

YELLOWSTONE BIRD REPORT 2003

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Sage Thrasher advertising territory. Photo Doug Dance.



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Cover and title page drawings: One of the many benefits of being married to a talented artist and a giving person is having access to original art. Special thanks go to my wife, Karen McEneaney, for permission to print her exquisite pencil drawing of a Whooper Swan.

All photographs in this report are by Terry McEneaney unless otherwise indicated.

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INTRODUCTION

The Yellowstone Bird Report summarizes all bird information in Yellowstone National Park. The report started as a quarterly publication; in 1996, it became an annual document summarizing all results and activities that occurred within the calendar year. Information found in this publication is used in the Superintendent's Annual Report and provides valuable information for the Yellowstone historic record and interested public.

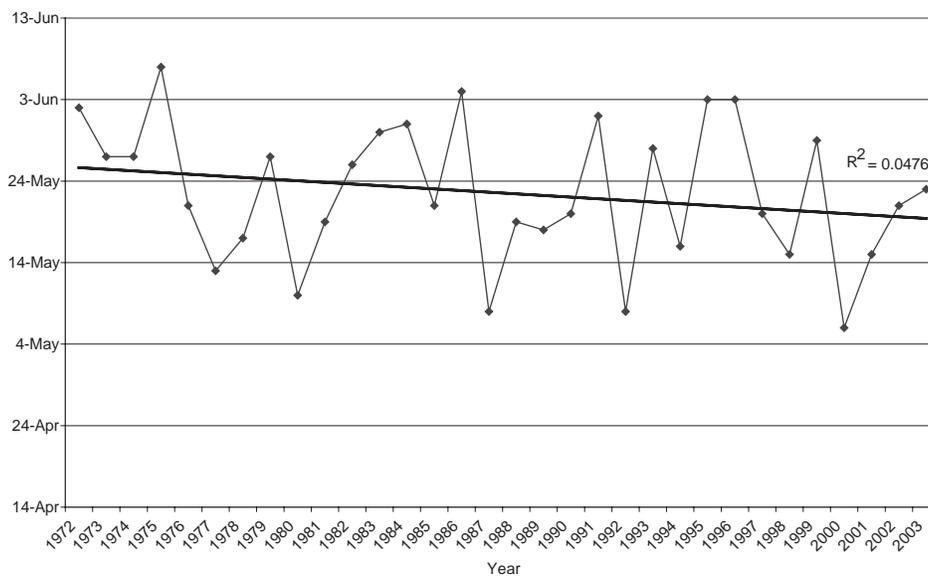
2003 WEATHER PATTERNS AND SUMMARY

The winter of 2002–2003 started as extremely mild in January, with warm temperatures and very little snow. More typical winter weather arrived in February, with snowstorms occurring well into April. Spring temperatures and precipitation were average. Interestingly, ice-out dates on Yellowstone Lake continue to show a downward trend, with the lake gradually thawing out over time (Figure 1). Mountain snowpack melted early, resulting in extremely dry, drought-like conditions for the remainder of the summer and into much of the fall. November finally turned cold by mid-month. December remained mild. As 2003 came to a close, winter appeared sluggish, resulting in average precipitation and slightly below-average temperatures.



Approaching ice-out on Yellowstone Lake, spring 2003.

Figure 1. Ice-out dates on Yellowstone Lake, 1972-2003



THREATENED AND ENDANGERED SPECIES

BALD EAGLE

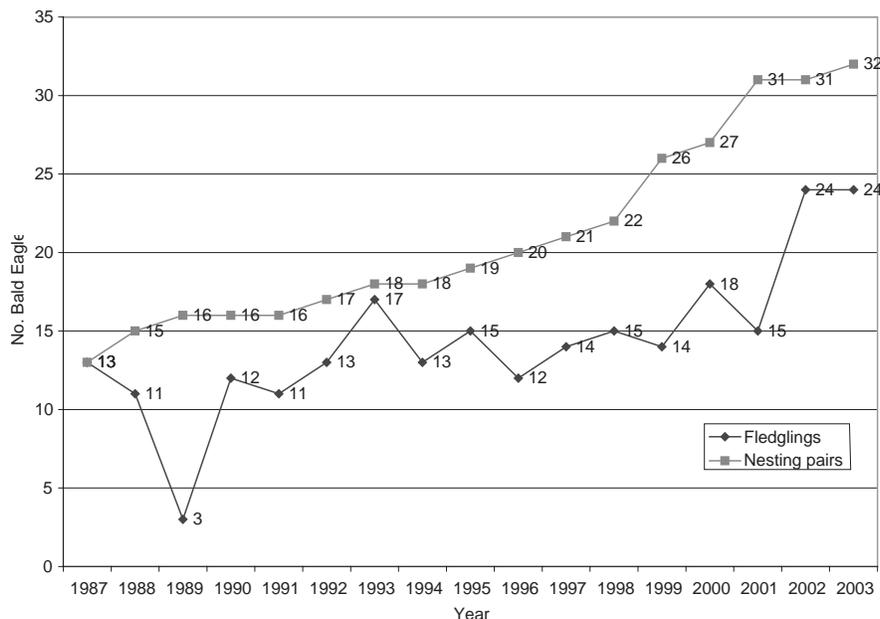
In 1995, the U.S. Fish and Wildlife Service reclassified the Bald Eagle from “endangered” to “threatened,” due to significant population gains made over the last three decades. Certain specific populations, however, are not completely recovered due to heavy metal contamination problems in the Great Lakes region, and habitat encroachment and development problems associated with riparian zones in the desert southwest.

In Yellowstone, a total of 24 eaglets fledged from 32 active nests during 2003 (Figure 2). This equals the highest number of fledged eaglets, and breaks the record for active nests ever recorded in the history of Yellowstone National Park. The Yellowstone Bald Eagle subpopulation continues to incrementally increase, with territorial shifts and new nests appearing in unexpected places. **For the second year in a row, a pair of Bald Eagles took up residence on a nest 55 meters off the Madison-to-West Yellowstone road. This created quite an attraction for visitors, and kept wildlife managers and rangers on their toes with crowd control throughout the spring and summer.** Also for the second consecutive year, this pair fledged one eaglet. Nest substrate instability (resulting from the 1988 Yellowstone wildfires) caused minimal problems for nesting pairs this year. However, we expect large numbers of trees to topple to the ground over the next couple of decades, which will undoubtedly result in nest failure, loss of nest sites, or sudden changes in location of



Adult bald eagle stalking waterfowl.

Figure 2. Bald Eagle productivity



nesting territories. Bald Eagles have occasionally been documented taking over previously-occupied Osprey nests, and the incidence of takeover appears to be gradually increasing due to competition for nest sites.

WHOOPING CRANE

The Whooping Crane is currently classified as an endangered species. The worldwide population includes both wild and captive birds. This endemic North American species continues to rank as the rarest and most endangered crane in the world. Population figures as of summer 2003 placed the wild population at 300 cranes and the captive population at 132, for a total world population numbering 432 Whooping Cranes (Table 1, page 15, Figure 3). No Whooping Cranes now utilize the park. For a complete history of the Whooping Crane in Greater Yellowstone, see the 2000 Yellowstone Bird Report.

SPECIES OF SPECIAL CONCERN

PEREGRINE FALCON

On August 26, 1999, the Peregrine Falcon was removed from the list of threatened and endangered species. Under the provisions of the Endangered Species Act, this species still needs to be monitored closely for the next five years to ensure its recovery, even though it is no longer officially listed as endangered.

The Peregrine Falcon is now managed as a species of special concern, and Yellowstone continues to be a stronghold for peregrines in

