MDWFP Aerial Waterfowl Survey Report

January 5 - 8, 2021

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The third MDWFP aerial waterfowl survey of the season was flown January 5 – 8, 2021. Recent rainfall, heavy at times, has improved wetland habitat availability across the Mississippi Delta with most areas reaching normal levels for this time of year. Shallow, managed water has increased steadily since November, but the Mississippi River and interior Delta river systems are still well below flood stage, providing very little natural, overbank flooding so far this season. However, the Mississippi River has risen since late December and has provided additional habitat as water has spread out into willows adjacent to the main channel. Once again, flooded habitat availability generally increased as survey transects moved further northeast in the Delta region.

The total duck abundance estimate, as well as individual estimates for mallards, dabbling ducks, and diving ducks for the Mississippi Delta remained similar to December estimates and were below their respective long-term averages for early January (Tables 1 and 2). Total duck numbers did increase slightly from the December survey, with dabbling ducks other than mallards making up this increase. Mallards and other dabblers made up about 65% of all duck observations. Mallard observations decreased from the December survey, and biologists suspect this could partially be due to reduced detectability from mallards moving into more forested wetland habitats. The decrease in diving duck observations could have been due to a reduced number of aquaculture facilities along randomized survey transects for this survey. Most diving duck observations in the Mississippi Delta come from aquaculture ponds, but these habitats are not evenly distributed across the landscape. Gadwall and northern shovelers were the most abundant species observed, followed by mallards. Scaup and ring-necked ducks were the most abundant diving duck species observed. The northeastern portion of the Delta held the greatest abundances of mallards, other dabbling ducks, and total ducks overall. The greatest abundances of diving ducks were observed in the northwestern region.

Mallards and other dabblers were most observed using flooded agriculture fields; however, a high proportion of mallards were also observed using forested wetlands. As usual, most diving ducks were observed using aquaculture ponds and deep, permanent water bodies. In agricultural fields, ducks were commonly observed in large complexes with multiple flooded fields. Similar to the November and December surveys, ducks were not evenly distributed across available wetland habitat. Instead, ducks were often observed together remaining in relatively large groups, which is typical of early-season behavior. Observations of light geese (snow, blue, and Ross') and greater white-fronted geese (commonly called specklebellies) remained high and were well distributed during this survey.

Just over two weeks remain in Mississippi's regular waterfowl hunting season, and peak numbers of waterfowl are typically observed during the month of January. The final aerial survey of the year is planned for the week of January 18. Local temperatures have consistently dropped below freezing recently and the national forecast predicts significant snowfall for the upper Midwest and Great Lakes regions in the coming days. Weekly waterfowl reports will continue throughout the remainder of the hunting season and will include hunting reports from public and private lands, as well as weather and habitat condition updates. To read these 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, 2008-2021.

	Mallards	Dabblers	Divers	Total Ducks
2008	204,322	248,542	74,342	527,205
2009	191,236	278,601	66,691	536,529
2010	281,622	440,314	170,797	892,734
2011	197,319	352,858	120,700	670,878
2012	215,268	339,908	100,202	655,379
2013	131,930	263,852	70,775	448,586
2014	313,851	742,182	191,888	1,244,714
2015	145,153	364,349	74,502	584,004
2016	213,759	210,159	109,414	521,662
2017	678,235	620,432	143,739	1,442,406
2018	484,121	595,303	49,488	1,128,912
2019	111,787	186,633	69,791	368,211
2020	173,834	367,714	58,875	600,423
2021	73,724	381,903	34,315	489,942
Average	**244,012**	**385,197**	**95,394**	**722,256**

