

ALBANY COUNTY WATERBIRD SURVEYS (2002-2003) AND RAPTOR SURVEYS
(2003); EXECUTIVE SUMMARY

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The following report provides a summary of waterbird and raptor occurrence data gathered by Wyoming Natural Diversity Database biologists on public and private lands in Albany County. Waterbird surveys were conducted over two years along the Laramie River and Lake Ione, in central Albany County, and Hutton Lake National Wildlife Refuge. Raptor surveys were conducted in May of 2003 on private land in central Albany County. Observed species and their respective breeding status are provided in this summary (Table 1, 2).

Waterbird Surveys

The Laramie River and the system of lakes found in the Laramie Valley, collectively called the Laramie Lakes, are important during migration as staging and stopover sites for various waterfowl and shorebirds (collectively referred to as “waterbirds”). These waters are also important breeding centers for many species of waterbirds. The Laramie River and several wetlands and closed-basin lakes used by waterbirds may provide critical habitat for many species during migration and the breeding season.

Zoologists from the Wyoming Natural Diversity Database (WYNDD; University of Wyoming) conducted waterbird surveys along a portion of the Laramie River and several lakes on private land in central Albany County during 6 days in the spring of 2002-2003.

To provide a comparison to other lakes in the Laramie Valley, Hutton Lake National Wildlife Refuge (NWR) was also surveyed for waterbirds during the same period. Hutton Lake NWR is located 18 km southwest of the town of Laramie and consists of 5 clustered lakes; Hutton (200 acres), Creighton (200 acres), Hoge (75 acres), Rush (50 acres), and George (30 acres). The surface areas provided are typical of wet years; in 2003 all lakes had water, but levels on Creighton and Hutton Lakes were a bit low. There were an estimated total of 350 acres of open water available at Hutton Lake NWR and emergent vegetation on the margins of some of the lakes during the waterbird surveys.

A total of 34 waterbird species was observed along the Laramie River and Lake Ione (Table 1). All species observed use the area during migration. Of these, 20 species were also confirmed or likely breeding in the immediate vicinity and another 5 were possible breeders (breeding status unclear). Breeding status was determined by nest building behavior or the presence of ideal nesting habitat in combination with known nesting occurrences in previous years. There were also 2 transient species (likely breeding in southeast Wyoming, but not locally). Lake Ione was consistently occupied by 200-500 individual birds on the open water or shoreline, but it is important to note that a large portion of the lake's vegetated wetlands provided dense cover. The extent of the wetlands and density of the cover made it impossible to provide accurate counts. On many occasions several hundred ducks were observed in flight above the wetland while several hundred more remained on the lake surface. It is likely that the Lake Ione basin was occupied by several thousand waterbirds during survey period.

Hutton Lake NWR: A total of 35 species was observed at (Table 1). All species observed use the area during migration. Of these, 19 species were confirmed or likely breeding in the immediate vicinity, 6 were possible breeders and 2 were transients. Contrasting with surveys conducted in 2002, waterbird abundance at Hutton Lake NWR was similar to that observed at Lake Ione, most likely due to the availability of larger expanses of open water and emergent vegetation at Hutton NWR in 2003. Seven species were observed at Hutton Lake NWR that were not observed at Lake Ione; conversely, 5 or 6 species were observed at Lake Ione that were not observed at Hutton Lake NWR (Table 1).

Spring of 2003 was wetter than than it had been for several years, but the Laramie Basin is still in drought conditions. Due to irrigation efforts and immediate proximity to the Laramie River the Lake Ione basin remained wet while most other lakes in the Laramie Valley were at moderate to low levels. In this context, Lake Ione can be seen as an ecological refuge for waterbirds during times of extreme drought, as was experienced during several years leading up to the 2003 surveys. During periods of more normal precipitation the Laramie River corridor and other adjacent wetlands and lakes undoubtedly attracts multitudes of waterbirds, maintaining the position that private lands in central Albany County contain some of the most productive waterbird centers in the Laramie Valley.

Raptor Surveys

Southeast Wyoming supports a large number of nesting raptors, notably Swainson's Hawks (*Buteo swainsoni*), Ferruginous Hawks (*Buteo regalis*) and Golden Eagles (*Aquila chrysaetos*). Suitable nesting habitat for these species was surveyed along an 11 mile linear stretch of patchy, woody riparian habitat in central Albany County, Wyoming, and opportunistic observations suggest a rather high density and diversity of raptors here during the breeding season. The region may provide critical breeding habitat for these, as well as several other, raptor species.