Figure 3. Worldwide Whooping Crane population

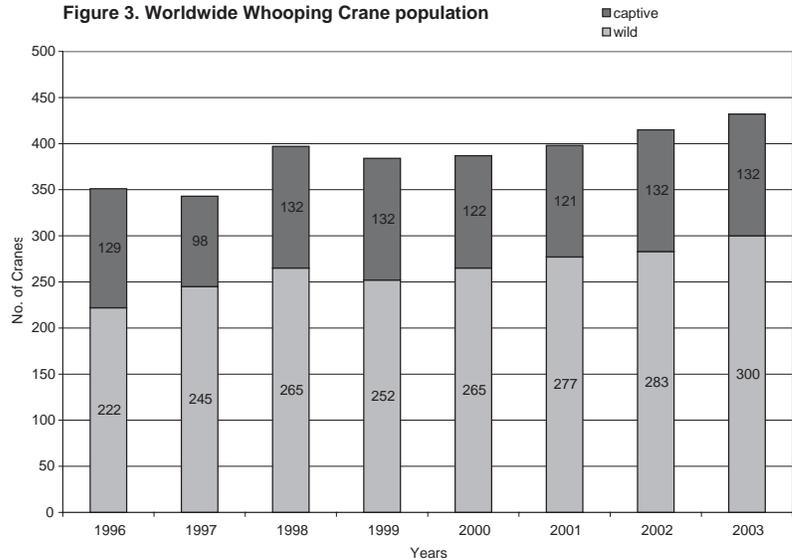
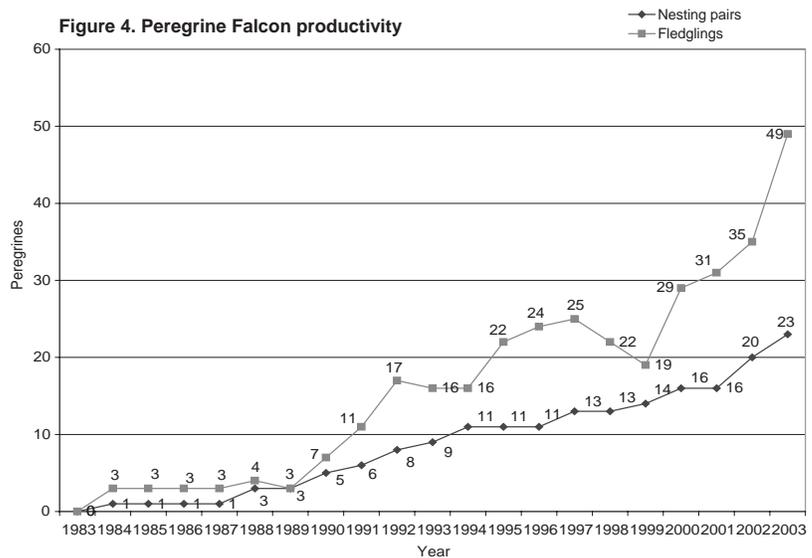


Figure 4. Peregrine Falcon productivity



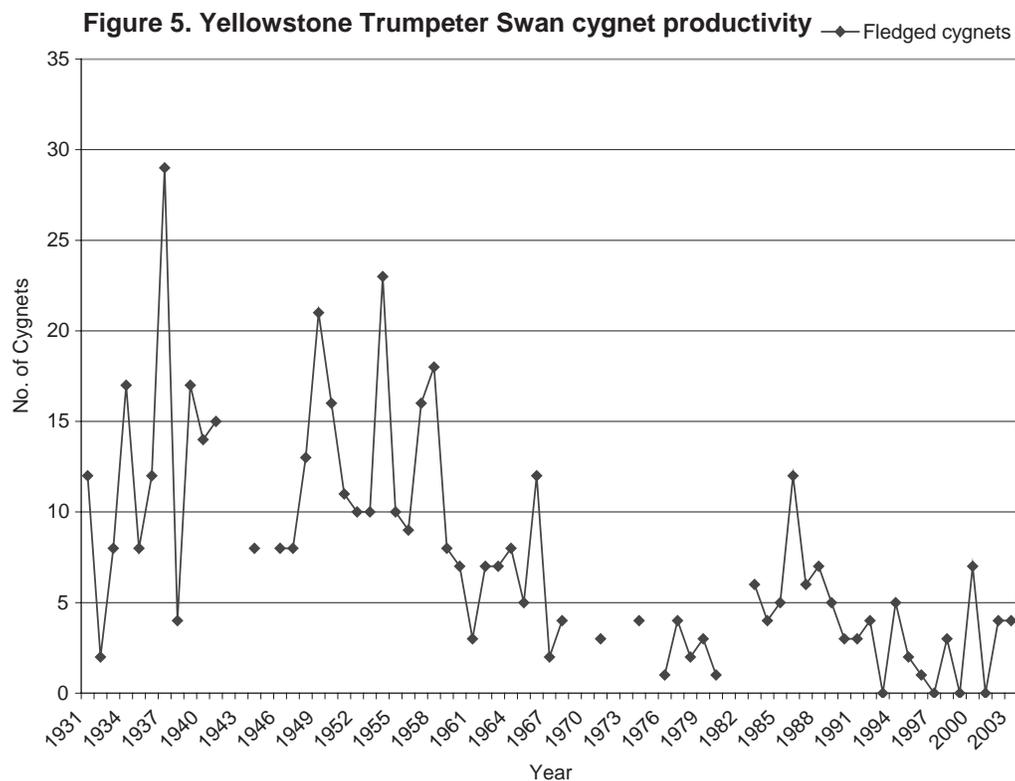
Censusing the Absaroka Range for peregrines.

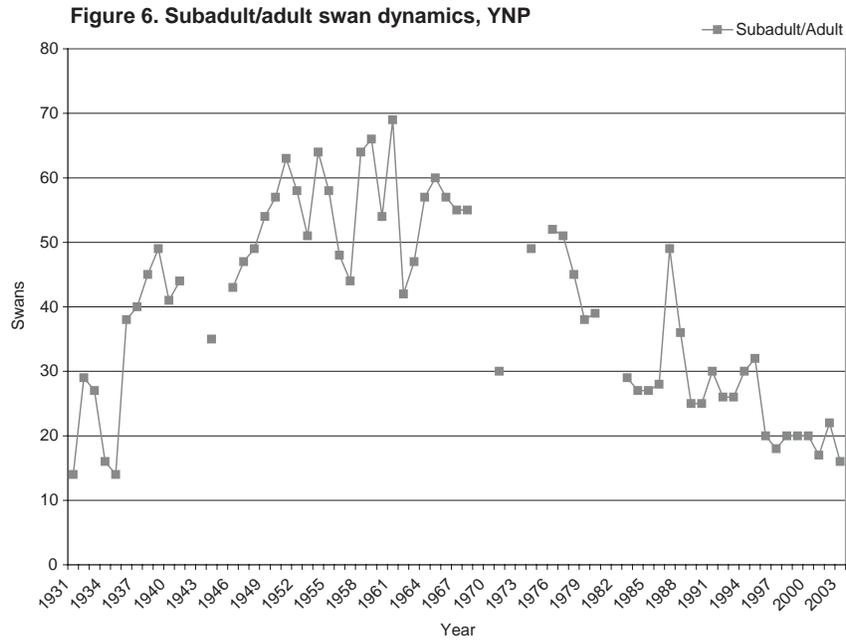
the northern Rockies. Three new eyries were found in 2003, bringing the total number of peregrine eyries to 23, compared to 20 in 2002. Finding the new peregrine eyries allowed the park's ornithologist to record a total of 49 young fledged in 2003—the highest number of fledged peregrine ever recorded in Yellowstone National Park (Figure 4).

Monitoring peregrine eyries is time-consuming. As 2003 marked the fourth year since de-listing, only one more year of extensive monitoring is required to fulfill federal requirements for full recovery. After that period, a sampling scheme will be developed in which perhaps only one-third of all known eyries in the park will be checked each year, thus completing a full parkwide production survey every three years. This will allow time to check cliffs for new eyries and move on to other projects.

TRUMPETER SWAN

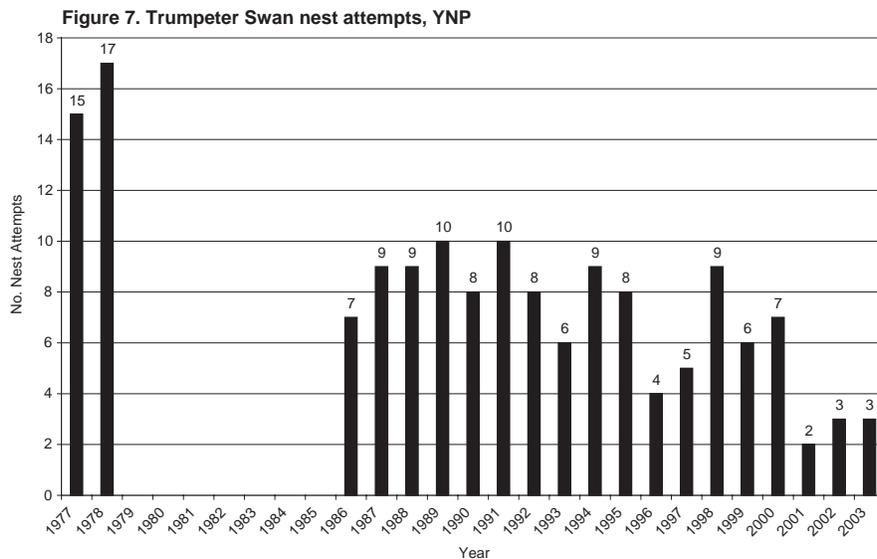
The YNP resident Trumpeter Swan subpopulation continues to show signs of a species at risk of local imperilment. Swan recruitment from outside YNP is critical in maintaining the resident swan population; historically, swans that died in the park were eventually replaced by swans from outside the park (namely Montana's Centennial Valley, traditionally a hotspot for cygnet production). However, events over the last decade have led to a reduction of breeding swans, particularly outside the park. Coupled with low numbers of fledged cygnets throughout the greater Yellowstone, these reductions are of serious concern (Figure 5). The number of subadult/adult swans in YNP has declined steadily since 1961, and currently stands at only 16 individuals (Figure 6). This is the fourth-lowest number of adults ever recorded in the park, and represents numbers reminiscent of the early 1930s.





