



# MDWFP Aerial Waterfowl Survey Report

December 16 - 18, 2013



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The December MDWFP aerial waterfowl survey occurred during December 16 – 18. Several cold fronts moved into Mississippi prior to the survey, creating favorable conditions for migrating waterfowl. Recent rains have begun to fill many areas with water management capability. However, there are still many wetlands with little or no available water across the Delta, particularly in the northwest and southern regions. As in previous years, a lack of flooded agricultural fields was a common observation across much of the Delta. Wetland habitat availability increased as transects moved further northeast. No large natural floods along the Mississippi or its tributaries have occurred to date. These conditions demonstrate why managed wetland habitat is extremely important during this time of year.

Overall, December total duck estimates were the highest recorded since MDWFP began using the current survey method. Total duck estimates were well above average compared to December surveys in previous years (Table 1 and Figure 1). Mallards and other dabbling ducks followed the same trend, with estimates well above the past averages for this time of year. Diving duck estimates were lower than the average of recent years' estimates for December. Gadwalls and northern shovelers comprised the majority of dabbling duck observations other than mallards.

The northeastern portion of the Delta contained the greatest abundance of ducks overall, followed closely by the southeast region. The northeast region of the Delta contained the greatest amount of flooded habitat on the landscape as well.

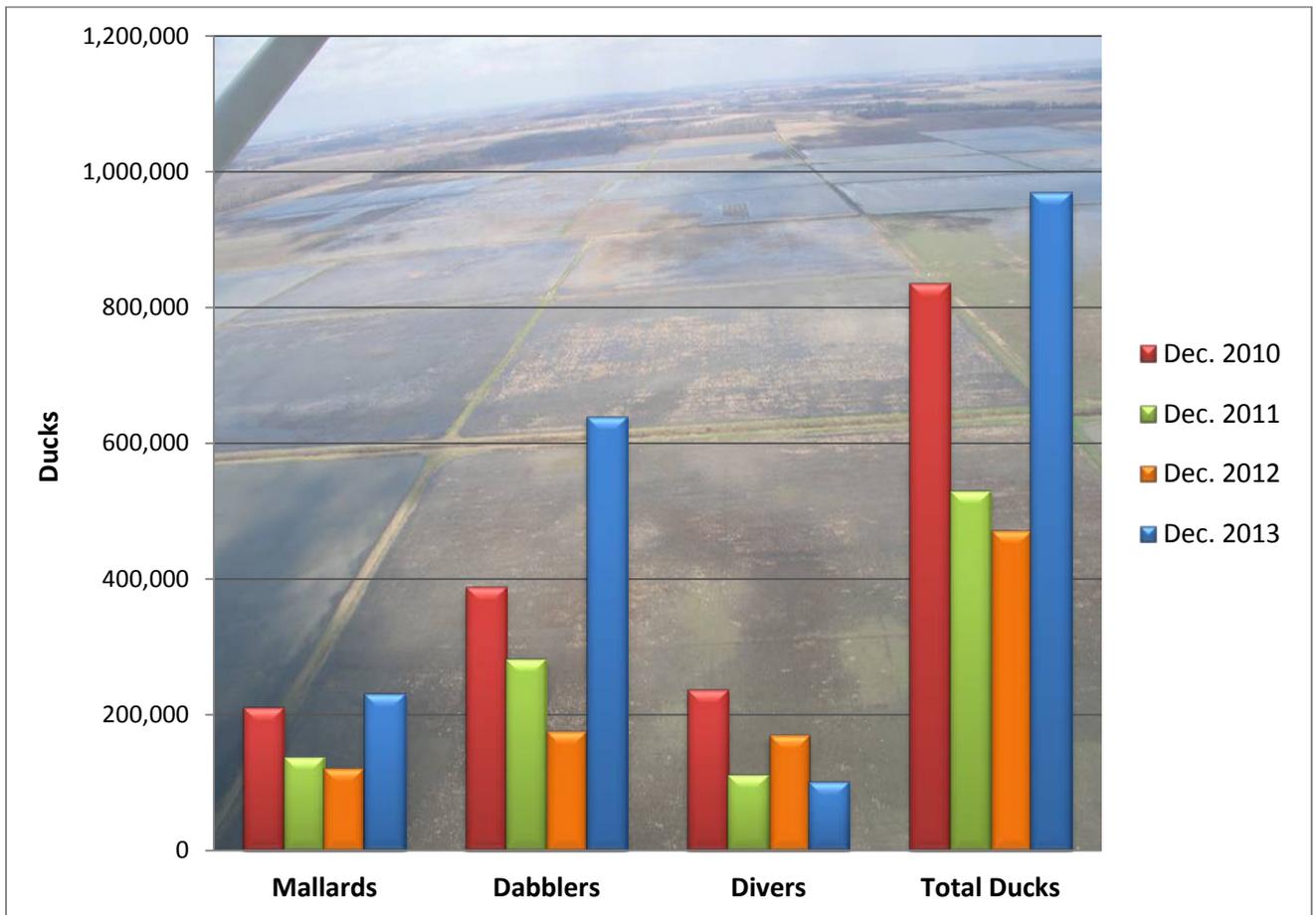
Most mallards and other dabblers were observed on or near large expanses of flooded, diverse wetland habitats. Flooded agricultural fields held the greatest abundances of mallards and other dabblers, followed by natural moist-soil and permanent water habitats such as sloughs and oxbow lakes and their surrounding forested and scrub-shrub areas. These habitats with woody structure are very important to mallards for forming and strengthening pair bonds. Most diving ducks were observed using catfish pond complexes, followed by large deep water habitats such as river oxbows.