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

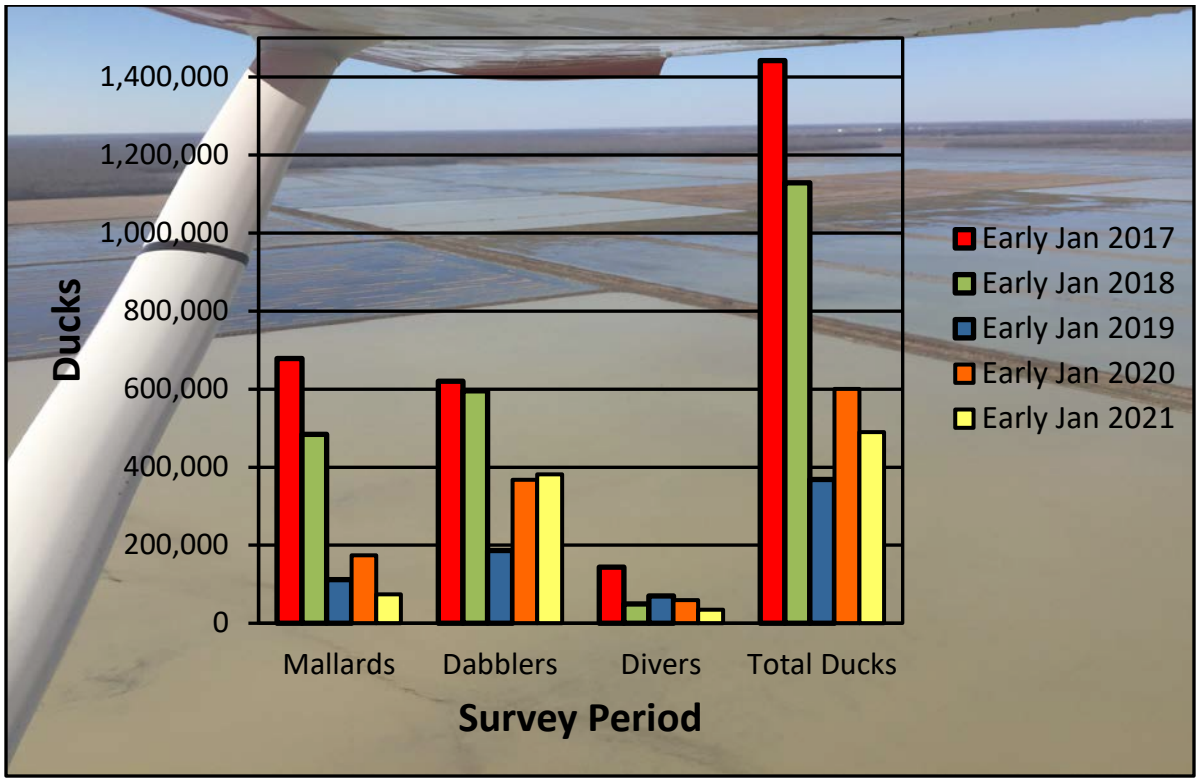
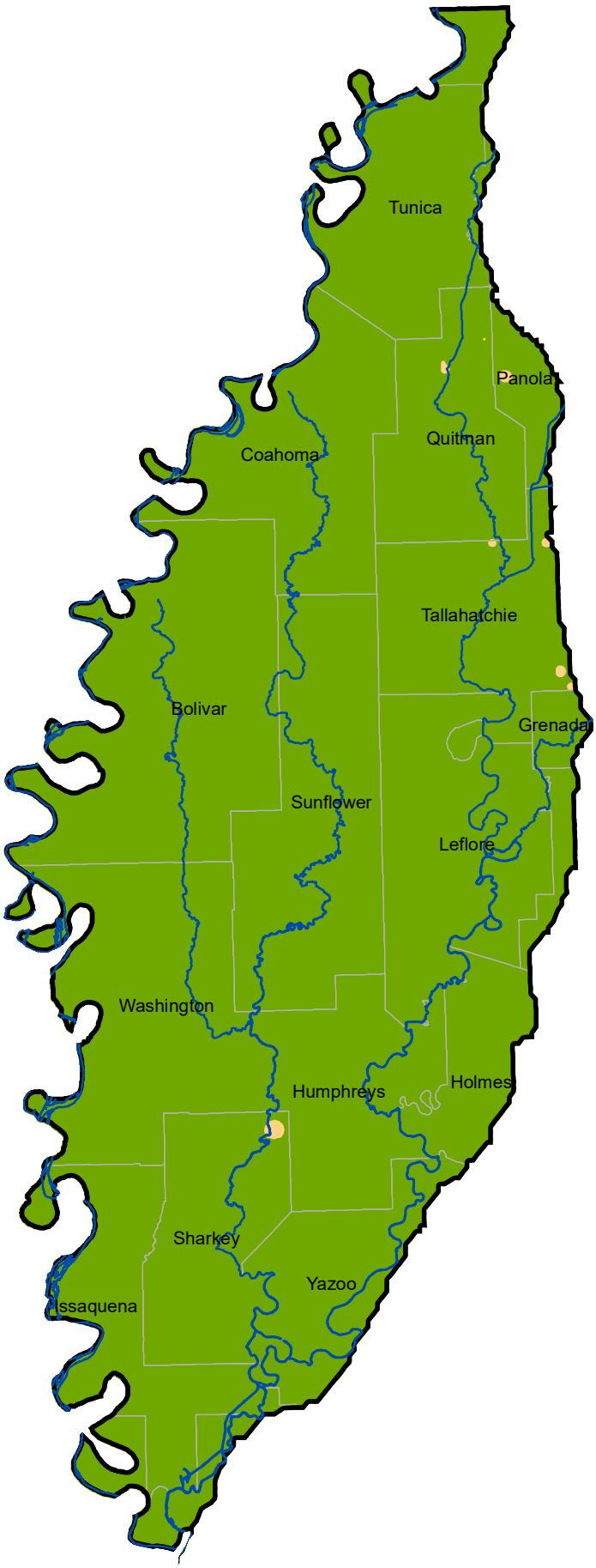


