research management
findings
Number 26 • August 1990

THE HISTORY AND STATUS OF WISCONSIN'S RESIDENT CANADA GOOSE POPULATIONS

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Wisconsin's resident Canada goose populations have swung the full spectrum. Once common, these populations declined, were brought back by breeding efforts, and are now on the increase again. Within the last decade or so, these increases have been dramatic, to nuisance proportions in some areas. Similar increases have occurred in nearby states. As a result, the Mississippi Flyway Council has been considering special control measures.

Before any such controls could be implemented, we need to pull together what we know about our resident geese. Some data will come from an ongoing study of goose numbers and productivity. This Findings gives the rest of the story--its purpose is to trace the history of Wisconsin's resident geese from early nesting records and lineages of captive flocks to current population trends.

Historical data were summarized from published sources (see References) and from unpublished records (of J. Bell, R. Hopkins, R. Hunt, L. Jahn, and W. Wheeler). Population indices were derived from late summer and winter surveys conducted by state wildlife managers.

Nesting Records

The historical peak in Wisconsin's nesting Canada goose populations appeared to be in the 1850s, when early settlers found them plentiful on prairie sloughs. Canada geese were so abundant then that eggs were gathered by the bushel. Unlimited hunting and egg collecting soon reduced the goose populations, and early agricultural drainage attempts degraded wetland nesting habitat. As a result, breeding geese disappeared in the 1890s and 1930s from southern and northern Wisconsin, respectively.

Restoration Efforts and Races of Geese

Efforts to bring back breeding populations began with private game breeders. Many of the early efforts can be traced to geese from a single source: the Thomas Yaeger Game Farm, Owatonna, Minn. (Table 1). Transfers of these geese by Jack Miner of Kingsville, Ontario to the Barkhausen Preserve (near Green Bay), and transfers by others from Barkhausen to other Wisconsin and Illinois sites, established this lineage in several areas. The original birds for this lineage were geese Yaeger obtained from game breeders in Minnesota, and cripples from Manitoba hunters.

State and federal efforts in Wisconsin began in the 1930s with captive flocks established to attract migrant geese to refuges. These flocks were made up of hunting season cripples, spring- and fall-trapped migrants, and geese from private breeders. Of the 10 captive flocks, 9 have since been discontinued. However, hundreds and even thousands of geese continue to return to and breed at most of the original captive flock sites.

In addition to captive flocks, restoration also involved stocking geese throughout the state (Table 2). These efforts began at 6 sites in the 1940s-1950s with geese

TABLE 1. Historical efforts to reintroduce breeding geese in Wisconsin through captive flocks.

Site	Year	History (No., Source, Year) and Current Flock Status	Size in 1989
Barkhausen Preserve	1932	6 from Owatonna, Minn., private flock of Thomas Yaeger Game Farm in 1932 (obtained by J. Miner) to Barkhausen via Milford, Mich., private flock of M. Wallace. Captives released at unk. time.	250
Bay Beach Sanctuary	1938	12, 31, and 75 from Barkhausen captive flock in 1938, 1939, and 1948, respectively; 30 from SE Wis. private flock of L. Wilke in 1968. Captives released at unk. time.	1,000
Necedah NWR/Sandhill WA*	1939	Several pairs from Barkhausen captive flock to W. Grange in 1939; unk. no. of B. c. moffitti from Bear R. NWR, Utah in 1939 plus unk. no. of cripples from Horicon NWR in 1950s to Necedah NWR. Grange flock released in 1953; Necedah flock discontinued & released in 1951.	2,500
Poynette Game Farm	1942	34 from Sandhill captive flock of W. Grange in 1942; unk. no. of cripples from Horicon Marsh WA in 1946-60; unk. no. from Horicon Marsh WA captive flock in 1967-60; 11 from Crex Meadows captive flock in 1966; 27 & unk. no. of cripples from Horicon NWR in 1971 & 1980, respectively. Flock discontinued in 1981 & relocated.	0
Horicon Marsh WA	1948	7 migrants from Horicon Marsh WA in 1948-49; 16 from Rock Prairie, Wis., flocks of E. Inman & A. Brown in 1950; unk. no. of migrants from Horicon Marsh WA in 1950-55; 5 from SE Wis. private flock of F. Gettleman in 1952; 42 from Barrington, Ill., private flock of C. Kossack & E. Kaempfer; unk. no. from Nebraska at unk. time; 11 from Poynette captive flock in 1956. Flock discontinued in 1957 & captive breeders relocated; current flock size includes Horicon NWR.	400
Horicon NWR	1950	Unk. no. of migrants and cripples from Horicon NWR in 1950-54. Flock discontinued in 1954 & released.	--
LaCrosse area	1950	Unk. no. from unk. private flock of Badger Sportsman's Club. Flock still in existence.	350
Dike 17 WA	1954	13 & 7 from LaCrosse area captive flock in 1954 & 1955, respectively; unk. no. of migrants from Dike 17 in 1957. Flock discontinued in 1958 & captives released.	350
Crex Meadows WA	1957	49 from Horicon Marsh WA captive flock in 1957; unk. no. of cripples from Horicon in 1962-70; unk. no. of cripples from NW Wis. in 1962-70; unk. no. from Poynette captive flock in 1962-70; 106 from SE Wis. private flocks of the Uihlein family, G. Rahr, & L. Wilke. Flock discontinued in 1972 & captive breeders released.	3,000
Powell Marsh WA	1957	27 from Horicon Marsh WA captive flock in 1957; 6 from LaCrosse area captive flock in 1957-63; unk. no. of cripples from Horicon Marsh WA at unk. time; 78 from Bay Beach captive flock in 1966-68; 24 from Barkhausen captive flock in 1966-68; 48 from SE Wis. private flock of G. Rahr. Flock discontinued in 1963 & captive breeders released.	50

