



MDWFP Aerial Waterfowl Survey Report

December 14 - 17, 2020



WATERFOWL PROGRAM

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The second MDWFP aerial waterfowl survey of the season occurred December 14 – 17, 2020. Although recent rainfall has helped improve the situation, wetland habitat availability remained below average for much of the Mississippi Delta for this time of year. Shallow, managed water has increased since November as rainfall has likely prevented further fall disking of agricultural fields. However, public lands continued to hold the majority of intensively managed waterfowl habitat. As in November, much opportunity remains for private landowners to capture rainfall with water control structures as fall and winter continue and as waterfowl numbers to continue to increase. Flooded habitat availability generally increased as survey transects moved further northeast in the Delta region. The Mississippi River and interior Delta river systems are still well below flood stage, providing no natural, overbank flooding so far this season.

Although duck numbers increased from the November survey, the total duck abundance estimate for the Mississippi Delta was below the long-term average for December surveys, as were the individual estimates for mallards and other dabbling ducks (Tables 1 and 2). Mallards and other dabblers made up about 65% of all duck observations. Mallards were the most abundant species observed, followed by gadwall and northern shovelers. Scaup and ring-necked ducks were the most abundant diving duck species observed. The southeastern portion of the Delta contained the greatest abundance of mallards overall, 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, other dabbling ducks, and diving ducks were all most commonly observed using natural moist soil wetlands, and moist soil habitats accounted for over 50% of all duck observations. In agricultural fields, ducks were commonly observed in large complexes with multiple flooded fields. As in November, 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. A significant increase in observations of light geese (snow, blue, and Ross') and greater white-fronted geese (commonly called specklebellies) occurred during this survey. In addition to becoming more widespread across the entire Delta, snow geese were seen in very large numbers in several locations.

The bulk of Mississippi's waterfowl hunting season remains ahead, and peak numbers of waterfowl are typically observed during the month of January. Temperatures dipped below freezing recently and the forecast predicts more freezing weather around Christmas. Weather severity index models for waterfowl migration predict improved chances for migration for mallards and other dabbling ducks over the next week.

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 December survey periods, 2007-2020.

	Mallards	Dabblers	Divers	Total Ducks
2007	50,368	75,604	41,738	167,710
2008	223,976	389,939	70,750	684,665
2009	116,748	209,346	74,396	400,491
2010	210,531	388,064	236,966	835,561
2011	136,776	281,560	111,423	529,758
2012	122,779	176,950	171,542	471,271
2013	230,634	638,386	100,412	969,432
2014	86,838	331,460	102,117	520,415
2015	139,805	193,719	90,958	424,482
2016	202,135	460,752	146,707	809,594
2017	100,389	366,802	208,749	675,940
2018	84,032	176,070	143,417	403,519
2019	105,827	176,863	104,843	387,533
2020	99,767	167,139	143,458	410,365
Average	136,472	288,047	124,820	549,338

