe Lactation     |            |            |            |            |            |            |            |           |            |            |                |                 |
| 1.5 Yr.             | 12         | 8          | 9          | 9          | 9          | 8          | 6          | 13        | 9          | 8          | 9              | 10              |
| 2.5 Yr.             | 57         | 49         | 60         | 55         | 61         | 49         | 60         | 65        | 58         | 61         | 60             | 56              |
| 3.5+ Yr.            | 71         | 64         | 73         | 74         | 76         | 65         | 73         | 75        | 74         | 72         | 72             | 72              |
| Doe Age Classes     |            |            |            |            |            |            |            |           |            |            |                |                 |
| % 0.5 Yr.           | 8          | 6          | 6          | 6          | 8          | 7          | 4          | 4         | 4          | 4          | 10             | 7               |
| % 1.5 Yr.           | 17         | 21         | 24         | 21         | 20         | 24         | 25         | 23        | 24         | 25         | 24             | 21              |
| % 2.5 Yr.           | 24         | 22         | 22         | 19         | 21         | 22         | 20         | 20        | 22         | 21         | 25             | 22              |
| % 3.5+ Yr.          | 51         | 51         | 48         | 54         | 51         | 47         | 50         | 53        | 50         | 51         | 42             | 51              |
| Doe Weights         |            |            |            |            |            |            |            |           |            |            |                |                 |
| 0.5 Yr.             | 61         | 62         | 63         | 64         | 67         | 61         | 64         | 68        | 66         | 66         | 60             | 64              |
| 1.5 Yr.             | 96<br>100  | 93         | 93         | 98         | 97         | 94         | 96         | 101       | 98         | 95         | 97             | 95              |
| 2.5 Yr.             | 109        | 109        | 110        | 110        | 110        | 110        | 111        | 110       | 111        | 111        | 111            | 109             |
| 3.5+ Yr.            | 114        | 115        | 113        | 116        | 118        | 116        | 117        | 116       | 117        | 116        | 118            | 115             |

# Table 17. Upper Thin Loess Soil Resource Area Summary of DMAP Data

|                    |            |            |            |            | y UI L     |            | 0          |            |            |            |                |                |
|--------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------------|----------------|
|                    |            |            |            |            | Sea        |            |            |            |            | 1          |                | rage           |
|                    | <b>'09</b> | <b>'08</b> | <b>'07</b> | <b>'06</b> | <b>'05</b> | <b>'04</b> | <b>'03</b> | <b>'02</b> | <b>'01</b> | <b>'00</b> | <b>'91-'94</b> | <b>'05-'09</b> |
| Acres              | 143,358    | 134,573    | 130,385    | 127,618    | 123,479    | 163,848    | 172,889    | 181,597    | 166,290    | 146,172    | 221,531        | 131,883        |
| Total Deer         | 2,849      | 2,702      | 2,649      | 2,663      | 2,327      | 1,961      | 1,926      | 1,914      | 1,790      | 1,780      | 3,045          | 2,638          |
| Bucks              | 1,141      | 995        | 964        | 1,008      | 1,030      | 865        | 836        | 930        | 882        | 853        | 1,656          | 1,028          |
| Does               | 1,708      | 1,707      | 1,685      | 1,655      | 1,297      | 1,096      | 1,090      | 984        | 908        | 927        | 1,457          | 1,610          |
| Acres/Deer         | 50         | 50         | 49         | 48         | 53         | 84         | 90         | 95         | 93         | 82         | 73             | 50             |
| Bucks              | 126        | 135        | 135        | 127        | 120        | 189        | 207        | 195        | 189        | 171        | 134            | 128            |
| 3.5+ Bucks         | 183        | 203        | 224        | 198        | 201        | 419        | 457        | 513        | 412        | 502        | 1,365          | 202            |
| Does               | 84         | 79         | 77         | 77         | 95         | 149        | 159        | 185        | 183        | 158        | 163            | 82             |
| Avg. Age ALL Bucks | 3.4        | 3.2        | 3.1        | 3.3        | 3.2        | 2.5        | 2.5        | 2.4        | 2.6        | 2.3        | 2.4            | 3.2            |
| % 0.5 Yr. Bucks    | 3          | 3          | 4          | 4          | 6          | 4          | 4          | 7          | 4          | 4          | 7              | 4              |
| Weight             | 60         | 62         | 62         | 61         | 109        | 63         | 66         | 99         | 66         | 61         | 63             | 70.9           |
| % 1.5 Yr.          | 7          | 12         | 12         | 9          | 9          | 15         | 22         | 24         | 16         | 15         | 52             | 10             |
| Weight             | 109        | 108        | 107        | 113        | 111        | 115        | 117        | 121        | 117        | 117        | 112            | 109            |
| Points             | 2.6        | 2.7        | 2.6        | 2.7        | 3.1        | 3.7        | 4.1        | 4.6        | 4.0        | 4.4        | 3.2            | 2.7            |
| Circumf.           | 2.0        | 2.1        | 2.1        | 2.2        | 2.1        | 2.3        | 2.4        | 2.5        | 2.3        | 2.5        | 2.2            | 2.1            |
| Length             | 4.9        | 4.6        | 4.3        | 7.0        | 5.9        | 7.3        | 8.3        | 9.2        | 7.9        | 8.8        | 6.7            | 5.3            |
| Spread             | 5.9        | 5.7        | 5.4        | 6.6        | 6.1        | 6.8        | 7.1        | 7.7        | 7.1        | 7.5        | 5.8            | 5.9            |
| % 2.5 Yr.          | 16         | 17         | 22         | 20         | 19         | 33         | 26         | 31         | 35         | 46         | 31             | 19             |
| Weight             | 148        | 145        | 147        | 147        | 148        | 143        | 148        | 147        | 147        | 140        | 144            | 147            |
| Points             | 7.3        | 6.9        | 7.0        | 7.0        | 7.2        | 6.5        | 6.4        | 6.7        | 6.7        | 6.7        | 6.5            | 7.1            |
| Circumf.           | 3.6        | 3.5        | 3.6        | 3.5        | 3.5        | 3.2        | 3.3        | 3.4        | 3.4        | 3.3        | 3.3            | 3.5            |
| Length             | 15.2       | 14.3       | 14.7       | 14.4       | 14.8       | 13.7       | 14.0       | 14.0       | 14.0       | 13.7       | 13.6           | 14.7           |
| Spread             | 12.4       | 11.9       | 12.2       | 11.7       | 12.0       | 11.1       | 11.4       | 11.4       | 11.7       | 11.3       | 11.0           | 12.1           |
| % 3.5 Yr.          | 32         | 32         | 31         | 29         | 34         | 35         | 30         | 25         | 29         | 27         | 9              | 32             |
| Weight             | 167        | 164        | 165        | 166        | 165        | 157        | 158        | 159        | 154        | 158        | 164            | 166            |
| Points             | 8.0        | 7.8        | 7.8        | 7.7        | 7.7        | 7.2        | 7.3        | 7.4        | 7.2        | 7.7        | 7.9            | 7.8            |
| Circumf.           | 4.1        | 4.2        | 4.0        | 4.3        | 4.0        | 3.7        | 3.7        | 3.9        | 3.7        | 4.0        | 4.1            | 4.1            |
| Length             | 17.6       | 17.2       | 17.5       | 17.5       | 17.2       | 15.8       | 15.8       | 16.2       | 15.5       | 16.6       | 17.3           | 17.4           |
| Spread             | 14.0       | 14.1       | 13.9       | 14.0       | 14.0       | 12.7       | 12.9       | 13.3       | 12.5       | 13.3       | 14.0           | 14.0           |
| % <b>4</b> .5+ Yr. | 42         | 36         | 32         | 39         | 32         | 13         | 17         | 14         | 18         | 8          | 2              | 36             |
| Weight             | 178        | 176        | 179        | 181        | 181        | 170        | 172        | 171        | 166        | 169        | 174            | 179            |
| Points             | 8.6        | 8.2        | 8.6        | 8.4        | 8.5        | 7.8        | 7.9        | 8.0        | 7.9        | 8.0        | 8.4            | 8.5            |
| Circumf.           | 4.6        | 4.5        | 4.6        | 4.5        | 4.5        | 4.3        | 4.2        | 4.3        | 4.2        | 4.5        | 4.5            | 4.5            |
| Length             | 19.6       | 18.9       | 19.7       | 19.4       | 19.3       | 18.4       | 18.0       | 18.3       | 17.8       | 18.8       | 19.3           | 19.4           |
| Spread             | 15.3       | 15.0       | 15.4       | 15.4       | 15.2       | 14.4       | 14.3       | 14.6       | 14.2       | 15.1       | 15.4           | 15.2           |
| % Doe Lactation    |            |            |            |            |            |            |            |            |            |            |                |                |
| 1.5 Yr.            | 12         | 8          | 9          | 9          | 9          | 17         | 9          | 18         | 11         | 11         | 9              | 10             |
| 2.5 Yr.            | 57         | 49         | 60         | 55         | 61         | 54         | 53         | 62         | 52         | 56         | 54             | 56             |
| 3.5+ Yr.           | 71         | 64         | 73         | 74         | 76         | 70         | 70         | 71         | 66         | 66         | 65             | 72             |
| Doe Age Classes    |            |            |            |            |            |            |            |            |            |            |                |                |
| % 0.5 Yr.          | 8          | 6          | 6          | 6          | 8          | 6          | 10         | 11         | 7          | 5          | 12             | 7              |
| % 1.5 Yr.          | 17         | 21         | 24         | 21         | 20         | 23         | 26         | 25         | 24         | 25         | 24             | 21             |
| % 2.5 Yr.          | 24         | 22         | 22         | 19         | 21         | 23         | 19         | 19         | 24         | 26         | 25             | 22             |
| % 3.5+ Yr.         | 51         | 51         | 48         | 54         | 51         | 48         | 45         | 45         | 45         | 44         | 39             | 51             |
| Doe Weights        |            |            |            |            |            |            |            |            |            |            |                |                |
| 0.5 Yr.            | 61         | 62         | 63         | 64         | 67         | 62         | 71         | 74         | 66         | 63         | 60             | 64             |
| 1.5 Yr.            | 96         | 93         | 93         | 98         | 97         | 92         | 96         | 98         | 96         | 89         | 93             | 95             |
| 2.5 Yr.            | 109        | 109        | 110        | 110        | 110        | 106        | 104        | 106        | 107        | 103        | 104            | 109            |
| 3.5+ Yr.           | 114        | 115        | 113        | 116        | 118        | 111        | 112        | 112        | 112        | 109        | 111            | 115            |

