MDWFP Aerial Waterfowl Survey Report

January 3 - 10, 2022

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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.

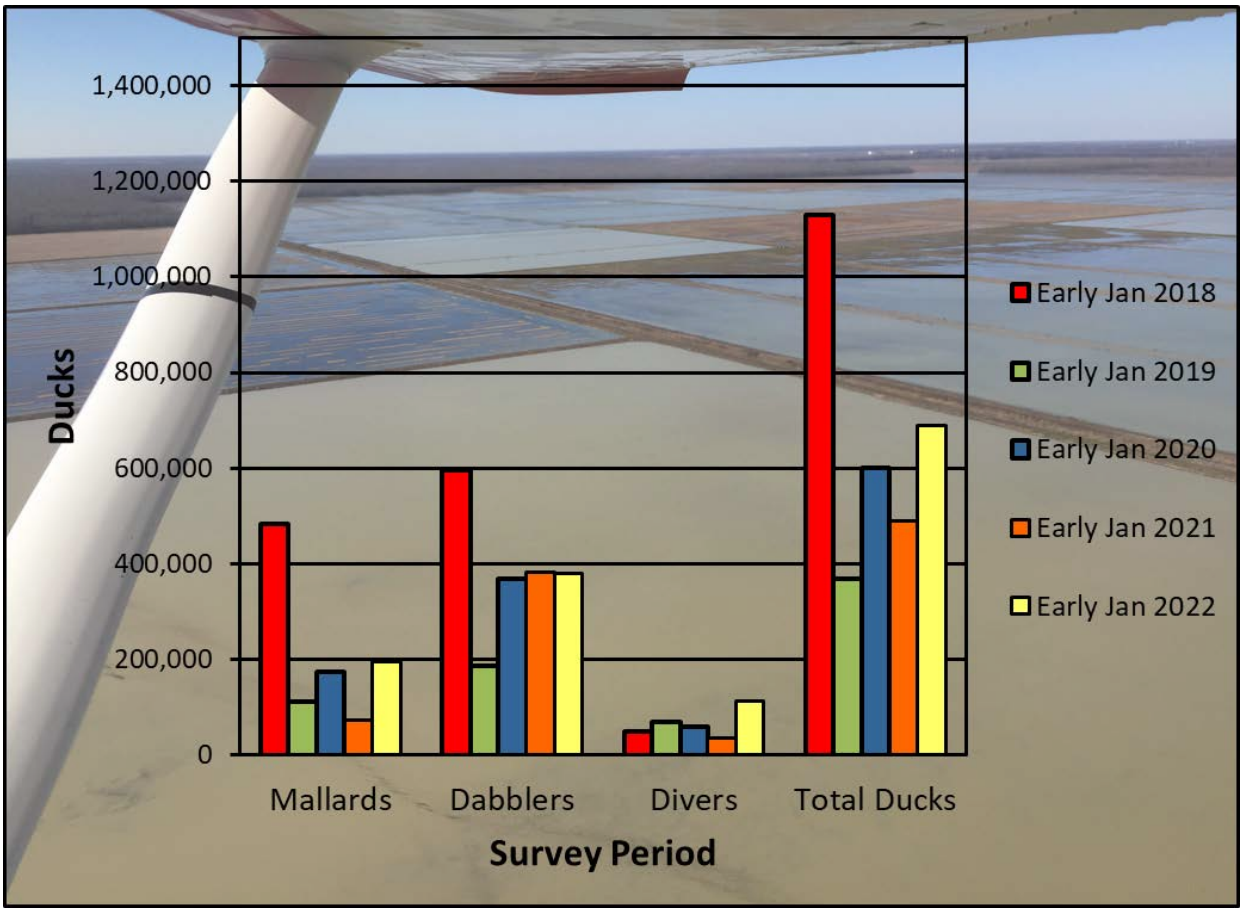
Table 1. Waterfowl abundance estimates in the Mississippi Delta during the early January survey periods, 2008-2022.