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

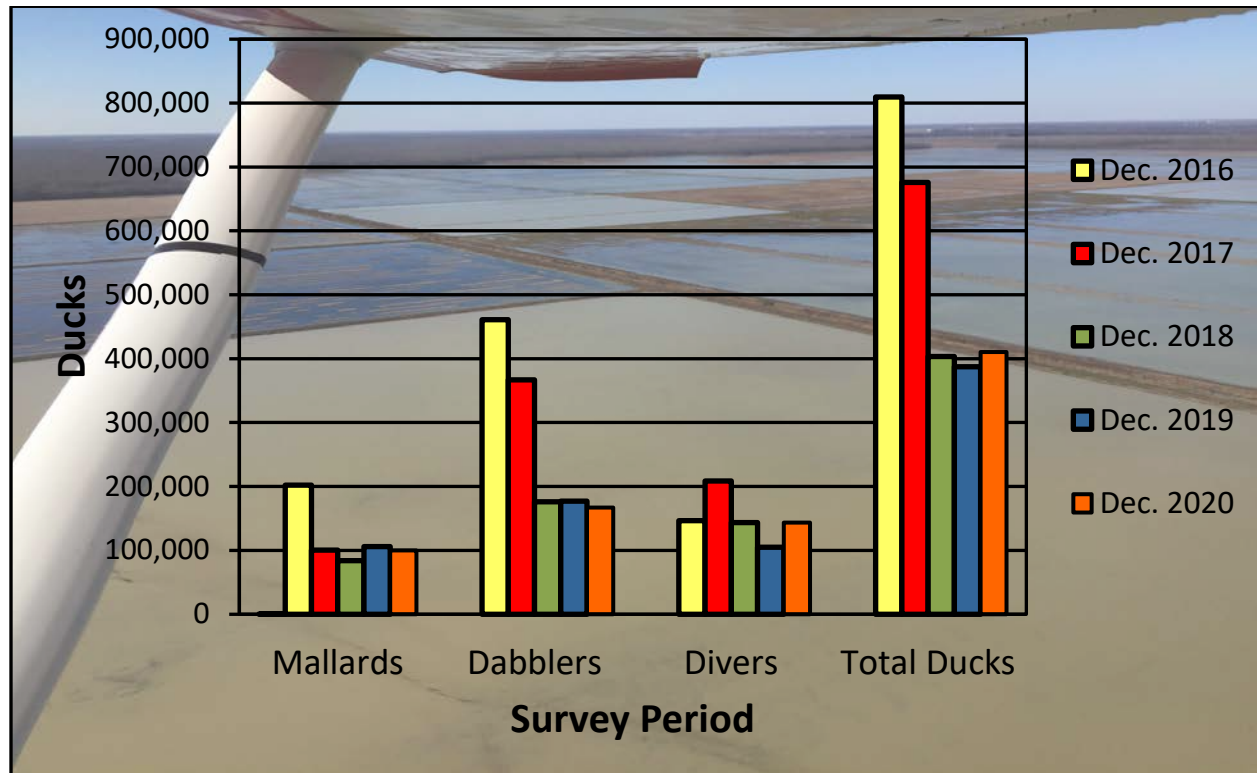
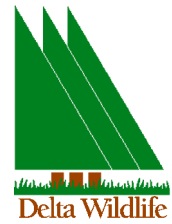
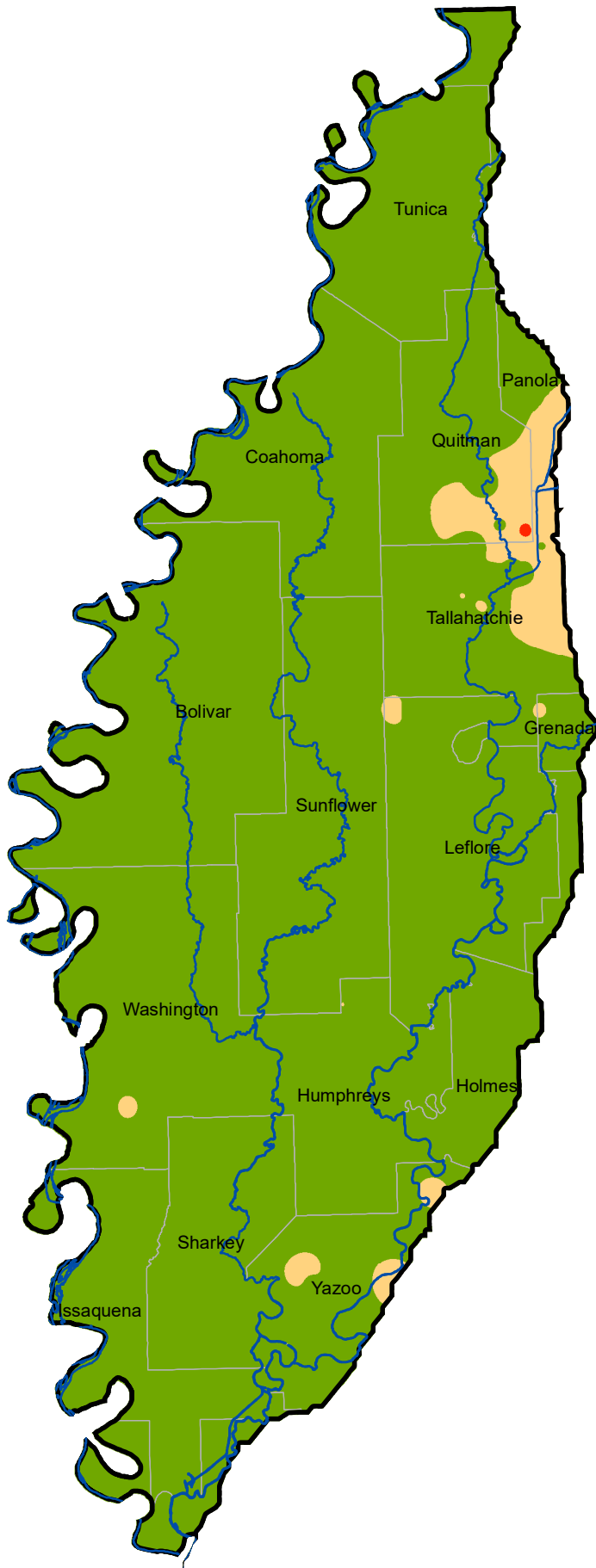