Adult swan recruitment has been observed in the southern and northern portions of the park. However, no adult recruitment has been observed on the western portion; a lone adult female has been waiting for a mate in the 7 Mile Bridge area since February 2001. As of November 2003, this bird has been waiting a total of 33 months in the same area and has yet to find a mate.

In recent years, Trumpeter Swan nest attempts have ranged from 2–10 per year (Figure 7). There were only three swan nesting pairs in both 2002 and 2003, compared with two in 2001, seven in 2000, six in 1999, and nine in 1998. In 2003, four cygnets fledged from one brood in YNP. This was somewhat expected, because years with drought-like conditions are usually favorable for swan production. During two other severe drought years (1988 and 2000), Yellowstone National Park fledged seven cygnets each year. However, 2001 was a severe drought year, yet zero cygnets were produced. Except for these anomalies, cygnet production has been dismal over the last 14 years, ranging from 0–5 cygnets per year.



Paradise Valley

Trumpeter Swan flock. Adult swan recruits from Montana's Paradise Valley are helping to maintain the Yellowstone swan population for the time being. Yellowstone National Park originally began to participate in Trumpeter Swan conservation issues in the Paradise Valley (north of the park) of Montana due to the potential threat posed by exotic Mute Swans, introduced in the 1960s by a private landowner. By the late 1970s, concern about potential competition with native

Trumpeter Swans in Yellowstone National Park led the National Park Service to become involved in a program to reverse this alien threat to native swans. With the assistance of the Cinnabar Foundation and the Chevron Corporation, and led by the park ornithologist, the park has helped support local educational efforts, Mute Swan eradication, and Trumpeter Swan introduction. By 1991, Trumpeter Swans outnumbered Mute Swans nine to two in Paradise Valley, and by the mid-1990s, Mute Swans were eliminated from Paradise Valley altogether. The threat posed by this alien species was mitigated in a relatively short period of time. For more information on this program, see the 2001 Yellowstone Bird Report.

In 2003, in Paradise Valley, there were three nesting pairs that fledged nine young from three broods. Of the 10 young that hatched, nine successfully made it to the fledgling stage. A fall survey of Paradise Valley swans tallied 22 individuals in 2003 (Figure 8), with details on production (Table 2, page 15). Subadult/adult swans declined in numbers in Paradise Valley primarily due to collision mortality with wires, lead poisoning, and recruits exploring the confines of Yellowstone National Park and the Paradise Valley. Banded swans from the Paradise Valley have been seen in YNP.

MOLLY ISLANDS COLONIAL NESTING BIRDS

The Molly Islands Colonial Nesting Bird Census was conducted in mid-May, early June, early August, and mid-September 2003. The Molly Islands consist of two small islands appropriately named Rocky Island and Sandy Island, due to the nature of the substrate. The census techniques applied this year were consistent with those conducted over the last several years; however, both aerial and boat surveys were employed this year. Although this year's spring appeared to be late, American White Pelicans arrived on the islands on schedule. On Rocky Island, a total of 130 pelicans initiated nests on the eastern (highest) part of the island (Table 3, page 15). Nests were restricted to this one aggregation. Double-crested Cormorants constructed 81 nests in the same area as the pelicans.

The islands were free of flooding this year and snowmelt runoff was gradual. Of the 72 California Gulls that attempted to nest, only 40 were successful in hatching young, whereas of the 6 nest attempts by Caspian Terns, five were successful in hatching and rearing young. The following young fledged from Rocky Island: 64 American White Pelicans, 183 Double-crested Cormorants, 77 California Gulls, and 6 Caspian Terns.

Predation was not a factor on Sandy Island this year. Consequently, a total of 220 American White

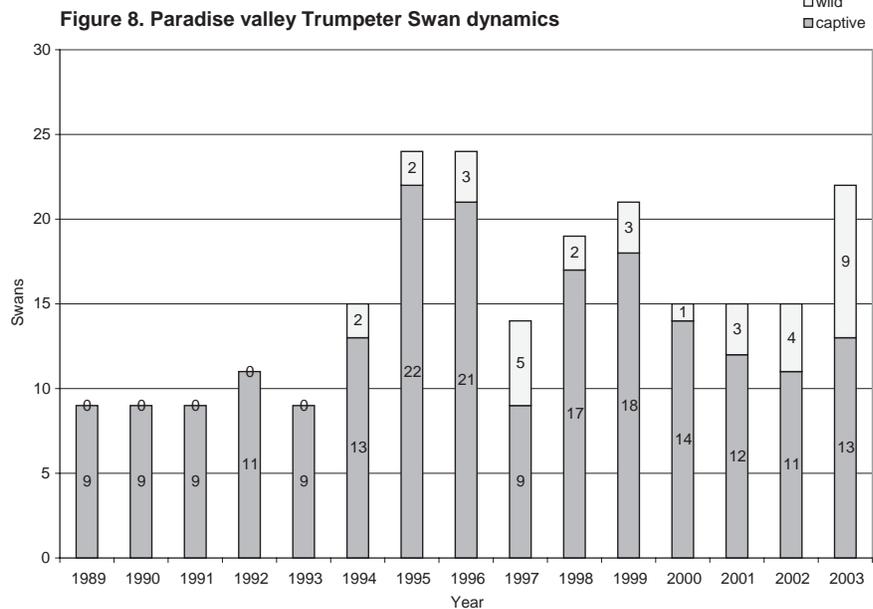
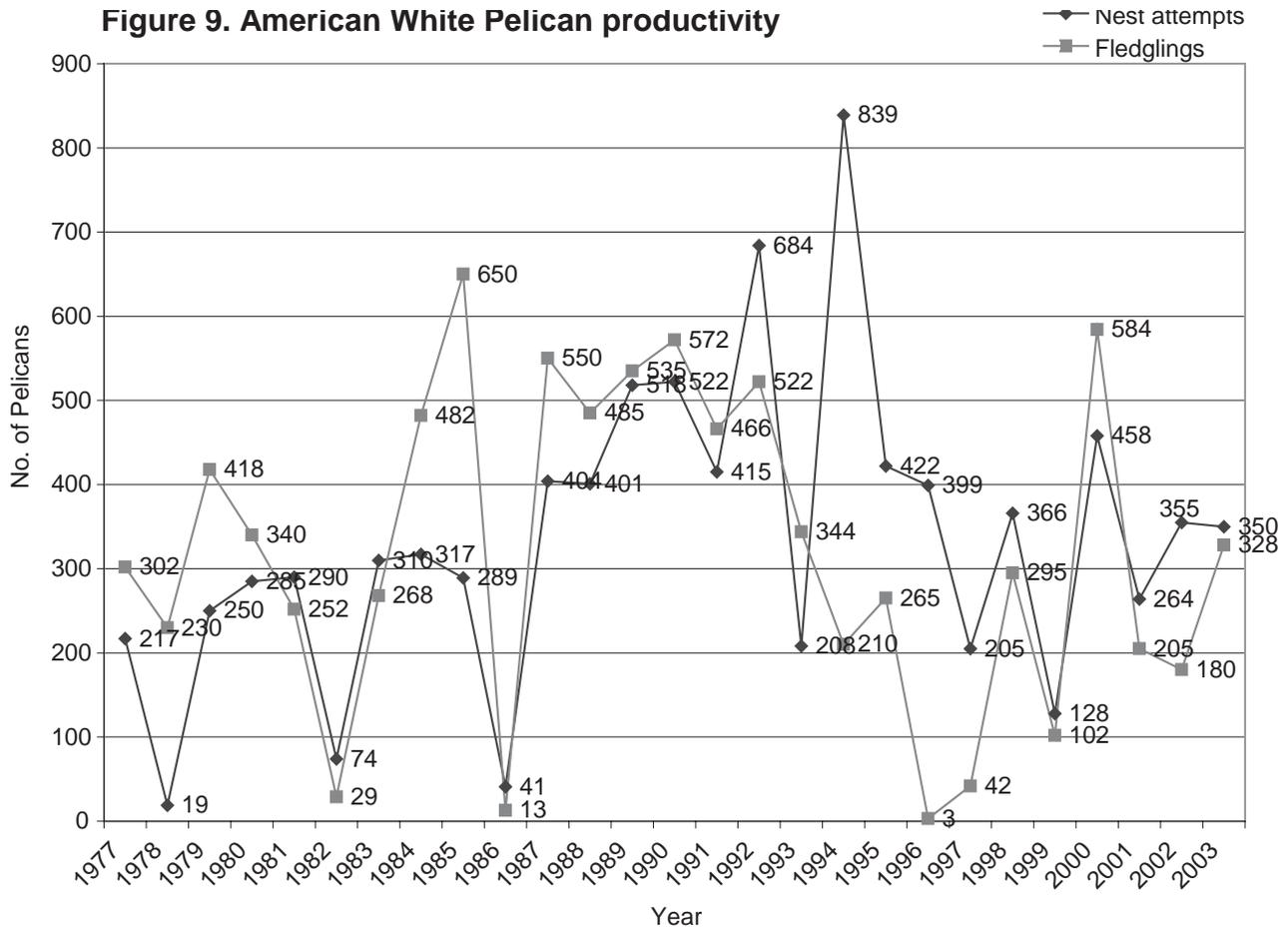


