

Wisconsin Bald Eagle Nest Survey

2018



Photo Credit: Laura Jaskiewicz

Survey Team

Ryan Magana – Spooner
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Rich Staffen – Madison
Sharon Fandel – Fitchburg

Summary

Staff from the Wisconsin Department of Natural Resources' (WDNR) Bureau of Natural Heritage Conservation and Wildlife Management completed statewide aerial nesting surveys for active bald eagle nests in cooperation with WDNR pilots in Spring, 2018. Detailed records of eagle nest occupancy have been collected in Wisconsin since 1973, making it one of the longest running surveys of its kind in America. In 2018 a total of 1,695 active eagle nests were found throughout the state of Wisconsin, breaking last year's record (1590 nests) by 105 nests. All counties were surveyed, and active eagle nests were observed in 71 of 72 (98.6%) counties in 2018. Additional projects included nest identification and avoidance guidance, construction project reviews, forest management guidance, and the Mid-winter Eagle Survey, which counts overwintering eagles throughout the state.

Acknowledgments

Local eagle nest information was provided by numerous WDNR field staff and reports from the public. Aircraft pilots flying these surveys included: Mike Weinfurter (Rhinelander), Leo Bunderson (Eau Claire),

Matthew Brandt (Eau Claire), Joe Sprenger (Siren), Paul Christensen (Siren), Mike Callahan (Oshkosh), Greg Marshel (Oshkosh), and John Jorgensen (Madison).

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Bald Eagles

All nest surveys were completed using a WDNR aircraft, pilot, and at least one other trained observer. Starting in 2017, nest occupancy surveys have started earlier than in past years because of early nesting activity observed throughout the state. Nests were observed for occupancy from early March through mid-April. Additional ground observations were provided by landowners, birders, eBird, volunteers and raptor banders; this information is used to supplement and check aerial data. Regional reports were collected by area observers (Appendix 1) that detail bald eagle nest locations by county (Figure 1).

In 2018, a total of 1,695 bald eagle nests were found to be occupied by breeding adults (Table 1; Figure 1). This was an increase of 105 nests from the 2017 survey (Figure 2). An occupied nest was defined as a nest where one or more of the following was observed: a repaired nest, an incubating adult, eggs, or young in the nest. As in past years, Vilas (n=172) and Oneida (n=154) counties had the highest number of occupied eagle nests. These two counties represent most of the Northern Highland Ecological Landscape, which has one of the highest concentrations of freshwater lakes in the world. Bald eagles occupied nests in 71 of the state’s 72 counties in 2018 (98.6%; Figure 1), and the number of occupied nests continued to increase in all portions of the state except in the northwest (Area 1), where the same number of occupied nests were observed in 2017 and 2018 (Table 1).

This year was the first year in the history of Wisconsin’s eagle survey that an occupied eagle nest was confirmed in Walworth County. Occupied eagle nest numbers continued to rise in most areas of the state. The number of occupied nests within area 2 (Appendix 1) continued to grow, increasing from 526 in 2017 to 537 in 2018 (Table 1). This area has the highest density of nesting eagles in Wisconsin. Survey area 6, in southwest Wisconsin, had the greatest percent increase (29.7%) of occupied nests. Statewide, there was an overall increase in occupied nests of 6.5% from 2017 to 2018 (Table 1).

Table 1. Summary of 2018 bald eagle occupancy surveys in Wisconsin

Survey Area¹	Occupied Nests 2017	Occupied Nests 2018	Percent Increase from 2017-2018
Area 1	360	360	0%
Area 2	526	537	+2.1%
Area 3	171	178	+4.1%
Area 4	59	62	+5.1%
Area 5	224	236	+5.4%
Area 6	212	275	+29.7%
Area 7	38	47	+23.7%
Total Nests	1,590	1,695	+6.5%

¹ Survey Areas are shown in Appendix 1.

The Federal Bald and Golden Eagle Protection Act provides protection for all eagle nests, nest trees, and adjacent habitat. Throughout the state, project staff were contacted by private landowners and public land managers for recommendations to protect bald eagle and osprey nests from disturbance. On public properties, habitat is managed to promote tall snags and large, super-canopy white pines for nest trees. Project staff annually provide recommendations at over 100 sites to protect nests where disturbances such as timber sales, utility and telecommunication projects, housing development, and road construction are being planned. In the past 35 years, WDNR staff made management recommendations that protected over 80% of all known eagle nests. Accurate nest locations, nesting activity, and management guidance continue to be important factors in the long-term conservation of Wisconsin's bald eagle and osprey populations.

