# MDWFP Aerial Waterfowl Survey Report

## November 16 - 18, 2020


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The first MDWFP aerial waterfowl survey of the season occurred November 16 – 18, 2020. In contrast to the previous two years' November surveys, wetland habitat availability was below average for much of the Mississippi Delta. Shallow, managed water was not widely distributed, as public lands held the majority of intensively managed waterfowl habitat. As a result, waterfowl were observed responding to these areas, often in high numbers. A large portion of harvested agricultural fields have been disked, which will result in reduced food availability for waterfowl if the fields are eventually flooded. Additionally, Mississippi's soybean harvest is slightly behind schedule, and many fields in the Delta region are expected to be prepared for flooding after harvest is completed. Overall, tremendous opportunity remains for private landowners to capture rainfall with water control structures as fall and winter continue. As in most years, flooded habitat availability generally increased as survey transects moved further northeast.

The total duck abundance estimate for the Mississippi Delta was similar to the long-term average for November surveys, as were the individual estimates for mallards, other dabbling ducks, and diving ducks (Tables 1 and 2). Mallards and other dabblers comprised nearly 75% of all duck observations. Northern shovelers and gadwall were the two most abundant dabbling duck species observed overall. Scaup and ruddy ducks were the most abundant diving duck species observed. The northwestern portion of the Delta contained the greatest abundance of mallards, while the northeastern portion held the greatest numbers of other dabblers and total ducks overall. The greatest number of diving ducks were observed in the southeastern region.

Mallards were most commonly observed using flooded areas of agricultural fields and permanent wetlands like sloughs and oxbow lakes. In agricultural fields, ducks were commonly observed in large complexes with multiple flooded fields. Most other dabbling ducks were observed using aquaculture complexes and semi-permanent or permanent wetlands with aquatic vegetation. And as usual, the greatest abundances of diving ducks were observed on aquaculture complexes. In general, ducks were not evenly distributed across available wetland habitat. Instead, ducks were observed together in relatively large groups, which is typical of early-season behavior. Biologists speculate that ducks will soon begin to distribute further as new wetland habitats become available. Very few concentrations of light geese (snow, blue, and Ross') and greater white-fronted geese (commonly called specklebellies) were observed during this survey, but numbers are expected to increase as the hunting season progresses.

With the regular duck hunting season set to open November 27, MDWFP biologists are optimistic that WMAs will continue to attract and hold waterfowl for a great start to the season. Temperatures are currently forecasted to remain relatively mild with chances of rainfall through most of next week. Weather severity index models for waterfowl migration predict little to no significant migration for mallards over the next week.

Weekly waterfowl reports will begin the week following the duck season opener, and will include updates from Mississippi hunting reports, as well as weather and habitat conditions. For weekly waterfowl reports and more information on the MDWFP Waterfowl Program, visit our website at http://www.mdwfp.com/waterfowl.

**Table 1**. Waterfowl abundance estimates in the Mississippi Delta during the November survey periods, 2007-2020.

| | Mallards | Dabblers | Divers | Total Ducks |
|---|---|---|---|---|
| 2007-08 | 25,872 | 34,241 | 27,992 | 88,106 |
| 2008-09 | 30,748 | 96,245 | 105,089 | 232,081 |
| 2009-10 | 24,281 | 137,996 | 77,839 | 240,117 |
| 2010-11 | 10,481 | 70,123 | 100,740 | 181,344 |
| 2011-12 | 43,845 | 183,823 | 80,928 | 308,596 |
| 2012-13 | No survey | No survey | No survey | No survey |
| 2013-14 | No survey | No survey | No survey | No survey |
| 2014-15 | 88,005 | 229,810 | 79,400 | 397,215 |
| 2015-16 | 30,933 | 57,702 | 54,167 | 142,802 |
| 2016-17 | 36,540 | 212,469 | 124,240 | 373,249 |
| 2017-18 | 88,019 | 303,472 | 109,101 | 500,591 |
| 2018-19 | 55,258 | 103,181 | 55,932 | 214,371 |
| 2019-20 | 26,866 | 123,036 | 178,488 | 328,390 |
| 2020-21 | 40,100 | 157,750 | 68,343 | 266,194 |
| **Average** | **41,746** | **142,487** | **88,522** | **272,755** |

**Figure 1**. Waterfowl abundance estimates in the Mississippi Delta during the five most recent November survey periods.