Figure 9. American White Pelican productivity

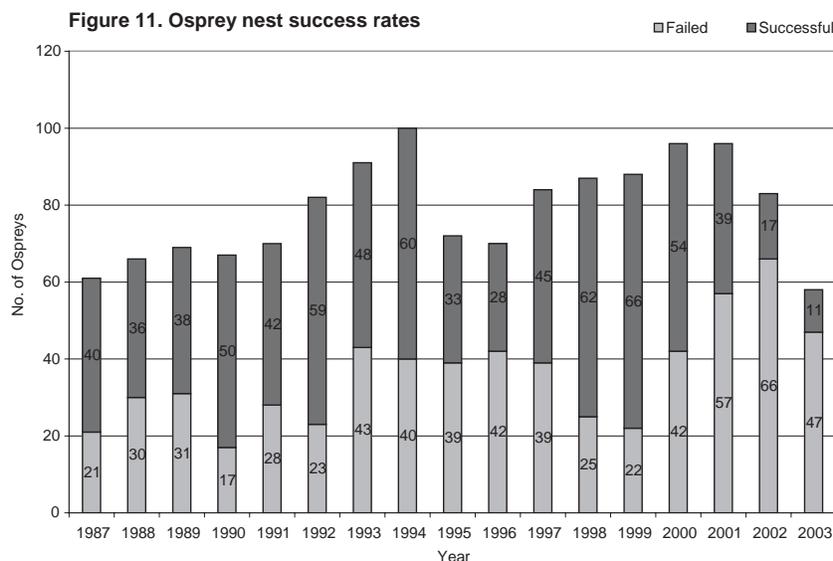
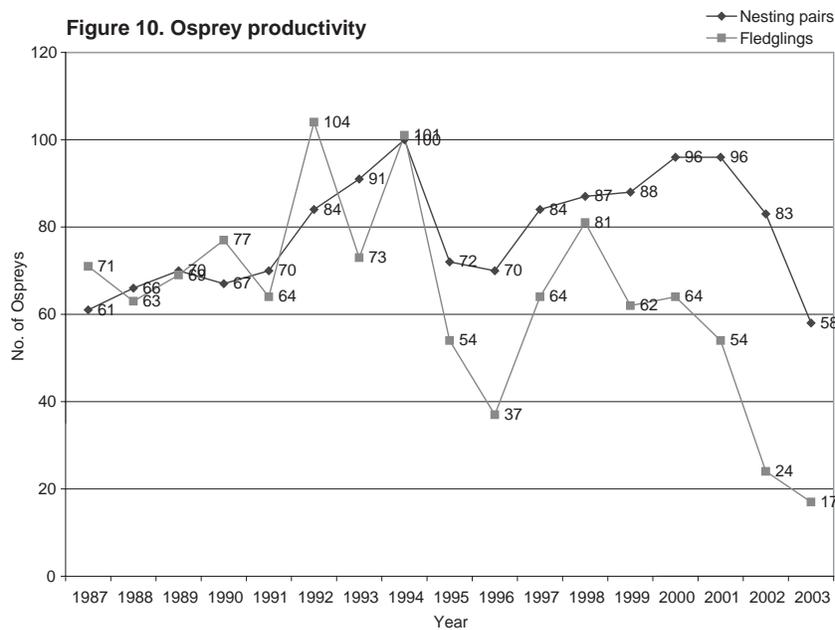


Pelican nests were initiated, but only 160 nests were successful in rearing 264 young. Double-crested Cormorant nest attempts were low, with 20 nests initiated and 12 successful in fledging 31 young. Pelicans nested in four distinct aggregations, two large and two small. No Caspian Terns or California Gulls nested on this island this year. In sum, 2003 was a year of surprisingly good colonial nesting bird production. Lake flooding did not occur due to the drought, which presented favorable conditions. Total production on the Molly Islands resulted in fledging 328 American White Pelicans (Figure 9), 214 Double-crested Cormorants, 77 California Gulls, and 6 Caspian Terns.

As the consequences of exotic lake trout establishment in Yellowstone Lake become apparent, the status of the Molly Islands bird colony will continue to be important. Rather than make predictions as to the future of this nesting colony, we need to let time take its course. At the moment, however, lake trout do not appear to have influenced colonial nesting bird production. Climatic conditions continue to be the most important factor affecting the Molly Islands nesting colony, particularly in recent years.

OSPREY

The Yellowstone National Park Osprey population continues to show signs of natural annual variation. In 2003, however, only 17 young fledged from 58 nests, compared to a mere 24 young fledging from 83 nests in 2002 (Figure 10). This represents the worst production ever experienced in the last 16 years of collecting detailed Osprey population data. A series of strong winds throughout the summer caused many of the nests and/or nest trees to fall to the ground, resulting in high failure rates (Figure 11). This pattern has been occurring more frequently in the last four years. Tree nest site instability and weather continue to play a major role in influencing Osprey productivity in the park. Frank Island, a major Osprey production area on Yellowstone Lake, has been out of favor recently due to nest substrate instability. The incidence of Bald Eagles taking over Osprey nest sites was noted again this year. Monitoring the population dynamics of Ospreys and other piscivorous bird species is especially important as we chart lake trout numbers over time.

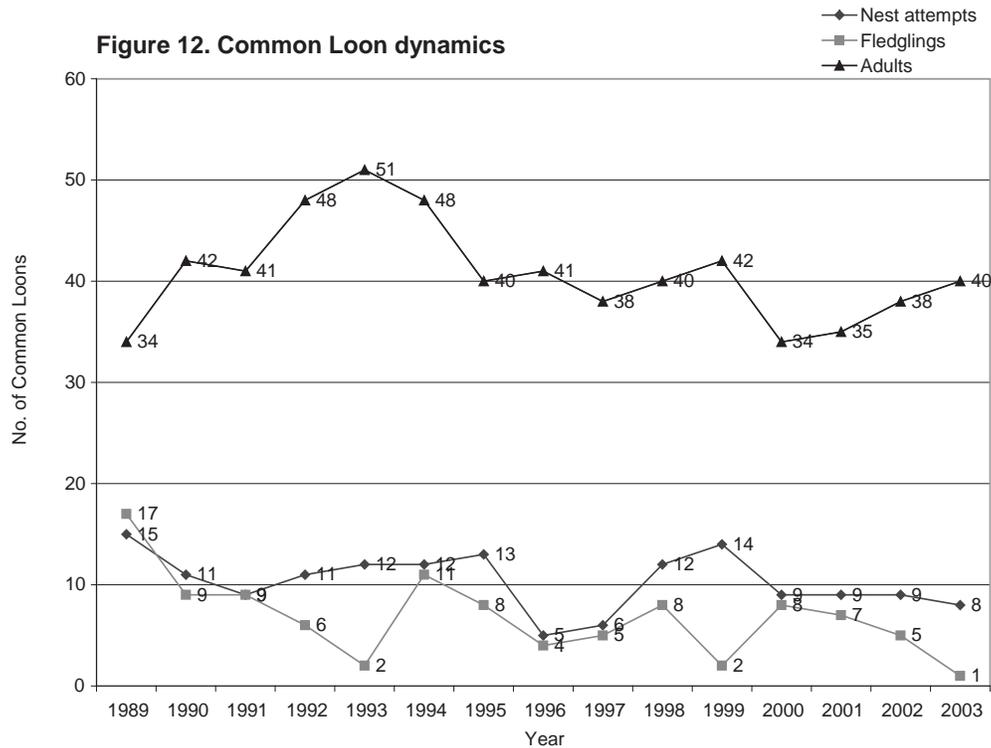


HARLEQUIN DUCK

The Harlequin Duck population in YNP continues to maintain itself and is only mildly variable from year to year, with generally 16–24 nesting pairs residing in the park. Monitoring adults is the most effective method of keeping track of population vigor and trends. Monitoring annual productivity is not cost-effective, as data collection is extremely time-consuming and difficult due to the remoteness of many of the areas in which harlequins are found. Productivity is extremely variable from year to year and is highly influenced by weather, such as flooding.

COMMON LOON

Yellowstone National Park's Common Loon population continues to fluctuate from year to year. There were eight nest attempts in 2003, yet only one Loonlet managed to reach fledgling age, compared to nine nest attempts and five fledglings in 2002, and nine nest attempts and seven fledglings in 2001 (Figure 12). A total of 40 adults were found in the park in 2003, compared to 38 adults in 2002, and 36 adults in 2001. These adult numbers have reliably ranged from 34–51 individuals over the last 15 years. Yearly fluctuations in adult numbers and in the production of young are thought to be the result of variable weather conditions.



