



# STATE OF IOWA

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Mr. Dyche,

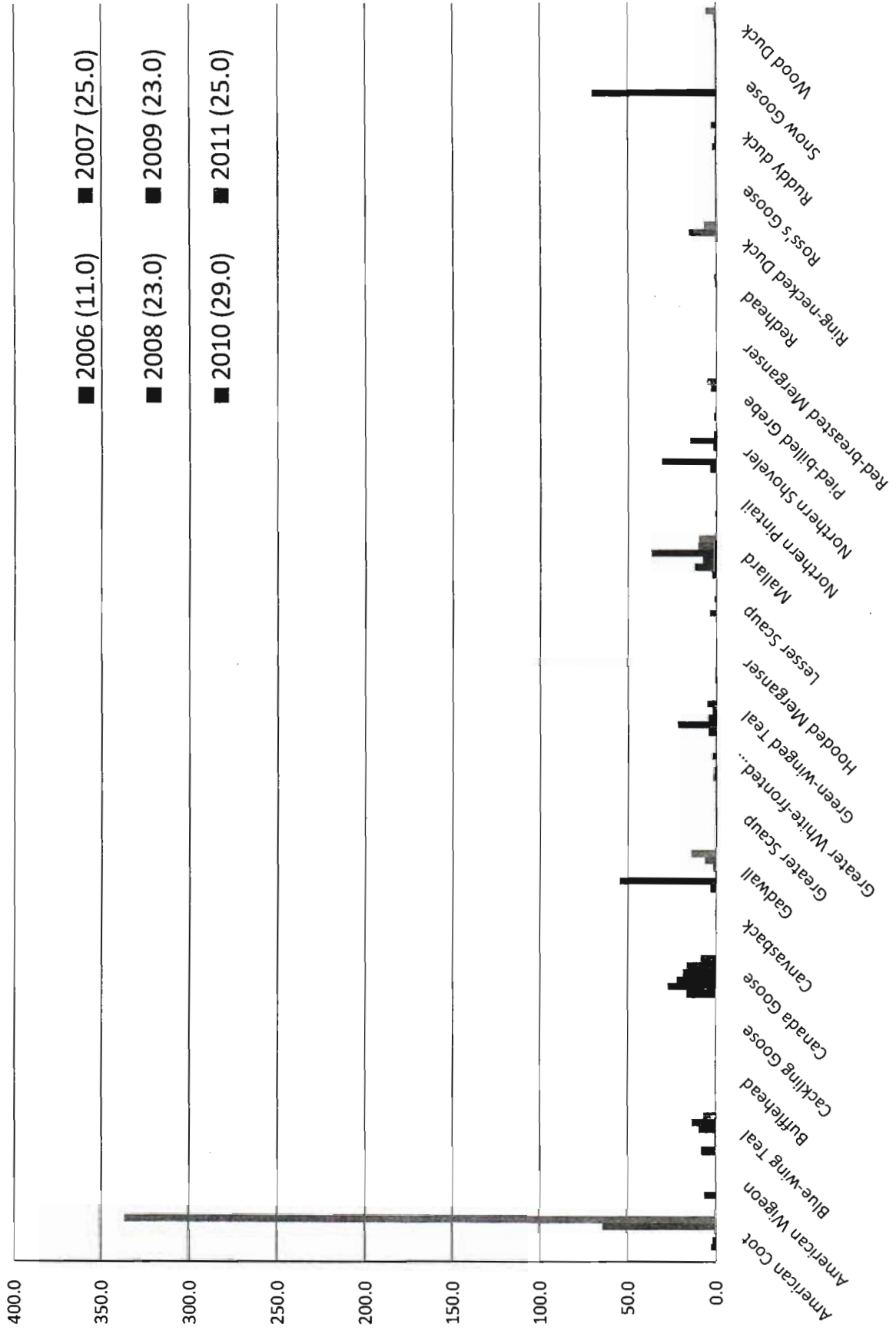
I would like to extend my thanks to you and the entire Iowa Ornithologist's Union for providing financial assistance to volunteers conducting bird usage surveys at shallow lakes and wetlands that have been or are in the process of being renovated. As you may be aware, the Iowa DNR Wildlife and Fisheries Bureaus have been using innovative techniques in attempt to "flip" shallow lakes and wetland complexes from a turbid, algae dominated system to a clear water, macrophyte dominated system. Modifications to outlets structures, winter drawdowns, and fish barrier structures are a few techniques we have used. The primary objectives our bird usage project are to expand the DNR's Shallow Lakes Monitoring and Assessment Program by: (1) continuing monitoring efforts on post renovated sites; (2) expanding monitoring efforts to include pre-renovated sites; and (3) analyzing long-term monitoring data to determine temporal changes in waterbird use of selected shallow lakes. Enumerating the different species of birds that inhabit these areas and recording species timing of migration would help natural resource manager's document waterbird use of these important areas before and after biomanipulation. These results would highlight the importance of lake renovation efforts and could be used to persuade legislators and other political figures to continue lake restoration funding. Public "buy in" for these projects is essential and since waterbird usage in a lake is tangible and something the public can easily grasp, this data would become essential for public education and outreach.