# Table 18. Lower Thin Loess Soil Resource AreaSummary of DMAP Data

|   |             |            | 54         | mma        | ,           |             | Uutu       |             |            |              | 3                 |                 |
|---|-------------|------------|------------|------------|-------------|-------------|------------|-------------|------------|--------------|-------------------|-----------------|
|   | <b>'09</b>  | <b>'08</b> | <b>'07</b> | <b>'06</b> | Sea<br>'05  | °04         | <b>'03</b> | <b>'02</b>  | <b>'01</b> | <b>'00</b> ' | Ave<br>'91-'94    | rage<br>'05-'09 |
| Acres                                   | 105,674     | 106,718    | 102,234    | 97,130     | 99,655      | 146,690     | 140,209    | 148,340     | 139,540    | 141,647      | 91- 94<br>214,591 | 102,282         |
| Total Deer                              | 1,258       | 1,319      | 1,448      | 1,475      | 1,264       | 2,096       | 2,249      | 2,079       | 2,017      | 2,157        | 3,892             | 1,353           |
| Bucks                                   | 436         | 431        | 525        | 506        | 460         | 2,090       | 793        | 781         | 734        | 2,137        | 1,705             | 472             |
| Does                                    | 430<br>822  | 888        | 923        | 969        | 804         | 1,326       | 1,456      | 1,298       | 1,283      | 1,380        | 1,703             | 472<br>881      |
| Acres/Deer                              | 822         | 81         | 923<br>71  | 969        | 804<br>79   | 70          | 62         | 71          | 1,283      | 1,380        | 1,457             | 76              |
| Bucks                                   | 242         | 248        | 195        | 192        | 217         | 191         | 177        | 190         | 190        | 182          | 126               | 217             |
| 3.5+ Bucks                              | 472         | 462        | 386        | 320        | 217         | 301         | 330        | 336         | 362        | 359          | 578               | 376             |
| Does                                    | 472         | 120        | 111        | 100        | 1240        | 111         | 96<br>96   | 330<br>114  | 109        | 103          | 99                | 116             |
| Avg. Age ALL Bucks                      | 2.8         | 2.9        | 2.9        | 3.0        | 3.0         | 2.9         | 2.8        | 2.9         | 2.8        | 2.8          | 2.4               | 2.9             |
| % 0.5 Yr. Bucks                         | 2.0         | 2.9        | 2.9        | 5.0        | 3.0         | 2.9         | 2.8        | 2.9         | 2.8        | 2.8          | 2.4               | 4.9             |
|   | 64          | 69         | 67         | 66         | 70          | 68          | 77         | 131         | 72         | 64           | 62                |                 |
| Weight <b>% 1.5 Yr.</b>                 | 13          | 14         | 12         | 15         | 12          | 10          | 14         | 131         | 12         | 13           | 39                | 67.1<br>13      |
|   |             |            |            |            | 12          | 109         | 14         |             | 12         |              |                   |                 |
| Weight<br>Points                        | 112<br>2.6  | 111<br>2.9 | 112<br>2.8 | 110<br>2.9 | 3.8         | 3.0         | 3.7        | 122<br>4.3  | 4.0        | 116<br>3.9   | 110<br>2.8        | 112<br>3.0      |
| Circumf.                                | 2.6         | 2.9        | 2.8<br>1.8 | 2.9        | 3.8<br>2.4  | 3.0         | 3.7        | 4.3<br>2.5  | 4.0<br>2.5 | 2.2          | 2.8<br>2.1        | 2.2             |
| Length                                  | 2.4<br>6.0  | 2.3<br>6.2 | 1.8<br>5.6 | 2.1<br>5.4 | 2.4<br>7.9  | 1.8<br>6.5  | 2.4<br>7.6 | 2.5<br>8.9  | 2.5<br>7.7 | 7.6          | 2.1<br>5.8        | 6.2             |
| , i i i i i i i i i i i i i i i i i i i | 6.3         | 5.7        | 5.0<br>6.1 | 5.4        | 7.9         | 7.7         | 7.0        | 7.8         | 6.9        | 6.8          | 5.6               | 6.2             |
| Spread<br>% 2.5 Yr.                     | 28          |            | 28         |            |             |             | 28         |             | 31         |              | 3.0               | 24              |
|   |             | 23         |            | 19         | 21          | 24          |            | 28          |            | 34           |                   |                 |
| Weight                                  | 147         | 145        | 147        | 150        | 148         | 145         | 150        | 152         | 144        | 144          | 142<br>6.3        | 147             |
| Points                                  | 6.8         | 6.5        | 6.6        | 7.1        | 6.6<br>3.3  | 6.5         | 6.7<br>3.4 | 6.7         | 6.7<br>3.3 | 6.7          |                   | 6.7             |
| Circumf.                                | 3.5         | 3.3        | 3.3        | 3.4        |             | 3.2         |            | 3.4         |            | 3.3          | 3.3               | 3.4             |
| Length                                  | 14.6        | 13.9       | 14.1       | 14.7       | 14.0        | 13.5        | 13.9       | 14.0        | 14.0       | 13.9         | 13.6              | 14.3            |
| Spread                                  | 11.8        | 11.4       | 11.5       | 11.6       | 11.5        | 11.0        | 11.0       | 11.3        | 11.1       | 11.1         | 10.7              | 11.6            |
| % 3.5 Yr.                               | 30          | 31         | 29         | 29         | 37          | 39          | 33         | 31          | 30         | 30           | 16                | 31              |
| Weight                                  | 170         | 170        | 170        | 166<br>7 0 | 165         | 162         | 169        | 168         | 166        | 164          | 163               | 168             |
| Points                                  | 7.9         | 7.6        | 7.6        | 7.3        | 7.3         | 7.5         | 7.7        | 7.7         | 7.7        | 7.6          | 7.5               | 7.5             |
| Circumf.                                | 4.1         | 4.1        | 4.0        | 4.0        | 3.9         | 3.7         | 4.0        | 3.9         | 3.9        | 3.9          | 3.8               | 4.0             |
| Length                                  | 17.9        | 17.3       | 17.4       | 16.8       | 16.3        | 16.4        | 16.9       | 17.2        | 16.7       | 16.9         | 16.7              | 17.1            |
| Spread                                  | 14.1        | 14.0       | 13.6       | 13.2       | 12.9        | 13.3        | 13.5       | 13.7        | 13.3       | 13.4         | 13.3              | 13.6            |
| % <b>4.5</b> + <b>Yr</b> .              | 24          | 28         | 26         | 33         | 26          | 26          | 24         | 27          | 24         | 22           | 7                 | 27              |
| Weight<br>Points                        | 184         | 180        | 181        | 181        | 178         | 180         | 181        | 183         | 181        | 177          | 176               | 181             |
| Circumf.                                | 8.3<br>4.5  | 8.0        | 8.2        | 8.1        | 8.2<br>4.5  | 8.2         | 8.3<br>4.5 | 8.3<br>4.5  | 8.2<br>4.4 | 8.3<br>4.3   | 8.3               | 8.2             |
|   | 4.5<br>19.5 | 4.4        | 4.6        | 4.3        | 4.5<br>18.7 | 4.3<br>18.8 |            | 4.5<br>19.4 |            |              | 4.4<br>19.2       | 4.5<br>19.3     |
| Length<br>Spread                        |             | 19.3       | 20.1       | 18.8       |             | 14.8        | 19.1       | 19.4        | 19.5       | 19.2         |                   |                 |
|   | 15.4        | 15.2       | 15.5       | 15.1       | 14.7        | 14.0        | 14.9       | 13.0        | 15.2       | 15.1         | 15.0              | 15.2            |
| % Doe Lactation<br>1.5 Yr.              | 15          | 16         | 14         | 10         | 9           | 11          | 10         | 12          | 14         | 9            | 11                | 13              |
| 2.5 Yr.                                 | 57          | 54         | 14<br>64   | 66         | 63          | 11<br>64    | 61         | 61          | 63         | 9<br>60      | 11<br>61          | 61              |
| 2.5 Yr.<br>3.5+ Yr.                     | 57<br>68    | 54<br>71   | 64<br>75   | 66<br>74   | 63<br>74    | 64<br>72    | 74         | 77          | 63<br>74   | 75           | 75                | 72              |
| Doe Age Classes                         | 00          | /1         | /3         | /4         | /4          | 12          | /4         | 11          | 74         | /3           | /3                | 12              |
| % 0.5 Yr.                               | 8           | 7          | 8          | 7          | 8           | 6           | 4          | 6           | 3          | 4            | 10                | 7               |
| % 0.5 Yr.<br>% 1.5 Yr.                  | 8<br>21     | 22         | 8<br>22    | 20         | 8<br>21     | 6<br>26     | 4<br>26    | 25          | 3<br>25    | 4<br>24      | 23                | 21              |
| % 1.5 H.<br>% 2.5 Yr.                   | 30          | 22         | 22         | 17         | 17          | 19          | 20         | 23          | 23         |              |                   | 21              |
| % 2.5 Yr.<br>% 3.5+ Yr.                 | 30<br>42    | 48         | 24<br>47   | 56         | 55          | 50          | 50         | 20<br>49    | 23<br>49   | 24<br>48     | 24<br>43          | 50              |
| % 3.5+ Yr.Doe Weights                   | 42          | 46         | 4/         | 30         | 55          | 30          | 30         | 49          | 49         | 48           | 43                | 50              |
| 0.5 Yr.                                 | 62          | 65         | 69         | 65         | 67          | 64          | 65         | 73          | 71         | 62           | 59                | 66              |
|   | 62<br>98    | 65<br>99   | 69<br>97   | 65<br>97   |             | 64<br>96    | - 65<br>98 | 101         | 71<br>99   | 95           | 94                | 66<br>98        |
| 1.5 Yr.                                 |             |            |            |            | 100         |             |            |             |            |              |                   |                 |
| 2.5 Yr.                                 | 111         | 110        | 111        | 108        | 111         | 107         | 109        | 110         | 109        | 107          | 107               | 110             |
| 3.5+ Yr.                                | 117         | 117        | 117        | 116        | 115         | 115         | 115        | 116         | 117        | 114          | 115               | 117             |

# Table 19. Black Prairie Soil Resource AreaSummary of DMAP Data

|                         |            |            |            | -          |            |            | Data       |            |            |            |                |                |
|-------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------------|----------------|
|                         | (22        | (22        | (a=        |            | Sea        |            | (00        | (0.5       | (0.1       | (0.0       |                | rage           |
|                         | <b>'09</b> | <b>'08</b> | <b>'07</b> | <b>'06</b> | <b>'05</b> | <b>'04</b> | <b>'03</b> | <b>'02</b> | <b>'01</b> | <b>'00</b> | <b>'91-'94</b> | <b>'05-'09</b> |
| Acres                   | 100,266    | 82,761     | 73,084     | 87,883     | 86,293     | 117,927    | 107,229    | 110,602    | 76,890     | 79,742     | 156,927        | 86,057         |
| Total Deer              | 842        | 976        | 777        | 729        | 735        | 939        | 929        | 988        | 719        | 880        | 1,994          | 812            |
| Bucks                   | 306        | 365        | 326        | 284        | 296        | 357        | 373        | 420        | 290        | 334        | 857            | 315            |
| Does                    | 536        | 611        | 451        | 445        | 439        | 582        | 556        | 568        | 429        | 546        | 1,457          | 496            |
| Acres/Deer              | 119        | 85         | 94         | 121        | 117        | 126        | 115        | 112        | 107        | 91         | 79             | 106            |
| Bucks                   | 328<br>593 | 227        | 224<br>387 | 309        | 292        | 330        | 287        | 263        | 265<br>394 | 239        | 186<br>913     | 272            |
| 3.5+ Bucks              | 593<br>187 | 381<br>135 | 387<br>162 | 567<br>197 | 529<br>197 | 659        | 638<br>193 | 510<br>195 |            | 385        |                | 492            |
| Does Avg. Age ALL Bucks | 2.8        | 3.0        | 2.9        | 2.9        | 2.9        | 203<br>2.7 | 2.6        | 2.7        | 179<br>2.7 | 146<br>2.7 | 139<br>2.4     | 173<br>2.9     |
| Avg. Age All Bucks      | 2.8        | 3.0        |            | 2.9        | 2.9        | 2.7        |            |            |            | 2.7        | 2.4            | 2.9            |
|                         | 58         | 68         | 1<br>78    | 2<br>64    | 73         | 2<br>69    | 1<br>62    | 3<br>54    | 1<br>50    | 55         | °<br>64        | 68             |
| Weight <b>% 1.5 Yr.</b> | 12         | 9          | 12         | 04<br>10   | 73<br>11   | 9          | 19         | 54<br>15   | 14         | 15         | 49             | 11             |
| Weight                  | 12         | 121        | 12         | 120        | 122        | 119        | 19         | 15         | 14         | 15         | 113            | 11             |
| Points                  | 3.4        | 3.9        | 3.7        | 3.8        | 3.9        | 4.1        | 4.4        | 5.0        | 4.8        | 5.1        | 3.3            | 3.7            |
| Circumf.                | 2.4        | 2.5        | 2.7        | 2.6        | 2.7        | 2.3        | 4.4<br>2.5 | 2.8        | 4.0<br>2.6 | 2.7        | 2.2            | 2.6            |
| Length                  | 7.6        | 7.7        | 7.2        | 8.6        | 8.9        | 8.4        | 8.6        | 2.0<br>9.8 | 8.8        | 2.7<br>9.8 | 6.9            | 8.0            |
| Spread                  | 7.4        | 7.9        | 7.2        | 7.3        | 8.3        | 7.5        | 7.0        | 7.8        | 7.2        | 8.4        | 6.3            | 7.6            |
| % 2.5 Yr.               | 29         | 20         | 23         | 25         | 25         | 34         | 31         | 28         | 31         | 30         | 23             | 24             |
| Weight                  | 152        | 153        | 147        | 147        | 148        | 151        | 141        | 146        | 131        | 132        | 143            | 149            |
| Points                  | 7.3        | 7.0        | 6.9        | 6.8        | 6.9        | 7.0        | 6.6        | 7.0        | 6.7        | 6.5        | 6.1            | 7.0            |
| Circumf.                | 3.6        | 3.6        | 3.5        | 3.5        | 3.5        | 3.5        | 3.5        | 3.4        | 3.3        | 3.2        | 3.3            | 3.5            |
| Length                  | 15.0       | 14.7       | 14.7       | 14.6       | 14.6       | 15.2       | 14.1       | 14.2       | 13.7       | 13.3       | 13.7           | 14.7           |
| Spread                  | 12.4       | 11.9       | 12.0       | 11.8       | 12.1       | 12.4       | 11.7       | 11.2       | 11.2       | 10.9       | 10.9           | 12.0           |
| % 3.5 Yr.               | 32         | 41         | 36         | 36         | 38         | 37         | 30         | 34         | 32         | 31         | 10.5           | 37             |
| Weight                  | 163        | 163        | 161        | 163        | 162        | 169        | 160        | 157        | 159        | 156        | 160            | 163            |
| Points                  | 7.8        | 7.8        | 7.9        | 7.7        | 7.5        | 7.8        | 7.6        | 7.5        | 7.6        | 7.9        | 7.3            | 7.8            |
| Circumf.                | 4.0        | 4.0        | 3.9        | 4.0        | 4.0        | 3.9        | 4.0        | 3.8        | 3.8        | 3.9        | 3.7            | 4.0            |
| Length                  | 17.0       | 16.8       | 17.0       | 16.6       | 16.7       | 17.3       | 16.6       | 16.5       | 16.2       | 16.8       | 16.4           | 16.8           |
| Spread                  | 13.6       | 13.5       | 14.1       | 13.3       | 13.4       | 14.1       | 13.2       | 13.2       | 13.3       | 13.2       | 13.2           | 13.6           |
| % 4.5+ Yr.              | 25         | 23         | 28         | 28         | 23         | 17         | 10.2       | 21         | 23         | 22         | 6              | 25             |
| Weight                  | 178        | 179        | 173        | 183        | 183        | 180        | 179        | 171        | 169        | 176        | 173            | 179            |
| Points                  | 8.7        | 8.4        | 8.7        | 8.0        | 8.2        | 8.1        | 8.0        | 8.1        | 8.6        | 8.0        | 8.0            | 8.4            |
| Circumf.                | 4.5        | 4.4        | 4.4        | 4.4        | 4.5        | 4.4        | 4.5        | 4.3        | 4.3        | 4.5        | 4.2            | 4.4            |
| Length                  | 19.3       | 18.9       | 19.2       | 18.6       | 19.3       | 18.2       | 18.6       | 18.5       | 18.6       | 18.5       | 18.4           | 19.1           |
| Spread                  | 15.2       | 15.1       | 15.3       | 14.4       | 14.9       | 14.2       | 14.4       | 14.9       | 15.1       | 14.5       | 14.5           | 15.0           |
| % Doe Lactation         |            |            |            |            |            |            |            |            |            |            |                |                |
| 1.5 Yr.                 | 16         | 15         | 13         | 17         | 26         | 20         | 12         | 13         | 10         | 10         | 14             | 17             |
| 2.5 Yr.                 | 54         | 51         | 48         | 53         | 61         | 58         | 53         | 62         | 54         | 52         | 57             | 53             |
| 3.5+ Yr.                | 59         | 64         | 66         | 73         | 70         | 70         | 63         | 71         | 66         | 68         | 66             | 66             |
| Doe Age Classes         |            |            |            |            |            |            |            |            |            |            |                |                |
| % 0.5 Yr.               | 2          | 8          | 4          | 4          | 7          | 7          | 2          | 4          | 2          | 3          | 12             | 5              |
| % 1.5 Yr.               | 23         | 21         | 26         | 19         | 26         | 21         | 27         | 21         | 25         | 24         | 24             | 23             |
| % 2.5 Yr.               | 24         | 22         | 22         | 20         | 19         | 30         | 23         | 22         | 22         | 18         | 19             | 21             |
| % 3.5+ Yr.              | 51         | 50         | 48         | 56         | 49         | 42         | 47         | 53         | 51         | 54         | 47             | 51             |
| Doe Weights             |            |            |            |            |            |            |            |            |            |            |                |                |
| 0.5 Yr.                 | 63         | 62         | 77         | 61         | 68         | 67         | 60         | 53         | 54         | 50         | 59             | 66             |
| 1.5 Yr.                 | 95         | 100        | 97         | 97         | 96         | 96         | 95         | 95         | 93         | 91         | 95             | 97             |
| 2.5 Yr.                 | 107        | 109        | 109        | 107        | 108        | 106        | 107        | 104        | 101        | 101        | 105            | 108            |
| 3.5+ Yr.                | 114        | 116        | 117        | 113        | 117        | 113        | 112        | 112        | 112        | 109        | 113            | 115            |