OTHER STUDIES AND POPULATION MONITORING

NORTH AMERICAN BIRD MIGRATION COUNT

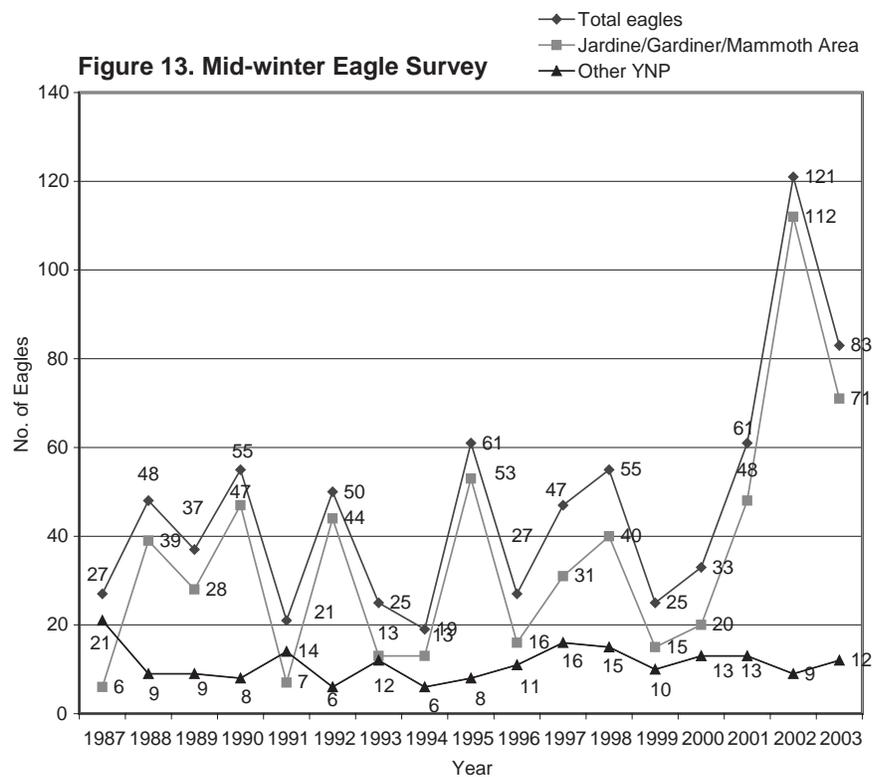
Yellowstone National Park participated in the North American Bird Migration Count for the eleventh consecutive year in 2003. Originally designed to collect quantitative and qualitative spring bird migration information on a continental scale, the count has turned into a low-key social event. The survey is traditionally scheduled each year on the second Saturday in May. This year, the count was conducted on May 10. Four observers recorded a total of 3,630 individual birds. A total of 78 species of birds were recorded during the count, including 57 species within the confines of YNP (Table 4, page 16). An 11-year summary is enclosed (Table 5, page 16). The count originates on Yellowstone Lake, and ends 70 miles north of the park in the Shields Valley of Montana. It is an excellent means of gauging the pulse of migration in both the mountains and the intermountain valleys.

MID-WINTER EAGLE SURVEY

The annual mid-winter Bald Eagle/Golden Eagle survey was conducted for the seventeenth consecutive year in YNP and on portions of the northern range outside the park. A total of 83 eagles were counted on January 10, 2003 (Figure 13). Of the total, 76 were identified as Bald Eagles, and seven were identified as Golden Eagles. Seventy-one of the 83 total wintering eagles were found in the Jardine/Gardiner/Mammoth area. The northern range outside YNP continues to be the hotspot for wintering eagles, at least in part due to carrion availability from the regular- and late-season elk reduction hunts. Weather continues to play a major role in eagle distribution, as does prey and carrion availability.

BREEDING BIRD SURVEYS

Three Breeding Bird Surveys were conducted in 2003. This songbird data was sent to the continental database clearinghouse located at the Patuxent Wildlife Research Center in Laurel, Maryland, and is included in the information available online at www.mp2-pwrc.usgs.gov/bbs. Data from these surveys are used to develop population trends for North American songbirds. YNP Breeding Bird Surveys date back as far as 1982.



GLACIER BOULDER ROUTE SURVEY

The Glacier Boulder songbird survey documents birdlife found exclusively in lodgepole pine habitats in Yellowstone. The survey was conducted in 2003. The transect begins at the Glacier Boulder trailhead near Inspiration Point. The point count census consists of 30 stations, and is conducted entirely on foot. Census protocol for this survey is similar to that of a Breeding Bird Survey. This survey first began in 1986, and only one year (2002) has been missed to date. However, we know the importance of establishing additional baseline data for neotropical migrant landbird monitoring. Traffic noise during the summer is beginning to affect Breeding Bird Survey routes, and it is for this reason that we are developing census routes away from established roads.

CHRISTMAS BIRD COUNT

On December 21, 2003, the Yellowstone Christmas Bird Count (YCBC) was conducted in the Gardiner, Montana, and Mammoth, Wyoming, areas, marking the 31st year for this traditional winter bird survey. The 2003 Yellowstone Christmas Bird Count tallied a total of 42 bird species and 2,134 individual birds—the second-highest number of species and fourth-highest number of individuals ever recorded on count day. Temperatures ranged from 20–42°F, with 0–8” of snow, depending on the elevation. River edges were not frozen.

New species. Two new species of wintering birds were detected; on count day, a Bufflehead was found along the Gardner River in Montana, and a Lincoln’s Sparrow was found at a bird feeder in Gardiner, Montana.

Records tied. Tied records included: 6 Northern Flickers (previous record set in 2002); and 1 White-crowned Sparrow (previous records set in 1991, 1992, 1994, and 1998).

Records broken. Five records were broken. New abundance records included: 4 Marsh Wrens (previous record was 2 in 2000 and 2001); 3 Gadwalls (previous record was 2 in 1995); 68 Common Goldeneyes (previous record was 27 in 1975); 2 Northern Goshawks (previous record was 1 in 1976, 1985, and 1990); and 132 Townsend’s Solitaires (previous record was 106 in 1988).

The 2003 YCBC marked the second-highest number of species and the fourth-highest number of individual birds ever recorded on count day. Below-average winter conditions resulted in slightly above-average numbers of species and individual birds observed. A grand total of 97 species have been recorded during the YCBC (102 species with count day and count week combined) during the 31 years the count has taken place (Tables 6 & 7, pages 17–18). Experience shows that colder temperatures and above average snow depths are the optimum conditions for finding the greatest bird richness and abundance during the YCBC.

Participants are reminded of these factors when deciding on attending future YCBCs. Some people enjoy searching for rare birds, for others, just learning the basics of bird identification is a thrill in itself. Many look forward to the exercise and/or social aspects of this festive event. Whatever the calling, the Yellowstone Christmas Bird Count tradition and the fun associated with this event continues. Details on past Yellowstone Christmas Bird Count methods, results, and summaries can be found in the Winter 2001 and Winter 2002 issues of *Yellowstone Science*.

POPULATION MONITORING TABLES

Table 1. Wild and captive Whooping Crane populations, 2003.

Wild populations				
Area	Adults	Young	Total	
Aransas/Wood Buffalo NP	170	25	195	
Florida (non-migratory)	67	2	69	
Wisconsin/Florida (migratory)	20	16	36	
subtotal in the wild	257	43	300	
Captive populations				
Area	Adults	Young	Total	Breeding pairs
Patuxent WRC, MD	49	10	59	10
International Crane Fdn., WI	26	11	37	10
Devonian WCC/Calgary, AB	17	1	18	6
San Antonio Zool. Gardens, TX	6	0	6	2
Lowery Park Zoo, Tampa, FL	2	0	2	0
ACRES, New Orleans, LA	8	0	8	0
New Orleans Zoo, LA	2	0	2	0
subtotal in captivity	110	22	132	28
Total (wild and captive)	367	65	432	

Data courtesy Tom Stehn, USFWS

Table 2. Trumpeter Swan production summary, 2003.

Parameters	YNP	Paradise Valley
Occupied sites	6	3
Nesting pairs	3	3
Successful nests	1	3
Cygnets hatched	4	10
Broods w/fledged young	1	3
Cygnets fledged	4	9
Adults	16	13
Total swans	20	22

Table 3. Molly Islands colonial nesting bird productivity, 2003.

Area	Species	Nests initiated	Successful nests	Young fledged
Rocky Island	American White Pelican	130	110	64
	Double-crested Cormorant	81	69	183
	California Gull	72	40	77
	Caspian Tern	6	5	6
Sandy Island	American White Pelican	220	160	264
	Double-crested Cormorant	20	12	31
Molly Islands totals	American White Pelican	350	270	328
	Double-crested Cormorant	101	81	214
	California Gull	72	40	77
	Caspian Tern	6	5	6

Table 4. International Migratory Bird Count, Yellowstone National Park, May 10, 2003.

