

The American Bald Eagle Report 2016-2017



US Army Corps
of Engineers
Rock Island District

Compiled by
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March 2017



The American Bald Eagle:

Natural History & Current Conditions

The bald eagle has proudly served as the emblem for the United States of America since 1782. As a symbol of our freedom, the eagle can be found on our national seal, coins, state flags, and postage stamps. The bald eagle has not had an easy history. In fact, as development continued to expand westward during the early 1900s, they were in danger of extinction. Humans out-competed the birds for food and destroyed much of their natural habitat. Consequently, the Bald Eagle Act passed in 1940, and eagle populations slowly began to improve. However, farmers were using an insecticide called DDT on their crops. This chemical was believed to poison the birds and cause them to produce unhealthy and fewer eggs.

The U.S. Fish & Wildlife Service declared the bald eagle an endangered species in the United States on July 4, 1976. Eventually, the use of DDT was banned, laws protecting their nesting trees were passed, and the eagles slowly began to recover. Due to increased protective measures and regulations, scientific and commercial data indicate that the bald eagle has recovered. Thus, effective August 8, 2007, the U.S. Fish and Wildlife Service delisted the bald eagle (*Haliaeetus leucocephalus*) in the lower 48 States of the United States from the Federal List of Endangered and Threatened Wildlife. Even though the bald eagle is delisted, it continues to be protected by other Federal laws: the Bald and Golden Eagle Protection Act, the Migratory Bird Treaty Act, and the Lacey Act. The Endangered Species Act requires that the Secretary of Interior "implement a system in cooperation with the States to monitor effectively for not less than five years the status of all species which have recovered". This provision mandates a monitoring program for five years after delisting. The Service recommends monitoring of bald eagles for 20 years. The purpose of the monitoring program was to document bald eagle population health. If problems with bald eagle population were detected during this monitoring period, the species could be quickly relisted under the Act.

During the winter months, eagles migrate south from their native habitats in Canada and the northernmost United States, such as Wisconsin, to regions along rivers and streams where they can obtain food in unfrozen waters. Specifically, these birds of prey focus their attention to waters immediately below dams where the water never freezes, and they can have open access to the fish found there.

During the months of December, January, and February, the Rock Island District of the U.S. Army Corps of Engineers conducts a winter survey to monitor the presence of the American bald

eagle. Eagles gather near open water during winter months to feed on fish. At 16 locks and dams along the Mississippi and Illinois Rivers, lock personnel take counts of the birds on a weekly basis. These surveys are conducted at 8:30 every Wednesday morning. Then, those numbers are organized into this collaborative report, which can be used for research, recreation, and general knowledge. Data gathered for this report is distributed weekly to the public on the following website <http://www.mvr.usace.army.mil/Missions/Recreation/MississippiRiverProject/Education/EagleWatching/EagleCounts.aspx>.

The US Army Corps of Engineers visitor centers along the Upper Mississippi River and Illinois Waterway frequently receive inquiries regarding locations where eagles are most prevalent. This information assists travelers planning their trips to the Mississippi River Valley. When visitors come to see the eagles, it gives the Corps an opportunity to educate the public about its missions.

The results of this year's survey (2016-2017) are included in the following pages. Eagles continue to reside in the area outside of the described three-month period, but December through February is the primary season for their migration south.



Figure 1. Map of locks & dams along the Upper Mississippi River & Illinois Waterway where annual eagle counts take place—L/D 11-22 on Upper Mississippi River; Marseilles, Starved Rock, Peoria, & LaGrange L/D's on Illinois Waterway.



Summary of 2016-2017 Findings

In all, 1,532 eagles were sighted during the 2016-17 survey period. Total adults sightings were 1,164; juveniles were 339; and unknowns were 29 (see Figures 2-3 for percent totals by age class). The total number of eagles counted this season was down from 1,736 (in 2015-16) to 1,532 (in 2016-17). Total sightings on the Upper Mississippi River decreased from 1,694 (in 2015-16) to 1,497 (in 2016-17). Total sightings along the Illinois Waterway were also down this year from 42 (in 2015-16) to 35 (in 2016-17).