# Table 20. Upper Coastal Plain Soil Resource AreaSummary of DMAP Data

|                    |            |            | 54         | mma        | Sea        |            | Uutu       |            |            |            | 3               |         |
|--------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-----------------|---------|
|                    | (00        | (00        | (07        | 100        |            |            | (00        |            | (01        |            | Avei<br>'91-'94 | rage    |
| -                  | <b>'09</b> | <b>'08</b> | <b>'07</b> | <b>'06</b> | <b>'05</b> | <b>'04</b> | <b>'03</b> | <b>'02</b> | <b>'01</b> | <b>'00</b> |                 | '05-'09 |
| Acres              | 339,300    | 333,198    | 339,348    | 329,432    | 367,708    | 379,987    | 402,570    | 404,504    | 378,380    | 359,495    | 879,440         | 341,797 |
| Total Deer         | 3,629      | 3,816      | 3,362      | 3,371      | 3,502      | 3,534      | 3,370      | 3,572      | 3,335      | 3,512      | 8,488           | 3,536   |
| Bucks              | 1,369      | 1,526      | 1,442      | 1,406      | 1,498      | 1,490      | 1,501      | 1,653      | 1,662      | 1,551      | 4,677           | 1,448   |
| Does               | 2,260      | 2,290      | 1,920      | 1,965      | 2,004      | 2,044      | 1,869      | 1,919      | 1,673      | 1,961      | 1,457           | 2,088   |
| Acres/Deer         | 93         | 87         | 101        | 98         | 105        | 108        | 119        | 113        | 113        | 102        | 105             | 97      |
| Bucks              | 248        | 218        | 235        | 234        | 245        | 255        | 268        | 245        | 228        | 232        | 188             | 236     |
| 3.5+ Bucks         | 513        | 491        | 483        | 481        | 508        | 706        | 575        | 569        | 569        | 595        | 997             | 495     |
| Does               | 150        | 146        | 177        | 168        | 183        | 186        | 215        | 211        | 226        | 183        | 237             | 164     |
| Avg. Age ALL Bucks | 2.7        | 2.6        | 2.7        | 2.7        | 2.7        | 2.5        | 2.5        | 2.5        | 2.5        | 2.4        | 2.4             | 2.7     |
| % 0.5 Yr. Bucks    | 7          | 6          | 4          | 3          | 4          | 5          | 2          | 3          | 3          | 2          | 7               | 4.9     |
| Weight             | 58         | 60         | 62         | 58         | 65         | 65         | 66         | 63         | 61         | 59         | 58              | 60.7    |
| % 1.5 Yr.          | 16         | 18         | 17         | 16         | 13         | 15         | 18         | 21         | 16         | 20         | 51              | 16      |
| Weight             | 100        | 107        | 105        | 108        | 105        | 107        | 108        | 113        | 112        | 110        | 108             | 105     |
| Points             | 2.9        | 3.7        | 3.4        | 3.9        | 3.7        | 3.9        | 4.3        | 4.7        | 4.6        | 4.6        | 3.2             | 3.5     |
| Circumf.           | 1.9        | 2.2        | 2.0        | 2.3        | 2.2        | 2.3        | 2.4        | 2.5        | 2.6        | 2.5        | 2.1             | 2.1     |
| Length             | 6.5        | 7.2        | 6.4        | 7.7        | 7.1        | 7.8        | 8.7        | 9.2        | 9.1        | 9.0        | 6.7             | 7.0     |
| Spread             | 6.3        | 6.6        | 6.2        | 6.6        | 6.4        | 7.0        | 7.5        | 7.5        | 7.6        | 7.5        | 5.8             | 6.4     |
| % 2.5 Yr.          | 27         | 30         | 27         | 30         | 31         | 41         | 33         | 32         | 38         | 38         | 24              | 29      |
| Weight             | 137        | 140        | 135        | 137        | 137        | 140        | 137        | 140        | 138        | 138        | 134             | 137     |
| Points             | 6.5        | 6.7        | 6.5        | 6.5        | 6.4        | 6.5        | 6.4        | 6.9        | 6.6        | 6.6        | 6.0             | 6.5     |
| Circumf.           | 3.3        | 3.4        | 3.3        | 3.3        | 3.3        | 3.3        | 3.2        | 3.3        | 3.2        | 3.3        | 3.2             | 3.3     |
| Length             | 14.2       | 13.9       | 13.7       | 13.7       | 13.2       | 13.7       | 13.4       | 14.1       | 13.7       | 13.7       | 13.2            | 13.7    |
| Spread             | 11.5       | 11.5       | 11.0       | 11.0       | 10.8       | 11.0       | 10.7       | 11.4       | 11.1       | 11.0       | 10.5            | 11.1    |
| % 3.5 Yr.          | 30         | 26         | 30         | 32         | 32         | 27         | 31         | 29         | 28         | 27         | 14              | 30      |
| Weight             | 152        | 151        | 151        | 152        | 150        | 152        | 154        | 152        | 152        | 151        | 152             | 151     |
| Points             | 7.5        | 7.5        | 7.3        | 7.3        | 7.0        | 7.3        | 7.1        | 7.4        | 7.3        | 7.5        | 7.1             | 7.3     |
| Circumf.           | 3.8        | 3.9        | 3.9        | 3.7        | 3.7        | 3.8        | 3.7        | 3.8        | 3.7        | 3.8        | 3.6             | 3.8     |
| Length             | 16.2       | 16.2       | 16.1       | 15.7       | 15.5       | 15.8       | 15.7       | 15.7       | 15.8       | 16.3       | 15.6            | 16.0    |
| Spread             | 13.2       | 13.2       | 13.0       | 12.7       | 12.5       | 12.6       | 12.6       | 12.7       | 12.6       | 13.0       | 12.7            | 12.9    |
| % 4.5+ Yr.         | 21         | 20         | 22         | 20         | 20         | 13         | 16         | 16         | 15         | 13         | 5               | 20      |
| Weight             | 163        | 164        | 160        | 169        | 164        | 167        | 165        | 165        | 167        | 164        | 164             | 164     |
| Points             | 8.0        | 8.0        | 8.2        | 8.0        | 7.8        | 8.0        | 7.8        | 8.0        | 8.0        | 8.1        | 7.6             | 8.0     |
| Circumf.           | 43         | 4.3        | 4.2        | 4.3        | 4.1        | 4.2        | 4.2        | 4.3        | 4.3        | 4.2        | 4.1             | 4.2     |
| Length             | 18.3       | 18.3       | 18.1       | 17.9       | 17.5       | 17.7       | 17.9       | 18.2       | 18.3       | 18.0       | 17.7            | 18.0    |
| Spread             | 14.3       | 14.6       | 14.4       | 14.5       | 14.1       | 14.4       | 14.4       | 14.4       | 14.4       | 14.8       | 14.1            | 14.4    |
| % Doe Lactation    |            |            |            |            |            |            |            |            |            |            |                 |         |
| 1.5 Yr.            | 9          | 9          | 11         | 12         | 12         | 12         | 14         | 14         | 11         | 12         | 13              | 10      |
| 2.5 Yr.            | 48         | 51         | 49         | 56         | 56         | 57         | 52         | 56         | 59         | 59         | 56              | 52      |
| 3.5+ Yr.           | 58         | 62         | 68         | 69         | 68         | 67         | 69         | 68         | 71         | 68         | 65              | 65      |
| Doe Age Classes    |            |            |            |            |            |            |            |            |            |            |                 |         |
| % 0.5 Yr.          | 9          | 10         | 8          | 7          | 7          | 8          | 5          | 7          | 6          | 4          | 11              | 8       |
| % 1.5 Yr.          | 23         | 21         | 22         | 20         | 22         | 22         | 24         | 23         | 25         | 25         | 24              | 22      |
| % 2.5 Yr.          | 18         | 19         | 21         | 19         | 20         | 25         | 21         | 19         | 24         | 25         | 20              | 19      |
| % 3.5+ Yr.         | 50         | 50         | 49         | 54         | 52         | 45         | 50         | 51         | 45         | 47         | 45              | 51      |
| Doe Weights        |            |            |            |            |            |            |            |            |            |            |                 |         |
| 0.5 Yr.            | 57         | 59         | 60         | 59         | 62         | 62         | 65         | 63         | 60         | 56         | 58              | 59      |
| 1.5 Yr.            | 87         | 89         | 88         | 89         | 89         | 89         | 87         | 90         | 90         | 87         | 89              | 88      |
| 2.5 Yr.            | 99         | 100        | 98         | 97         | 98         | 101        | 97         | 100        | 100        | 97         | 99              | 98      |
| 3.5+ Yr.           | 105        | 106        | 106        | 107        | 107        | 106        | 106        | 105        | 106        | 103        | 105             | 106     |