The next aerial waterfowl survey is scheduled to begin January 6, 2014. Hunters are reminded that while duck numbers are relatively high, birds are still heavily concentrated on large complexes of managed water. Birds should begin to spread out as more wetland habitat becomes available from rainfall. Recent colder temperatures have likely led to waterfowl concentrating on agriculture for high energy food resources, and habitat use may change when temperatures rise. For more information on the MDWFP Waterfowl Program, visit our website at [www.mdwfp.com/waterfowl](http://www.mdwfp.com/waterfowl).

**Table 1.** Waterfowl abundance estimates in the Mississippi Delta during the December survey period, 2010-2013.

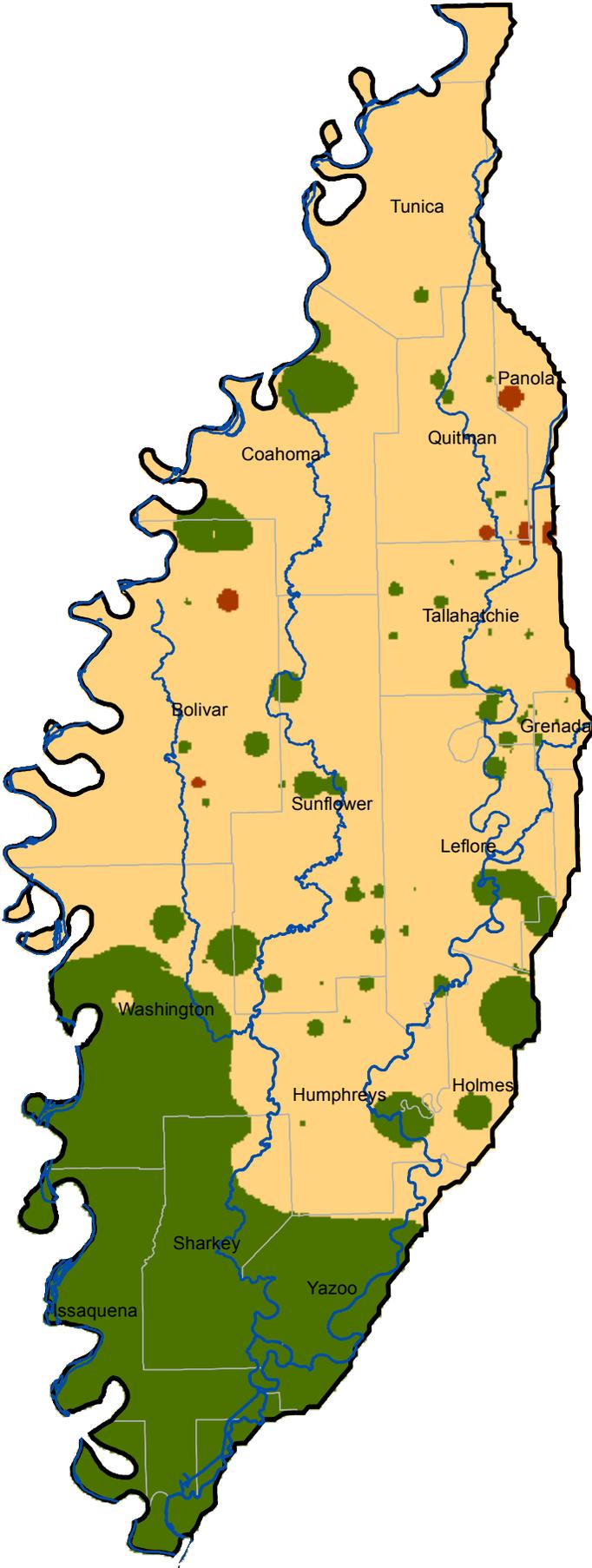
Species	Survey Period			
	December 2010	December 2011	December 2012	December 2013
Mallards	210,531	136,776	122,779	230,634
Dabblers	388,064	281,560	176,950	638,386
Diving Ducks	236,966	111,423	171,542	100,412
<b>Total Ducks</b>	<b>835,561</b>	<b>529,758</b>	<b>471,271</b>	<b>969,432</b>

