



MDWFP Aerial Waterfowl Survey Report

December 15 - 19, 2022



WATERFOWL PROGRAM

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The second MDWFP aerial waterfowl survey of the season experienced multiple weather delays, but flights were completed over the span of December 15 – 19, 2022. Wetland habitat availability saw a marked increase since November, as much of the Mississippi Delta received significant rainfall immediately prior to this survey. However, much of the accumulated rainfall observed on agricultural fields was still draining through pipes and into ditches at the time of this survey. As a result of new habitat on the landscape, waterfowl were observed quickly responding to newly flooded areas. A large portion of harvested agricultural fields were disked earlier this fall, resulting in reduced food availability for waterfowl. Some opportunity still remains for landowners and managers to capture rainfall with water control structures as winter continues and as more waterfowl migrate into the state. Flooded habitat availability was greatest in the northeast portion of the Delta and was least in the northwest and southwest regions.

Although total 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, other dabbling ducks, and diving ducks (Tables 1 and 2). However, reports from the field would suggest that waterfowl numbers have continued to increase after the survey was completed, as extreme winter weather approaches from the north. Dabbling ducks other than mallards made up about 56% of all duck observations and were highlighted by above-average numbers of northern pintails and wood ducks. Wood duck observations were consistent with many hunting reports, noting higher than usual numbers of wood ducks in many parts of the state. Overall, northern shovelers and scaup were the two most abundant duck species observed, largely due to their high use of aquaculture ponds throughout the Delta. While Mississippi is not typically known for wintering large numbers of canvasbacks, multiple observations of “the king of ducks” were made during this survey. The northeast portion of the Delta contained the greatest abundances of mallards, while the southeast region held the greatest abundances of other dabblers, diving ducks, and total ducks overall.

Mallards and other dabbling ducks were most observed using flooded agricultural fields, as newly flooded fields were made available by recent rains. Semi-permanent or permanent wetlands with aquatic vegetation were also highly used by all categories of ducks. And as usual, the greatest abundances of diving ducks were observed on aquaculture complexes. In general, ducks more evenly distributed across available wetland habitat than November, largely due to increased shallow wetland habitat availability. Hunters should prepare to deal with extremely cold and icy conditions in the next few days as the current forecast predicts a significant freezing event. Biologists speculate that ducks will feed heavily in available high-quality foraging habitats prior to incoming below-freezing temperatures. When shallow wetlands freeze, ducks and geese will likely rely on more non-traditional wetlands like rivers and deep ponds or lakes. And as soon as shallow wetlands begin to thaw, birds will likely respond quickly to refuel energy supplies.

A little over half of Mississippi’s waterfowl hunting season remains ahead, and peak numbers of waterfowl are typically observed during the month of January. Weekly waterfowl reports have begun and 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>.