# Table 21. Lower Coastal Plain Soil Resource Area Summary of DMAP Data

|                            |                |              |              | mmu         | •              | son          |              |             |             |              | Awar       | rage            |
|----------------------------|----------------|--------------|--------------|-------------|----------------|--------------|--------------|-------------|-------------|--------------|------------|-----------------|
|                            | <b>'09</b>     | <b>'08</b>   | <b>'07</b>   | <b>'06</b>  | '05            | '04          | <b>'03</b>   | <b>'02</b>  | <b>'01</b>  | <b>'00</b> ' | 491-'94    | rage<br>'05-'09 |
| <b>.</b>                   |                | 133,107      | 147,424      | 127,032     | 154,868        | 177,584      | 159,786      | 147,417     | 137,863     | 136,197      | 308,965    |                 |
| Acres<br>Total Deer        | 100,218<br>755 |              |              |             | 154,868<br>958 |              |              |             | 989         | 1,039        |            | 132,530         |
|                            | 365            | 1,136<br>550 | 1,115<br>500 | 1,102       | 460            | 1,128<br>422 | 1,117<br>488 | 1,143       | 510         | 495          | 2,944      | 1,013<br>473    |
| Bucks                      | 303            | 586          |              | 488         | 400            | 706          | 400<br>629   | 587<br>556  | 479         | 493<br>544   | 1,467      |                 |
| Does Acres/Deer            |                |              | 615<br>132   | 614         |                |              |              |             | 479         |              | 1,457      | 541             |
| Bucks                      | 133<br>275     | 117<br>242   | 295          | 115<br>260  | 162<br>337     | 157<br>421   | 143<br>327   | 129<br>251  | 270         | 131<br>275   | 104<br>210 | 131<br>280      |
| 3.5+ Bucks                 | 759            | 579          | 683          | 602         | 790            | 998          | 1,310        | 801         | 889         | 678          | 1,098      | 683             |
| Does                       | 257            | 227          | 240          | 207         | 311            | 252          | 254          | 265         | 288         | 250          | 209        | 245             |
| Avg. Age ALL Bucks         | 2.4            | 2.6          | 240          | 2.5         | 2.6            | 252          | 2.2          | 265         | 288         | 2.4          | 2.9        | 245             |
| % 0.5 Yr. Bucks            | 2.4            |              | 2.7          | 2.3         | 2.0            | 4            | 2.2          | 2.4         | 2.3         | 4            | 2.4<br>10  | 2.5             |
|                            | 5<br>63        | 1<br>70      | 59           | 59          | 4<br>69        | 4<br>74      | 58           | 56          | 62          | 4<br>56      | 56         | 63.9            |
| Weight <b>% 1.5 Yr.</b>    | 18             | 17           | 12           | 20          | 12             | 18           | 16           | 14          | 15          | 18           | 47         | 16              |
|                            | 109            |              | 12           |             | 110            |              |              |             | 114         |              |            |                 |
| Weight<br>Points           | 3.5            | 111<br>3.9   | 3.3          | 112<br>4.1  | 3.9            | 106<br>3.8   | 113<br>4.3   | 115<br>4.5  | 4.6         | 110<br>4.3   | 102<br>2.7 | 110<br>3.8      |
| Circumf.                   | 2.2            | 2.3          | 3.3<br>2.1   | 4.1<br>2.4  | 2.7            | 2.3          | 4.3<br>2.4   | 4.5<br>2.4  | 4.0<br>2.3  | 4.3<br>2.3   | 2.7        | 2.3             |
| Length                     | 7.5            | 2.3          | 2.1<br>7.0   | 2.4<br>8.7  | 8.8            | 2.3<br>7.3   | 2.4<br>8.5   | 2.4<br>9.0  | 2.3<br>8.6  | 8.2          | 5.4        | 2.3<br>7.9      |
| Spread                     | 7.3            | 6.9          | 6.3          | 7.4         | 7.4            | 6.6          | 7.0          | 7.2         | 7.9         | 6.9          | 5.3        | 7.9             |
| % 2.5 Yr.                  | 42             | 35           | 40           | 29          | 38             | 36           | 56           | 50          | 53          | 39           | 25         | 37              |
| Weight                     | 140            | 139          | 136          | 134         | 136            | 141          | 140          | 139         | 140         | 133          | 126        | 137             |
| Points                     | 6.7            | 6.7          | 6.8          | 6.5         | 6.8            | 6.6          | 6.5          | 6.9         | 6.9         | 6.7          | 5.2        | 6.7             |
| Circumf.                   | 3.4            | 3.4          | 3.2          | 0.5<br>3.1  | 3.3            | 3.3          | 3.4          | 3.4         | 3.3         | 3.2          | 2.8        | 3.3             |
|                            |                |              |              |             |                |              |              |             |             |              |            |                 |
| Length                     | 14.2           | 13.9         | 13.5         | 13.5        | 13.5           | 13.5         | 13.8         | 14.2        | 14.0        | 13.6         | 11.5       | 13.7            |
| Spread % 3.5 Yr.           | 11.6<br>25     | 11.4<br>31   | 11.2<br>29   | 10.8<br>35  | 10.9           | 11.2         | 11.0         | 11.3        | 11.3<br>19  | 10.9         | 9.3        | 11.2<br>30      |
|                            | 155            |              |              |             | 30<br>149      | 32           | 18<br>154    | 22          | 153         | 27           | 14         |                 |
| Weight                     |                | 149          | 153          | 144         |                | 151          |              | 146         |             | 151          | 146        | 150             |
| Points<br>Circumf.         | 7.6<br>3.8     | 7.5<br>3.8   | 7.7<br>3.8   | 7.7<br>3.7  | 7.4<br>3.7     | 7.2<br>3.7   | 7.5<br>3.8   | 7.5<br>3.7  | 7.6<br>3.8  | 7.4<br>3.7   | 7.1<br>3.5 | 7.6<br>3.7      |
|                            | 3.8<br>16.4    |              | 3.8<br>15.8  |             |                |              |              |             |             |              |            |                 |
| Length                     |                | 15.7         |              | 15.4        | 14.8           | 15.3         | 16.1         | 15.4        | 16.1        | 15.2         | 15.0       | 15.6            |
| Spread                     | 13.1           | 12.8         | 12.8         | 12.3        | 12.4<br>16     | 12.7         | 12.8<br>7    | 12.6        | 13.1        | 12.5         | 12.1       | 12.7            |
| % 4.5+ Yr.                 | 12             | 16           | 16           | 13          |                | 11           |              | 13          | 10          | 13           | 6          | 15              |
| Weight<br>Points           | 161<br>8.0     | 163<br>8.0   | 163<br>8.3   | 158<br>8.1  | 160<br>8.0     | 157          | 159<br>8.3   | 156<br>8.3  | 164         | 158          | 155<br>7.5 | 161<br>8.1      |
| Circumf.                   | 4.2            | 4.1          | 4.2          | 4.2         | 4.1            | 8.0<br>4.1   | 4.2          | 4.2         | 8.1<br>4.3  | 7.8<br>4.1   | 4.0        | 4.2             |
| Length                     | 4.2<br>18.1    | 4.1<br>17.3  | 4.2<br>18.0  | 4.2<br>18.0 | 4.1            | 4.1          | 4.2          | 4.2<br>17.9 | 4.3<br>18.2 | 4.1<br>17.6  | 4.0        | 4.2<br>17.7     |
| _                          | 14.6           | 17.3         | 14.3         | 14.2        | 17.2           | 17.5         | 13.7         | 17.9        | 15.0        |              |            |                 |
| Spread % Doe Lactation     | 14.0           | 13.0         | 14.3         | 14.2        | 13.0           | 14.3         | 13./         | 14.0        | 13.0        | 14.2         | 13.8       | 14.1            |
| % Doe Lactation<br>1.5 Yr. | 13             | 12           | 15           | 11          | 16             | 13           | 8            | 19          | 9           | 17           | 14         | 14              |
| 2.5 Yr.                    | 54             | 49           | 55           | 59          | 49             | 53           | 63           | 62          | 62          | 60           | 58         | 53              |
| 2.5 II.<br>3.5+ Yr.        | 61             | 49<br>65     | 61           | 62          | 68             | 66           | 64           | 66          | 70          | 71           | 68         | 63              |
| Doe Age Classes            | 01             | 03           | 01           | 02          | 00             | 00           | 04           | 00          | 70          | /1           | 00         | 03              |
| % 0.5 Yr.                  | 7              | 6            | 6            | 5           | 5              | 5            | 4            | 4           | 6           | 6            | 11         | 6               |
| % 0.5 II.<br>% 1.5 Yr.     | 17             | 18           | 20           | 18          | 17             | 21           | 4<br>20      | 4<br>19     | 21          | 18           | 23         | 18              |
| % 1.5 Yr.                  | 28             | 21           | 20           | 22          | 24             | 21           | 40           | 31          | 41          | 25           | 23         | 24              |
| % 3.5+ Yr.                 | 49             | 55           | 24<br>51     | 55          | 55             | 46           | 37           | 46          | 33          | 23<br>51     | 45         | 53              |
| Doe Weights                | 77             |              | 51           |             | 55             | UF.          | 57           | 10          | 55          | 51           | -13        | 55              |
| 0.5 Yr.                    | 60             | 56           | 61           | 55          | 62             | 62           | 58           | 55          | 60          | 54           | 54         | 59              |
| 0.5 H.<br>1.5 Yr.          | 94             | 90           | 90           | 89          | 90             | 89           | 85           | 91          | 91          | 90           | 86         | 91              |
| 2.5 Yr.                    | 94<br>101      | 101          | 101          | 101         | 90<br>98       | 69<br>98     | 83<br>98     | 91<br>98    | 91          | 90<br>96     | 95         | 91<br>100       |
| 2.5 II.<br>3.5+ Yr.        | 101            | 101          | 101          |             | 102            |              | 104          |             | 104         |              | 100        |                 |
| 3.5+ Yr.                   | 105            | 105          | 105          | 104         | 102            | 105          | 104          | 103         | 104         | 102          | 100        | 104             |

# Table 22. Coastal Flatwoods Soil Resource AreaSummary of DMAP Data

|                    |            |            | - Ju         | mmar       |            |            | Dulu       |             |            |              |                 |                |
|--------------------|------------|------------|--------------|------------|------------|------------|------------|-------------|------------|--------------|-----------------|----------------|
|                    | (00        | (00        | ( <b>n</b> = | (0.5       | Sea        |            | (0.0       | ( <b>nn</b> | (07        | (00          |                 | rage           |
|                    | <b>'09</b> | <b>'08</b> | <b>'07</b>   | <b>'06</b> | <b>'05</b> | <b>'04</b> | <b>'03</b> | <b>'02</b>  | <b>'01</b> | <b>'00</b> ' | '91-'9 <b>4</b> | <b>'05-'09</b> |
| Acres              | 12,884     | 26,283     | 21,046       | 12,790     | 10,790     | 26,810     | 18,927     | 18,650      | 18,650     | 14,850       | 46,517          | 16,759         |
| Total Deer         | 54         | 136        | 58           | 74         | 40         | 35         | 61         | 82          | 77         | 78           | 177             | 72             |
| Bucks              | 26         | 54         | 38           | 33         | 19         | 14         | 34         | 49          | 49         | 41           | 105             | 34             |
| Does               | 28         | 82         | 20           | 41         | 21         | 21         | 27         | 33          | 28         | 37           | 1,457           | 38             |
| Acres/Deer         | 239        | 193        | 363          | 173        | 270        | 766        | 310        | 227         | 242        | 190          | 526             | 229            |
| Bucks              | 496        | 487        | 554          | 388        | 568        | 1,915      | 557        | 381         | 381        | 362          | 1,332           | 482            |
| 3.5+ Bucks         | 2,147      | 1,011      | 1,503        | 1,163      | 899        | 4,468      | 2,103      | 1,695       | 1,865      | 675          | 3,445           | 1,345          |
| Does               | 460        | 321        | 1,052        | 312        | 514        | 1,277      | 701        | 565         | 666        | 401          | 3,219           | 428            |
| Avg. Age ALL Bucks | 2.3        | 2.5        | 2.2          | 2.5        | 3.0        | 2.3        | 2.2        | 2.2         | 2.2        | 2.4          | 2.0             | 2.5            |
| % 0.5 Yr. Bucks    | 4          | 0          | 0            | 4          | 0          | 0          | 0          | 0           | 2          | 2            | 17              | 1.5            |
| Weight             | 58         | 0          | 0            | 58         | 0          | 0          | 0          | 0           | 48         | 35           | 36              | 23.2           |
| % 1.5 Yr.          | 32         | 17         | 37           | 18         | 11         | 18         | 10         | 12          | 3          | 19           | 31              | 23             |
| Weight             | 102        | 95         | 102          | 122        | 106        | 94         | 102        | 83          | 110        | 100          | 96              | 105            |
| Points             | 2.6        | 2.5        | 2.8          | 3.4        | 2.0        | 4.5        | 4.7        | 4.0         | 4.0        | 4.2          | 2.5             | 2.7            |
| Circumf.           | 1.8        | 1.9        | 2.3          | 2.5        | 0.0        | 2.9        | 2.1        | 2.6         | 2.2        | 1.9          | 1.4             | 1.7            |
| Length             | 4.1        | 6.0        | 4.3          | 7.4        | 0.0        | 7.6        | 8.8        | 8.4         | 8.4        | 8.2          | 4.3             | 4.4            |
| Spread             | 6.3        | 7.3        | 6.9          | 7.0        | 0.0        | 5.5        | 6.7        | 7.8         | 7.0        | 8.5          | 5.7             | 5.5            |
| % 2.5 Yr.          | 40         | 33         | 30           | 39         | 22         | 47         | 60         | 65          | 78         | 32           | 29              | 33             |
| Weight             | 128        | 134        | 139          | 133        | 114        | 124        | 122        | 122         | 123        | 124          | 120             | 129            |
| Points             | 6.0        | 6.0        | 6.9          | 7.0        | 4.8        | 5.6        | 5.7        | 5.7         | 6.0        | 6.1          | 4.9             | 6.1            |
| Circumf.           | 3.1        | 2.9        | 4.0          | 3.1        | 2.9        | 3.2        | 2.7        | 2.8         | 2.7        | 2.8          | 2.4             | 3.2            |
| Length             | 12.8       | 14.0       | 12.7         | 13.6       | 13.3       | 12.4       | 11.8       | 11.8        | 12.2       | 12.1         | 10.0            | 13.3           |
| Spread             | 11.2       | 11.8       | 10.6         | 10.5       | 10.3       | 9.8        | 9.5        | 9.0         | 9.7        | 9.7          | 7.8             | 10.9           |
| % 3.5 Yr.          | 4          | 37         | 14           | 21         | 33         | 24         | 27         | 12          | 14         | 40           | 16              | 22             |
| Weight             | 176        | 152        | 148          | 157        | 151        | 133        | 130        | 132         | 127        | 127          | 115             | 157            |
| Points             | 8.0        | 7.3        | 8.2          | 8.5        | 8.0        | 6.8        | 5.6        | 7.0         | 6.6        | 5.9          | 5.1             | 8.0            |
| Circumf.           | 3.6        | 3.5        | 3.6          | 4.0        | 4.0        | 3.3        | 3.1        | 3.3         | 3.8        | 2.5          | 2.5             | 3.8            |
| Length             | 16.8       | 15.7       | 16.3         | 16.1       | 17.4       | 14.3       | 13.4       | 14.6        | 15.1       | 12.4         | 10.7            | 16.4           |
| Spread             | 14.8       | 12.9       | 13.0         | 12.9       | 13.7       | 12.8       | 11.6       | 13.5        | 12.1       | 10.8         | 8.9             | 13.4           |
| % 4.5+ Yr.         | 20         | 14         | 19           | 18         | 33         | 12         | 3          | 10          | 3          | 6            | 6               | 21             |
| Weight             | 165        | 156        | 175          | 153        | 160        | 137        | 141        | 139         | 174        | 145          | 116             | 162            |
| Points             | 7.8        | 8.4        | 7.9          | 9.0        | 8.0        | 8.5        | 5.0        | 6.6         | 10.0       | 7.0          | 5.1             | 8.2            |
| Circumf.           | 4.3        | 4.1        | 5.2          | 4.3        | 4.2        | 4.0        | 0.0        | 3.8         | 4.5        | 3.0          | 2.8             | 4.4            |
| Length             | 17.3       | 17.5       | 18.6         | 17.4       | 19.2       | 16.3       | 8.3        | 14.7        | 21.1       | 14.3         | 11.5            | 18.0           |
| Spread             | 14.7       | 13.7       | 15.2         | 14.2       | 14.5       | 12.8       | 6.5        | 12.0        | 17.1       | 11.3         | 9.6             | 14.5           |
| % Doe Lactation    |            |            |              |            |            |            |            |             |            |              |                 |                |
| 1.5 Yr.            | 14         | 15         | 10           | 0          | 0          | 0          | 14         | 0           | 15         | 13           | 6               | 8              |
| 2.5 Yr.            | 33         | 9          | 25           | 33         | 60         | 40         | 44         | 54          | 31         | 64           | 65              | 32             |
| 3.5+ Yr.           | 72         | 50         | 71           | 55         | 56         | 45         | 43         | 65          | 47         | 65           | 67              | 61             |
| Doe Age Classes    |            |            |              |            |            |            |            |             |            |              |                 |                |
| % 0.5 Yr.          | 11         | 4          | 16           | 4          | 17         | 33         | 8          | 9           | 11         | 14           | 0               | 10             |
| % 1.5 Yr.          | 29         | 17         | 36           | 21         | 17         | 11         | 27         | 13          | 30         | 19           | 10              | 24             |
| % 2.5 Yr.          | 11         | 28         | 13           | 13         | 28         | 28         | 35         | 47          | 36         | 26           | 23              | 18             |
| % 3.5+ Yr.         | 50         | 51         | 36           | 63         | 39         | 28         | 31         | 31          | 23         | 42           | 67              | 48             |
| Doe Weights        |            |            |              |            |            |            |            |             |            |              |                 |                |
| 0.5 Yr.            | 55         | 70         | 86           | 37         | 44         | 48         | 70         | 68          | 60         | 55           | 0               | 58             |
| 1.5 Yr.            | 89         | 91         | 89           | 78         | 88         | 73         | 82         | 83          | 87         | 82           | 41              | 87             |
| 2.5 Yr.            | 97         | 96         | 104          | 78         | 79         | 94         | 92         | 89          | 86         | 83           | 69              | 91             |
| 3.5+ Yr.           | 96         | 98         | 98           | 97         | 95         | 95         | 95         | 95          | 96         | 100          | 90              | 97             |