*NWR = National Wildlife Refuge; WA = Wildlife Area.

TABLE 2. Historical and recent efforts to reintroduce breeding geese in Wisconsin through stocking.

Site	Year	No. and Source	Site	Year	No. and Source
Horicon	1947	7 from Poynette	Vernon Marsh WA	1984	99 from Bay Beach
Burnett Cty.	1949	unk. from Horicon		1989	110 from SE Wis.
	1952	29 from NW Wis.	Fish Lake	1984	24 from Crex Meadows
Boulder Jct.	1950-52	14 from Poynette	Lower Wisconsin R.	1984	224 from Bay Beach
	1950-52	24 from Rock Prairie	Yellowstone Lake	1986	25 from Bay Beach
Rainbow Flw.	1952	52 from Rock Prairie	Turtle Flambeau Flw.	1986	167 from Bay Beach
Mountain	1952	7 from Rock Prairie	Theresa Marsh	1986-87	18 from SE Wis.
Manitowish R.	1952	unk. from Horicon	Sportsman's Lake	1986-88	89 from Bay Beach
Mead WA	1969	30 from SE Wis.	Ackley WA	1986-89	112 from Bay Beach
	1972	25 from Horicon	Trempealeau	1986-89	75 from Bay Beach
Pershing WA	1979-85	149 from Crex Meadows	Thunder Lake	1987-88	65 from Bay Beach
Spooner Lake	1982	32 from Bay Beach	Little Turtle Flw.	1987-88	51 from Crex Meadows
Potato Creek	1982	22 from Bay Beach	Joel Marsh	1987	4 from Cumberland
New Auburn WA	1982	42 from Bay Beach	Boom Lake	1989	77 from SE Wis.
Washburn Cty.	1983	73 from Bay Beach	Sheboygan Marsh	1989	43 from SE Wis.

primarily from private flocks. A second major stocking effort took place in the 1980s at 19 sites, with local geese transplanted in summer.

During the early restoration efforts, races of geese were not identified. Most likely they were *Branta canadensis interior*, the smaller migrant most common to Wisconsin, and the giant Canada goose (*B. c. maxima*), a race thought to be extinct, but rediscovered in Minnesota in 1961. Subsequent examinations of captive flocks in Wisconsin indicated they, too, were giants--including flocks at Bay Beach, Barkhausen Preserve, Crex Meadows, and Powell Marsh.

Wisconsin's resident flocks today are thought to be descendants of giants imported from Nebraska, Minnesota, and Manitoba. They also derive from colonizing, free-flying offspring of captive flocks held by private game farms in Wisconsin. Many of the early private flocks, which had been kept in family ownership for decades, are thought to have contained giants. The unknown origins of such flocks suggests all sorts of genetic combinations may be involved.