Species	WY (YNP)	MT (YNP)	Park Co., MT	Totals	Species	WY (YNP)	MT (YNP)	Park Co., MT	Totals
Common Loon	5			5	Horned Lark		1		1
Eared Grebe	1		20	21	Tree Swallow		12	1,545	1,557
Western Grebe	2		16	18	Northern Rough-winged Swallow		2	6	8
American White Pelican	5		1	6	Clark's Nutcracker	1		1	2
Great Blue Heron	5		8	13	Black-billed Magpie		3	61	64
Trumpeter Swan	2			20	American Crow			14	14
Canada Goose	38	16	24	78	Common Raven	24	3	24	51
Green-winged Teal	25	2	80	107	Black-capped Chickadee			4	4
Mallard	49	11	13	73	Mountain Chickadee	1	1	2	4
Northern Pintail	10		4	14	House Wren		1		1
Blue-winged Teal			3	3	American Dipper		1		1
Cinnamon Teal	3		20	23	Ruby-crowned Kinglet	2	4	6	12
Northern Shoveler			40	40	Mountain Bluebird		1	3	4
Gadwall	20		90	110	Townsend's Solitaire		2		2
American Wigeon	22		70	92	American Robin	114	9	40	163
Lesser Scaup	76		25	101	American Pipit	10			10
Ring-necked Duck			18	18	European Starling	3		80	83
Common Goldeneye	28		2	30	Yellow-rumped Warbler (Myrtle's)			1	1
Barrow's Goldeneye	74	40		114	Vesper Sparrow		7		7
Bufflehead	32	4	10	46	Song Sparrow			3	3
Harlequin Duck	2			2	Lincoln's Sparrow		2		2
Common Merganser	13	2	4	19	Chipping Sparrow			1	1
Red-breasted Merganser	2			2	White-crowned Sparrow	61			61
Ruddy Duck		1	120	121	Dark-eyed Junco	1	30	65	96
Osprey	1	3	4	8	Red-winged Blackbird		5	7	12
Bald Eagle	1		7	8	Western Meadowlark		5	7	12
Swainson's Hawk	2			2	Yellow-headed Blackbird			12	12
Red-tailed Hawk	1	5	6	12	Brewer's Blackbird	20	9	46	75
Ferruginous hawk			2	2	Brown-headed Cowbird	16		20	36
Golden Eagle			7	7	Cassin's Finch	5			5
American Kestrel	2	18	6	26	House Finch			15	15
American Coot			40	40	Red Crossbill	5			5
Sandhill Crane	24		4	28	Pine Siskin	1		5	6
Killdeer	3	1	4	8	House Sparrow			6	6
Willet			2	2	Totals	716	205	2,709	3,630
Long-billed Curlew			1	1	78 species recorded				
Common Snipe	2			2	Total number of observers: 4				
Wilson's Phalarope			6	6	Total number of group hours in the field: 44				
Franklin's Gull			25	25	Species detected in YNP only: 56				
Rock Dove			35	35	Recorded: Terry McEneaney				
Mourning Dove			2	2	Weather: 20–40° F. Cold, windy, overcast. Birds seemed to be late in arriving.				
White-throated Swift			5	5					
Downy Woodpecker			1	1					
Three-toed Woodpecker	1			1					
Northern Flicker (red-shafted)	1	4	10	15					

Table 5. North American Bird Migration Count Summary, Yellowstone National Park and vicinity.

Year	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Number of species recorded	72	74	61	82	93	91	85	85	91	90	78
Revised number of species (1996 standards and route)	86	74	75	82	93	91	85	85	91	90	78
Total individual birds											
YNP (WY)	1,545	1,793	2,408	1,797	1,038	1,073	826	750	967	895	716
YNP (MT)	289	145	242	113	94	64	163	912	74	128	205
Park Co., MT	139	89	248	313	949	413	1,974	936	656	609	2,709
Grand totals	1,973	2,027	2,898	2,223	2,081	1,550	2,963	2,598	1,697	1,632	3,630
Number of observers	2	5	7	4	4	4	3	5	5	5	4
Total hours in the field	16	47.5	76.5	28	42	48	36	69	44	55	44
Total species YNP only	69	73	52	73	70	69	70	61	65	71	56

Table 6. Yellowstone Christmas Bird Count, December 21, 2003.

Species	WY (YNP)	MT (YNP)	MT (outside YNP)	Totals
Green-winged Teal	10	2		12
Mallard	32	66	33	131
Gadwall	2	3		5
Common Goldeneye	4	7	57	68
Barrow's Goldeneye	1	2	4	7
Bufflehead		1		1
Bald Eagle	2	3	4	9
Golden Eagle	2	2	1	5
Cooper's Hawk		1		1
Northern Goshawk	2			2
Wilson's Snipe			2	2
Rock Pigeon	27	10	111	148
Belted Kingfisher	1	1		2
Downy Woodpecker	1		2	3
Hairy Woodpecker			1	1
Northern Flicker	2	2	2	6
Clark's Nutcracker	15	6	20	41
Black-billed Magpie	52	11	53	116
Common Raven	19	25	42	86
Black-capped Chickadee	6		13	19
Mountain Chickadee	3		27	30
Red-breasted Nuthatch			4	4
Marsh Wren	4			4
American Dipper	26	6	3	35
Townsend's Solitaire	66	19	47	132
American Robin	7		4	11
Bohemian Waxwing	640	225		865
Cedar Waxwing	1			1
Northern Shrike	1			1
European Starling			2	2
American Tree Sparrow			4	4
Dark-eyed Junco	1		32	33
Song Sparrow	2		4	6
Lincoln's Sparrow			1	1
White-crowned Sparrow			1	1
Harris's Sparrow			2	2
Gray-crowned Rosy Finch	160		85	245
Black Rosy Finch			5	5
Common Redpoll			2	2
House Finch			31	31
Red Crossbill	3			3
House Sparrow	23		28	51
Totals	1,115	392	627	2,134

Total species: 42

Additional species during count week: 4

Virginia Rail: December 18, Mammoth, Wyoming

Gray Partridge (5): December 18, Gardiner, Montana

Great Horned Owl: December 18, Gardiner, Montana (YNP)

Pinyon Jay (27): December 22, Gardiner, Montana

Bald Eagle classification: 1 Class II; 8 Class V; 9 total

Golden Eagle classification: 5 adults; 5 total

Gray-crowned Rosy Finch classification: Gray-crowned race = 208; Hepburn race = 37; Total = 245

Dark-eyed Junco breakdown: 32 pink-sided, 1 slate-colored; 33 total

Observers: Annie Bochus, Phil Doepke, Katy Duffy, Ed Folts, Judy Knuth-Folts, Catherine Hiestand, Dejan Kovac, Betty Martyn, Dave Martyn, Terry McEneaney

Feeder watchers: George Bumann, Karen McEneaney, Mark Donahue

Records.

Tied abundance records: Northern Flicker (6), previous record 2002; White-crowned Sparrow (1), previous records 1991, 1992, 1994, 1998.

New abundance records: Marsh Wren (4), previous record 2 (2000, 2001); Gadwall (3), previous record 2 (1995); Common Goldeneye (68), previous record 27 (1975); Northern Goshawk (2), previous record 1 (1976, 1985, 1990); Townsend's Solitaire (132), previous record 106 (1988).

New YCBC records. Bufflehead (1); Lincoln's sparrow (1)

General observations.

Below average winter conditions resulted in slightly above average numbers of species and individual birds observed. Temperatures 20–42°F. Snow depth 0–8" deepest at higher elevations. Edge of rivers were not frozen.

Location: MT (WY) 45 02 N 110 42 W.

Hours: 71 total

Miles: 60 vehicle, 11 foot.

97 species tallied on count day for history of count.

102 species with the YCBC and the count week combined for history of count (31 years of data).

2003 marks the second-highest number of species, and fourth-highest number of individual birds tallied on count day.

Above-average number of species (42, mean 33), and above-average abundance (2,134 individuals, mean 1,416) during this count.

Compiler: Terry McEneaney

Table 7. Twelve most abundant species, Yellowstone Christmas Bird Counts, 1920–2003 (based on 31 years of data).

Species	Number of individuals	Number of years detected	Average number of birds per year
Bohemian Waxwing	11,994	28	428.4
Gray-crowned Rosy Finch	5,987	29	206.4
Common Raven	4,306	31	138.9
Mallard	2,593	31	83.6
Black-billed Magpie	2,578	31	83.2
Rock Pigeon	1,757	30	83.7
Mountain Chickadee	1,734	30	57.8
American Dipper	1,596	31	51.5
Townsend's Solitaire	1,535	31	49.5
Clark's Nutcracker	848	31	27.4
Black Rosy Finch	720	24	30
Black-capped Chickadee	410	30	13.7



Above: Wilson's Phalaropes are often found during the International Migratory Bird Count.

Right: Red Crossbill found on Christmas Bird Count.