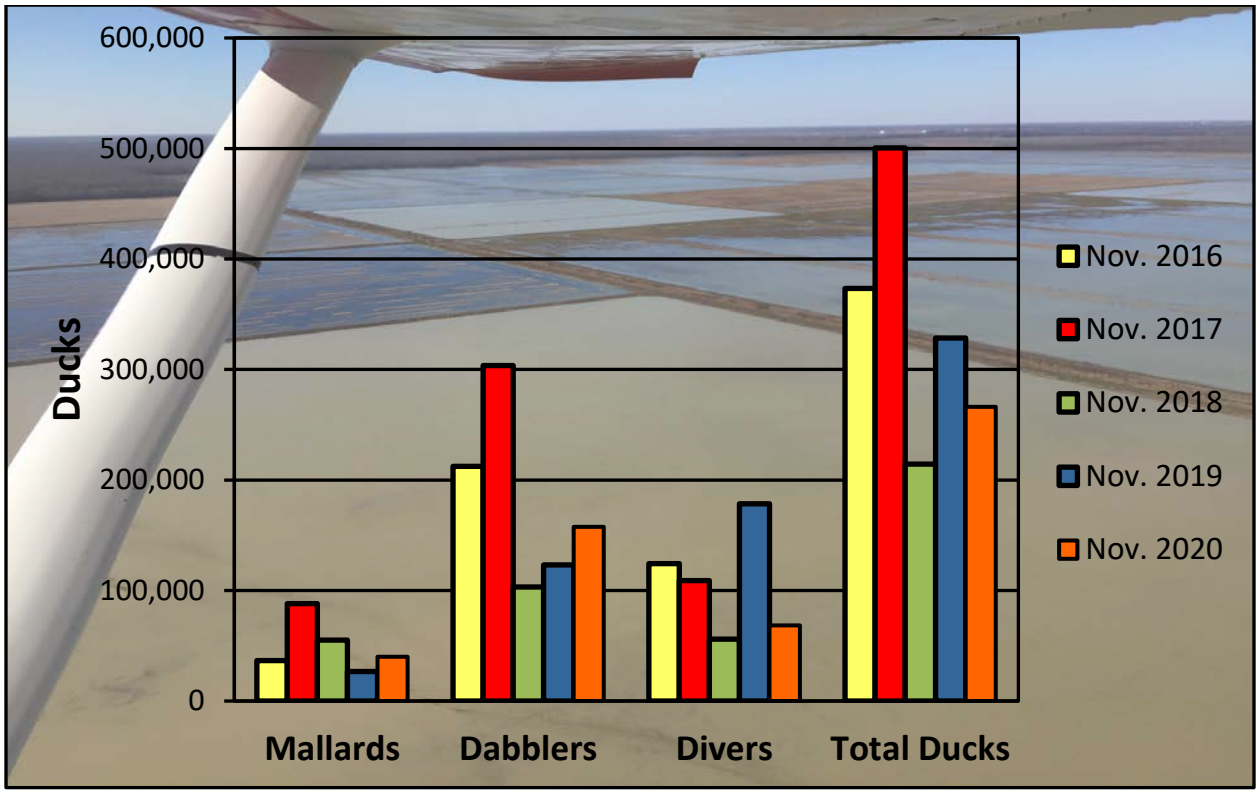
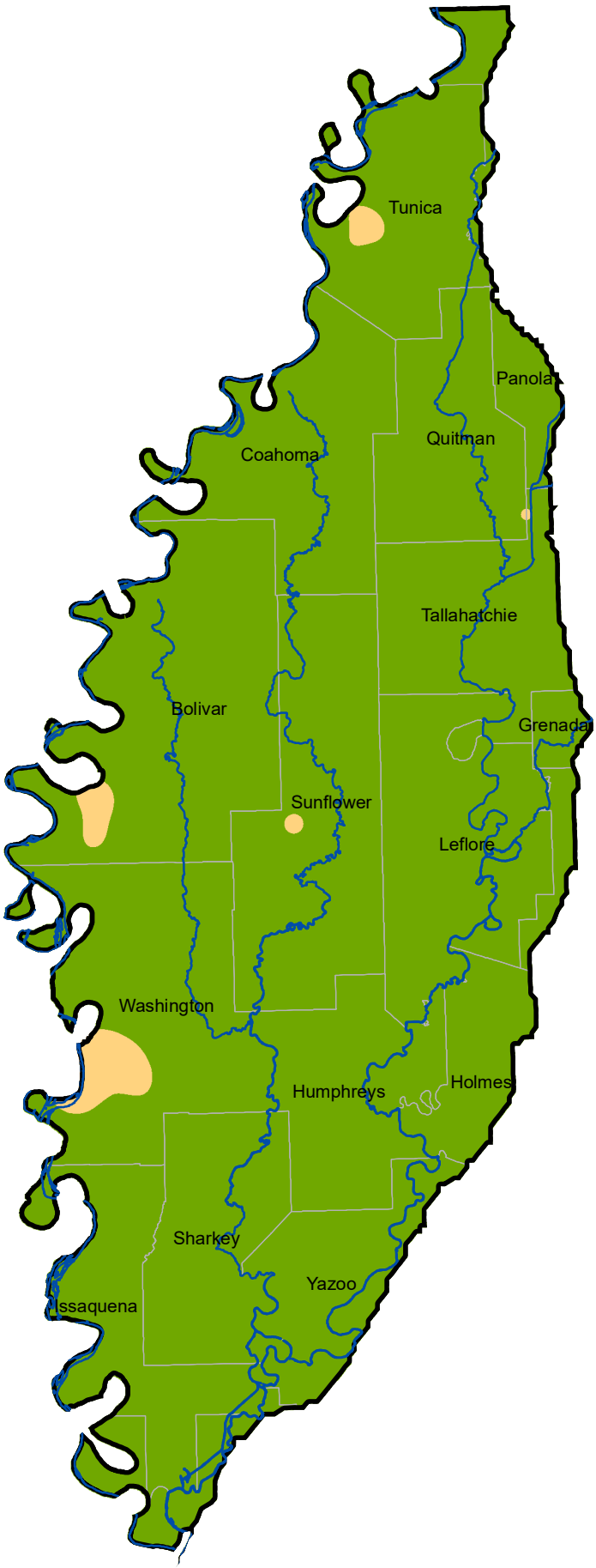