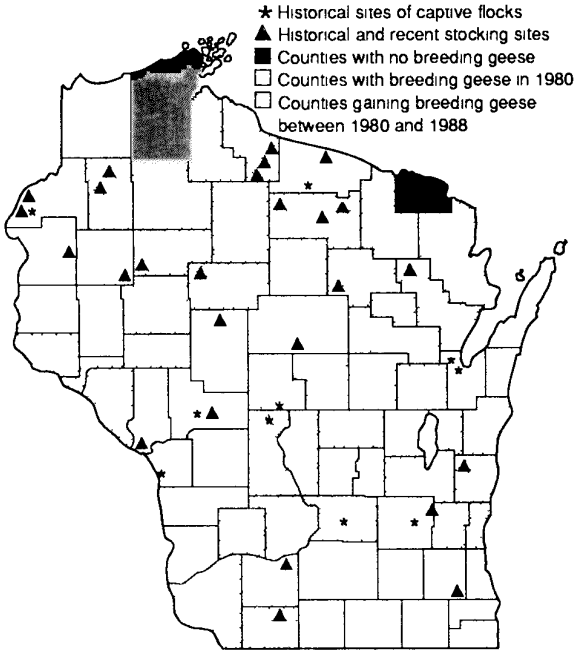

FIGURE 1. Sites of historical and recent restoration efforts, and changes in statewide distribution of breeding geese.

Recent Statewide Population Increases

Resident goose populations are on the increase statewide (Figs. 1, 2). During 1948-64, only 29 broods were reported statewide outside of propagation areas, rarely more than one per county, and seldom from the same sites in consecutive years. Since then, the number of counties (including propagation areas) that have breeding resident geese has increased from 24 in 1964 to 32 in 1980 and 70 in 1988 (Fig. 1).

Resident goose populations have been so successful in the urban areas of southeastern Wisconsin and Green Bay that they are becoming a nuisance on lawns and golf courses and in parks. Some incidences of agricultural crop damage have even occurred during the summer. The Green Bay area resident flock has grown to nearly 2,000 geese. The urban area of southeastern Wisconsin (Ozaukee, Milwaukee, Washington, Walworth, Racine, and Kenosha counties) has a combined flock nearing 5,000 resident geese.

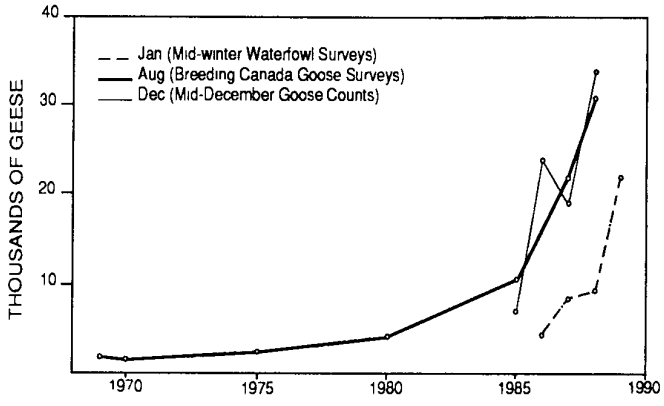

FIGURE 2. Trends in relative abundance of resident Canada geese.

Estimates of resident geese in August indicate that statewide populations have increased from less than 5,000 in 1980 to over 30,000 in 1988 (Fig. 2). Estimates made in December and January of resident geese in traditional wintering areas have also increased greatly since 1985 (Fig. 2). Over 20,000 geese remained in these areas of Wisconsin in January of 1989. These 3 indices all point to a sharp upward trend for resident goose populations in Wisconsin.

Upshot

Resident Canada goose populations in Wisconsin are the result of a variety of reintroduction efforts and sources of birds. This may explain recent evidence of considerable variation in size and morphology of resident breeding geese in Wisconsin and across the Midwest. This summary of the history of these geese points out the need to identify differing morphological characteristics of the various flocks. The contributions of resident geese to the harvest during both regular goose seasons and special seasons for resident geese may then be discerned through further studies.

All indicators suggest that the dramatic increases in resident goose populations that occurred in the past decade are continuing. Clearly, now is the time to review current stocking plans and determine the need for and feasibility of population control measures.

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Funded in part by the Federal Aid to Wildlife Restoration Act under Pittman-Robertson Project W-141-R, Study 323.

Edited by Susan Nehls

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