MDWFP Aerial Waterfowl Survey Report

January 3 - 6, 2023

Prepared by:
Houston Havens
Waterfowl Program Coordinator
and
Darrin Hardesty
Waterfowl Program Biologist
MS Department of Wildlife, Fisheries, and Parks
601-432-2199
Houston.Havens@wfp.ms.gov
Darrin.Hardesty@wfp.ms.gov

The third of four planned MDWFP aerial waterfowl surveys for the season occurred January 3 – 6, 2023. Wetland habitat availability has increased in some areas of the Mississippi Delta since the December survey, but little to no natural, overbank flooded has occurred so far this season. 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. Although adequate rainfall has been received since early December, 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 mallard abundance estimates were observed during this survey when compared to November and December. However, estimates for mallards, other dabblers, diving ducks, and total ducks all remained well below their long-term averages for early January surveys (Tables 1 and 2). Mallards and northern shovelers were the two most abundant duck species observed overall. The northeast portion of the Delta contained the greatest abundance of mallards and other dabbling ducks, while the southeast portion contained the greatest abundances of diving ducks and total ducks overall.

Mallards and other dabbling ducks were observed heavily using flooded agriculture for the first time this season. This may have been due to a continuation of birds feeding on high-energy foods after the extremely cold temperatures and icy conditions around the Christmas holidays. 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, (as usual) 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.

Based on the number of outstanding hunting reports during the week of Christmas (immediately following the thaw), biologists speculate that survey timing may have missed the period when duck numbers were previously at their highest, at least at this point in the season. Peak numbers of waterfowl are typically observed in Mississippi during the month of January, and biologists and hunters are optimistic that another "push" or two of ducks from the north could head for Mississippi before the season comes to a close on Tuesday, January 31. The last aerial waterfowl survey of the season is scheduled to begin next week. 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.

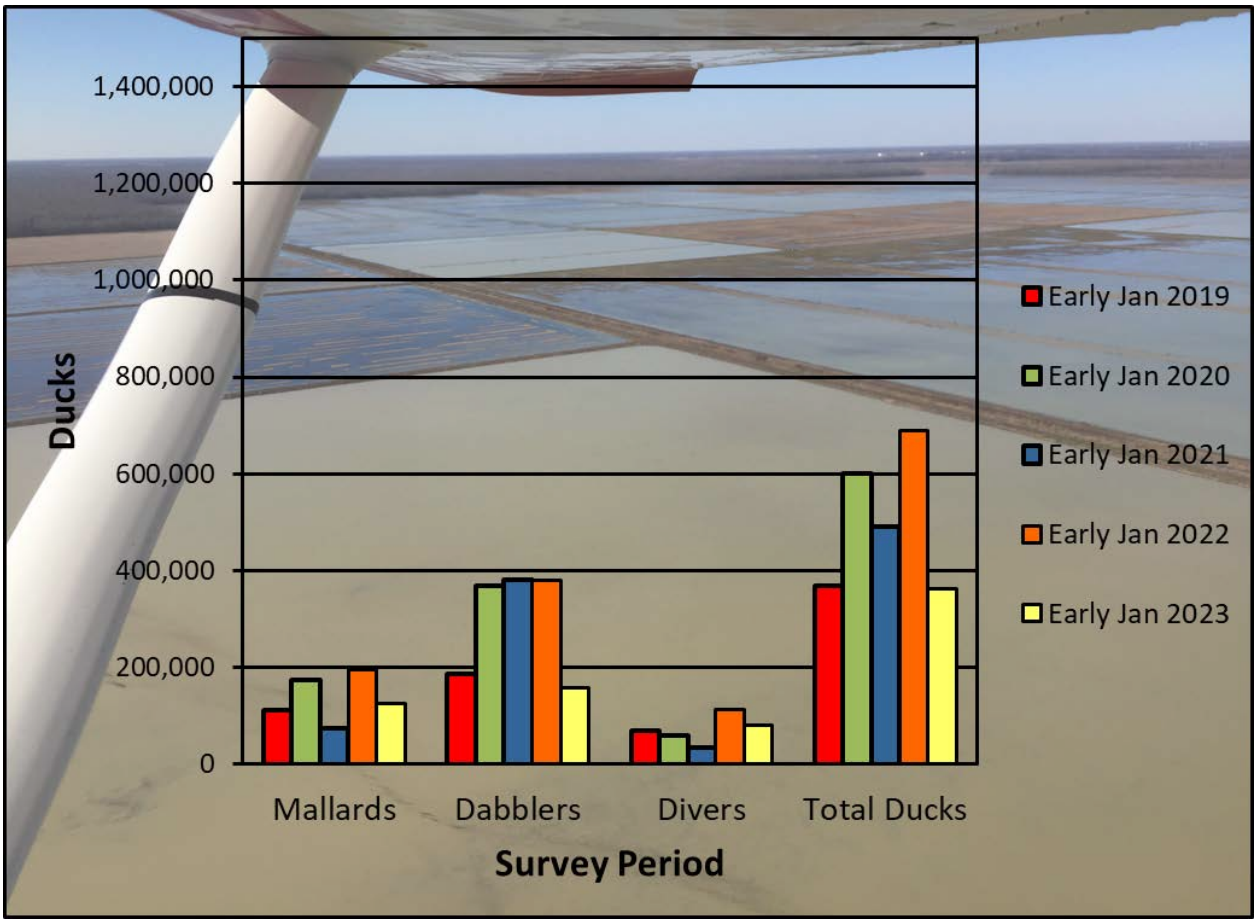
Table 1. Waterfowl abundance estimates in the Mississippi Delta during the early January survey periods, 2008-2023.