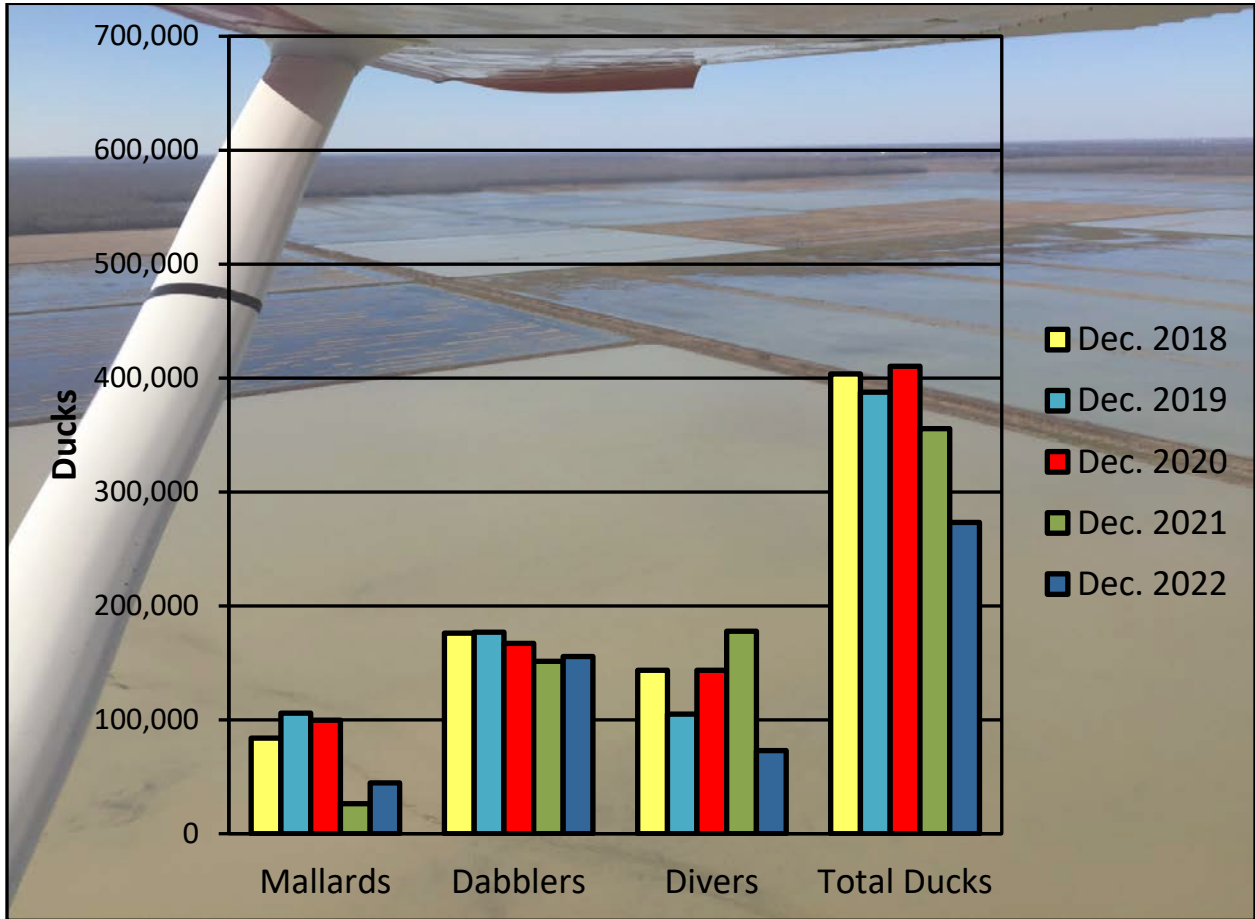
Table 1. Waterfowl abundance estimates in the Mississippi Delta during the December survey periods, 2007-2022.

	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
2021	26,403	151,460	177,615	355,478
2022	44,554	155,597	73,045	273,196
Average	123,848	271,232	124,883	519,963