The survey was conducted every Wednesday morning within the hour of 830-930 beginning the first week in December 2016 through the last week in February 2017 (see Figure 4 for distribution of total sightings by Lock & Dams).

Overall, the number of eagles sighted during the 2016-2017 season decreased slightly. One possible reason for this observed trend was that it was an unusually warm winter, with reduced ice cover in many river reaches. Without ice cover throughout the river, the eagles are not restricted to feeding near the Lock and Dams. However, the District will continue to monitor eagles to ensure that 2016-2017 was an anomaly, rather than the beginning of a decline in eagle populations.

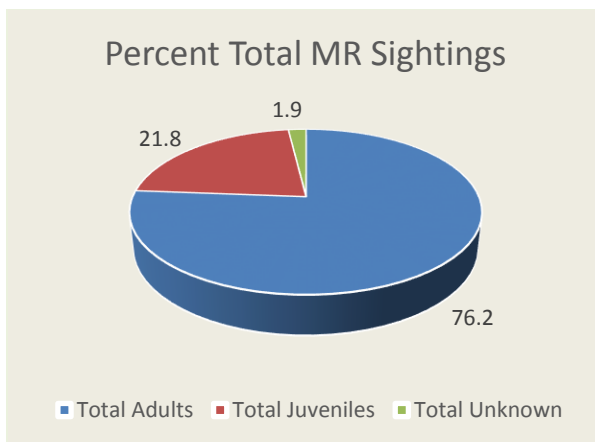


Figure 2. Pie Chart Depicting % Total Miss River Sightings by Age Class

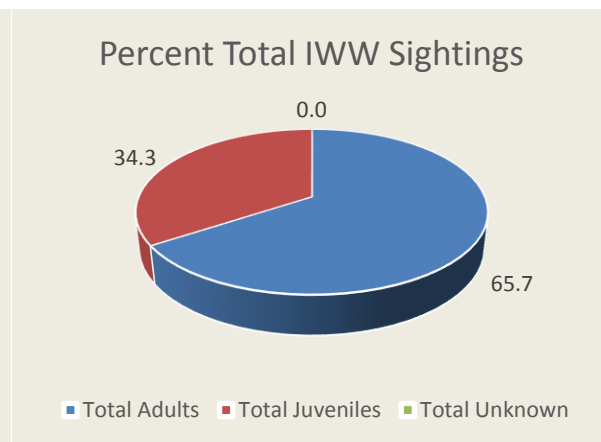


Figure 3. Pie Chart Depicting % Total IWW River Sightings by Age Class

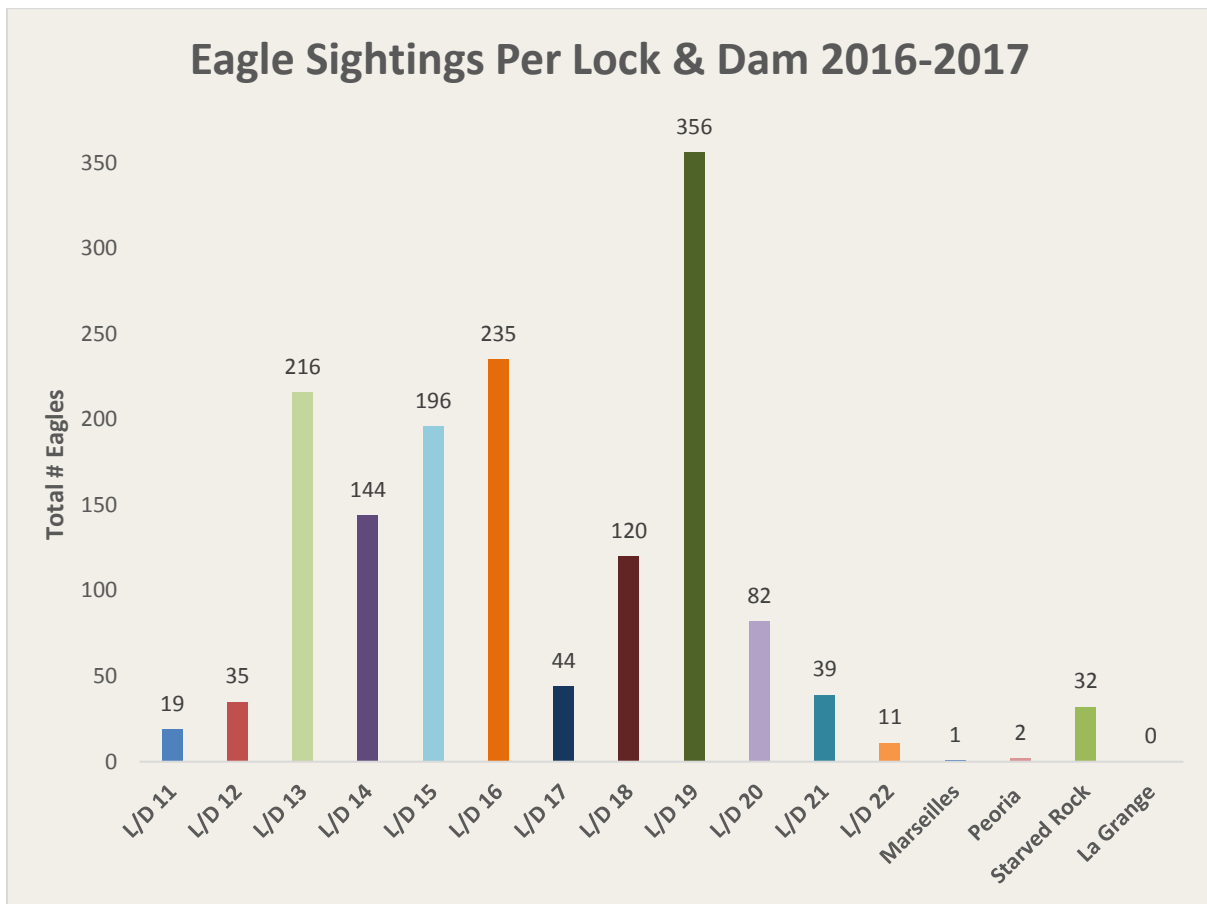


Figure 4. Bar graph showing distribution of total eagle sightings at all locks & dams during 2016-17 season

Table 1. Bald eagle sightings in the tail waters of **Upper Mississippi River** dams during the winter 2016-2017