	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
2023	125,221	156,929	80,177	362,327
Average	**233,557**	**370,567**	**95,557**	**697,628**

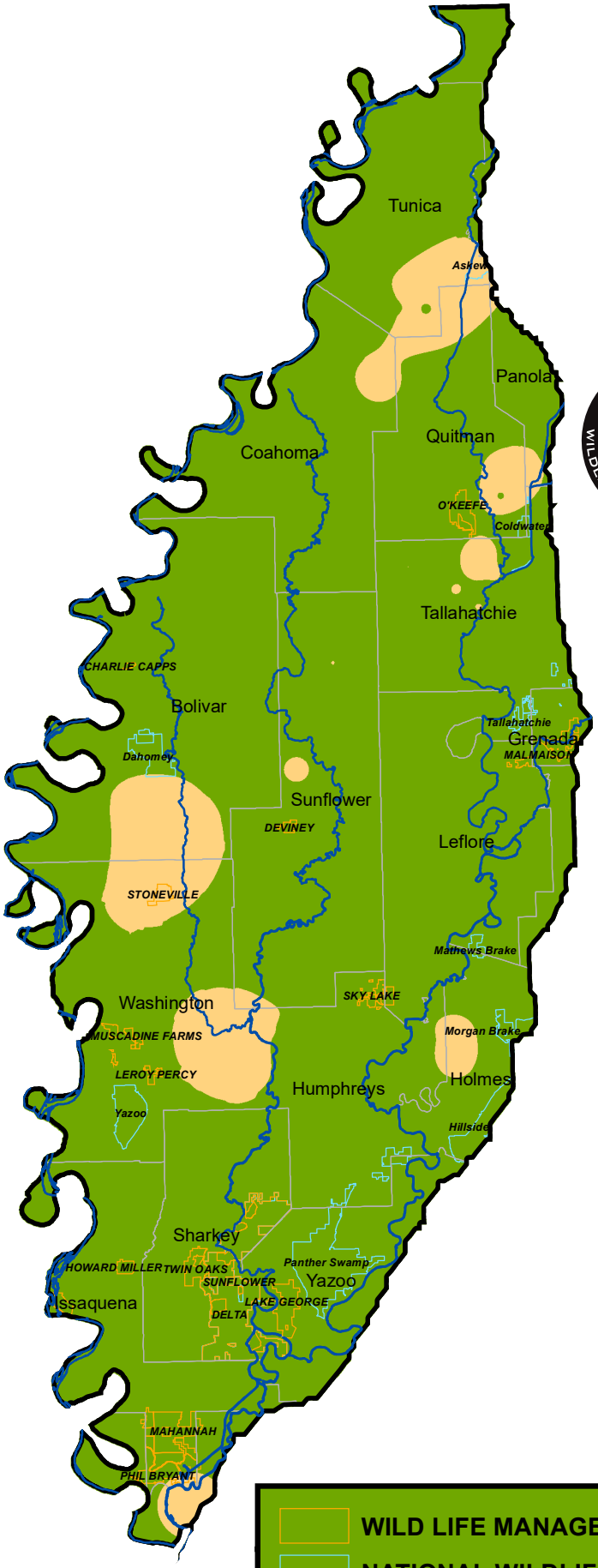
Table 2. Comparison of early January 2023 aerial waterfowl survey estimates to the long-term average (LTA) for early January survey estimates.