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

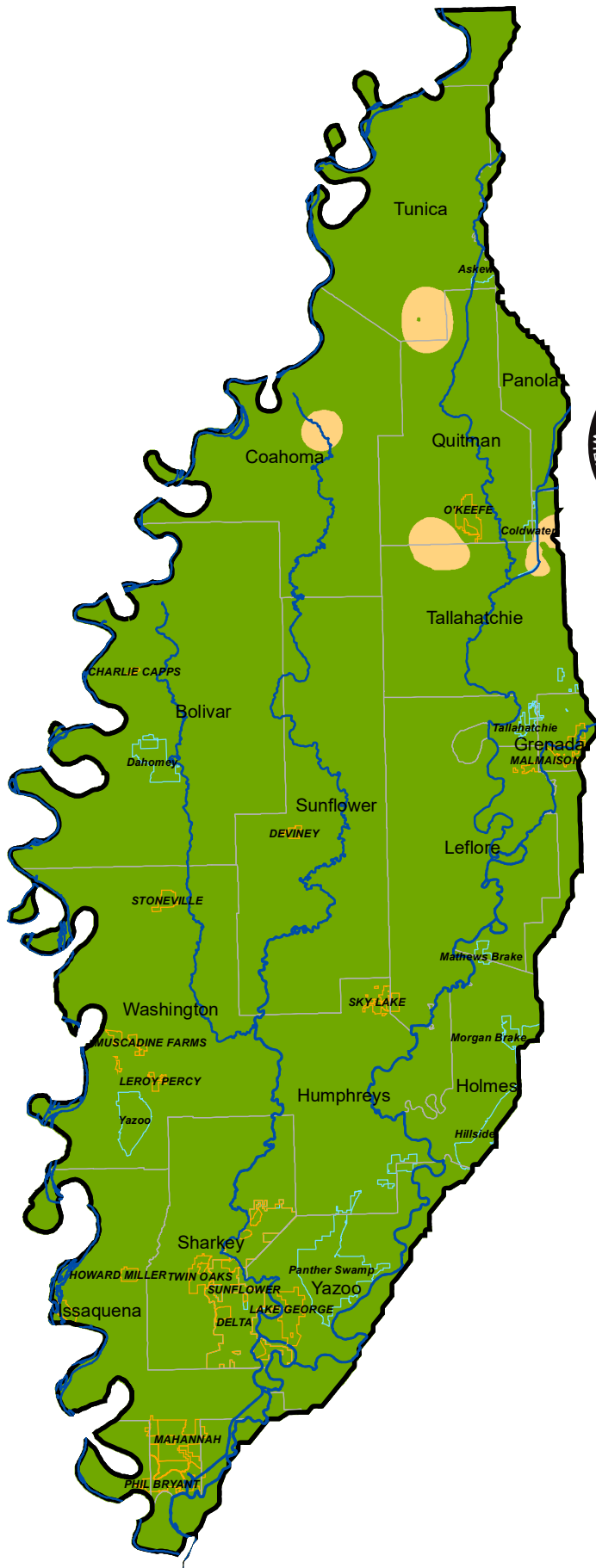
Species Group	December 2022	December LTA	% Change from LTA
Mallards	44,554	123,848	-64.0%
Other Dabblers	155,597	271,232	-42.6%
Diving Ducks	73,045	124,883	-41.5%
Total Ducks	273,196	519,963	-47.5%

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



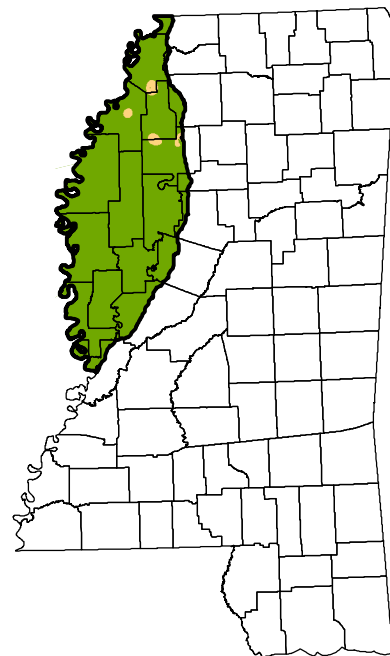
Distribution of Mallards in the Mississippi Delta