Habitat surveyed along the Laramie River and several adjacent small lakes consisted of Cottonwood (*Populus angustifolia*) /willow (*Salix spp.*) vegetation, scattered along

approximately 8.5 river miles. Woody vegetation also occurs along a 3-mile ribbon along the margin of Lake Ione. Much of the remaining portion of the study area consists of rolling hills and plains of mixed-grass prairie with varying levels of shrub (mostly *Artemisia tridentata*) cover.

Raptor nest surveys were conducted by zoologists from the Wyoming Natural Diversity Database (University of Wyoming; WYNDD) during May 2003 to determine nesting status for several species. Nesting success and productivity were not measured. Surveys were limited to the linear patches of cottonwood/willow vegetation, although nesting habitat for some species (especially *B. regalis*) does exist outside of the riparian habitat studied here. A total of 17 occupied nests of 5 species were found (Table 2) as well as 3 unoccupied nests (although it is difficult to estimate nesting density due to the linear nature of the habitat, there were 1.5 raptor nests per river mile). An additional 5 raptor species were observed (Table 2), and habitat exists for at least 8 other species. Although nesting success and productivity were not measured, at least one Golden Eagle fledgling and one nestling were observed, as well as several immature (1-2 years old) Golden Eagles and Bald Eagles during the survey.

Table 1. Species of waterbirds observed on Laramie River, Lake Ione and Hutton Lake National Wildlife Refuge, Albany County, Wyoming, spring 2002/2003. Status: C = confirmed breeder, L = likely breeder, P = possible breeder, T = transient, M = migrant, X = not observed. Abundance: A = abundant, C = common, U = uncommon, R = rare, X = not observed. Species shown in bold were unique to private property in the vicinity of the Laramie River and Lake Ione; species shown in italics were unique to Hutton Lake National Wildlife Refuge. Each of seven species not seen in both years is identified with an asterisk (*).

Common Name	Status		Abundance	
	Lar.R./L. Ione	Hutton	Lar.R./L. Ione	Hutton
Pied-billed Grebe	L	L	R	R
Eared Grebe	L	L	C	C
Western Grebe	M	X	R	X
American White Pelican	T	T	C	R
Black-crowned Night Heron	X	C	X	C
<i>Great Blue Heron</i>	X	T	X	R
White-faced Ibis	P	P	R	U
Canada Goose	C	C	A	SA
Gadwall	L	L	U	C
American Widgeon	L	L	C	U
Mallard	L	L	A	A
Blue-winged Teal	L	L	U	U
Cinnamon Teal	L	L	U	U
Northern Shoveler	L	P	U	U
Northern Pintail	L	P	U	U
Green-winged Teal	L	L	C	A
Canvasback	P	P	R	C
Redhead	L	L	A	A
Ring-necked Duck	X	M	X	R
Lesser Scaup	P	P	R	U
Common Merganser	M	X	R	X

Common Name	Status		Abundance	
	Lar.R./L. Ione	Hutton	Lar.R./L. Ione	Hutton
Ruddy Duck	L	L	U	C
American Coot	L	L	C	C
Sora*	L	X	R	X
Killdeer	L	L	A	C
Black-necked Stilt	P	X	R	X
American Avocet	L	L	A	C
Lesser/Greater Yellowlegs	M	M	R	R
Willet	L	L	A	C
Solitary Sandpiper*	M	X	R	X
Spotted Sandpiper	P	P	R	R
<i>Whimbrel*</i>	X	M	X	R
Marbled Godwit*	M	M	R	R
<i>Baird's Sandpiper</i>	X	M	X	U
<i>Long-billed Dowitcher*</i>	X	M	X	R
Common Snipe	L	L	C	U
Unidentified Sandpiper	?	X	R	X
Wilson's Phalarope	L	L	A	A
Franklin's Gull*	M	M	R	R
California Gull	T	X	R	X
Black Tern*	M	X	R	X
<i>Forsters Tern</i>	X	L	X	R

Table 2. Raptor distribution status along an 11 mile stretch of the Laramie River in the vicinity of Lake Ione, central Albany County, WY. May, 2003.

Nesting Species	Nests	Species Observed	Additional Possible Species
Swainson's Hawk	7	Northern Harrier	Cooper's Hawk
Ferruginous Hawk	5	Peregrine Falcon	Sharp-shinned Hawk
Red-tailed Hawk	1	Prairie Falcon	Rough-legged Hawk
Golden Eagle	3	American Kestrel	Merlin
Bald Eagle	1	Great Horned Owl (nested in 2002)	Barn Owl
			Short-eared Owl
			Long-eared Owl
			Burrowing Owl