# Table 23. Interior Flatwoods Soil Resource AreaSummary of DMAP Data

|                    |            |            |            |            | ,      | <b>JWIAF</b> | e atta     |        |            |            |                |         |
|--------------------|------------|------------|------------|------------|--------|--------------|------------|--------|------------|------------|----------------|---------|
|                    |            |            |            |            | Sea    |              | 1          |        |            |            | Avei           |         |
|                    | <b>'09</b> | <b>'08</b> | <b>'07</b> | <b>'06</b> | ʻ05    | <b>'04</b>   | <b>'03</b> | ʻ02    | <b>'01</b> | <b>'00</b> | <b>'91-'94</b> | ʻ05-'09 |
| Acres              | 47,757     | 48,293     | 58,168     | 58,745     | 56,441 | 40,168       | 25,016     | 26,956 | 32,766     | 34,436     | 69,015         | 53,881  |
| Total Deer         | 647        | 802        | 864        | 811        | 642    | 531          | 280        | 341    | 465        | 434        | 1,107          | 753     |
| Bucks              | 242        | 338        | 362        | 375        | 266    | 228          | 126        | 184    | 234        | 192        | 517            | 317     |
| Does               | 405        | 464        | 502        | 436        | 376    | 303          | 154        | 157    | 231        | 242        | 1,457          | 437     |
| Acres/Deer         | 74         | 60         | 67         | 72         | 88     | 76           | 89         | 79     | 70         | 79         | 63             | 71      |
| Bucks              | 197        | 143        | 161        | 157        | 212    | 176          | 199        | 147    | 140        | 179        | 135            | 170     |
| 3.5+ Bucks         | 367        | 270        | 355        | 298        | 409    | 441          | 463        | 333    | 293        | 415        | 642            | 340     |
| Does               | 118        | 104        | 116        | 135        | 150    | 133          | 162        | 172    | 142        | 142        | 120            | 123     |
| Avg. Age ALL Bucks | 2.8        | 2.7        | 2.7        | 2.8        | 2.7    | 2.6          | 2.5        | 2.7    | 2.8        | 2.5        | 2.4            | 2.7     |
| % 0.5 Yr. Bucks    | 4          | 6          | 6          | 5          | 4      | 6            | 5          | 3      | 3          | 1          | 9              | 5       |
| Weight             | 63         | 60         | 64         | 61         | 64     | 63           | 61         | 59     | 61         | 65         | 63             | 62.5    |
| % 1.5 Yr.          | 13         | 13         | 10         | 14         | 17     | 13           | 19         | 10     | 10         | 16         | 45             | 13      |
| Weight             | 108        | 108        | 108        | 104        | 126    | 105          | 112        | 116    | 122        | 117        | 111            | 111     |
| Points             | 3.3        | 2.2        | 2.4        | 2.8        | 2.5    | 2.8          | 3.7        | 4.9    | 5.7        | 5.2        | 3.0            | 2.6     |
| Circumf.           | 2.0        | 1.6        | 1.6        | 1.8        | 1.9    | 1.8          | 2.2        | 2.7    | 2.7        | 2.6        | 2.2            | 1.8     |
| Length             | 6.4        | 4.4        | 3.4        | 5.9        | 6.0    | 6.1          | 9.0        | 9.7    | 11.7       | 10.9       | 6.5            | 5.2     |
| Spread             | 7.0        | 5.9        | 4.0        | 6.5        | 7.1    | 7.1          | 7.4        | 7.1    | 8.5        | 8.3        | 6.0            | 6.1     |
| % 2.5 Yr.          | 28         | 24         | 34         | 24         | 21     | 36           | 31         | 38     | 32         | 37         | 25             | 26      |
| Weight             | 136        | 143        | 145        | 144        | 144    | 151          | 138        | 142    | 144        | 145        | 137            | 143     |
| Points             | 6.2        | 6.6        | 6.7        | 6.4        | 6.4    | 7.1          | 5.8        | 7.0    | 6.8        | 6.7        | 5.7            | 6.5     |
| Circumf.           | 3.2        | 3.3        | 3.5        | 3.2        | 3.2    | 3.3          | 3.2        | 3.5    | 3.3        | 3.3        | 3.1            | 3.3     |
| Length             | 14.2       | 14.7       | 14.7       | 13.5       | 13.8   | 14.6         | 12.6       | 15.0   | 14.5       | 14.2       | 13.0           | 14.2    |
| Spread             | 11.4       | 12.3       | 11.7       | 10.7       | 11.0   | 12.3         | 10.0       | 11.4   | 12.0       | 11.2       | 10.1           | 11.5    |
| % 3.5 Yr.          | 34         | 40         | 31         | 34         | 39     | 25           | 26         | 32     | 37         | 30         | 16             | 35      |
| Weight             | 157        | 157        | 158        | 160        | 158    | 161          | 168        | 165    | 161        | 161        | 153            | 158     |
| Points             | 7.7        | 7.1        | 7.6        | 7.3        | 8.1    | 7.3          | 7.3        | 7.7    | 7.9        | 8.1        | 7.1            | 7.6     |
| Circumf.           | 3.8        | 3.7        | 3.8        | 3.8        | 3.6    | 3.6          | 3.9        | 4.1    | 3.9        | 3.9        | 3.6            | 3.8     |
| Length             | 16.4       | 15.9       | 16.8       | 16.5       | 15.8   | 15.9         | 15.3       | 17.0   | 16.7       | 16.4       | 15.6           | 16.3    |
| Spread             | 13.2       | 12.8       | 13.2       | 13.0       | 12.6   | 12.9         | 12.5       | 13.2   | 13.5       | 13.4       | 12.5           | 12.9    |
| % 4.5+ Yr.         | 22         | 17         | 19         | 23         | 20     | 20           | 20         | 17     | 20         | 15         | 5              | 20      |
| Weight             | 163        | 170        | 175        | 172        | 187    | 185          | 158        | 187    | 173        | 182        | 176            | 173     |
| Points             | 8.4        | 7.9        | 8.4        | 8.2        | 8.1    | 8.4          | 7.5        | 8.6    | 9.1        | 8.2        | 8.5            | 8.2     |
| Circumf.           | 4.3        | 4.3        | 4.4        | 4.3        | 4.2    | 4.2          | 4.0        | 4.8    | 4.4        | 4.5        | 4.3            | 4.3     |
| Length             | 18.3       | 18.5       | 18.5       | 18.4       | 17.9   | 19.2         | 17.0       | 19.9   | 18.8       | 19.4       | 18.5           | 18.3    |
| Spread             | 14.3       | 14.2       | 14.3       | 14.6       | 14.1   | 14.9         | 13.8       | 15.7   | 14.9       | 14.6       | 15.0           | 14.3    |
| % Doe Lactation    |            |            |            |            |        |              |            |        |            |            |                |         |
| 1.5 Yr.            | 7          | 6          | 10         | 6          | 18     | 12           | 8          | 16     | 14         | 15         | 15             | 9       |
| 2.5 Yr.            | 47         | 59         | 57         | 56         | 55     | 49           | 62         | 52     | 55         | 67         | 53             | 55      |
| 3.5+ Yr.           | 61         | 65         | 75         | 68         | 69     | 66           | 71         | 73     | 67         | 65         | 65             | 68      |
| Doe Age Classes    |            |            |            |            |        |              |            |        |            |            |                |         |
| % 0.5 Yr.          | 5          | 8          | 5          | 5          | 6      | 11           | 6          | 4      | 1          | 0          | 11             | 6       |
| % 1.5 Yr.          | 28         | 24         | 23         | 25         | 21     | 21           | 25         | 23     | 20         | 30         | 28             | 24      |
| % 2.5 Yr.          | 19         | 22         | 24         | 26         | 19     | 26           | 19         | 18     | 26         | 26         | 20             | 22      |
| % 3.5+ Yr.         | 47         | 47         | 48         | 44         | 54     | 42           | 50         | 55     | 53         | 44         | 42             | 48      |
| Doe Weights        |            |            |            |            |        |              |            |        |            |            |                |         |
| 0.5 Yr.            | 53         | 63         | 60         | 58         | 57     | 60           | 60         | 56     | 68         | 0          | 60             | 58      |
| 1.5 Yr.            | 85         | 92         | 93         | 91         | 93     | 94           | 95         | 94     | 95         | 94         | 93             | 91      |
| 2.5 Yr.            | 102        | 105        | 103        | 106        | 106    | 109          | 107        | 108    | 106        | 106        | 103            | 105     |
| 3.5+ Yr.           | 109        | 111        | 111        | 111        | 115    | 115          | 117        | 115    | 117        | 117        | 111            | 112     |

### **Enforcement of Deer Hunting-Related Citations 2009-2010**

The Law Enforcement Bureau began monitoring all statewide citations at the district and county levels during the 1996 – 1997 deer season. The eight most common deer hunting citations from October 1 – January 31 were extracted from the database and summarized. Citation totals by county are shown in **Table 25** on **page 59**. Yearly trends in various citations show some variability.

A total of 2,256 citations were written during the 2009 - 2010 deer hunting season. This is a decrease of 232 citations from the previous season. The most citations were written for



# Table 24. Statewide Citations Summary byMost Frequent Violations During Deer Season

|                  | Hunt From        |                |                     | No Li    | cense            |         | 6           | 6u           |                    |
|------------------|------------------|----------------|---------------------|----------|------------------|---------|-------------|--------------|--------------------|
| Season<br>Totals | Motor<br>Vehicle | Public<br>Road | No Hunter<br>Orange | Resident | Non-<br>Resident | Baiting | Trespassing | Headlighting | Total<br>Citations |
| 2009-2010        | 30               | 644            | 281                 | 390      | 93               | 286     | 241         | 291          | 2256               |
| 2008-2009        | 81               | 748            | 311                 | 383      | 130              | 279     | 240         | 316          | 2488               |
| 2007-2008        | 33               | 575            | 401                 | 356      | 102              | 544     | 207         | 158          | 2376               |
| 2006-2007        | 59               | 609            | 363                 | 341      | 115              | 554     | 223         | 303          | 2567               |
| 2005-2006        | 57               | 528            | 271                 | 445      | 68               | 365     | 343         | 179          | 2256               |
| 2004-2005        | 104              | 725            | 652                 | 391      | 125              | 689     | 283         | 261          | 3230               |
| 2003-2004        | 136              | 914            | 700                 | 482      | 159              | 724     | 330         | 363          | 3808               |
| 2002-2003        | 99               | 867            | 658                 | 491      | 184              | 569     | 240         | 282          | 3390               |
| 2001-2002        | 120              | 840            | 702                 | 491      | 179              | 781     | 275         | 227          | 3615               |
| 2000-2001        | 236              | 1137           | 612                 | 505      | 118              | 519     | 297         | 332          | 3756               |
| 1999-2000        | 238              | 938            | 415                 | 422      | 87               | 449     | 318         | 299          | 3166               |
| 1998-1999        | 433              | 1037           | 409                 | 378      | 152              | 356     | 290         | 260          | 3315               |
| 1997-1998        | 476              | 1063           | 403                 | 335      | 112              | 313     | 278         | 282          | 3262               |

hunting from a public road. The total number of citations was at an all time high during the 2003 – 2004 deer hunting season. Over the past 6 hunting seasons, citations have been significantly lower (**Table 24** and **Figure 24**). The decline in citations can be attributed to a number of occurrences: violations actually decreased, fewer hunters in the woods, and an increase in law enforcement activity.

It is logical to assume that if fewer citations were written for a specific violation, then a decreased incidence of that violation occurred. Numerically, total number of violations

for hunting from public road decreased the most compared to the past season (a decrease of 104 violations). However, on a percentage basis, total number of violations for hunting from a motor vehicle decreased the most compared to the past season (a 63% decrease). Other categories like baiting, resident hunting with no license, and trespassing increased slightly. The increase in baiting citations may be attributed to increased enforcement of Public Notice Number W-3796. Hopefully, having the parameters for feeding and baiting specified will help officers make stronger cases and deter baiting in future seasons.