Dec. 15 -19, 2022



Description

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



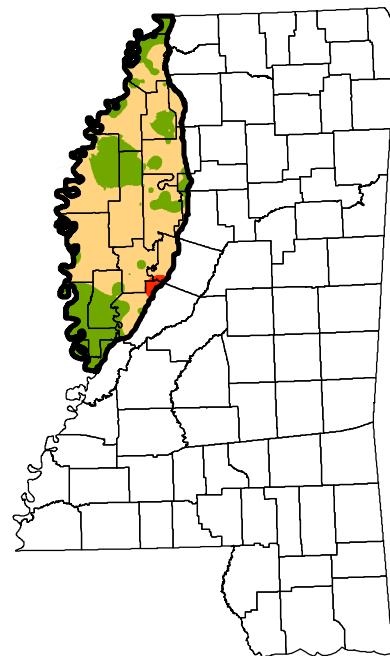
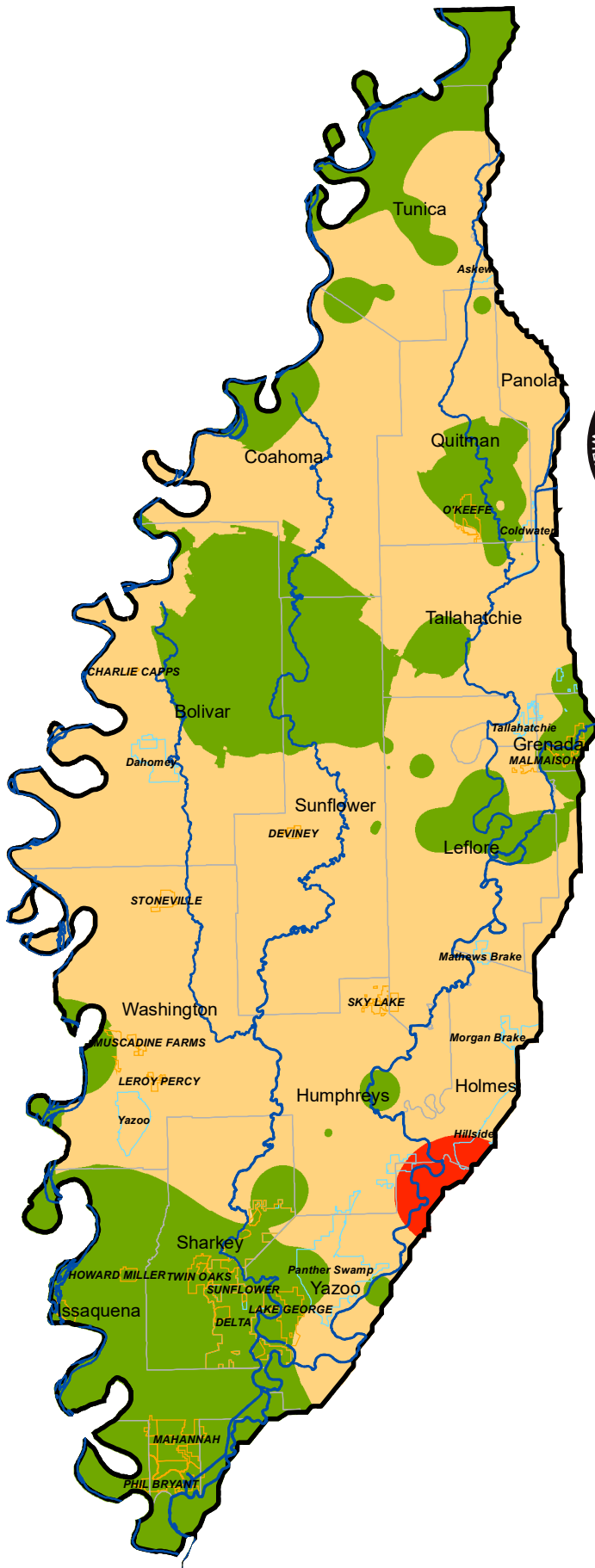
Distribution of Total Ducks in the Mississippi Delta