Table 2. Comparison of December 2020 aerial waterfowl survey estimates to the long-term average (LTA) for December survey estimates.

Species Group	December 2020	December LTA	% Change from LTA
Mallards	99,767	136,472	-26.8%
Other Dabblers	167,139	288,047	-41.9%
Diving Ducks	143,458	124,820	+14.9%
Total Ducks	410,365	549,338	-25.3%

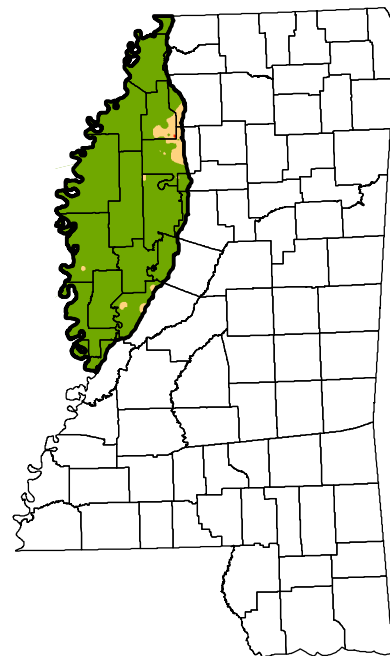
Distribution of Mallards in the Mississippi Delta