Citizen Science

2018 marked the pilot year for a new citizen-based bald eagle nest monitoring project in southcentral Wisconsin called Eagle Watch. The project was coordinated by Drew Cashman and Madison Audubon Society and utilized volunteers to monitor nest success of 15 eagle nests weekly throughout the nesting season. Results showed two nests were inactive or no sign of activity and four nests failed, largely due to severe spring storms in southern Wisconsin during the nesting period. Of the remaining nine active nests, at least 15 eaglets successfully fledged. This project provides a subset of information on bald eagle nest productivity within an urbanized portion of southern Wisconsin.

Wintering Eagles

Wintering bald eagle numbers were recorded throughout Wisconsin during the annual Midwinter Bald Eagle Survey, which is conducted in conjunction with the winter waterfowl surveys by WDNR field staff, landowners, and volunteers. In 2018, the count was conducted between January 3rd to January 17th. Annually, observers count the number of bald eagles observed on specific routes conducted by plane, vehicle, and on foot. In 2018, 40 midwinter bald eagle survey routes were completed with observers reporting 467 bald eagles (248 adult, 174 immature, and 45 of unknown age) (Figure 3). This count represented a 3% decrease in the number of eagles observed in the previous winter's count. Overwintering eagles are nomadic and tend to concentrate near open water and traditional feeding and roosting areas. Numbers counted on specific routes can be affected by snow and ice coverage across the region and do not necessarily reflect the status of the bald eagle population in the state.

Occupied Bald Eagle Nests 2018

(*n* = 1,695)