Dec. 15 -19, 2022

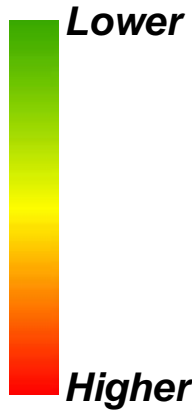


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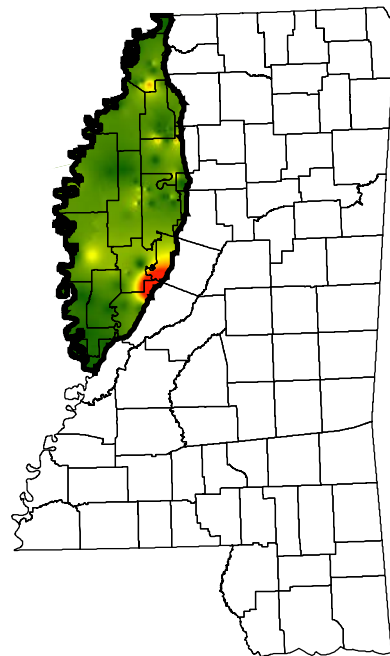
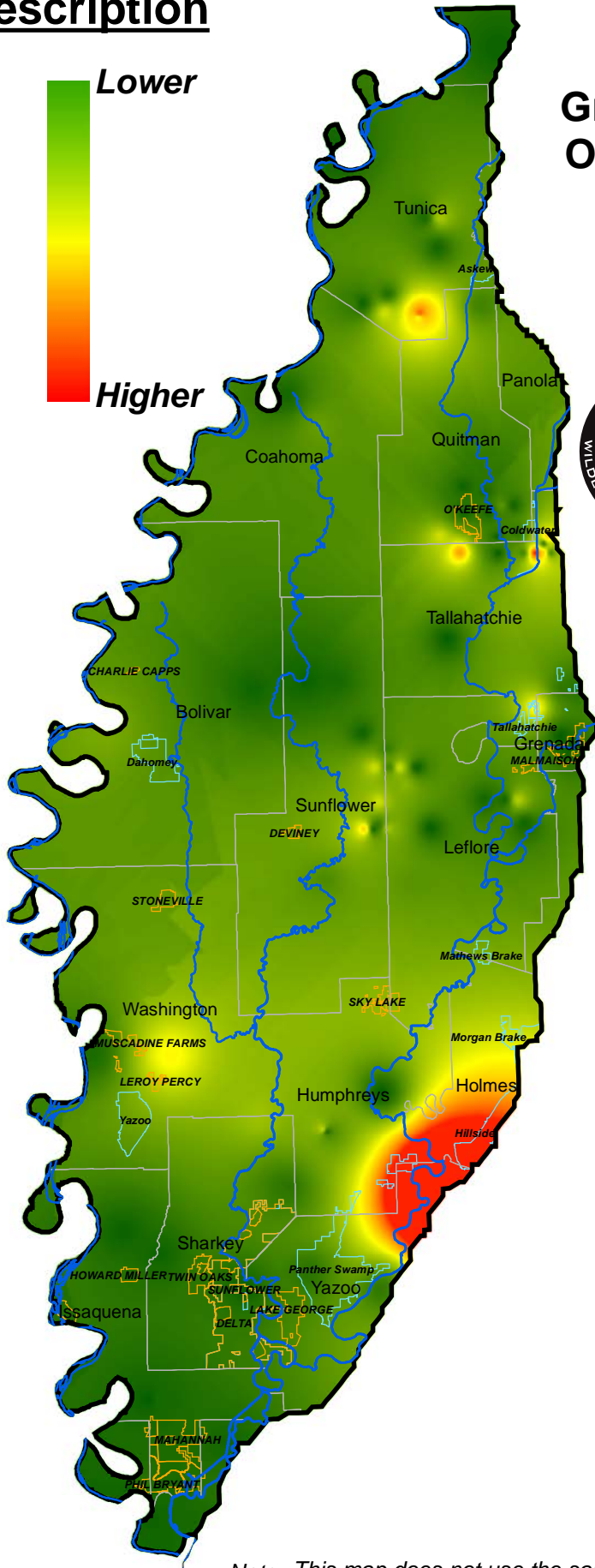
- Low (<12/mi²)
- Medium (12-115/mi²)
- High (>115/mi²)



Description



Greatest Concentrations of Ducks Observed in the Mississippi Delta Dec. 15 -19, 2022