**Figure 1.** Waterfowl abundance estimates in the Mississippi Delta during the December survey period, 2010-2013.



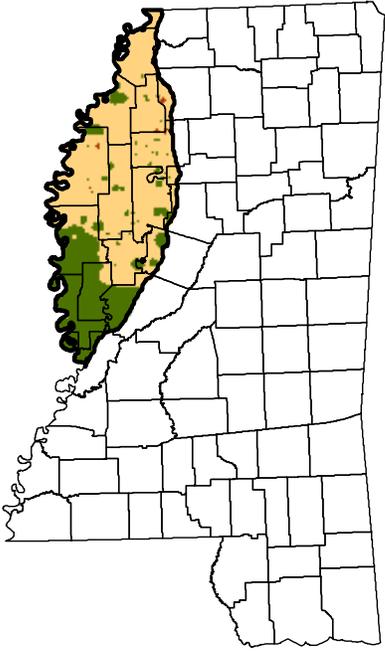
# Distribution of Total Ducks in the Mississippi Delta

## Dec.16- 18 ,2013



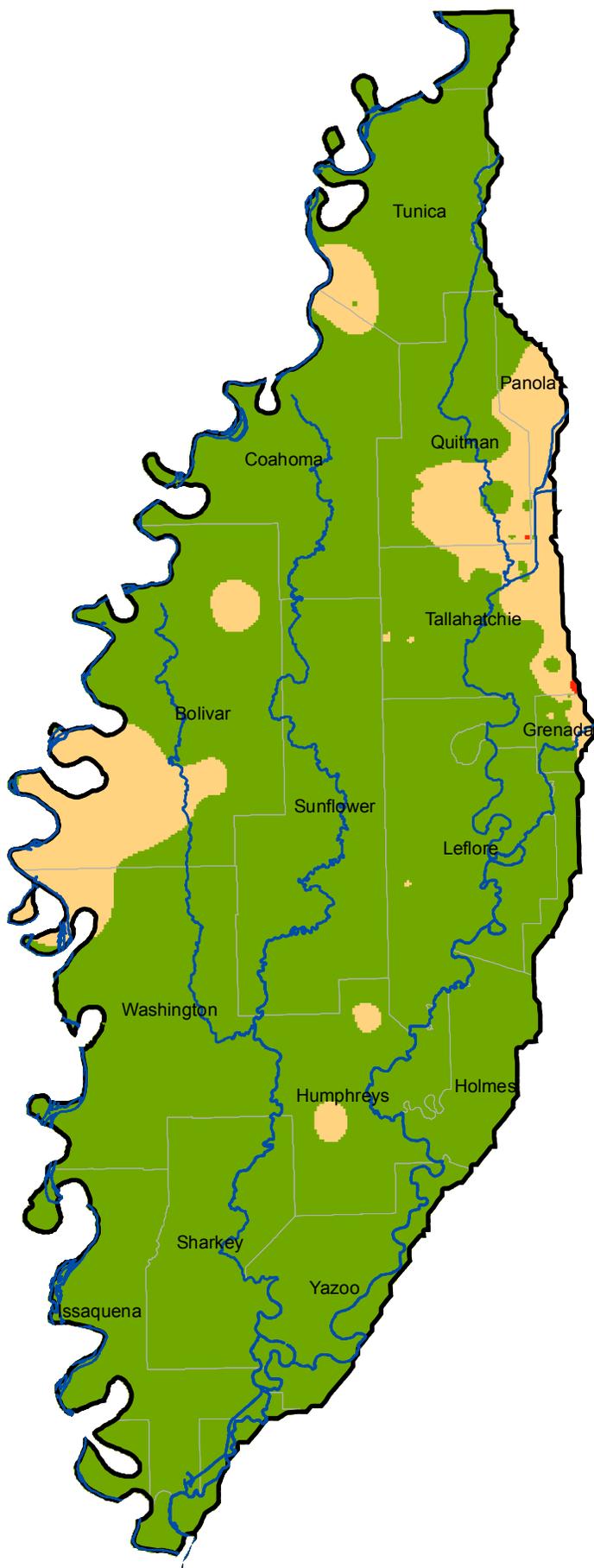
### Description

- Low (<12/mi<sup>2</sup>)
- Medium (12-115/mi<sup>2</sup>)
- High (>115/mi<sup>2</sup>)



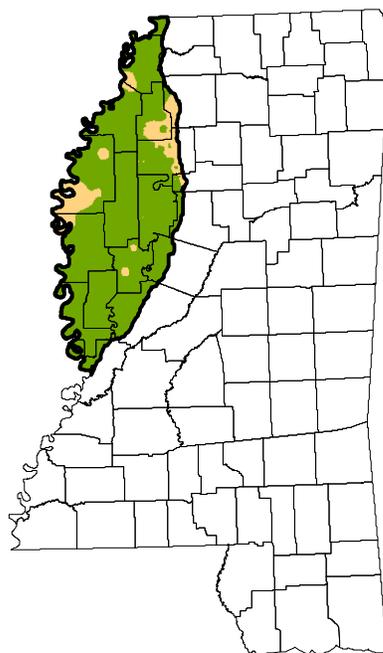
# Distribution of Mallards in the Mississippi Delta

