MDWFP Aerial Waterfowl Survey Report

January 3 - 10, 2022

Prepared by:

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and

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The third of four planned MDWFP aerial waterfowl surveys for the season occurred January 3 – 10, 2022. Although wetland habitat availability has increased across the Mississippi Delta since the December survey, water levels are still below average for this time of year. Most areas have still not received adequate rainfall for flooding shallow, seasonal wetlands. Public lands continue to hold the majority of intensively managed waterfowl habitat across the state. As a result, waterfowl were observed responding to these areas, along with large blocks of intensively managed private lands. As in previous surveys this year, much opportunity remains to capture rainfall with water control structures as winter continues along. Flooded habitat availability was again greatest in the northeast portion of the Delta and was least in the southwest portion.

Significant increases in duck abundance estimates were observed during this survey when compared to November and December. The total duck abundance estimate for the Mississippi Delta was similar to the long-term average for early January surveys, as was the estimate for dabbling ducks other than mallards (Tables 1 and 2). While the mallard estimate substantially increased from the December survey, it still remained slightly below the long-term average for this time of year. The diving duck estimate remained above their long-term average for this time of year, despite declining from December’s high numbers. Northern shovelers and mallards were the two most abundant duck species observed overall. The northeast portion of the Delta contained the greatest abundance of mallards, while the southeast portion contained the greatest abundances of total ducks, other dabblers, and diving ducks.

Mallards and other dabbling ducks were observed heavily using flooded agriculture for the first time this season. An increase in flooded agriculture was observed during this survey, and colder temperatures may have caused birds to shift their diets to higher energy sources provided in agricultural crops. Most diving ducks were observed using aquaculture complexes and semi-permanent or permanent wetlands with aquatic vegetation. In general, duck observations during this survey were more distributed across available wetland habitat, rather than together in fewer, but very large groups as they were earlier in the season. However, managed complexes with diverse wetland habitats typically held higher duck numbers than small, isolated wetlands. Significant rainfall will be required to increase wetland availability in many areas, particularly areas which rely on over-bank flooding of creeks and rivers. Very large concentrations of light geese (snow, blue, and Ross’) and greater white-fronted geese (commonly called specklebellies) were observed during this survey. Most specklebellies were again observed using large agricultural fields (both dry and flooded) and levees around production catfish ponds.

Peak numbers of waterfowl are typically observed in Mississippi during the month of January, and hunters are optimistic that another “push” or two of ducks from the north could be headed for Mississippi before the season comes to a close on Monday, January 31. The last aerial waterfowl survey of the season is scheduled to begin January 18. Weekly waterfowl reports will continue to include updates from Mississippi hunting reports, as well as updated 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 early January survey periods, 2008-2022.

<table>
<thead>
<tr>
<th>Year</th>
<th>Mallards</th>
<th>Dabblers</th>
<th>Divers</th>
<th>Total Ducks</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>204,322</td>
<td>248,542</td>
<td>74,342</td>
<td>527,205</td>
</tr>
<tr>
<td>2009</td>
<td>191,236</td>
<td>278,601</td>
<td>66,691</td>
<td>536,529</td>
</tr>
<tr>
<td>2010</td>
<td>281,622</td>
<td>440,314</td>
<td>170,797</td>
<td>892,734</td>
</tr>
<tr>
<td>2011</td>
<td>197,319</td>
<td>352,858</td>
<td>120,700</td>
<td>670,878</td>
</tr>
<tr>
<td>2012</td>
<td>215,268</td>
<td>339,908</td>
<td>100,202</td>
<td>655,379</td>
</tr>
<tr>
<td>2013</td>
<td>131,930</td>
<td>263,852</td>
<td>70,775</td>
<td>448,586</td>
</tr>
<tr>
<td>2014</td>
<td>313,851</td>
<td>742,182</td>
<td>191,888</td>
<td>1,244,714</td>
</tr>
<tr>
<td>2015</td>
<td>145,153</td>
<td>364,349</td>
<td>74,502</td>
<td>584,004</td>
</tr>
<tr>
<td>2016</td>
<td>213,759</td>
<td>210,159</td>
<td>109,414</td>
<td>521,662</td>
</tr>
<tr>
<td>2017</td>
<td>678,235</td>
<td>620,432</td>
<td>143,739</td>
<td>1,442,406</td>
</tr>
<tr>
<td>2018</td>
<td>484,121</td>
<td>595,303</td>
<td>49,488</td>
<td>1,128,912</td>
</tr>
<tr>
<td>2019</td>
<td>111,787</td>
<td>186,633</td>
<td>69,791</td>
<td>368,211</td>
</tr>
<tr>
<td>2020</td>
<td>173,834</td>
<td>367,714</td>
<td>58,875</td>
<td>600,423</td>
</tr>
<tr>
<td>2021</td>
<td>73,724</td>
<td>381,903</td>
<td>34,315</td>
<td>489,942</td>
</tr>
<tr>
<td>2022</td>
<td>195,533</td>
<td>379,391</td>
<td>113,217</td>
<td>688,141</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>240,780</strong></td>
<td><strong>384,809</strong></td>
<td><strong>96,582</strong></td>
<td><strong>719,982</strong></td>
</tr>
</tbody>
</table>

Table 2. Comparison of early January 2022 aerial waterfowl survey estimates to the long-term average (LTA) for early January survey estimates.

<table>
<thead>
<tr>
<th>Species Group</th>
<th>Early Jan 2022</th>
<th>Early Jan LTA</th>
<th>% Change from LTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mallards</td>
<td>195,533</td>
<td>240,780</td>
<td>-19.8%</td>
</tr>
<tr>
<td>Other Dabblers</td>
<td>379,391</td>
<td>384,809</td>
<td>-1.4%</td>
</tr>
<tr>
<td>Diving Ducks</td>
<td>113,217</td>
<td>96,582</td>
<td>+17.2%</td>
</tr>
<tr>
<td><strong>Total Ducks</strong></td>
<td><strong>688,141</strong></td>
<td><strong>719,982</strong></td>
<td><strong>-4.4%</strong></td>
</tr>
</tbody>
</table>
Figure 1. Waterfowl abundance estimates in the Mississippi Delta during the five most recent early January survey periods.
Distribution of Mallards in the Mississippi Delta Jan. 3 - 10, 2022

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

WILDLIFE MANAGEMENT AREAS
NATIONAL WILDLIFE REFUGES

Prepared by MDWFP GIS Lab 14 Jan. 2022
Distribution of Total Ducks in the Mississippi Delta
Jan. 3 - 10, 2022

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

Prepared by MDWFP GIS Lab 14 Jan. 2022
Greatest Concentrations of Ducks Observed in the Mississippi Delta
Jan. 3 - 10, 2022

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.
Locations and relative size of light goose flocks in the Mississippi Delta
Jan. 3 - 10, 2022

Description

Lower

Higher

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.

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.