Species Group	Early Jan 2022	Early Jan LTA	% Change from LTA
Mallards	125,221	233,557	-46.4%
Other Dabblers	156,929	370,567	-57.6%
Diving Ducks	80,177	95,557	-16.1%
Total Ducks	**362,327**	**697,628**	**-48.1%**

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

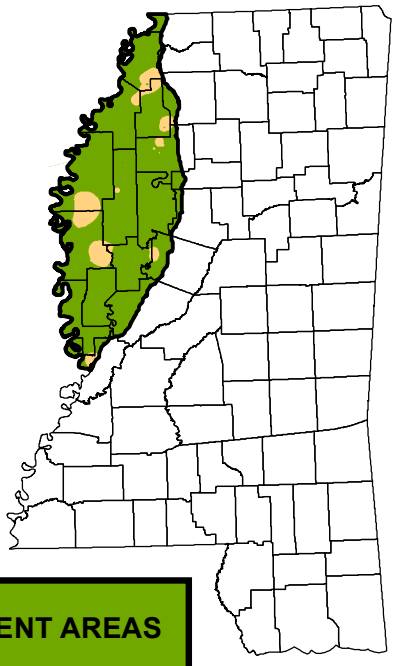


Distribution of Mallards in the Mississippi Delta Jan. 4 - 6, 2023



Description

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



WILD LIFE MANAGEMENT AREAS

NATIONAL WILDLIFE REFUGES

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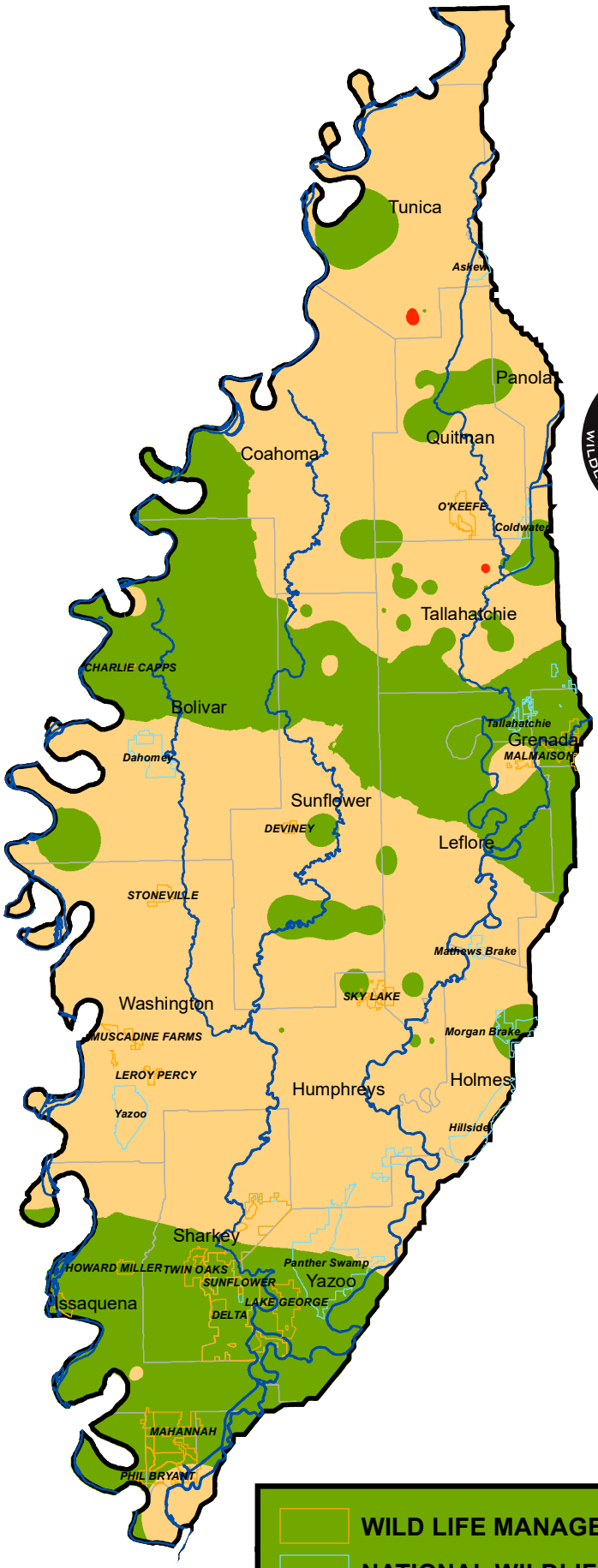
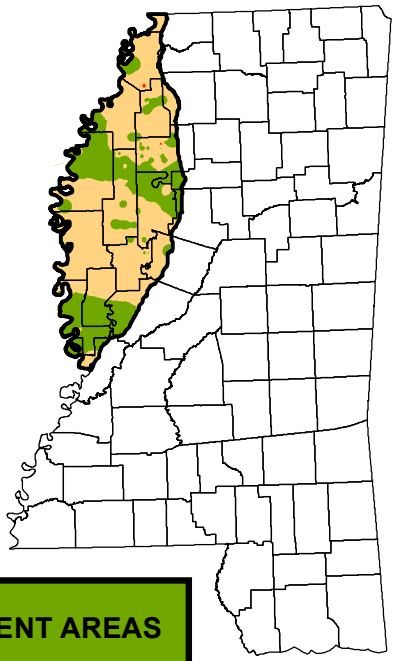
GIS Lab 11 Jan. 2023