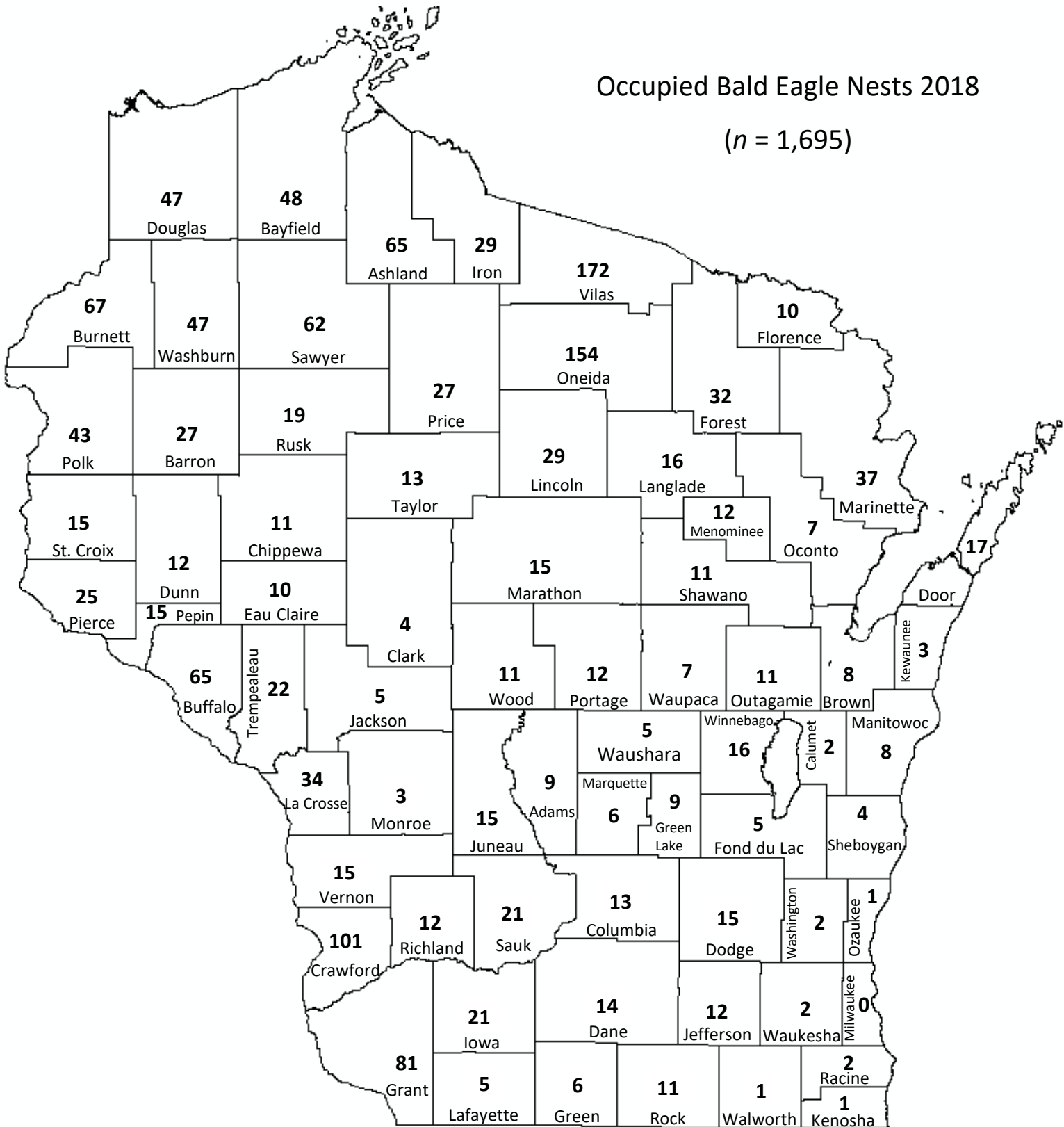


Figure 1. Occupied eagle nests where the observer recorded at least one of the following: a repaired nest, an incubating adult, eggs, or young in the nest.

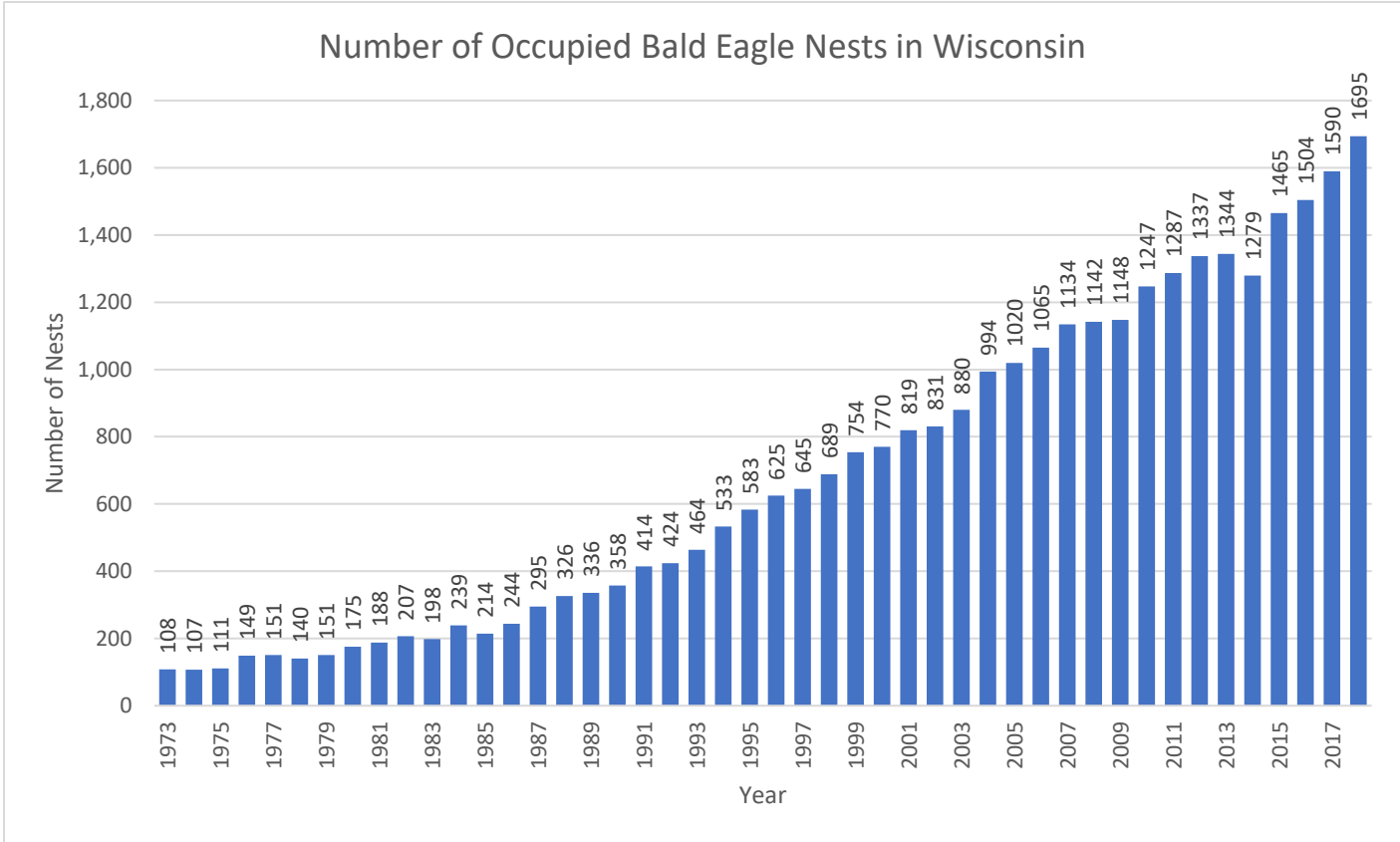


Figure 2. Occupied bald eagle nests in Wisconsin, 1973-2018. Bald eagle information for the years 1973 to 1989 was summarized from annual surveys completed by Charles Sindelar, Waukesha, WI.