## Dec.16 - 18, 2013

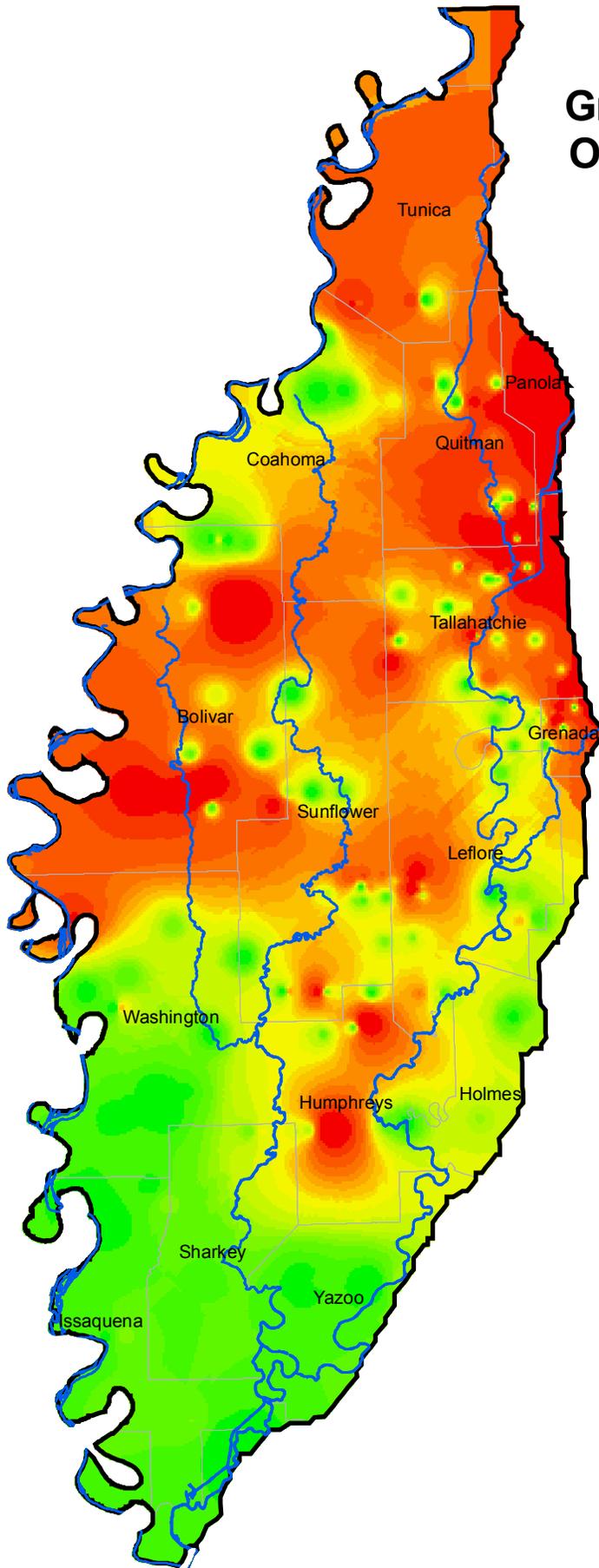


### Description

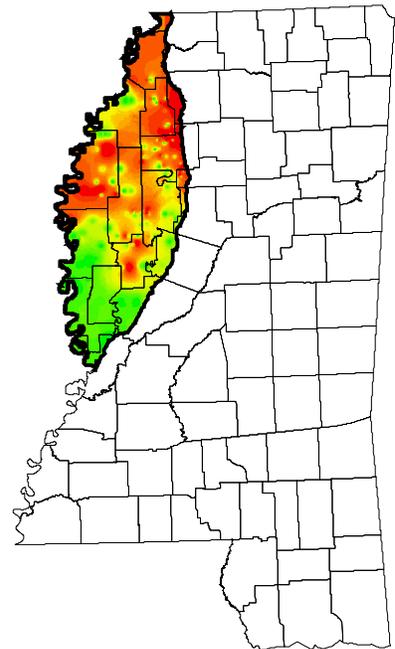
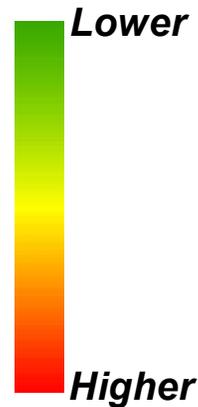
- Low (<12/mi<sup>2</sup>)
- Medium (12-115/mi<sup>2</sup>)
- High (>115/mi<sup>2</sup>)