Dec. 14 -17, 2020



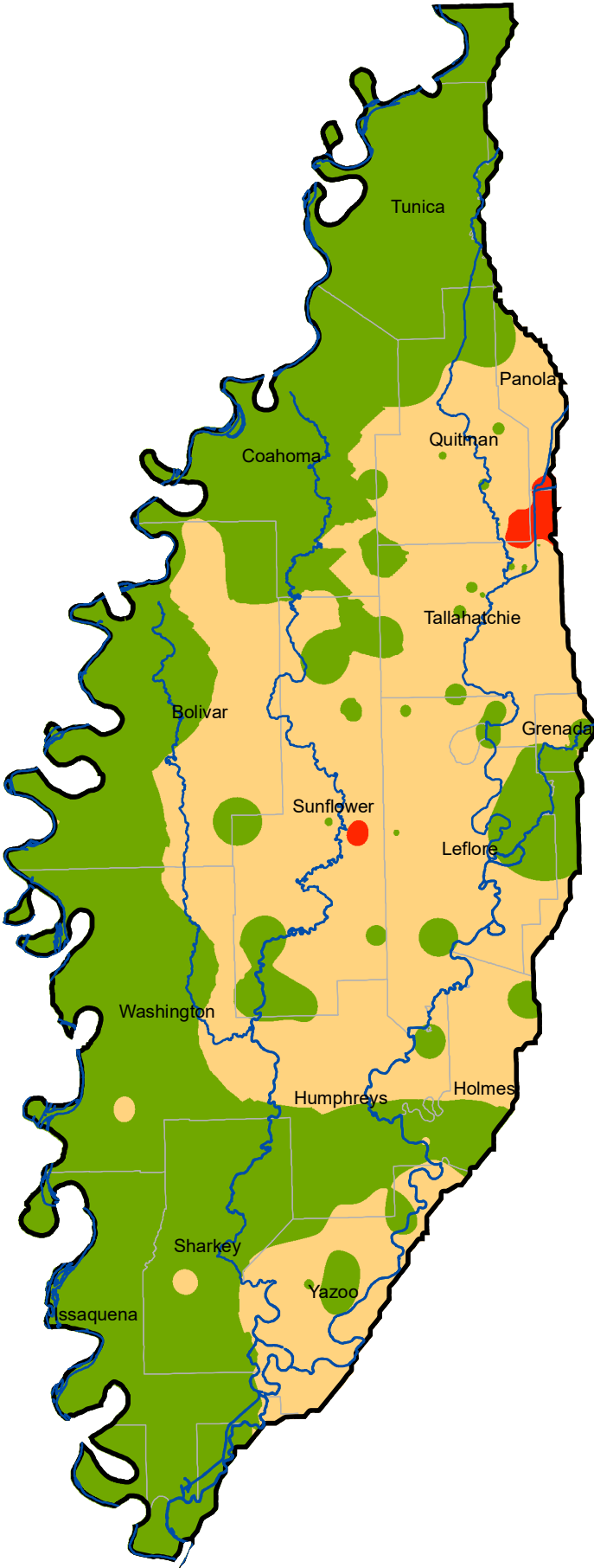
Description

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



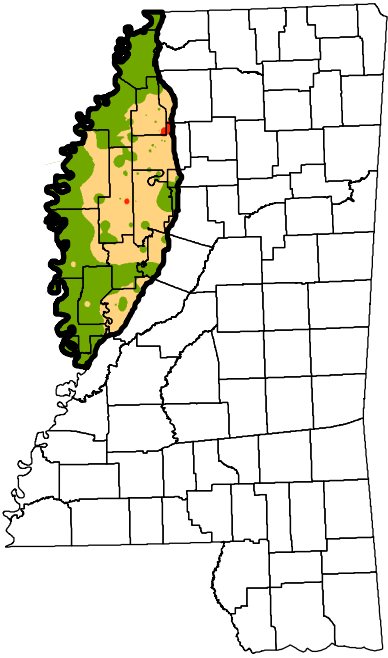
Distribution of Total Ducks in the Mississippi Delta