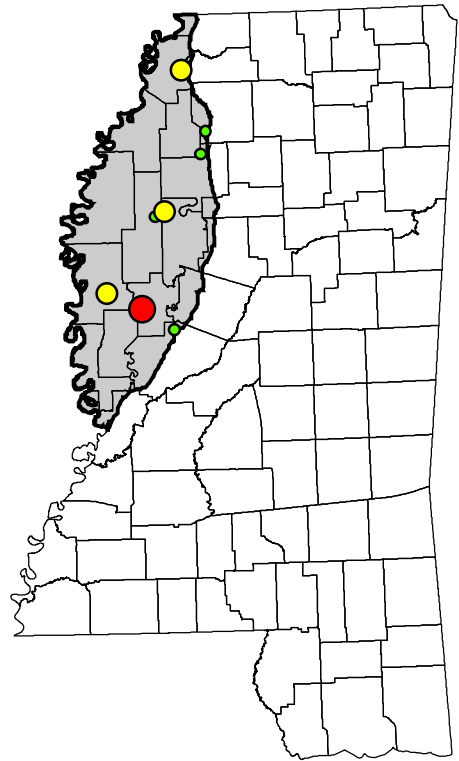
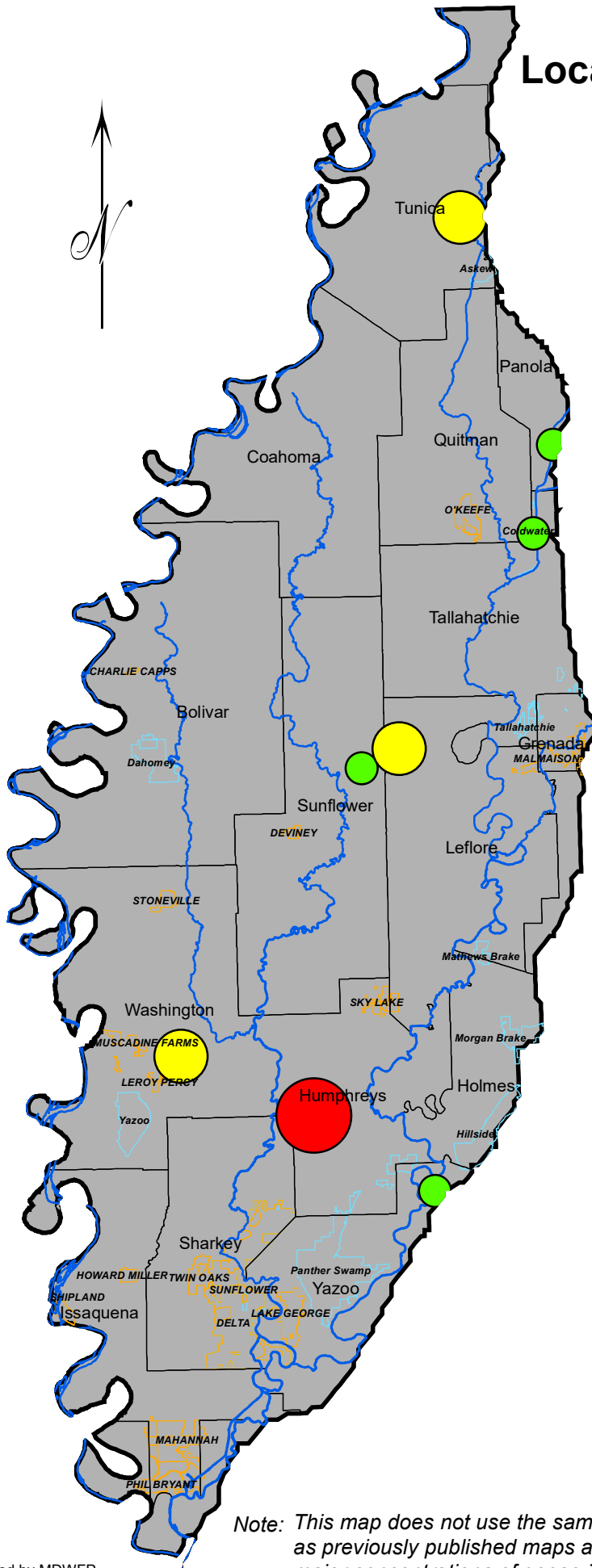
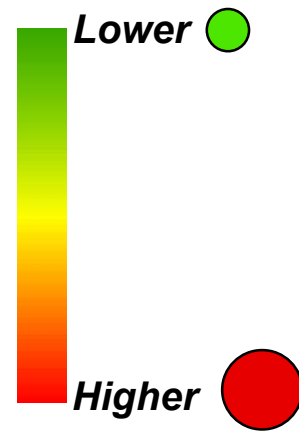


Note: This map does not use the same area calculations as previously published maps and is intended to illustrate major concentrations of ducks in the Mississippi Delta.

Locations and relative size of light goose flocks in the Mississippi Delta Dec. 15 - 19, 2022



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.