**Table 2**. Comparison of November 2020 aerial waterfowl survey estimates to the long-term average (LTA) for November survey estimates.

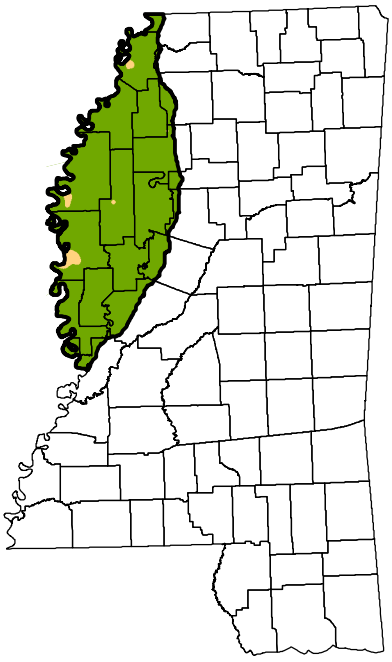
| Species Group | November 2020 | November LTA | % Change from LTA |
|---|---|---|---|
| Mallards | 40,100 | 41,746 | -3.9% |
| Other Dabblers | 157,750 | 142,487 | +10.7% |
| Diving Ducks | 68,343 | 88,522 | -22.8% |
| **Total Ducks** | 266,194 | 272,755 | -2.4% |

# Distribution of Mallards in the Mississippi Delta Nov. 16-18, 2020




## Description

- Low (<12/mi2)
- Medium (12-115/mi2)
- High (>115/mi2)