Dec. 14 -17, 2020

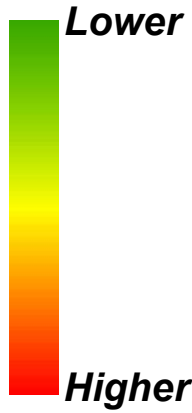


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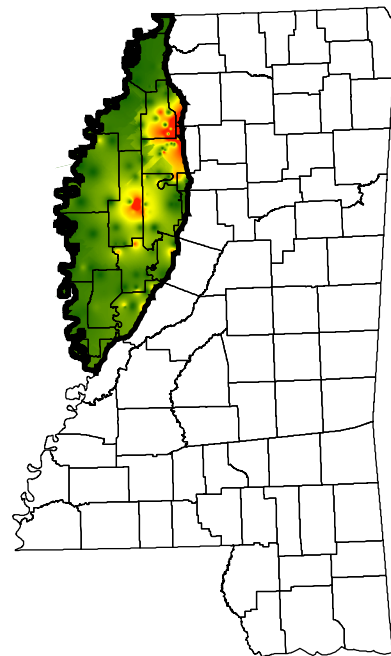
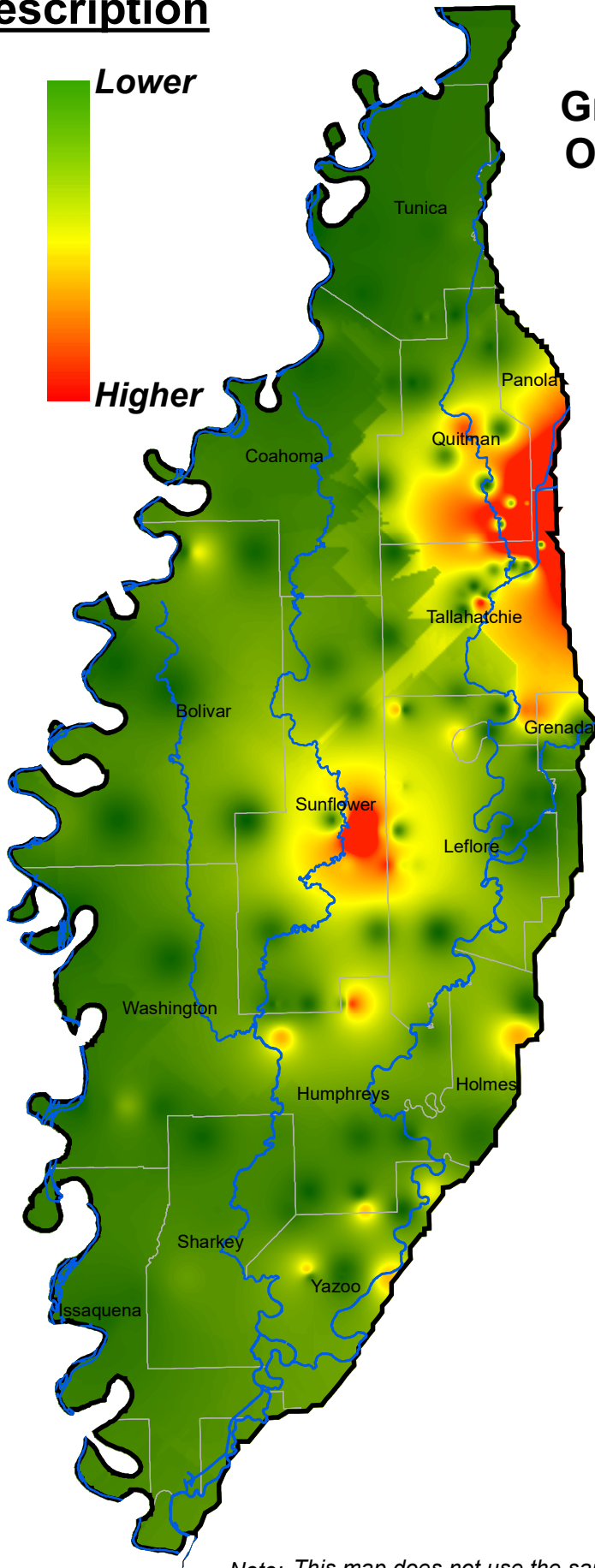
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Description