	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
2022	195,533	379,391	113,217	688,141
Average	**240,780**	**384,809**	**96,582**	**719,982**

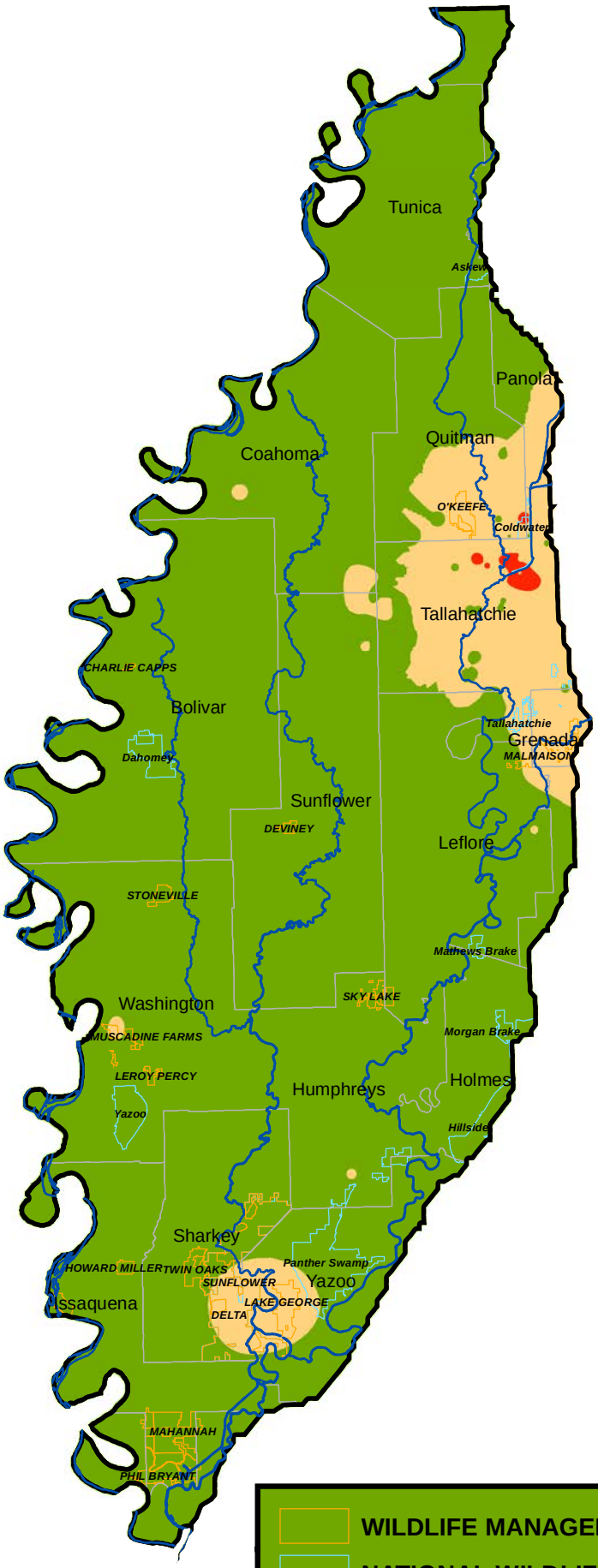
Table 2. Comparison of early January 2022 aerial waterfowl survey estimates to the long-term average (LTA) for early January survey estimates.

Species Group	Early Jan 2022	Early Jan LTA	% Change from LTA
Mallards	195,533	240,780	-19.8%
Other Dabblers	379,391	384,809	-1.4%
Diving Ducks	113,217	96,582	+17.2%
Total Ducks	**688,141**	**719,982**	**-4.4%**