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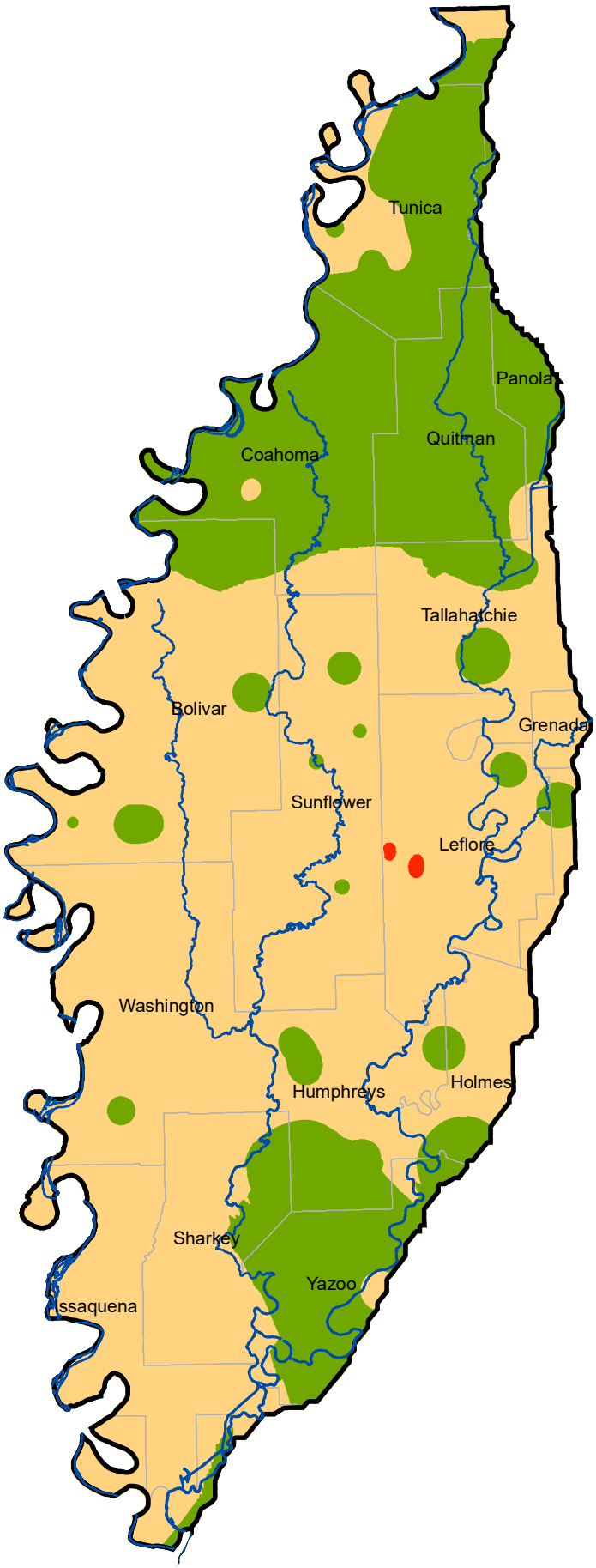
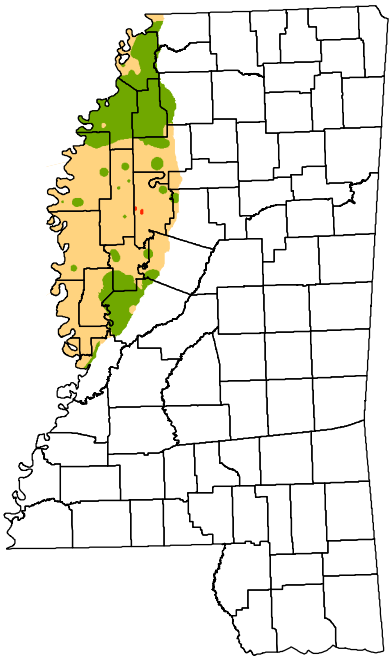
# Distribution of Total Ducks in the Mississippi Delta Nov. 16-18, 2020




## Description

- Low (<12/mi2)
- Medium (12-115/mi2)
- High (>115/mi2)