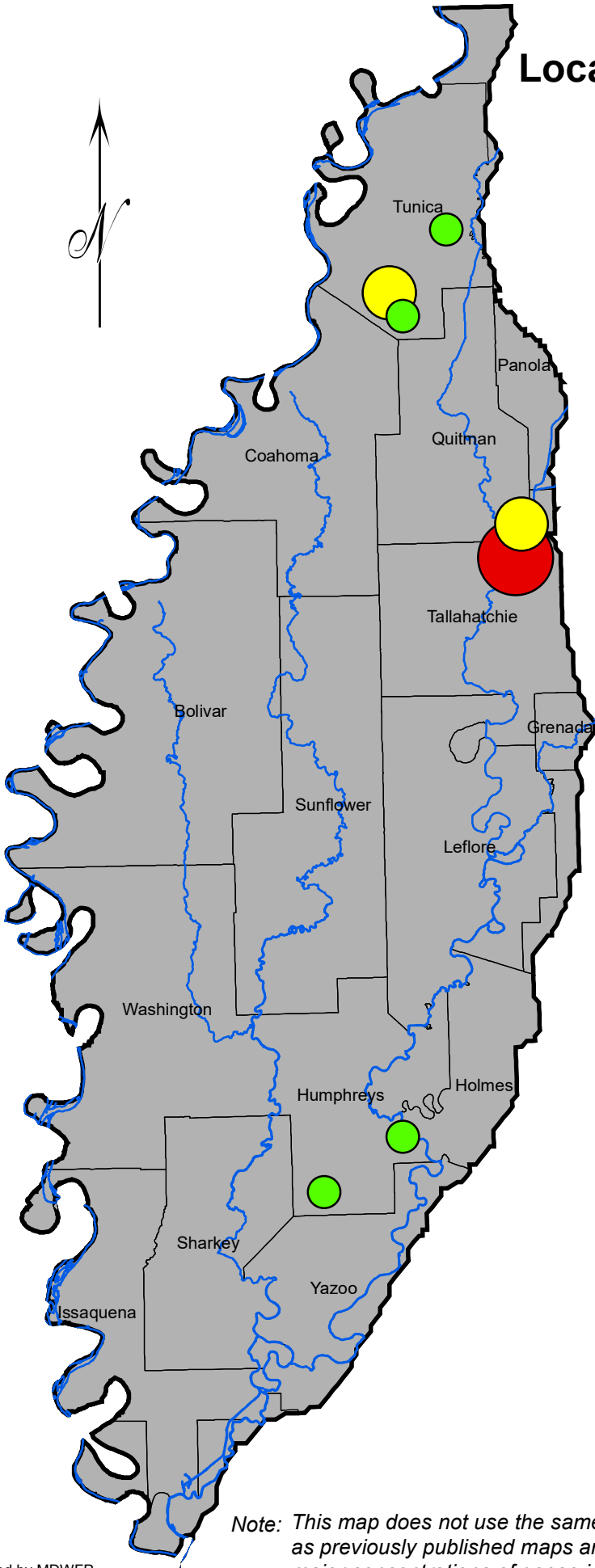


Greatest Concentrations of Ducks Observed in the Mississippi Delta Nov. 14 -17, 2020

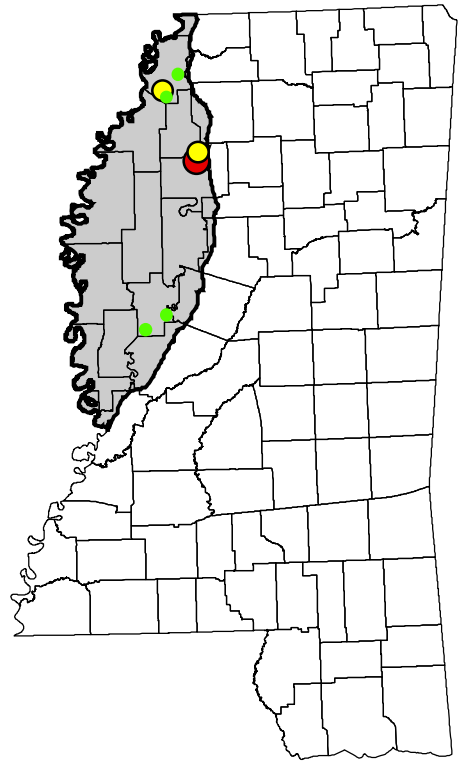
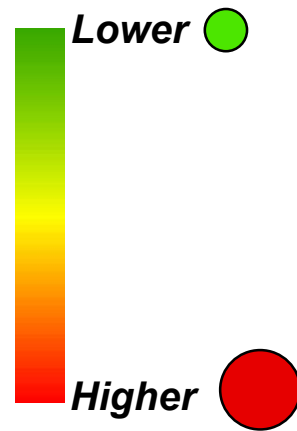


Note: This map does not use the same area calculations as previously published maps and is intended to illustrate major concentrations of ducks in the Mississippi Delta.

Locations and relative size of light goose flocks in the Mississippi Delta Dec. 14 - 17, 2020



Description



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.