# Greatest Concentrations of Ducks Observed in the Mississippi Delta Dec. 16 - 18, 2013



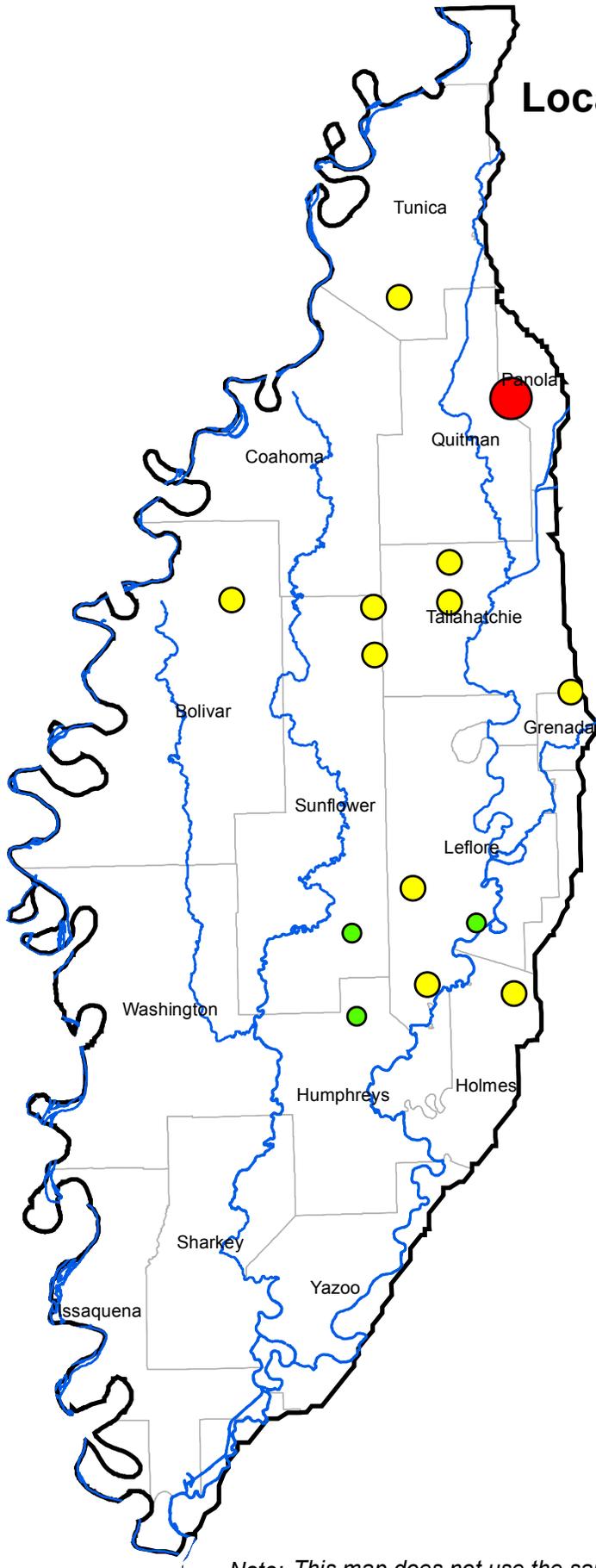
## Description



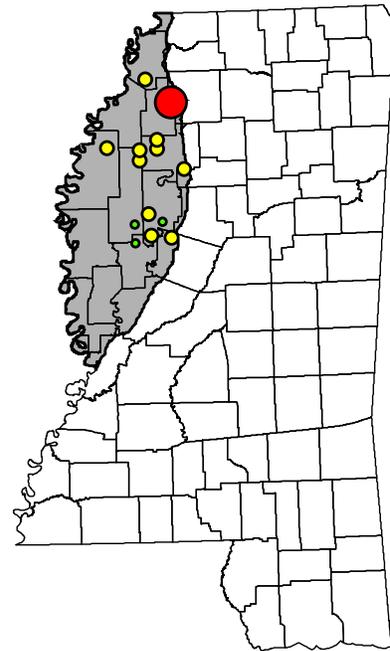
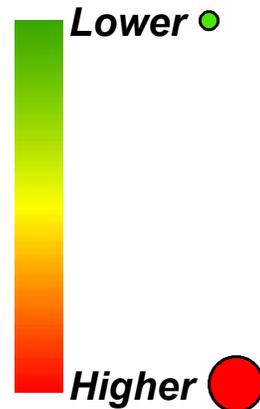
*Note: This map does not use the same area calculations as previously published maps and is intended to illustrate major concentrations of ducks in the Mississippi Delta.*



# Locations and relative size of light goose flocks in the Mississippi Delta Dec. 16 - 18, 2013



## Description



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