This project involves surveying all wetland bird species on a weekly basis (usually in the middle of the week and preferably at the same time of day) throughout the open water period. Since DNR staff is limited, we are unable to perform bird counts as frequently as we would like. Therefore, we have asked for assistance from avid bird watchers and enthusiasts' to assist with the project. The funds we received from your group in 2011 were used to help offset some of the travel cost associated with the bird surveys for our volunteer personnel. In 2012, our volunteers performed 43 usage counts on 4 shallow lakes or wetlands and counted 50,400 birds representing 99 species. These data were added to an already robust dataset and will assist managers in identify habitat use by birds throughout the cycle of shallow lake management. It also helps identify specific habitat that is critical to certain bird species. For instance, a shallow lake is drawn down the resulting mudflats become prime stopover habitats for migrating waterbirds. The results of this project will provide valuable scientific information about the biological factors for such waterbirds while helping to improve future conservation planning and management decisions.

Average Number of Waterfowl Species Observed  
Per Count at Lizard Lake - 2006-11 (Number of counts provided in parentheses)

	2006 (4)	2007 (11)	2008 (5)	2009 (5)	2010 (5)	2011 (8)
American Coot	13.3	55.2	4.2	21.0	27.0	111.5
American Wigeon	4.3	2.2	0.0	19.2	1.4	0.8
Blue-wing Teal	0.0	8.4	25.0	1.0	5.0	25.1
Bufflehead	0.0	0.6	0.2	1.6	0.6	7.6
Cackling Goose	0.0	0.2	0.0	0.0	9.4	0.0
Canada Goose	6.8	3.7	2.6	6.0	14.0	10.4
Canvasback	0.5	2.5	1.6	2.4	0.0	3.9
Gadwall	21.0	12.4	0.4	84.0	0.6	30.8
Greater Scaup	0.0	0.0	0.0	0.2	0.0	0.0
Greater White-fronted Goose	0.0	0.2	0.0	0.0	0.0	26.9
Green-wing Teal	1.5	7.0	23.0	0.2	1.6	16.8
Hooded Merganser	0.0	0.2	0.6	0.4	0.0	9.9
Lesser Scaup	0.8	22.8	0.4	80.2	10.4	198.9
Mallard	0.3	21.4	50.0	47.4	20.8	54.8
Northern Pintail	0.0	4.3	0.4	0.4	0.0	0.0
Northern Shoveler	2.0	14.8	5.2	214.0	12.2	149.5
Pied-billed Grebe	2.0	0.6	7.2	0.0	1.6	10.6
Red-breasted Merganser	0.0	0.0	0.0	2.4	1.8	7.6
Redhead	0.8	2.8	0.0	0.6	1.0	3.8
Ring-necked Duck	1.3	9.5	0.4	4.2	1.2	21.1
Ross's Goose	0.0	1.5	0.0	2.8	0.0	1.5
Ruddy duck	2.0	12.4	0.6	8.0	11.0	48.0
Snow Goose	0.0	68.5	0.0	8.0	0.0	11.4
Wood Duck	0.8	0.0	1.0	0.0	0.8	5.4
Total per count per Year	57.0	251.0	122.8	504.0	120.4	756.0