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

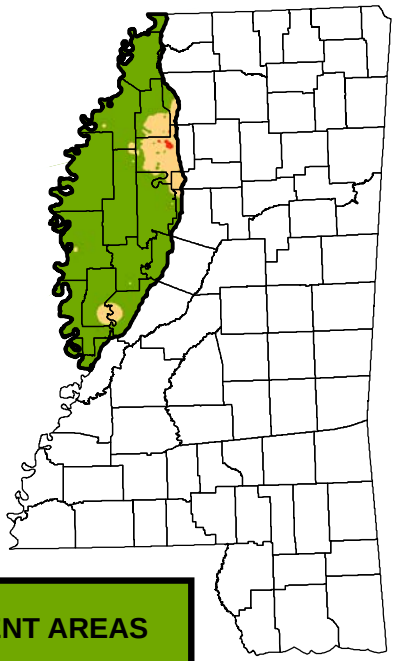


Distribution of Mallards in the Mississippi Delta Jan. 3 - 10, 2022



Description

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

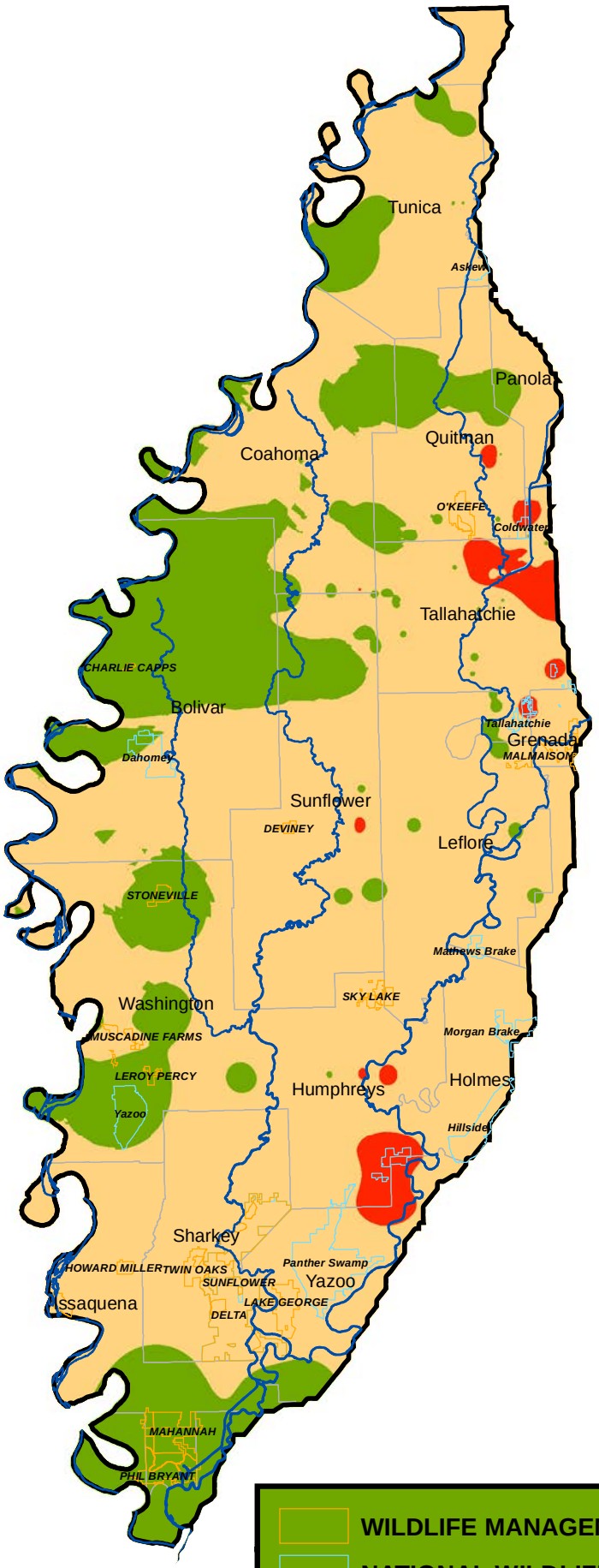


WILDLIFE MANAGEMENT AREAS

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)
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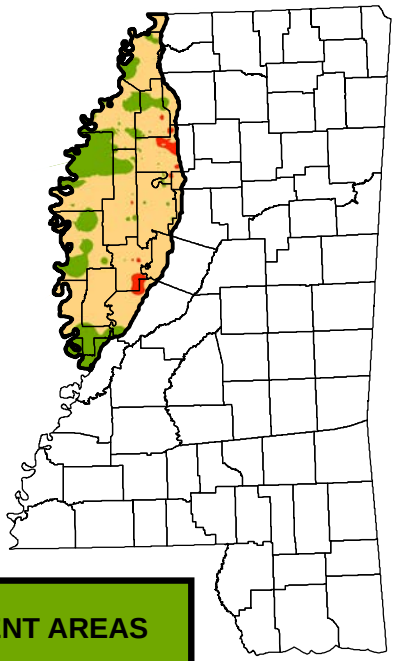