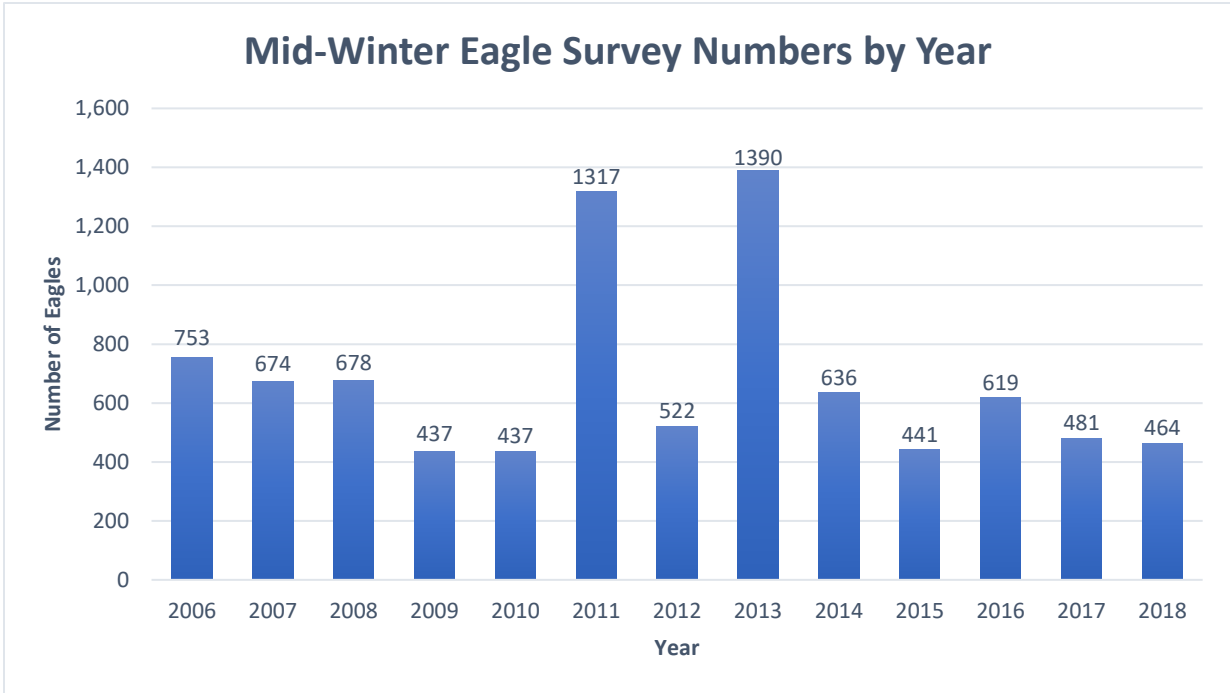


Figure 3. Mid-winter survey results 2006-2018.

Appendix 1. Wisconsin Natural Heritage Inventory (NHI) eagle and osprey contact list.

DNR Area Eagle/Osprey Survey Contacts

For the latest and most complete information on the location of eagle and osprey nests (rev. 10/2017) contact:

Area 1

Ryan Magana, 715-635-4153
DNR, 810 W Maple St.
Spooner, WI 54801
Ryan.Magana@wisconsin.gov

Statewide:

Laura Jaskiewicz, 715-365-8922
DNR, 107 Sutliff Ave,
Rhineland, WI 54501
Laura.Jaskiewicz@wisconsin.gov

Area 2

Carly Lapin, 715-365-8954
DNR, 107 Sutliff Ave.
Rhineland, WI 54501
Carly.Lapin@wisconsin.gov

Eagle Carcass Submissions Required for:

**Banded Eagles*

**Potential Law Enforcement cases*

Area 3

Joseph Henry, 920-662-5194
2984 Shawano Avenue
Green Bay, WI 54313
Joseph.Henry@wisconsin.gov

Area 4

Jim Woodford, 715-365-8856
DNR, 107 Sutliff Ave.
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Area 5a

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La Crosse, WI 54601
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Area 5b

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Area 6

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