**Average Number of Waterfowl Species Observed per count at Dan Green Slough 2006-2011**



Average Number of Waterfowl Species Observed  
Per Count at Dan Green Lake - 2006-11 (Number of counts provided in parenthesis)

	2006 (11.0)	2007 (25.0)	2008 (23.0)	2009 (23.0)	2010 (29.0)	2011 (25.0)
American Coot	0.0	3.2	2.1	0.0	63.8	336.2
American Wigeon	0.0	6.8	0.0	0.0	0.4	0.2
Blue-wing Teal	8.0	1.2	1.1	9.9	13.7	7.2
Bufflehead	0.3	0.0	0.0	0.0	0.3	0.9
Cackling Goose	0.0	0.0	0.0	0.0	0.0	0.0
Canada Goose	16.4	27.6	22.4	18.9	16.9	8.8
Canvasback	0.0	0.0	0.0	0.2	0.9	0.1
Gadwall	3.3	54.8	1.0	1.7	6.2	14.2
Greater Scaup						
Greater White-fronted Goose	0.0	1.8	1.5	0.0	2.4	0.5
Green-winged Teal	4.2	22.1	4.7	2.4	5.6	0.5
Hooded Merganser	0.3	0.2	0.4	0.0	0.2	0.0
Lesser Scaup	0.0	0.6	4.0	0.6	1.5	0.6
Mallard	2.3	12.4	7.6	36.5	10.2	9.7
Northern Pintail	0.0	1.0	0.0	0.1	0.2	0.1
Northern Shoveler	3.4	31.2	0.2	2.2	15.1	1.8
Pied-billed Grebe	1.1	0.9	0.2	0.0	3.7	5.4
Red-breasted Merganser						
Redhead	0.0	0.6	0.0	0.0	0.9	1.4
Ring-necked Duck	0.2	0.2	0.2	0.0	15.8	7.0
Ross's Goose	0.1	0.0	0.0	0.0	0.0	0.0
Ruddy duck	0.0	2.2	1.0	0.0	2.9	0.6
Snow Goose	0.0	70.5	0.1	0.3	0.0	0.0
Wood Duck	0.0	0.3	0.7	1.0	1.3	5.7
<b>Total per Count per year</b>	<b>39.4</b>	<b>237.8</b>	<b>47.4</b>	<b>73.8</b>	<b>161.9</b>	<b>401.0</b>

The past three years of data has been collected by volunteers and your organization has provided assistance to the volunteers for two of the three years. These data will be added to a statewide database that incorporates the chemical, physical, and other biological parameters to assist in our understanding of shallow lakes processes. I have provided summary tables and figures from the shallow lakes that were visited in 2012. Again, we appreciate your contributions to this project. Please contact me if you have any additional questions or would like to discuss the project in more detail.

Table 1. Lakes and wetland complexes where bird usage surveys were conducted between 2006 and 2011. Shading represents the stage of renovation for each lake.

Lake/Slough	2006	2007	2008	2009	2010	2011
Diamond	X	X	X	X	X	
Pickerel	X	X	X	X	X	X
Lizard	X	X	X	X	X	X
Dan Green Slough	X	X	X	X	X	X
Virgin	X	X	X			
South Twin	X	X	X	X	X	X
4-Mile	X	X	X			

Pre-renovation
Drawdown
Post-renovation