MDWFP Aerial Waterfowl Survey Report

January 4 - 6, 2016

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The early January MDWFP aerial waterfowl survey was conducted during January 4 – 6, 2016. Waterfowl habitat availability has remained relatively high across most of the Mississippi Delta, especially with the rising floodwaters from the Mississippi River and backwater flooding from closing off Mississippi River tributaries. However, a lack of actively managed wetland habitat, as well as an abundance of disked agricultural fields, were still observed in most of the Mississippi Delta, especially the northwest region. Flooded habitat was most available along the Mississippi River and in the northeast portion of the Mississippi Delta.

Overall, duck estimates increased from the previous survey period, and were similar to recent years’ early January estimates (Table 1 and Figure 1). Estimates for mallards and diving ducks were also very similar to the long-term average for all early January surveys (Table 2), but estimates for other dabbling ducks and overall ducks remained well below their long-term averages for early January. Estimates for all categories of ducks showed increases from the December survey. Mallards and northern shovelers showed the largest increases for all species from the December survey, and were the two most abundant species observed, respectively.

The northeastern portion of the Delta contained the greatest abundance of ducks overall, as well as the greatest amount of managed and flooded habitat across the landscape. Mallards were also more abundant in this region than all other portions of the Delta. However, an increase in mallard abundance was observed in the southern half of the Delta. The northeastern region of the Delta also contained the greatest abundances of dabbling ducks other than mallards. The southeastern region contained the greatest abundances of diving ducks.

Most mallards and other dabbling ducks were observed using flooded agricultural fields. This was likely driven by the necessity for ducks to feed heavily on high energy food sources during cold temperatures. Also of note, was the abundance of mallards and other dabbling ducks using forested wetlands. Most diving ducks were observed using large catfish pond complexes and permanent wetlands such as large oxbow lakes. A large increase in migrant light geese (snow, blue, and Ross’ geese), as well as greater white-fronted geese, was observed during the survey, and geese were fairly evenly distributed across the eastern half of the Delta. Geese were observed heavily using both flooded and dry agricultural fields.

Mississippi is currently experiencing a sustained cold front, and another cold front is predicted to begin this weekend. This weather could potentially cause a significant southerly migration of waterfowl by causing wetland habitat at more northern latitudes to freeze for several consecutive days. Hunters are reminded that weather not only greatly impacts migration of birds into the state, but it also influences daily movements of the birds which are already present. Hunters should take note of how waterfowl respond to freezing and thawing conditions to take advantage of daily changes in bird behavior.

The final aerial waterfowl survey of the season is scheduled to begin the week of January 19, 2016. Waterfowl seasons will continue through January 31, 2016. For more information on the MDWFP Waterfowl Program, visit our website at www.mdwfp.com/waterfowl.
Table 1. Waterfowl abundance estimates in the Mississippi Delta during the early January survey period, 2014-2016.

<table>
<thead>
<tr>
<th>Species</th>
<th>Survey Period</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Early January 2014</td>
</tr>
<tr>
<td>Mallards</td>
<td>313,851</td>
</tr>
<tr>
<td>Dabblers</td>
<td>742,182</td>
</tr>
<tr>
<td>Diving Ducks</td>
<td>191,888</td>
</tr>
<tr>
<td>Total Ducks</td>
<td>1,244,714</td>
</tr>
</tbody>
</table>

Figure 1. Waterfowl abundance estimates in the Mississippi Delta during the early January survey period, 2014-2016.
Table 2. Comparison of early January aerial waterfowl survey estimates to the long-term average (LTA) for early January survey estimates.

<table>
<thead>
<tr>
<th>Species Group</th>
<th>Early January 2016</th>
<th>Early January LTA</th>
<th>% Change from LTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mallards</td>
<td>213,759</td>
<td>210,496</td>
<td>1.5%</td>
</tr>
<tr>
<td>Other Dabblers</td>
<td>210,159</td>
<td>360,085</td>
<td>-42%</td>
</tr>
<tr>
<td>Diving Ducks</td>
<td>109,414</td>
<td>108,812</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total Ducks</strong></td>
<td><strong>521,662</strong></td>
<td><strong>675,743</strong></td>
<td><strong>-23%</strong></td>
</tr>
</tbody>
</table>
Distribution of Mallards in the Mississippi Delta
Jan. 4 - 6, 2016

Prepared by MDWFP
GIS Lab 8 Jan. 2016

Description
- Low (<12/mi²)
- Medium (12-115/mi²)
- High (>115/mi²)
Distribution of Total Ducks in the Mississippi Delta
Jan. 4 - 6, 2016

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

Prepared by MDWFP GIS Lab 8 Jan. 2016
Greatest Concentrations of Ducks
Observed in the Mississippi Delta
Jan. 4 - 6, 2016

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. 4 - 6, 2016

Description

Lower

Higher

Prepared by MDWFP
GIS Lab 8 Jan. 2016