WILDLIFE MANAGEMENT AREAS

NATIONAL WILDLIFE REFUGES

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Description

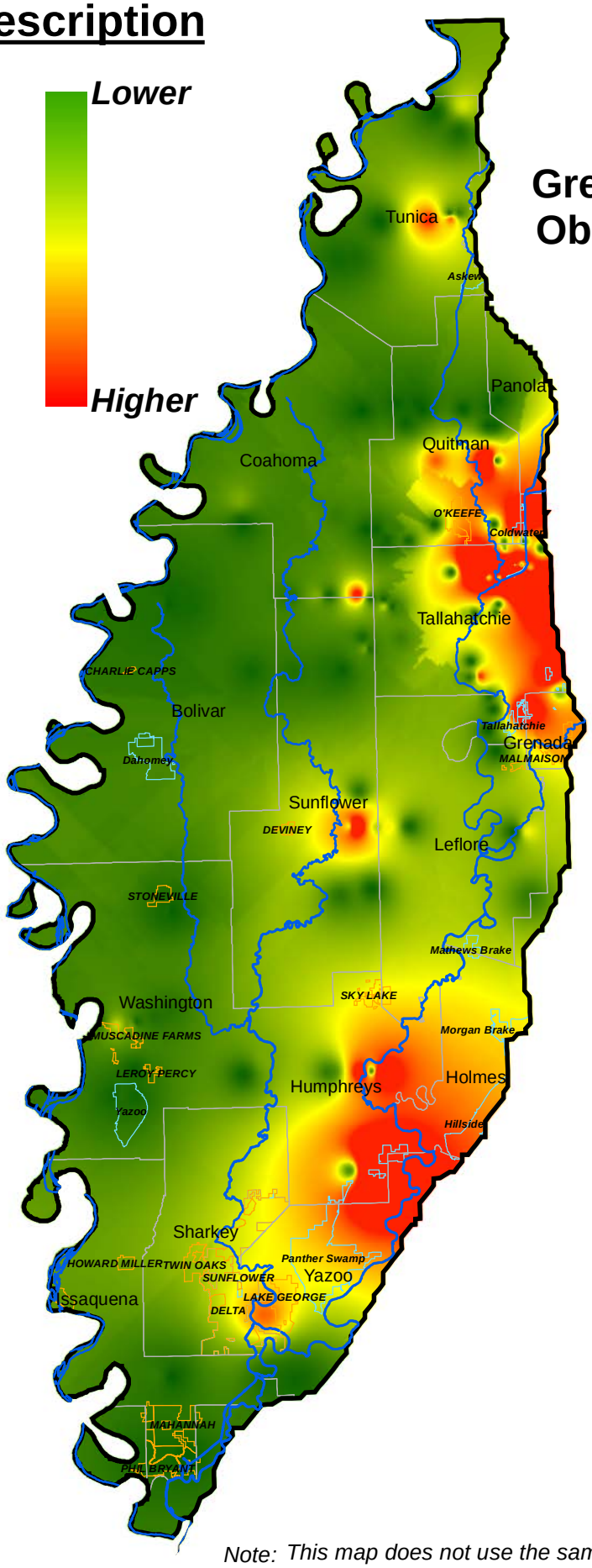
Lower

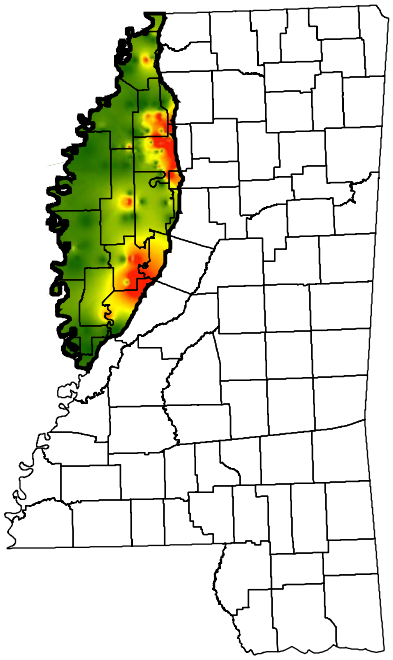
Higher

WILDLIFE MANAGEMENT AREAS

NATIONAL WILDLIFE REFUGES

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.*