Distribution of Total Ducks in the Mississippi Delta Jan. 4 - 6, 2023



Description

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



WILD LIFE MANAGEMENT AREAS

NATIONAL WILDLIFE REFUGES

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Description

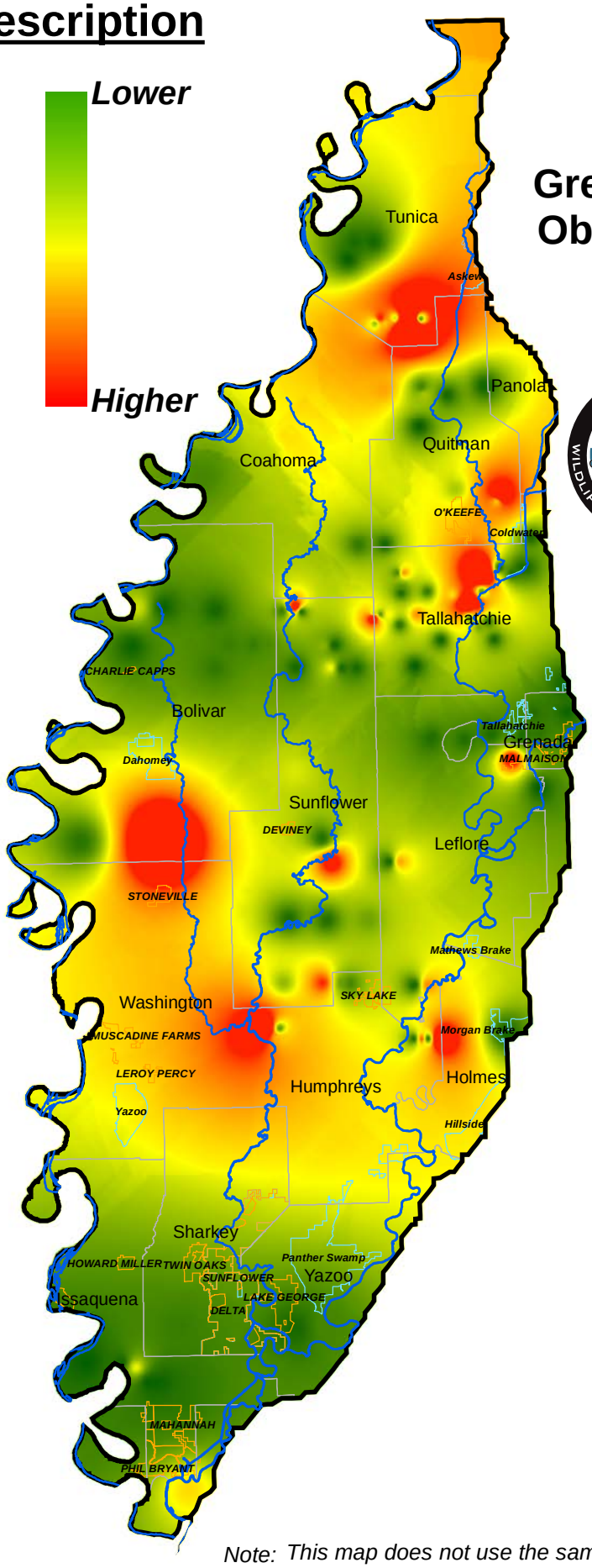
Lower

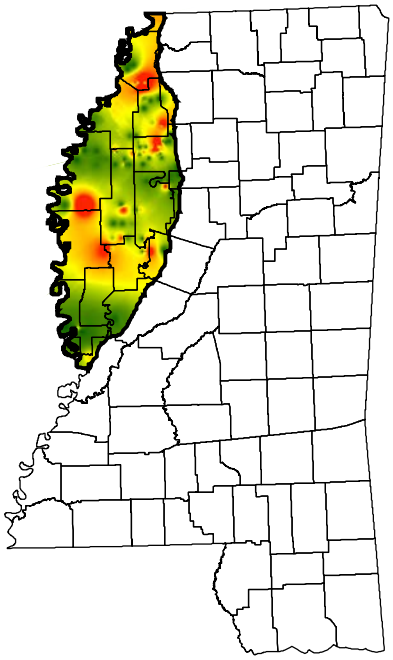
Higher

WILD LIFE MANAGEMENT AREAS

NATIONAL WILDLIFE REFUGES

Greatest Concentrations of Ducks Observed in the Mississippi Delta Jan. 4 - 6, 2023