Many violations are still occurring at dangerously high levels. Failure to wear hunter orange, which decreased slightly this year, is a good example. Many hunters still refuse to wear hunter orange. This law is in place to protect hunters. Trespassing also still occurs at a high rate, indicating that anyone could be on any property without a hunter's knowledge. The most common citation in the past deer season was hunting from public roads, which also poses a significant safety threat.

The number of licensed hunters continues to decline. This could be another reason for the general decrease in citations. With fewer hunters taking to the field, the number of violations should decrease. However, many hunters are also ignoring license requirements and taking their chances. This is evident by the increase in citations for no hunting license.

With more hunters managing their land for bigger deer, many poachers are trying to take advantage of the results that managers have created. More large-antlered bucks on roadsides equal more temptations. Many would-be hunters are giving in and turning to poaching. This is evidenced by the number of trespassing and headlighting citations written each year.

Our officers are doing a good job across the state, but they need the help of sportsmen. Hunters can assist our officers by reporting wildlife violations by calling **1-800-BE-SMART**. Most counties have only 2 officers, but with concerned sportsmen, they have eyes and ears all over the county.

# Table 25. Citations Summary of Most Frequent ViolationsDuring 2009-2010 Deer Season

| County            | Hunt from<br>Motor Vehicle | Hunt from<br>Public Road | No Hunter<br>Orange | No License<br>Resident | No License<br>Non-Resident | Baiting | Trespassing | Headlighting | <b>Total Citations</b> | County             | Hunt from<br>Motor Vehicle | Hunt from<br>Public Road | No Hunter<br>Orange | No License<br>Resident | No License<br>Non-Resident | Baiting | Trespassing | Headlighting | Total Citations |
|-------------------|----------------------------|--------------------------|---------------------|------------------------|----------------------------|---------|-------------|--------------|------------------------|--------------------|----------------------------|--------------------------|---------------------|------------------------|----------------------------|---------|-------------|--------------|-----------------|
| Adams             | 0                          | 1                        | 5                   | 3                      | 3                          | 0       | 3           | 1            | 16                     | Leflore            | 0                          | 8                        | 6                   | 6                      | 0                          | 0       | 2           | 7            | 29              |
| Alcorn            | 0                          | 8                        | 4                   | 3                      | 0                          | 2       | 0           | 1            | 18                     | Lincoln            | 2                          | 10                       | 2                   | 1                      | 1                          | 1       | 1           | 13           | 31              |
| Amite             | 3                          | 8                        | 6                   | 3                      | 6                          | 0       | 5           | 3            | 34                     | Lowndes            | 0                          | 2                        | 0                   | 3                      | 0                          | 3       | 0           | 2            | 10              |
| Attala            | 0                          | 19                       | 10                  | 10                     | 7                          | 20      | 8           | 4            | 78                     | Madison            | 0                          | 2                        | 3                   | 1                      | 0                          | 5       | 0           | 1            | 12              |
| Benton            | 0                          | 3                        | 2                   | 2                      | 1                          | 1       | 2           | 4            | 15                     | Marion             | 0                          | 7                        | 0                   | 1                      | 0                          | 0       | 5           | 7            | 20              |
| Bolivar           | 0                          | 2                        | 2                   | 3                      | 0                          | 3       | 5           | 3            | 18                     | Marshall           | 0                          | 4                        | 14                  | 15                     | 4                          | 5       | 5           | 4            | 51              |
| Calhoun           | 0                          | 3                        | 0                   | 1                      | 0                          | 1       | 0           | 0            | 5                      | Monroe             | 0                          | 28                       | 2                   | 15                     | 0                          | 3       | 6           | 14           | 68              |
| Carroll           | 0                          | 4                        | 6                   | 4                      | 0                          | 12      | 5           | 4            | 35                     | Montgomery         | 0                          | 0                        | 3                   | 0                      | 2                          | 1       | 0           | 0            | 6               |
| Chickasaw         | 0                          | 8                        | 2                   | 11                     | 0                          | 1       | 0           | 2            | 24                     | Neshoba            | 0                          | 6                        | 1                   | 5                      | 0                          | 6       | 1           | 0            | 19              |
| Choctaw           | 0                          | 11                       | 1                   | 3                      | 0                          | 0       | 1           | 8            | 24                     | Newton             | 0                          | 12                       | 7                   | 8                      | 0                          | 8       | 1           | 0            | 36              |
| Claiborne         | 5                          | 11                       | 2                   | 2                      | 2                          | 0       | 1           | 8            | 31                     | Noxubee            | 0                          | 5                        | 2                   | 3                      | 0                          | 6       | 0           | 4            | 20              |
| Clarke            | 0                          | 11                       | 9                   | 5                      | 4                          | 21      | 4           | 7            | 61                     | Oktibbeha          | 0                          | 8                        | 2                   | 4                      | 1                          | 0       | 4           | 3            | 22              |
| Clay              | 0                          | 6                        | 2                   | 6                      | 0                          | 2       | 2           | 0            | 18                     | Panola             | 0                          | 41                       | 12                  | 13                     | 4                          | 5       | 15          | 22           | 112             |
| Coahoma           | 0                          | 2                        | 2                   | 1                      | 1                          | 1       | 0           | 2            | 9                      | Pearl River        | 1                          | 1                        | 1                   | 0                      | 0                          | 1       | 0           | 2            | 6               |
| Copiah            | 0                          | 0                        | 7                   | 6                      | 2                          | 3       | 3           | 0            | 21                     | Perry              | 0                          | 35                       | 1                   | 10                     | 0                          | 1       | 0           | 3            | 50              |
| Covington         | 0                          | 2                        | 1                   | 2                      | 2                          | 1       | 0           | 2            | 10                     | Pike               | 0                          | 1                        | 2                   | 2                      | 3                          | 2       | 0           | 0            | 10              |
| Desoto            | 0                          | 2                        | 5                   | 3                      | 0                          | 0       | 6           | 0            | 16                     | Pontotoc           | 0                          | 9                        | 2                   | 8                      | 1                          | 1       | 2           | 7            | 30              |
| Forrest           | 0                          | 17                       | 3                   | 3                      | 0                          | 2       | 4           | 4            | 33                     | Prentiss           | 0                          | 10                       | 0                   | 1                      | 0                          | 0       | 2           | 6            | 19              |
| Franklin          | 0                          | 6                        | 0                   | 6                      | 3                          | 0       | 7           | 0            | 22                     | Quitman            | 0                          | 0                        | 0                   | 5                      | 1                          | 3       | 3           | 0            | 12              |
| George            | 0                          | 13                       | 5                   | 7                      | 6                          | 2       | 2           | 5            | 40                     | Rankin             | 0                          | 12                       | 3                   | 8                      | 0                          | 1       | 6           | 6            | 36              |
| Greene            | 0                          | 10                       | 3                   | 9                      | 0                          | 7       | 1           | 5            | 35                     | Scott              | 0                          | 8                        | 3                   | 10                     | 0                          | 6       | 2           | 2            | 31              |
| Grenada           | 0                          | 0                        | 0                   | 1                      | 0                          | 0       | 0           | 0            | 1                      | Sharkey            | 4                          | 4                        | 3                   | 9                      | 1                          | 1       | 1           | 4            | 27              |
| Hancock           | 0                          | 7                        | 1                   | 5                      | 0                          | 3       | 3           | 0            | 19                     | Simpson            | 0                          | 3                        | 1                   | 6                      | 0                          | 2       | 1           | 2            | 15              |
| Harrison<br>Hinds | 0<br>2                     | 23<br>4                  | 2<br>0              | 3<br>0                 | 0                          | 1<br>0  | 4<br>2      | 7<br>2       | 40                     | Smith              | 0<br>2                     | 4<br>23                  | 2<br>1              | 8<br>8                 | 4<br>0                     | 6<br>2  | 5<br>1      | 5<br>6       | 34<br>43        |
| Holmes            | 2                          | 4                        | 10                  | 4                      | 0                          | 13      | 2<br>7      | 2            | 10<br>39               | Stone<br>Sunflower | 0                          | 23<br>15                 | 5                   | о<br>З                 | 2                          | 2       | 1<br>3      | 4            | 43<br>34        |
| Humphreys         | 0                          | 10                       | 10                  | 4                      | 0                          | 2       | 0           | 2            | 39<br>19               | Tallahatchie       | 0                          | 2                        | 1                   | 3<br>1                 | 2                          | 2<br>1  | 3           | 4            | 34<br>8         |
| Issaquena         | 6                          | 8                        | 4                   | 4                      | 1                          | 1       | 12          | 7            | 43                     | Tate               | 0                          | 6                        | 5                   | 8                      | 2                          | 4       | 0           | 1            | 26              |
| Itawamba          | 0                          | 13                       | ч<br>10             | 11                     | 1                          | 13      | 9           | 6            | 63                     | Tippah             | 0                          | 5                        | 0                   | 3                      | 0                          | 3       | 1           | 5            | 20<br>17        |
| Jackson           | 0                          | 11                       | 6                   | 14                     | 0                          | 6       | 9           | 8            | 54                     | Tishomingo         | 0                          | 5                        | 1                   | 3                      | 0                          | 1       | 0           | 0            | 10              |
| Jasper            | 0                          | 21                       | 5                   | 6                      | 2                          | 11      | 7           | 10           | 62                     | Tunica             | 0                          | 4                        | 0                   | 1                      | 1                          | 1       | 2           | 1            | 10              |
| Jeff Davis        | 0                          | 5                        | 7                   | 2                      | 2                          | 0       | 2           | 0            | 18                     | Union              | 0                          | 5                        | 4                   | 4                      | 0                          | 6       | 2           | 3            | 24              |
| Jefferson         | 0                          | 9                        | 1                   | 2                      | 3                          | 2       | 0           | 1            | 18                     | Walthall           | 0                          | 2                        | 1                   | 1                      | 2                          | 1       | 0           | 1            | 8               |
| Jones             | 0                          | 13                       | 6                   | 14                     | 0                          | -<br>19 | 2           | 6            | 60                     | Warren             | 0                          | 5                        | 1                   | 7                      | 0                          | 1       | 5           | 6            | 25              |
| Kemper            | 0                          | 4                        | 6                   | 2                      | 0                          | 4       | 1           | 1            | 18                     | Washington         | 0                          | 2                        | 1                   | 1                      | 0                          | 0       | 0           | 1            | 5               |
| Lafayette         | 0                          | 8                        | 3                   | 5                      | 0                          | 6       | 1           | 1            | 24                     | Wayne              | 3                          | 20                       | 6                   | 9                      | 3                          | 2       | 6           | 9            | 58              |
| Lamar             | 0                          | 2                        | 13                  | 2                      | 1                          | 12      | 0           | 1            | 31                     | Webster            | 0                          | 7                        | 5                   | 5                      | 0                          | 4       | 3           | 3            | 27              |
| Lauderdale        | 0                          | 5                        | 8                   | 6                      | 2                          | 4       | 9           | 4            | 38                     | Wilkinson          | 0                          | 1                        | 6                   | 0                      | 11                         | 0       | 0           | 9            | 27              |
| Lawrence          | 1                          | 3                        | 0                   | 1                      | 0                          | 0       | 0           | 0            | 5                      | Winston            | 0                          | 6                        | 2                   | 6                      | 0                          | 10      | 2           | 0            | 26              |
| Leake             | 0                          | 8                        | 1                   | 2                      | 0                          | 0       | 8           | 6            | 25                     | Yalobusha          | 0                          | 7                        | 4                   | 3                      | 0                          | 1       | 2           | 0            | 17              |
| Lee               | 0                          | 0                        | 5                   | 5                      | 0                          | 0       | 5           | 0            | 15                     | Yazoo              | 1                          | 5                        | 0                   | 0                      | 1                          | 4       | 9           | 0            | 20              |

CITATIONS

# 2009-2010 Hunting Incident/Accident Summary

A hunting incident/accident is one in which a person is injured by the discharge of a hunting firearm, bow and arrow, or a fall from a hunting tree stand arising from the activity of hunting.

There were 24 total hunting related incident/accidents investigated in Mississippi during the 2009 – 2010 hunting season. Of these, 9 were firearm/bow related with zero fatalities and 15 were treestand related with 1 fatality.

Unlike previous years, all hunting incidents in 2009 – 2010 occurred while deer hunting (**Figure 25**).

Both firearm and treestand related accidents decreased from last year with firearm accidents dropping 111% since last year (**Figure 26**). Additionally, no incidents were recorded after January 22, 2010 indicating that no incidents occurred during late small game seasons or during the spring turkey season.

Sportsmen, Hunter Education Instructors, and Conservation Officers in Mississippi should be commended for keeping hunting among the safest of sports. Volunteer instructors and Conservation Officers certified 11,692 sportsmen in Hunter Education during the 2009 – 2010 season (**Figure 27**). Hunting accidents in Mississippi average about one injury for every 9,666 licensed hunters, which is an average of around ten injuries per 100,000 participants. When compared to other sports such as football, which averages around 3,500 injuries per 100,000 participants, hunting is a very safe sport.

Youths 12 - 15 years of age must complete a Hunter Education course to hunt unsupervised. Youths 12 - 15 years of age may hunt without a Hunter Education certificate if under the direct supervision of a licensed adult 21 years of age or older. Youths under 12 years of age must be under adult supervision while hunting. An apprentice license is available for residents over the age of 15 which do not have the required certificate of hunter education. This apprentice license may be purchased only one time by a resident and the apprentice hunting licensee must be accompanied by a licensed or exempt resident hunter at least 21 years of age when hunting. With these hunter education requirements, we are confident accident numbers will continue to decline.