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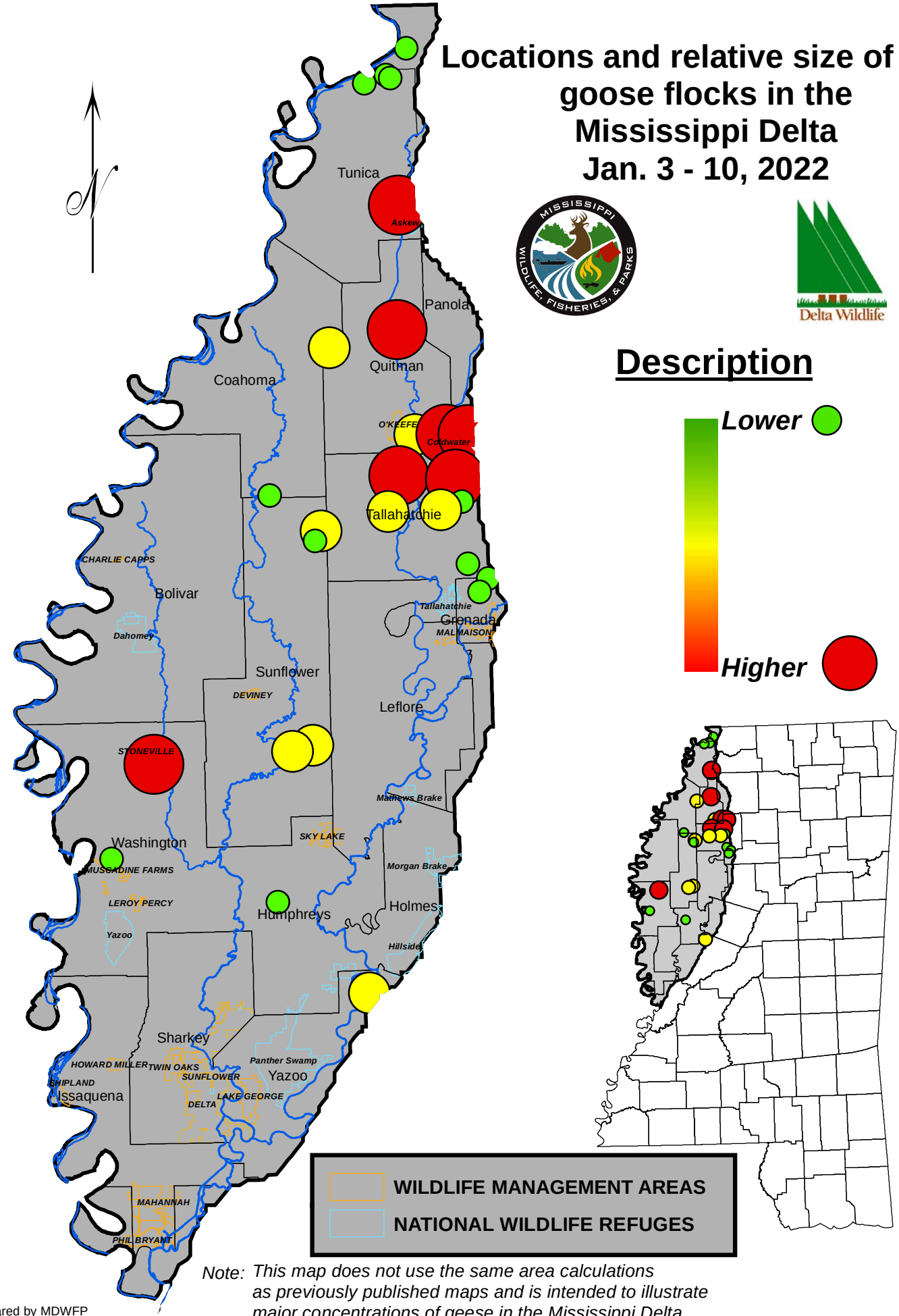
Locations and relative size of light goose flocks in the Mississippi Delta Jan. 3 - 10, 2022



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.

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