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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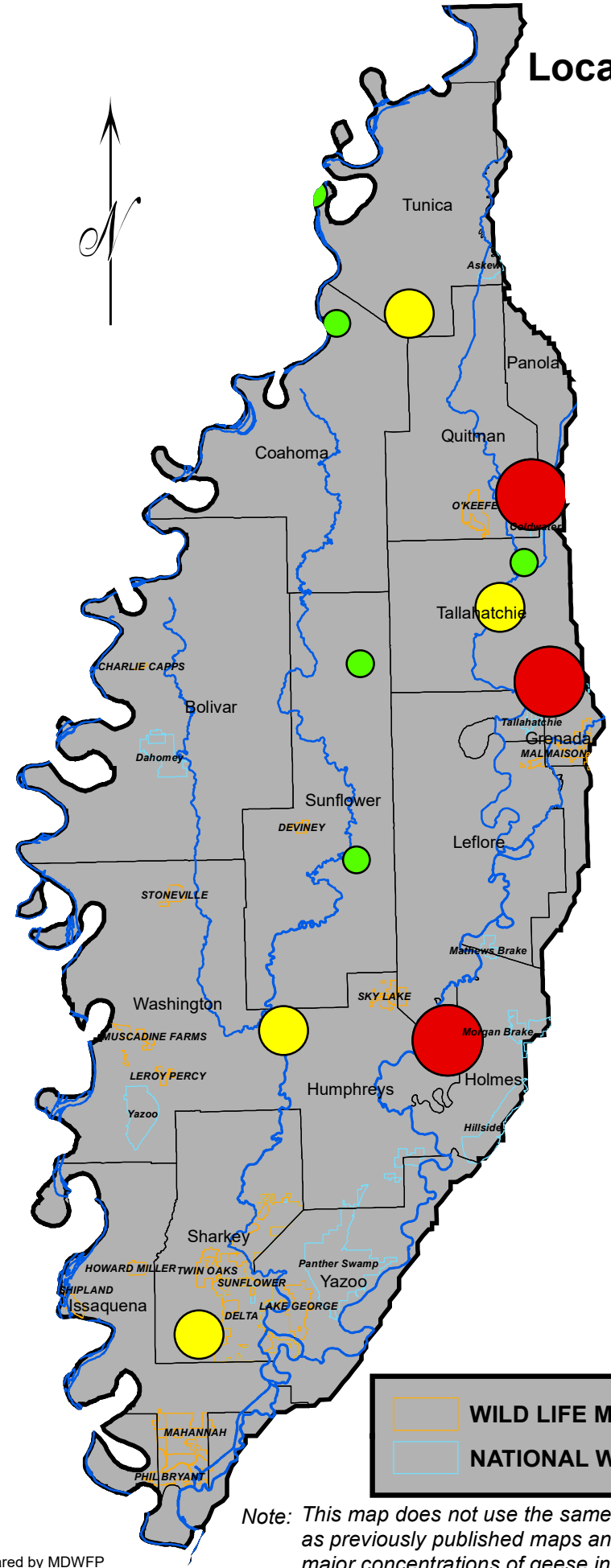
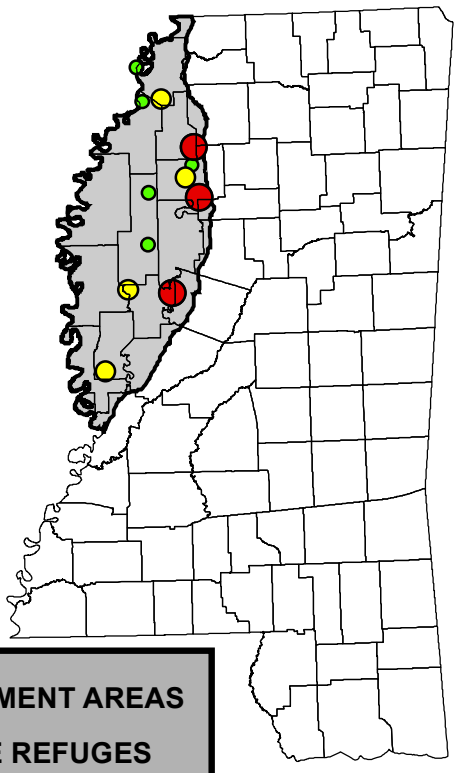
Locations and relative size of light goose flocks in the Mississippi Delta Jan. 4 - 6, 2023



Description

Lower

Higher



WILD LIFE MANAGEMENT AREAS

NATIONAL WILDLIFE REFUGES

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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