Figure 25. Hunting Incident by Animal Hunted



**Figure 26. Hunting Incidents** 



**Figure 27. Students Trained by Year** 



# 2009-2010 Research Project Summaries

### BUCKSCORE<sup>TM</sup>: New Technology for Aging and Scoring Photographed Whitetails

Jeremy Flinn, Steve Demarais, Bronson Strickland, Ken Gee, Harry Jacobson, Stephen Webb, and Phil Jones

BuckScore<sup>™</sup> is a user-friendly computer program that allows users to estimate score and age of photographed bucks. Age and Bantler size are estimated visually by wildlife professionals and the hunting public as part of many deer management strategies. However, acceptance of techniques proposed in popular books and magazines has obscured the questionable accuracy of many commonly used methods. Trail-camera photographs are currently used to gather important herd composition data, but sampling antler size and age from photographs is limited by subjective guessing. BuckScore<sup>™</sup> satisfies the demand for an accurate data collection tool for use on live white-tailed deer.

BuckScore<sup>™</sup> was developed by researchers at Mississippi State University's Deer Ecology and Management Lab. They recognized the management and research value of a tool that uses photographs to estimate antler size with up to 95% accuracy and estimate age up to 80% accuracy. BuckScore<sup>™</sup> is the result of years of rigorous development and testing using white-tailed deer data from Mississippi and across North America. The first version of BuckScore<sup>™</sup> accurately estimates antler size of a buck using

region-specific anatomical feature values and statistically-derived transformation equations. Future versions of BuckScore<sup>™</sup> will include aging, prediction of antler size at subsequent ages, and antler scoring for elk and mule deer.

BuckScore<sup>™</sup> is an innovative management tool with plenty of applications. It will allow collection of relatively unbiased buck age and antler size data from your hunting property. Harvest data has been the only source of this critical information, but does not represent the entire population because of hunter selectivity and antler restrictions. Camera surveys are a passive and effective way to sample a deer herd. Using BuckScore<sup>™</sup> and the photographs taken during the survey, a user can collect information that will lead to more appropriate management recommendations.

BuckScore is available for use online at <u>www.buckscore.com</u>. A downloadable, expanded version is available for less than \$10. A substantial portion of the proceeds from sales will fund future deer research at the MSU Deer Ecology and Management Lab.



### **R**EGIONAL BODY AND ANTLER SIZE DIFFERENCES IN WHITE-TAILED DEER: FIRST GENERATION

Emily Flinn, Steve Demarais, Bronson Strickland, and Chad Dacus

A re deer in the Delta bigger than deer in southeast Mississippi because of differences in the nutritional quality of the habitat or is it because of their genetic makeup? In 2005, we began research to identify whether regional differences in deer antler and body size in Mississippi are due to differences in habitat quality or genetics. Pregnant does were captured by MDWFP from the Delta, Thin Loess (Loess), and Lower Coastal Plain (LCP) regions. Their offspring have been raised on optimum nutrition to eliminate nutritional differences related with their source habitats, and these are called first generation deer. We allowed first generation deer from each region to breed and produce second generation fawns to further eliminate the effects of nutrition.

Body weight of Delta first generation males has been 20-25% greater than LCP males at 1-3 years of age, and Loess males have split the difference. We use an antler score similar to Boone and Crockett Score to estimate antler size, and this score



**Emily Flinn** 

score similar to Boone and Crockett Score to estimate antler size, and this score averaged 14% less in LCP males than Delta and Loess males at 1-3 years of age. Surprisingly, Loess males grew antlers as large as Delta males. We have data to collect on first generation males for one more year and several more years for second generation males, but the pattern is clearly established for the first generation results.

Body weight trends in research deer were similar to DMAP results with Delta deer being heaviest, Loess deer being mid-weight, and LCP deer being lightest. Antler size variation was particularly interesting, as the Loess males grew antlers as large as Delta males. So, have we answered our question about the cause of regional variation in antler and body size? Not yet. First generation results could be caused by differences in genetics or they may be due to lingering effects of the original regions. Results from second generation deer should finalize the answer - if regional differences are eliminated in the second generation, then genetic differences can be eliminated as a factor; if differences remain after two generations, then genetics likely will be contributing to body and antler size variation across Mississippi. Support for this project is from the MDWFP using Federal Aid in Wildlife Restoration funds, Purina Mills, and private individuals.

# 2009-2010 Research Project Summaries

### Assessment of White-Tailed Deer Lactation Index

Kamen Campbell, Bronson Strickland, Steve Demarais, Guiming Wang, and Chad Dacus



**Kamen Campbell** 

Fawn recruitment estimates are a critical part of deer harvest recommendations. Lactation index is the percentage of hunter-harvested adult does exhibiting evidence of lactation. Widely collected, the lactation index is often the best or only available method to estimate fawn recruitment. With data from 18 properties across Mississippi and Alabama, Mississippi State University and the MDWFP will evaluate the lactation index and factors affecting it. Cooperating properties assist in collecting hunter observation and harvest data, as well as conducting annual carnivore camera and scat surveys and post-season deer camera surveys. In our study, we are examining the effects of harvest date on the detectability of lactation and the sensitivity of the lactation index to changes in fawn production and recruitment.

We hope to strengthen the lactation index by developing a correction equation for missed lactation based on date of harvest, defining significance in changing annual lactation rates given sample size and harvest intensity, and understand the effects of predators like coyotes and bobcats on fawn recruitment and the lactation index. Understanding how these factors impact fawn recruitment and the lactation index will give biologists a more accurate picture of deer herd status, and enable them to develop more robust harvest recommendations.

### NUTRITIONAL CARRYING CAPACITY FOR DEER IN LOBLOLLY PINE PLANTATIONS FROM STAND ESTABLISHMENT TO CANOPY CLOSURE IN THE LOWER COASTAL PLAIN

Tamara Campbell, Steve Demarais, Andy Ezell, Scott Edwards, and Phil Jones

**P**ine plantations comprise 37 million acres of forest land in the southeastern United States. Management intensity of these plantations is of concern primarily due to the widespread use of herbicides and their potential impact on nutritional carrying capacity for white-tailed deer. We evaluated the effects of 5 levels of management intensity on deer forage from stand establishment to canopy closure in loblolly pine plantations in the Lower Coastal Plain of Mississippi. Treatments combined mechanical site preparation, chemical site preparation (i.e., herbicide), and banded or broadcast herbaceous weed control applications to create a range of operational management intensities. Although forage quantity was greater without chemical site preparation, chemical site preparation benefited deer by removing low-quality woody forages and allowing development of higher-quality forbs. This forb community was partially maintained by restricting herbaceous weed control to banded applications. Forage production peaked in year 3, and by year 5 all treatments were producing similarly low levels of forage quantity and quality. Progressive canopy closure caused further decline in forage production in all treatments through year 8, which we expect to persist until the stands are thinned. In this region of limited soil nutrients, intensive plantation management that combined chemical site preparation with banded herbaceous weed control optimized forage for white-tailed deer by providing higher quality forage with only minor reductions in overall forage quantity.



Tamara Campbell

# 2009-2010 Research Project Summaries

### EFFECTS OF HUNTER DENSITY ON BUCK MOVEMENTS

Andy Little, Steve Demarais, Ken Gee, Sam Riffell, Stephen Webb, and Josh Gaskamp

We many times have you wondered what would happen to that young buck that you just passed because it didn't meet your management criteria? Would he end up being seen and harvested by another hunter? Would having more hunters on your property cause bucks to become less available for harvest as they seek heavy cover or become nocturnally active? Researchers at Mississippi State University and the Samuel Roberts Noble Foundation are examining these questions using 52 radio-collared bucks on a 4,600-acre property during the 2008 and 2009 two-week firearm season in Oklahoma. Deer movements were compared at 3 hunter densities: no hunters on a sanctuary area, 1 hunter per 250 acres (low), and 1 hunter per 75 acres (high).

Deer had their first interactions with hunters during a two-day pre-season scouting period, when hunters entered their hunting compartments to scout and set-up stands. During this scouting period, buck movements were greatest in the high hunter density area (450 yards/hr) compared to the low hunter density (339 yards/hr) and the sanctuary area (380 yards/hr). Once hunting season began movements in the high and low hunter density areas were less than in the sanctuary area. Observation rates by hunters decreased from 38% the first weekend of hunting season to 3% the third weekend, despite collared bucks remaining within hunted areas. Having three-fold greater hunter density doubled the observation rate of collared bucks from 15 to 27%. In summary, bucks adjusted their behaviors to reduce potential contacts with hunters and become more secretive as the hunting season progressed.



**Andy Little** 

### EFFECT OF DOMINANCE ON OFFSPRING SEX RATIO IN CAPTIVE WHITE-TAILED DEER

Eric Michel, Steve Demarais, Bronson Strickland, and Jerry Belant



**Eric Michel** 

**B**iologists and most hunters know how important adult sex ratio is to effective management of white-tailed deer, and understand the factors that influence the proportion of males to females in a population. Unfortunately, we know far less about the factors that affect sex ratio at birth. There has been much debate on what influences offspring sex ratio, but one thing is for certain: initial number of male and female offspring is determined when the doe is bred. Conditions during pregnancy might also differentially alter the growth and survival of the fetuses. Some believe that nutrition and female body condition at the time of breeding affect the number of male and female fetuses. However, one theory suggests that a female's place in the social structure may be the primary factor, as dominant does have relatively more males than females. We will evaluate possible controlling mechanisms by comparing offspring sex ratios of dominant and subordinate does at the MSU Rusty Dawkins Memorial Deer Unit. All does will have access to optimum nutrition. Physical characteristics will be compared between the groups to see if dominance is associated with body size or condition. Support for this project is provided by the MDWFP using Federal Aid in Wildlife Restoration funds.



# **Magnolia Records Program**

### By: Rick Dillard

RECORDS

The year 2010 marks the 10th year of the Magnolia Records Program. Since the beginning, over 5,800 deer have been scored, with more than 3,700 of those deer meeting the minimum requirements (125 inches for typical and 155 inches for non-typical). An analysis of those bucks meeting the minimum requirements indicates that counties in the western region of the state as well as those in the east-central region have the highest average antler scores (**Figure 28**). The total number of bucks qualifying for Magnolia Records in each county is depicted in **Figure 29**.

The 2009 – 2010 hunting season was not quite as productive as the previous season with regard to the number of trophy bucks harvested. However, some outstanding deer were still taken. The largest typical buck scored 164 4/8 and was taken by Eddie J. Peterson, Jr. on Mahannah WMA in Issaquena County. The largest non-typical buck scored 183 5/8 and was taken by Kenny Watkins in Monroe County. Stephen Keen's 149 3/8 buck from Warren County was the largest typical taken by archery. Mark Ross' buck from Yazoo County was the largest typical taken by muzzleloader and scored 152 3/8 typical. Lastly, the largest non-typical muzzleloader buck was harvested by George V. Holliman, III in Oktibbeha County and scored 164 1/8.

For many hunters, the true measure of a bonafide trophy is a buck with an inside spread surpassing 20 inches. To date, over 620 deer with inside spreads greater than or equal to 20 inches have been entered. The widest deer on record was harvested by Richey Buchanan in Lowndes County in 2007 with an inside spread of 27 inches.

Many outstanding bucks, too numerous to list here, are being entered in Magnolia Records each year. To view all entries and their photos visit <u>www.mdwfp.com/deer</u> and look for Magnolia Records Program.



# Pope and Young Deer Taken in Mississippi

| Rank | Score   | Status | Taken By        | Season  | County     |
|------|---------|--------|-----------------|---------|------------|
| 1**  | 236 1/8 | 1      | Tracy Laird     | 2003-04 | Adams      |
| 2    | 204     | 1      | Denver Eshee    | 1996-97 | Webster    |
| 3    | 195 5/8 | 1      | Damon C. Saik   | 2000-01 | Madison    |
| 4    | 187 3/8 | 2      | Angus Catchot   | 2006-07 | Washington |
| 5    | 178 4/8 | 2      | Wyn Diggs       | 2006-07 | Holmes     |
| 6    | 177 5/8 | 2      | Adam McCurdy    | 2005-06 | Holmes     |
| 7    | 173 6/8 | 1      | Jimmy Riley     | 2000-01 | Adams      |
| 8    | 172 2/8 | 2      | Clifford Welch  | 2008-09 | Wilkinson  |
| 9    | 170 3/8 | 2      | Roger Tankesly  | 2007-08 | Madison    |
| 10   | 165 5/8 | 1      | James Goss, Jr. | 1987-88 | Washington |

### Table 26. Top 10 Non-Typical Trophies (Minimum Score 155)

### Table 27. Top 10 Typical Trophies (Minimum Score 125)

| Rank | Score   | Status | Taken By          | Season  | County       |
|------|---------|--------|-------------------|---------|--------------|
| 1**  | 167 2/8 | 2      | Rob Stockett, III | 2007-08 | Tallahatchie |
| 2    | 165 6/8 | 2      | Carl Taylor       | 2004-05 | Issaquena    |
| 3    | 164 7/8 | 1      | James House       | 1999-00 | Issaquena    |
| 4    | 164 3/8 | 2      | Michael Burkley   | 2008-09 | Jefferson    |
| 5    | 161 2/8 | 2      | Lance Johnson     | 2008-09 | Bolivar      |
| 6    | 160 1/8 | 1      | Odis Hill, Jr.    | 1989-90 | Washington   |
| 7    | 159 6/8 | 1      | Steve Nichols     | 1986-87 | Washington   |
| 8    | 158 4/8 | 1      | John Harvey       | 1989-90 | Adams        |
| 9    | 158 1/8 | 3      | Randy Hooks       | 2008-09 | Copiah       |
| 10   | 157 1/8 | 4      | Ryan H. McCarty   | 2006-07 | Clay         |

\*\* OFFICIAL STATE RECORD

+ TIES

1 - IN BOWHUNTING RECORDS OF NORTH AMERICAN WHITETAIL DEER

2 - OFFICIALLY SCORED AND ACCEPTED

3 - OFFICIALLY SCORED AND PENDING

4 - OFFICIALLY SCORED BUT NOT ENTERED



Kevin Smith (Claiborne County)