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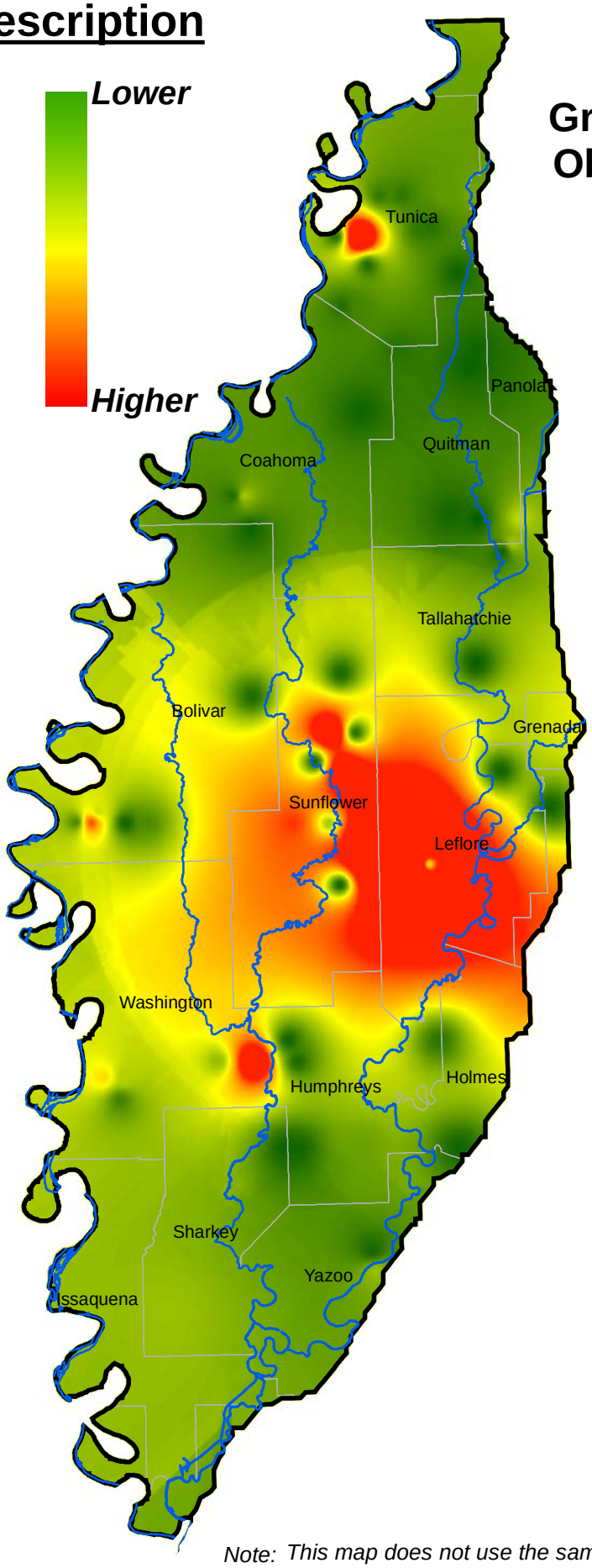
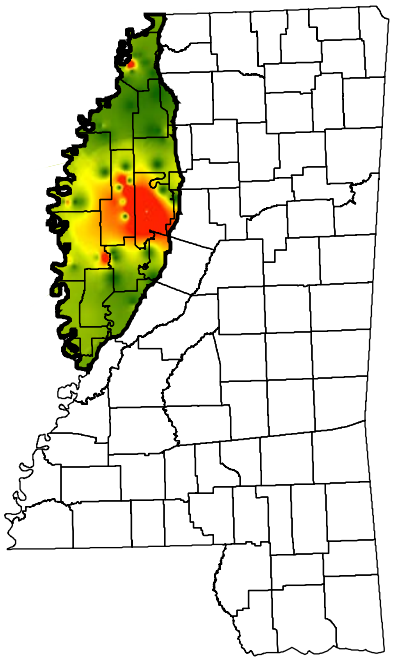
# Description

*Lower*

*Higher*

# Greatest Concentrations of Ducks Observed in the Mississippi Delta Nov. 16-18, 2020



*Note: This map does not use the same area calculations as previously published maps and is intended to illustrate major concentrations of ducks in the Mississippi Delta.*