Table 2. Comparison of early January 2021 aerial waterfowl survey estimates to the long-term average (LTA) for early January survey estimates.

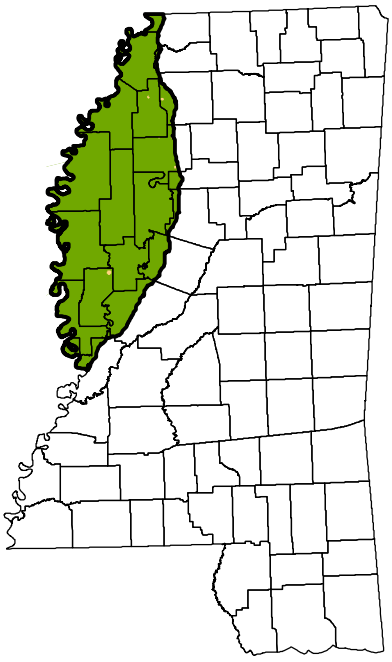
Species Group	Early Jan 2021	Early Jan LTA	% Change from LTA
Mallards	73,724	244,012	-69.8%
Other Dabblers	381,903	385,197	-0.9%
Diving Ducks	34,315	95,394	-64.1%
Total Ducks	489,942	722,256	-32.2%

Distribution of Mallards in the Mississippi Delta Jan. 5 - 8, 2021



Description

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



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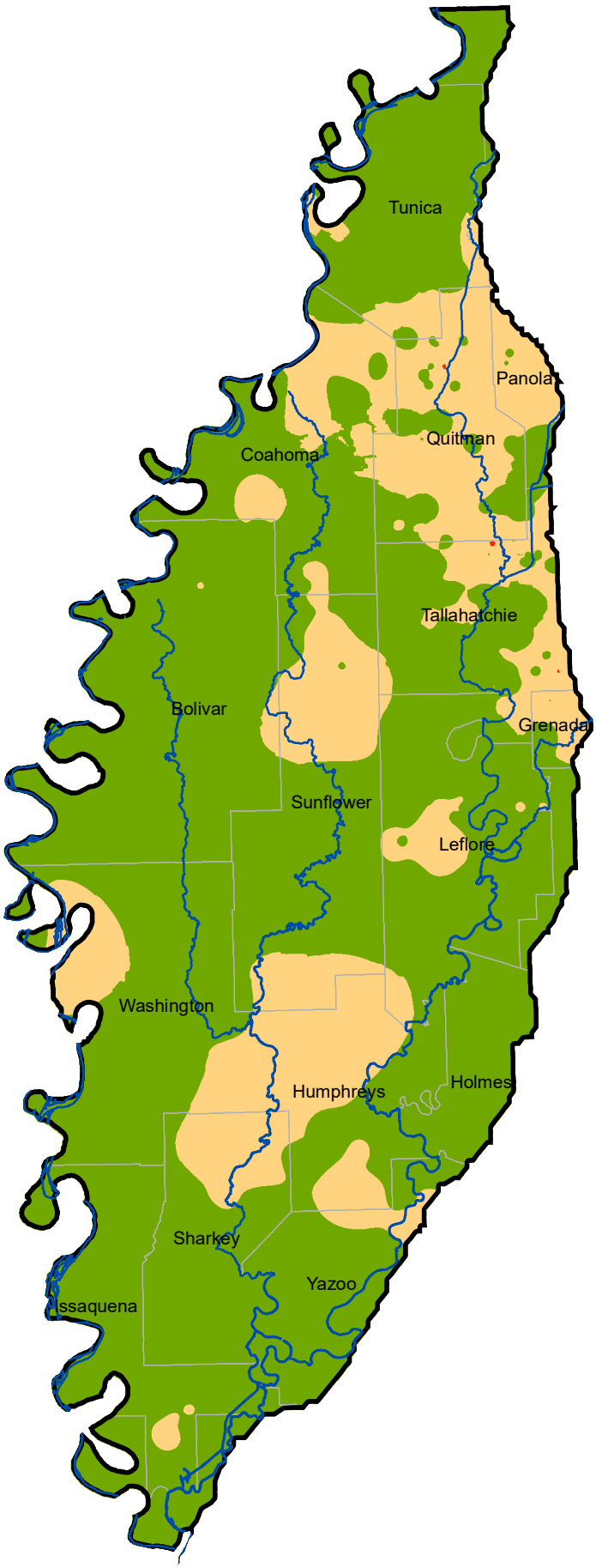
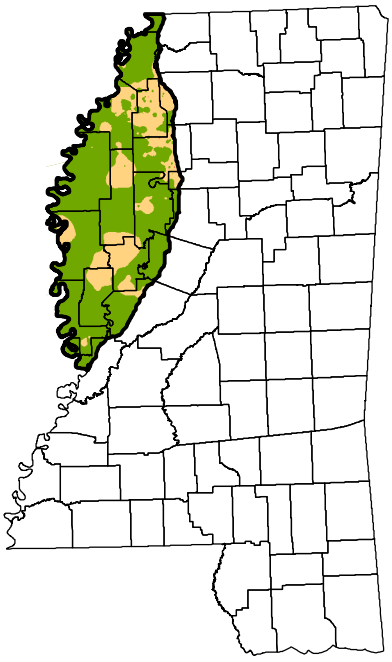
Distribution of Total Ducks in the Mississippi Delta Jan. 5 - 8, 2021