# **Boone and Crockett Deer Taken in Mississippi**

### Table 28. Top 25 Non-Typical Trophies (Minimum Score 195)

| Rank | Score   | Status | Taken By                 | Season  | County    |
|------|---------|--------|--------------------------|---------|-----------|
| 1 ** | 295 6/8 | 1      | Tony Fulton              | 1994-95 | Winston   |
| 2    | 236 1/8 | 4      | Tracy Laird              | 2003-04 | Adams     |
| 3    | 225     | 1      | Richard Herring          | 1988-89 | Lowndes   |
| 4    | 221 2/8 | 1      | Milton Parrish           | 1972-73 | Holmes    |
| 5    | 220 3/8 | 1      | Dean Jones               | 1976-77 | Oktibbeha |
| 6    | 219 6/8 | 2      | Brian Smith              | 2006-07 | Marshall  |
| 7    | 219 2/8 | 1      | Matt Woods               | 1997-98 | Hinds     |
| 8    | 217 5/8 | 1      | Mark Hathcock            | 1977-78 | Carroll   |
| 9    | 216 5/8 | 4      | (Pick up) Matthew Freeny | 1989-99 | Winston   |
| 10   | 212 5/8 | 2      | Stephen McBrayer         | 2005-06 | Pontotoc  |
| 11   | 212     | 1      | Wayne Parker             | 1999-00 | Madison   |
| 12   | 210     | 4      | (Pick up) Chip Haynes    | 2000-01 | Madison   |
| 13   | 209 6/8 | 1      | Ronnie Strickland        | 1981-82 | Franklin  |
| 14   | 207 6/8 | 2      | Shelby Tate              | 2007-08 | Amite     |
| 15   | 207 3/8 | 1      | Larry Reece              | 2001-02 | Madison   |
| 16   | 205 6/8 | 1      | Joe Shurden              | 1976-77 | Lowndes   |
| 17   | 205 5/8 | 2      | Terry Cruse              | 2007-08 | Chickasaw |
| 18   | 205 2/8 | 2      | Jimmy Baker              | 2007-08 | Webster   |
| 19   | 205     | 1      | (Pick up) Tommy Yateman  | 1959    | Lowndes   |
| 20   | 204     | 1      | Denver Eshee             | 1996-97 | Webster   |
| 21   | 202 5/8 | 1      | George Galey             | 1960'S  | Carroll   |
| 22   | 202 4/8 | 1      | William Westmoreland     | 2001-02 | Pontotoc  |
| 23   | 202 3/8 | 4      | Rob Heflin               | 1998-99 | Humphreys |
| 24 + | 202 1/8 | 1      | Oliver Lindig            | 1983-84 | Oktibbeha |
| 24 + | 202 1/8 | 2      | Bobby Smith              | 1992-93 | Tate      |

\*\* OFFICIAL STATE RECORD

+ TIES

1 - IN RECORDS OF NORTH AMERICAN BIG GAME

2 - OFFICIALLY SCORED AND ACCEPTED

3 - OFFICIALLY SCORED AND PENDING

4 - OFFICIALLY SCORED BUT NOT ENTERED



Ricky Case (Claiborne County)

# **Boone and Crockett Deer Taken in Mississippi**

| Table 29. Top 23 Typical Trophies (Minimum Score 170) |         |        |                                 |         |              |  |  |  |  |  |
|---|---------|--------|---------------------------------|---------|--------------|--|--|--|--|--|
| Rank  | Score   | Status | Taken By                        | Season  | County       |  |  |  |  |  |
| 1 **  | 182 7/8 | 1      | Glen Jourdan                    | 1986-87 | Noxubee      |  |  |  |  |  |
| 2   | 182 2/8 | 1      | R. L. Bobo                      | 1955-56 | Claiborne    |  |  |  |  |  |
| 3   | 181 5/8 | 1      | Ronnie Whitaker                 | 1980-81 | Wilkinson    |  |  |  |  |  |
| 4   | 181 2/8 | 3      | (Pick up) Alan Thornton         | 2009-10 | Coahoma      |  |  |  |  |  |
| 5   | 180 4/8 | 1      | W. F. Smith                     | 1968-69 | Leflore      |  |  |  |  |  |
| 6   | 180 2/8 | 1      | Steve Greer                     | 1995-96 | Madison      |  |  |  |  |  |
| 7   | 179 2/8 | 1      | Marlon Stokes                   | 1988-89 | Hinds        |  |  |  |  |  |
| 8   | 178 5/8 | 1      | Grady Robertson                 | 1951-52 | Bolivar      |  |  |  |  |  |
| 9   | 177 2/8 | 4      | Ronnie Houston                  | 1988-89 | Grenada      |  |  |  |  |  |
| 10  | 176 6/8 | 2      | Paul Warrington                 | 2007-08 | Bolivar      |  |  |  |  |  |
| 11  | 176 5/8 | 1      | Sidney Sessions                 | 1952-53 | Bolivar      |  |  |  |  |  |
| 12  | 176 1/8 | 1      | J.D. Hood (Mike Steadman-owner) | 1972-73 | Monroe       |  |  |  |  |  |
| 13 +  | 175 2/8 | 1      | Johnnie Leake, Jr.              | 1977-78 | Wilkinson    |  |  |  |  |  |
| 13 +  | 175 2/8 | 1      | Charlie G. Wilson, II           | 2001-02 | Neshoba      |  |  |  |  |  |
| 15  | 175     | 2      | Kyle Gordon                     | 2005-06 | Madison      |  |  |  |  |  |
| 16 +  | 174 6/8 | 1      | O. P. Gilbert                   | 1960-61 | Coahoma      |  |  |  |  |  |
| 16 +  | 174 6/8 | 1      | Jeremy Boelte                   | 1997-98 | Adams        |  |  |  |  |  |
| 18 +  | 174 1/8 | 1      | William Ladd                    | 1999-00 | Noxubee      |  |  |  |  |  |
| 18 +  | 174 1/8 | 4      | Unknown (Mike Shell-owner)      | 1940    | Warren       |  |  |  |  |  |
| 18 +  | 174 1/8 | 1      | Bill Walters                    | 1995-96 | Coahoma      |  |  |  |  |  |
| 21  | 173 5/8 | 1      | Geraline Holliman               | 1982-83 | Lowndes      |  |  |  |  |  |
| 22  | 173 3/8 | 1      | Richard Powell                  | 1994-95 | Coahoma      |  |  |  |  |  |
| 23  | 173 2/8 | 4      | Allen Hunley                    | 2007-08 | Hinds        |  |  |  |  |  |
| 24  | 173     | 2      | Steve Simmons                   | 2007-08 | Tallahatchie |  |  |  |  |  |
| 25  | 172 6/8 | 1      | Bob Martin                      | 1940    | Warren       |  |  |  |  |  |

### Table 29. Top 25 Typical Trophies (Minimum Score 170)

\*\* OFFICIAL STATE RECORD

+ TIES

1 - IN RECORDS OF NORTH AMERICAN BIG GAME

2 - OFFICIALLY SCORED AND ACCEPTED

3 - OFFICIALLY SCORED AND PENDING

4 - OFFICIALLY SCORED BUT NOT ENTERED



### Conclusion

### Status

CONCLUSION

As in previous reports, data was collected from a wide array of sources. The 2009 – 2010 season continued to indicate a diverse statewide deer herd. Unique populations continued to exist in all regions of the state.

Across the state, Deer Program Biologists evaluated habitat and deer herd conditions. The results from these evaluations all point to an expanding deer herd in most areas of the state. Each year there are increasing complaints of crop damage and vehicle collisions. For the first time this year a municipality has written a deer management plan to address their deer population problems.

Even with the liberal season structure and bag limits, hunters are not harvesting enough deer to decrease the population. Overharvest of deer is not a risk with the exception of some areas of southeast Mississippi. Across the remainder of the state, harvest numbers could increase without causing any negative effect on the deer herd. This increase in harvest would allow already stressed habitats the ability to recover. Deer habitat on poorer soils has been damaged at a greater level than habitat on more fertile soils. In addition, habitat damage on lower fertility soils requires a longer recovery time than on the more fertile soils in regions like the Mississippi Delta. Reduction of deer populations to levels where habitat can recover is unacceptable to many hunters. The result has been continued over-use of quality browse species by deer.

This past season was one that will be remembered as the weird weather year. Excessive rains across most of the state in late summer – early fall made planting food plots nearly impossible. The rainfall caused seed to wash away or rot in the ground. This was followed by two periods of record cold temperatures across two-thirds of the state. A December snow blanketed a large portion of the state and then a hard freeze in late December – early January greatly reduced deer movements.

Seasons like this past will cause hunters to reduce harvest because deer sightings were reduced. Properties along the Mississippi River decreased, or eliminated, doe harvest due to the perception that there was severely decrease fawn production for the past two years. While the fawn production was decreased due to spring/summer floods, there are no areas in Mississippi that should eliminate at least a moderate doe harvest. Properties affected by the cold temps cut off doe harvest at that point due to decreased deer movement. It will be interesting to follow the 2008 and 2009 cohorts over time to see what effects the weather and decreased harvest has on overall herd condition.

For the seventh year additional buck tags were offered to landowners and hunting clubs which suffer from extreme overpopulation, whose objective is to reduce total deer numbers, or to remove lower quality bucks that do not meet their management objective. This tool is effective for the removal of management bucks on above average habitat. Legislation was passed in 2003 allowing the harvest of sub-four point bucks by special permit; and was altered to include management bucks in 2005. Landowners or clubs must meet certain requirements, such as cooperating with an approved wildlife biologist and be enrolled in DMAP for a minimum of at least one year to be eligible for these tags. A written justification from the biologist must be approved by the MDWFP Deer Committee before management tags will be issued to a property. The biologist recommendations are used to determine the management buck criteria on individual properties.

This season the state was divided into three Deer Management Zones and a minimum spread or main beam length criteria based on local parameters took the place of one statewide point based criteria. Additionally, the antlerless bag limit changed from 3 antlerless deer with any weapon and 2 additional antlerless deer with archery equipment to 5 antlerless deer with any weapon. The impacts of these new regulations will not be realized for a few years.

During 2009 – 2010, the MDWFP Deer Committee consisted of a statewide coordinator, a youth/outreach coordinator, and four regional deer biologists who worked with landowners and hunting clubs across Mississippi. Additionally, the MDWFP Deer Committee works hand-in-hand with the MD-WFP Wildlife Management Area biologists and other public lands to provide deer management recommendations.

### Recommendations

Statewide variance in parameters such as breeding dates, condition indicators, and changes in habitat quality continue to warrant intelligent site-specific deer management recommendations. Because of the extreme diversity in management needs across the state, landowners can implement these recommendations only if they are provided with a season framework that offers maximum opportunity or with special permits that allow additional opportunity.

A liberal antlerless season framework is mandatory if landowners are to meet management goals. Antlerless opportunity should be provided to allow landowners in all regions of the state the opportunity to manage deer populations. Decision makers will receive an increasing number of negative reports associated with antlerless hunting opportunity, as behavioral changes in the deer population create changes that make deer less visible to hunters. Continued complaints will arise as hunters incorrectly associate decreasing deer populations to antlerless season opportunity. These complaints will be more frequent in areas of the state with poor soil quality, previously high deer populations, and/or declining habitat quality.

An effective method to monitor statewide harvest on a county basis is needed to take deer management to the next level in Mississippi. Harvest data, which would include sex, harvest method, and county of harvest would provide information from which detailed analyses of the deer herd could occur. A telephone-based reporting system, which provides this type of information, is currently in use in many states across the Southeast. Harvest data at a county level are instantaneously available to wildlife officials in these states. Voluntary implementation of a similar, efficient and cost-effective system, known as Tel-Chek, began in 2002, but has been underutilized. A mandatory tagging and reporting system like Tel-Chek would provide biologists with much needed data, and law enforcement officers with a new tool to catch violators.

# Conclusion

Current harvests estimates are collected via a statewide mail survey. This mail survey encompasses all hunted species in Mississippi. Since the survey includes questions regarding spring turkey harvest, it is not mailed until after the turkey season ends. This causes a one year time-lag in receiving the deer harvest estimates and makes evaluating any regulation changes extremely difficult. In order to receive more timely deer harvest estimates a deer only mail survey is needed until a mandatory harvest and reporting system is put into place statewide.

The MDWFP has the ability to change the antler criteria and Deer Management Zones if the results warrant the change. Constant evaluation of these regulations will need to continue. These regulations may need to be changed to provide sportsmen and women the best possible deer herd and hunting opportunity.

Research funding should continue. Continued advancement of the state deer program hinges on the professional association and interaction with current deer research projects. The MDWFP Wildlife Technical Staff has benefited professionally from this relationship with Mississippi State University for over 20 years. Many of the advances in the management of Mississippi's deer herd would not have occurred without this relationship. The opportunity to find answers, which address practical management questions, should continue to receive priority.

Existing data collection procedures on public and private lands must continue if responsible harvest recommendations for these lands are expected. Extensive baseline data exists from which objective evaluations can be conducted to examine the effects of changes in habitat, hunting opportunity, and harvest schemes. The annual mail survey will continue to be a valuable tool to monitor trends in a variety of important categories.

Information and education should remain the top priority of the deer program in Mississippi. Deer management needs are well documented in most regions of the state. Landowner and hunter understanding, acceptance, and support of sound deer management will continue to determine the success of deer management in Mississippi. Deer management objectives should be better communicated to the users of this resource. Without landowner and hunter support, success is not expected. When provided the freedom, sportsmen in Mississippi have proven they can make informed decisions that benefit the deer resource if they are provided with the correct management and biological information.



### Notes

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