MISCELLANEOUS PROJECTS AND PROGRAMS

NEW BIRD DISCOVERIES

Two new bird species were added to the Field Checklist of Birds of Yellowstone National Park in 2003. On November 26, a Whooper Swan (*Cygnus cygnus*) in second winter plumage was observed in Hayden Valley by the staff ornithologist. This is the first Whooper Swan record for YNP and the state of Wyoming. Photographs were taken of this misplaced bird to accompany detailed written documentation. This swan is believed to be wild, as it was with marked swans from northern Canada, and arrived following a major cold front event. Whooper Swans are endemic to Iceland and Eurasia, but occasionally make it to North America. This finding is significant, because it shows how difficult it is to compartmentalize populations into geographic groups, because waterfowl are notorious for long-distance migration and constant mixing. The staff ornithologist detected a Lesser Goldfinch (*Carduelis psaltria*) on the west shore of Yellowstone Lake on October 10. More details of these and other new finds can be found in an upcoming issue of *Yellowstone Science*. As of 2003, 318 species of birds have been documented in the park since it was established in 1872. The Field Checklist of Birds of Yellowstone National Park was last revised by the staff ornithologist in April 2000, and made available to the public in March 2001. This checklist is available on the park website at www.nps.gov/yell. Updates to this checklist and the website are scheduled for March 2004. Other interesting and/or unusual Yellowstone bird finds for the year include a Richardson's Canada Goose on Yellowstone Lake in April; a Black and White Warbler near Mammoth in June; two Hudsonian Godwits on the north shore of Yellowstone Lake in August; a Nashville Warbler near Mammoth in September; a Pacific Loon at Heart Lake in September; a small flock of Western Bluebirds near the 45th parallel in February; a Northern Mockingbird each at Old Faithful and in Lamar Valley in May; and a Scissor-tailed Flycatcher on Upper Slough Creek in August.



Rare Whooper Swan observed in Hayden Valley, in November.

ENVIRONMENTAL ASSESSMENTS, STATUS REVIEWS, TECHNICAL DOCUMENTS

The most important YNP assessments in 2003 that utilized bird data included: East Entrance Road, Old Faithful Sewage Treatment Upgrade, the Madison Sewage Treatment Upgrade, and various road assessments. The U.S. Fish and Wildlife Service also contacted the staff ornithologist regarding status reviews for the Caspian Tern. Because of the large number of bird species found in North America, more status reviews of this nature are expected in the future.

GREATER YELLOWSTONE BALD EAGLE WORKING GROUP

Established in 1982, the Greater Yellowstone Bald Eagle Working Group is still in existence. Bald Eagle productivity and other management information are communicated to the group via either e-mail or an annual meeting, but a meeting was not held in the last three years. Hopefully, the working group will continue to exist. The Bald Eagle is doing remarkably well, and is ecologically recovered in the greater Yellowstone area. The group is unified in its belief that the Bald Eagle can be de-listed in this area. The U.S. Fish and Wildlife Service is expected to take such action in the near future.

GREATER YELLOWSTONE PEREGRINE FALCON WORKING GROUP

Peregrine Falcon working groups are primarily organized by state. The park participates in two Peregrine Falcon working groups (Montana and Wyoming), and has been an active participant ever since peregrines have been found in the greater Yellowstone area. Wyoming has an informal working group, and most of the coordination is done over the telephone. Montana has a more formalized working group. Yellowstone National Park works closely with both state agencies and the Peregrine Fund. Working as a team is one of the main reasons the peregrine has made such a remarkable recovery. The staff ornithologist attended the PFWG meeting in January 2003.

GREATER YELLOWSTONE TRUMPETER SWAN WORKING GROUP

The Greater Yellowstone Trumpeter Swan Working Group was organized in 1997. The staff ornithologist was the first chairman of this working group. Yellowstone National Park and Wyoming Game and Fish have been taking the lead to ensure that the greater Yellowstone area Trumpeter Swans are conserved.

Annual population and production data for greater Yellowstone area Trumpeter Swans are collected by the group, and management activities are communicated between agencies at these meetings. Yellowstone participated in the fall 2003 meeting held in West Yellowstone, Montana.

HARLEQUIN DUCK WORKING GROUP

Yellowstone National Park is a member of the Harlequin Duck Working Group. Although unable to attend a formal meeting in recent years due to financial reasons, the staff ornithologist is planning to attend future HDWG meetings.

MONTANA BIRD RECORDS COMMITTEE

The Montana Bird Records Committee meets once or twice a year, depending on the volume of information, to review new bird records. This is a very high profile committee, which keeps the park up-to-date on the latest advances in ornithology. The staff ornithologist was chairman of this committee for several years, and resigned this post to devote more time to writing projects but still remains a member of the MBRC.

NEOTROPICAL MIGRANT WORKING GROUPS

Yellowstone National Park typically participates in three neotropical migrant working groups. The two state working groups are the Montana Partners in Flight and the Wyoming Partners in Flight.

The third group, an international working group, is called the Western Working Group Partners in Flight. Ornithologists from all over the West are in this group, including colleagues from Canada and Mexico. They are currently focused on prioritizing species and developing conservation plans. Meetings occur twice a year, usually in different areas of the West. The staff ornithologist did not attend meetings in 2003 due to budget constraints.

WYOMING IMPORTANT BIRD AREA TECHNICAL REVIEW COMMITTEE

In 2003, the staff ornithologist participated as a member of the Wyoming Important Bird Area Technical Review Committee (WIBATRC). The WIBATRC is responsible for reviewing, designating and implementing important land tracts in Wyoming for bird conservation. The WIBATRC is sponsored by Wyoming Audubon. All meetings were attended by conference call because of travel restrictions. Approximately a dozen new IBAs were evaluated in 2003.

MUSEUM SCIENTIFIC BIRD COLLECTION

No specimens were added to the Albright Visitor Center museum collection in 2003, due to the upcoming move into the Yellowstone Heritage and Research Center.

SWALLOW, WOODPECKER, AND RAVEN MANAGEMENT AND MITIGATION

Swallows, woodpeckers, and ravens continue to pose obstacles for the people responsible for care and management of buildings in the park. There are some health risks associated with some of these birds, which are protected by law under the Migratory Bird Treaty Act. As such, mitigation options are limited. With proper installation, plastic netting can be used to discourage nesting in selected areas of high public use.

SPEAKING ENGAGEMENTS AND PUBLIC CONTACTS

Public contacts are increasing each year. The park concessioners annually request bird lectures from professional biologists to train summer and winter guides. Bird management staff lectured to Colorado State University wildlife students in YNP, and to the annual Naturalists' Training Workshop held in Mammoth. In addition, there were hundreds of letters of inquiry and bird information e-mail requests. Speaking engagements were also popular again in 2003. The public is keenly interested in new information about Yellowstone National Park's birds, and it is fitting that a professional ornithologist make these contacts. Birders comprise a large segment of the North American human population and are excellent supporters of national parks and bird conservation programs.

INJURED AND ROAD-KILLED BIRDLIFE

As long as we have roads, we will have injured birdlife. A protocol for handling injured and road-killed birds has been in place for the last few years and appears to be working well. Procedures were followed very well in recent years, and there have been no problems associated with this protocol. In the past, some park personnel failed to follow protocol and procedures, which resulted in improper lines of communication and in birds' being turned over to unqualified rehabilitators. The only professional bird rehabilitator the park is involved with is Big Sky Wild Care of Bozeman, Montana. All road-killed birds are to be salvaged, if possible, for future placement in the Albright museum collection. In November 2003, a revised protocol for injured Yellowstone birds was updated and sent out to ranger staff. Copies of this protocol can be obtained by contacting the park ornithologist.

TRUMPETER SWAN DATA ANALYSIS AND MONOGRAPH

For the last two years, the staff ornithologist has been actively entering and analyzing Trumpeter Swan data for an upcoming scientific monograph on the Yellowstone Trumpeter Swan. This peer-

reviewed publication is scheduled to be completed within two years and will pave a new course of action for Trumpeter Swan management in YNP.

YELLOWSTONE WINTER USE WILDLIFE STUDY

Much controversy surrounds the Yellowstone winter use issue. A multi-disciplinary team was established from fall 2002–spring 2003 to better understand winter use impacts (snowmobiles, snowcoaches, skiers) on wildlife populations. The bird management program is assisting in the design, field training, collection and analysis of winter use data in an effort to better understand these recreational impacts, particularly on Trumpeter Swans and Bald Eagles.

6 MILE MADISON RIVER BALD EAGLE NEST CLOSURE

A pair of Bald Eagles again occupied a nest approximately 150 feet off the road at 6 Mile (Eagle Bend) on the Madison River. The eagles created quite an attraction from mid-February through early July. In an effort to protect the eagles from human disturbance, park staff (bird management, resource management, patrol rangers, and interpretation) coordinated a temporary closure in the immediate vicinity of the nest. A zone-style system was established where visitors could stop and observe or photograph the eagles from a distance, then travel by the nest without stopping. The no-stopping zone allowed the eagles to come and go freely with prey and nest material without being disturbed by people. Although some people violated the closure, compliance was generally exemplary. The eagles hatched two chicks, one of which managed to fledge from the nest. A similar closure is expected to be in place as long as the eagles continue to nest there. Special thanks go out to the volunteers who made this possible; we are greatly indebted for their hard work and dedication.



Volunteers at the Bald Eagle nest at 6 Mile on the Madison River.