Description

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



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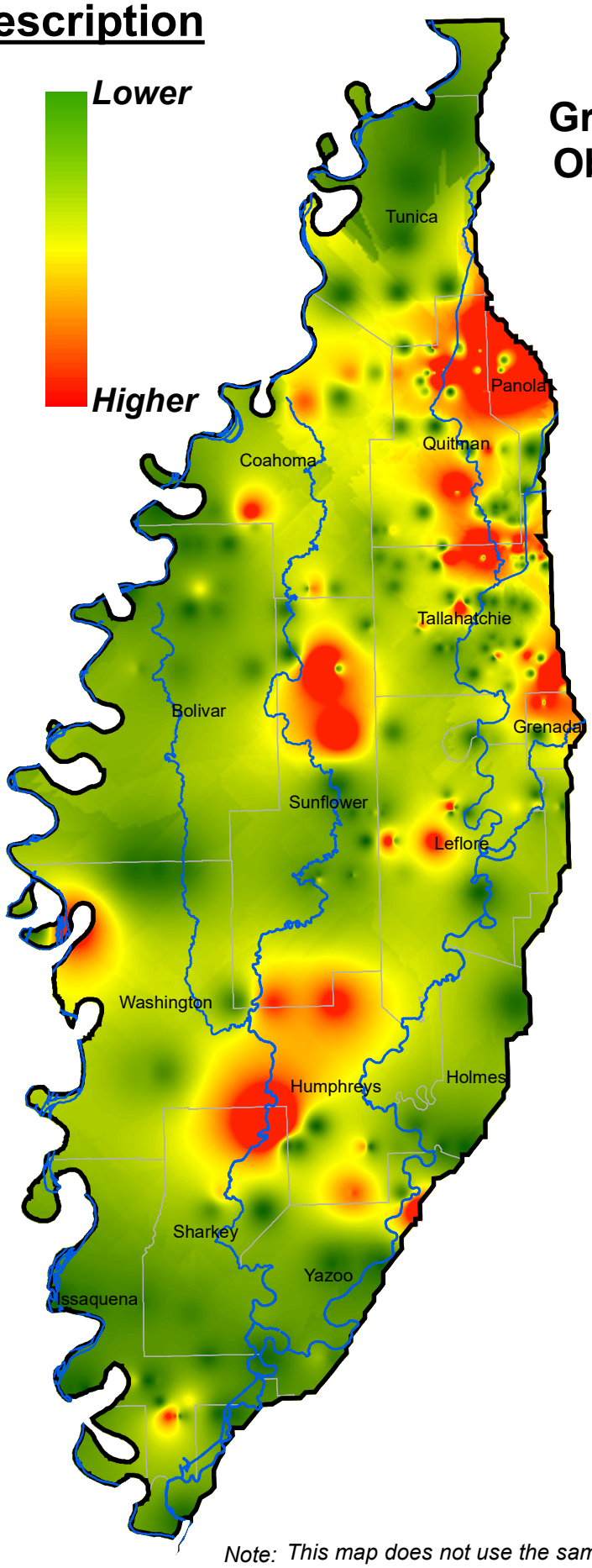
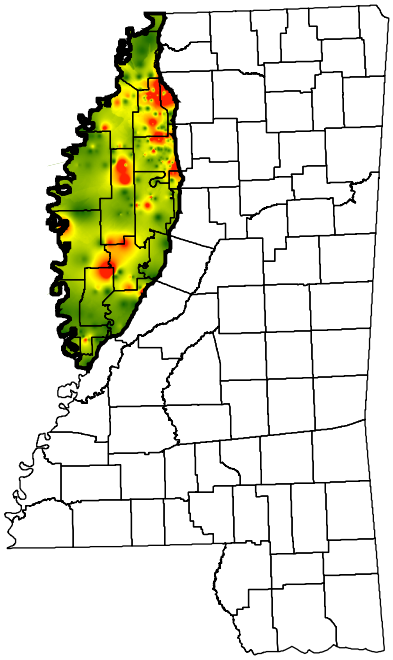
Description

Lower

Higher

Greatest Concentrations of Ducks Observed in the Mississippi Delta Jan. 5 - 8, 2021