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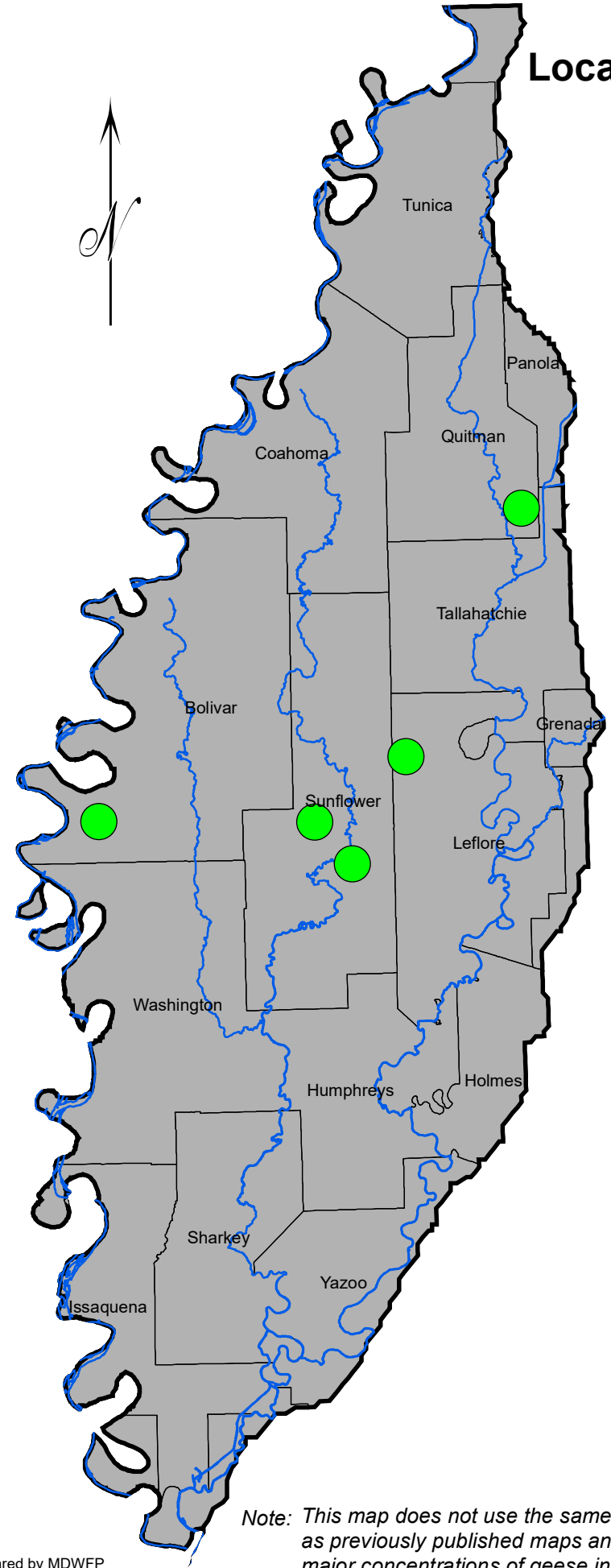
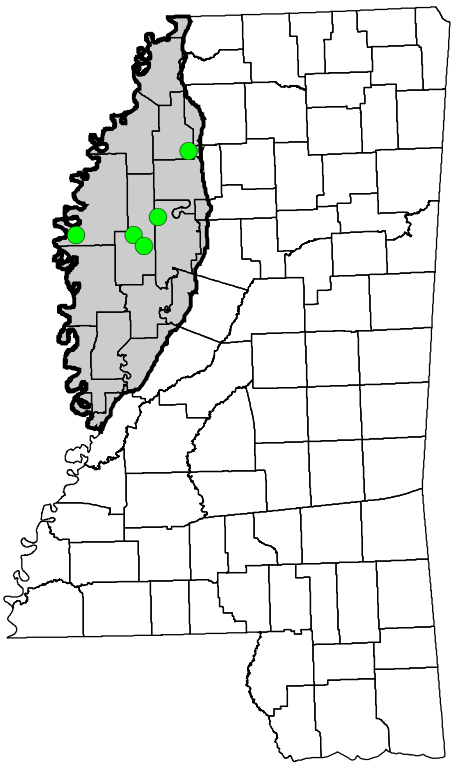
# Locations and relative size of light goose flocks in the Mississippi Delta Nov. 16 -18, 2020




## Description

***Lower***

***Higher***



*Note: This map does not use the same area calculations as previously published maps and is intended to illustrate major concentrations of geese in the Mississippi Delta.*

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