7 MILE BRIDGE

TRUMPETER SWAN NESTING AREA

The area known as 7 Mile Bridge (7 miles east of West Yellowstone) along the Madison River has been a traditional nesting area for Trumpeter Swans for at least the last 21 years. A total of 23 cygnets have fledged from this site since 1983, making it one of the more productive swan nesting areas in Yellowstone National Park in recent years. In February 2001, the adult male, or cob, was killed by a coyote near 7 Mile Bridge leaving the adult female without a mate. November 2003 marked the thirty-third month the female swan remained on or near this site without a mate. Traditionally, adult swan recruitment in Yellowstone came from an area west of the park known as the Centennial Valley. In recent years, swan numbers in the area have declined substantially, resulting in swan recruits, or floaters, to be nearly non-existent. The lack of recruitment of subadult/adult swans from outside the

park has played a major role in the rate in which swans are replaced or new mates are found. We will continue to monitor the status of the swans of this area, but the future does not look promising.

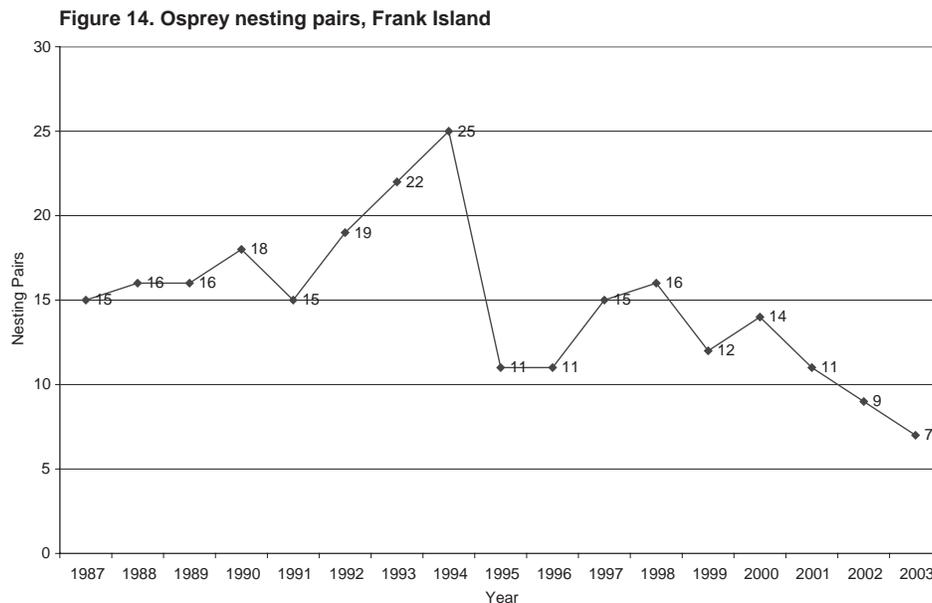
FRANK ISLAND WILDFIRE

Frank Island has always been a major area for nesting Ospreys in Yellowstone. The island is so important that in 1987, it was designated a protected area and off-limits to the public, with only the small area to the southeast point, or picnic area portion, open for visitor use. All that changed on August 8, when lightning struck Frank Island and an inferno developed. Approximately 570 acres of the 600-acre island burned, and engulfed nearly all of the old growth trees in a relatively short period of time. Frank Island has had a long history of fire; in 1956, lightning caused a .01-acre wildfire, and in 1975 and 1978, a one-acre and a 1.5-acre fire were caused by humans.

Over a 17-year period, Osprey nesting has ranged from 7–25 nesting pairs on Frank Island in any given year (Figure 14). Nesting pairs peaked six years after the 1988 wildfires, and a slow but steady decline has occurred in recent years, primarily due to strong winds blowing down nest trees. An aerial survey revealed all the Osprey nests but one succumbed to the wildfires, and only one Osprey young fledged from the single nest on Frank Island in 2003. Bald Eagles failed to produce young on Frank Island in 2003, and the old nest was destroyed by this wildfire after the fact. However, within 30 days after the wildfire, a newly-completed Bald Eagle nest was discovered on the island.



Aerial view of the 2003 Frank Island wildfire. Photo by Terry McEneaney and Roy Renkin.



TRUMPETER SWAN GENETICS STUDY

The staff ornithologist participated in a North American Trumpeter Swan genetics study in 2003, conducted by Sara Oyler-McCance of the University of Denver. Feathers, addled eggs, egg shells, and carcass muscle tissue were collected from nine separate sites in Yellowstone National Park. The study hopes to determine through DNA analysis, whether or not Trumpeter Swans in certain geographical areas are genetically distinct. The findings of this study will set the framework for future swan introductions in North America.



One of the backcountry sites where swan genetics material was collected.

MONTANA/WYOMING ALL BIRD WORKSHOP

In August, the staff ornithologist participated in the Montana/Wyoming All Bird Workshop held in Billings, Montana. Ornithologists and managers from throughout Montana and Wyoming, and from national organizations, participated in this three day event to chart future planning efforts for bird conservation.

USFWS CONTINENTAL GOLDEN EAGLE CENSUS

West, Inc., of Laramie, Wyoming under contract with the U.S. Fish and Wildlife Service, conducted a continental Golden Eagle census in Yellowstone in 2003. Three 60-kilometer east-west transects were flown in August. YNP staff made arrangements for overflights. The results of the survey have not been made public. The purpose of the transects was to develop a continent-wide population estimate for Golden Eagles.

NEW AOU CHANGES IN BIRD NAMES FOR 2003

The American Ornithologists Union (AOU) formally announced recent changes in the *AOU Checklist of North American Birds*. In the 44th Supplement, released in the July 2003 issue of *The Auk*, the following changes applied to Yellowstone birds: the English-named Rock Dove is now called the Rock Pigeon, because this bird is closely aligned with current day pigeons and conforms with the 1992 name change by the British Ornithologists' Union; the scientific name for the Rock Pigeon remains the same; the English-named Three-toed Woodpecker is now referred to as the American Three-toed Woodpecker, since the Eurasian equivalent is different primarily in mitochondrial DNA sequences and call. The Eurasian equivalent is now referred to as Three-toed Woodpecker (*Picooides tridactylus*), whereas the American Three-toed Woodpecker's scientific name is now *Picooides dorsalis*. There were several other changes, but these are the principal changes that affect Yellowstone birds.

LAKE TROUT GILLNETTING AND BIRD MORTALITY

Efforts to reduce lake trout on Yellowstone Lake are not without risks to birds. In 2003, eight

birds drowned in gillnets strategically placed for lake trout. They included two Barrow's Goldeneyes, two Common Goldeneyes, two Common Loons, 1 Double-crested Cormorant, and 1 Red-breasted Merganser. Most of the birds found in gillnets were believed to be migrants. However, the fisheries unit and the bird management program are working together to monitor the extent of this netting mortality. More data remains to be collected over several years to determine the extent of lake trout gillnetting on birdlife, and to come up with more meaningful recommendations.

MOLLY ISLAND PELICANS AND CUTTHROAT TROUT TRANSMITTERS

A study conducted by the YNP fisheries unit, under the direction of Brian Ertel, revealed some interesting findings. A cutthroat trout captured and radio-tagged on June 26 near the Thorofare Creek/Yellowstone River area was detected in mortality pulse on the Molly Islands by August 7. The transmitter was eventually retrieved in the water 20 meters southwest of Sandy Island on September 3. Additionally, a cutthroat trout captured and radio-tagged near Cabin Creek on the Yellowstone River on June 29 was detected on a mortality pulse on the Molly Islands (Rocky) July 30. The transmitter was retrieved from the nest material of a double-crested cormorant on September 3, but was believed to have been predated by American White Pelicans.

JOHN CRAIGHEAD ORAL HISTORY INTERVIEW

In August, the staff ornithologist had the privilege of interviewing John J. Craighead at his home in Missoula, Montana. In the three-day, audiotaped session, we were able to get several hours of tape recapturing the career of this famous wildlife biologist in the words and personal recollections of John Craighead himself. John Craighead is now 87 years old, but his passion and intellect have not wavered. Returning to the car after the interview, the ornithologist discovered that his possessions had been ransacked by John's pet Common Raven.



John Craighead feeding his pet Common Raven.

TRUMPETER SWAN KILLS CANADA GOOSE

On May 25, several people witnessed and reported a Trumpeter Swan killing a Canada Goose at the Glacier Boulder Pothole in the vicinity of Little America. Pond water levels were low this year, creating some inter- and intraspecific competition. Three swans were on the pond; one of a pair chased one of two Canada Geese, eventually catching up with it and killing it by stomping on it with its feet and hitting it with its wings.

ERRATUM

An error in the 2002 Yellowstone Bird Report warrants attention and correction. On page 23, the caption to the photo indicated a laughing gull; the bird in the photo was a Franklin's Gull. It was simply a proofreading error. The author apologizes and accepts responsibility for the error. A detailed article on the 2002 Laughing Gull record will appear in an upcoming issue of *Yellowstone Science*.

ACKNOWLEDGMENTS

Special thanks to Alice Wondrak Biel for editorial comments and layout ideas. Thanks also to Glenn Plumb for reviewing this report. And of course, special thanks goes out to pilot Roger Stradley for his friendship, sharp eyes, and expert pilot skills to keep us safe. Aerial surveys remain an important part of the bird management program.

NOTES



Sandhill Crane chick.