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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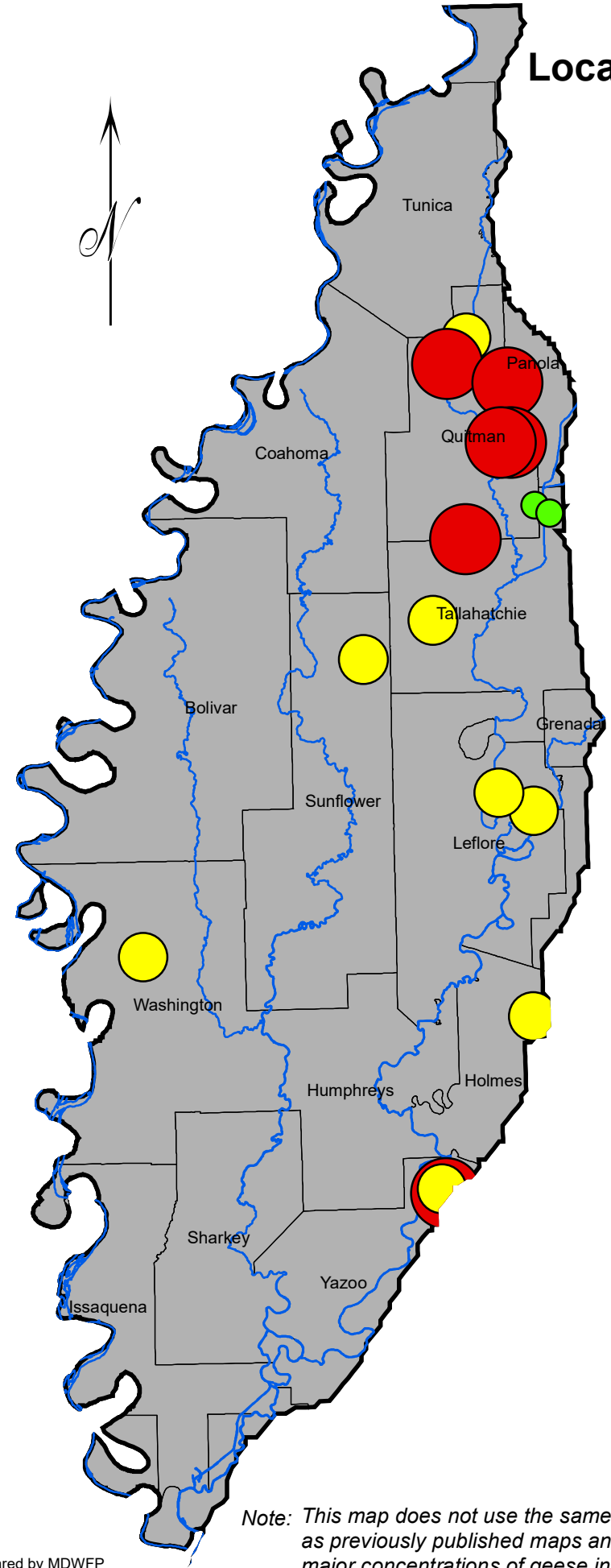
Locations and relative size of light goose flocks in the Mississippi Delta Jan. 5 - 8, 2021



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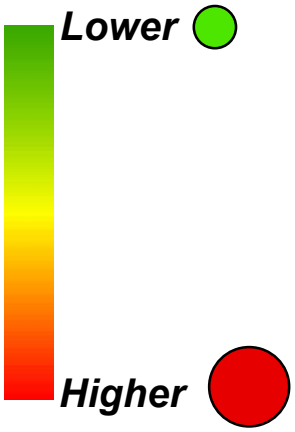

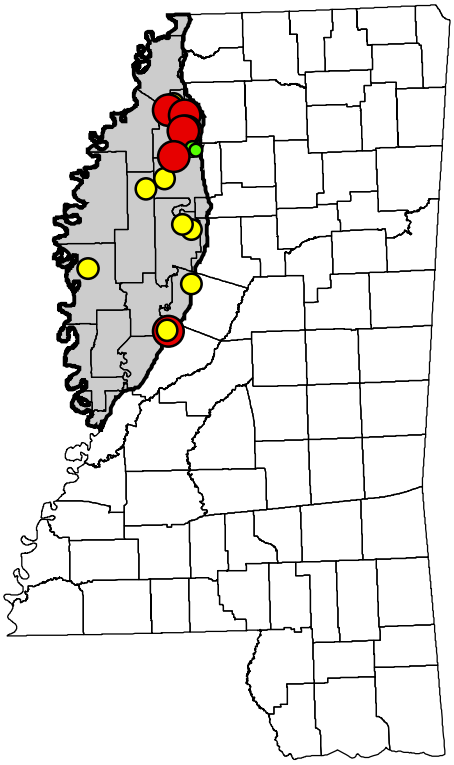

Note: This map does not use the same area calculations as previously published maps and is intended to illustrate major concentrations of geese in the Mississippi Delta.

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