Lock & Dam	Adults	Juveniles	Unknown	Total
L/D 11+	19	0	0	19
L/D 12	27	8	0	35
L/D 13+	178	38	0	216
L/D 14*	110	21	13	144
L/D 15	128	59	9	196
L/D 16	177	58	0	235
L/D 17	43	1	0	44
L/D 18*	105	15	0	120
L/D 19*	259	92	5	356
L/D 20+	52	30	0	82
L/D 21+	32	5	2	39
L/D 22*	11	0	0	11
Total	1141	327	29	1497

^ Some data collected at other than standard time.

* Data not collected during one week of the sampling period

+ Data not collected during two or more weeks of the sampling period

Table 2. Bald eagle sightings in the tail waters of the **Illinois Waterway** dams during the winter 2016-2017

Lock & Dam	Adults	Juveniles	Unknown	Total
LaGrange+	0	0	0	0
Marseilles+	1	0	0	1
Peoria+	2	0	0	2
Starved Rock	20	12	0	32
Total	23	12	0	35

+ Data not collected during two or more weeks of the sampling period.

* Data not collected during one week of the sampling period

Table 3. Bald eagle sightings in the tail waters of **both** the **Upper Mississippi River** and the **Illinois Waterway** dams during the winter of 2016-2017.

Adults	Juveniles	Unknown	Total
1164	339	29	1532

Total Number of Eagles Sighted Per Season on Both Miss & IWW (Dec - Feb)

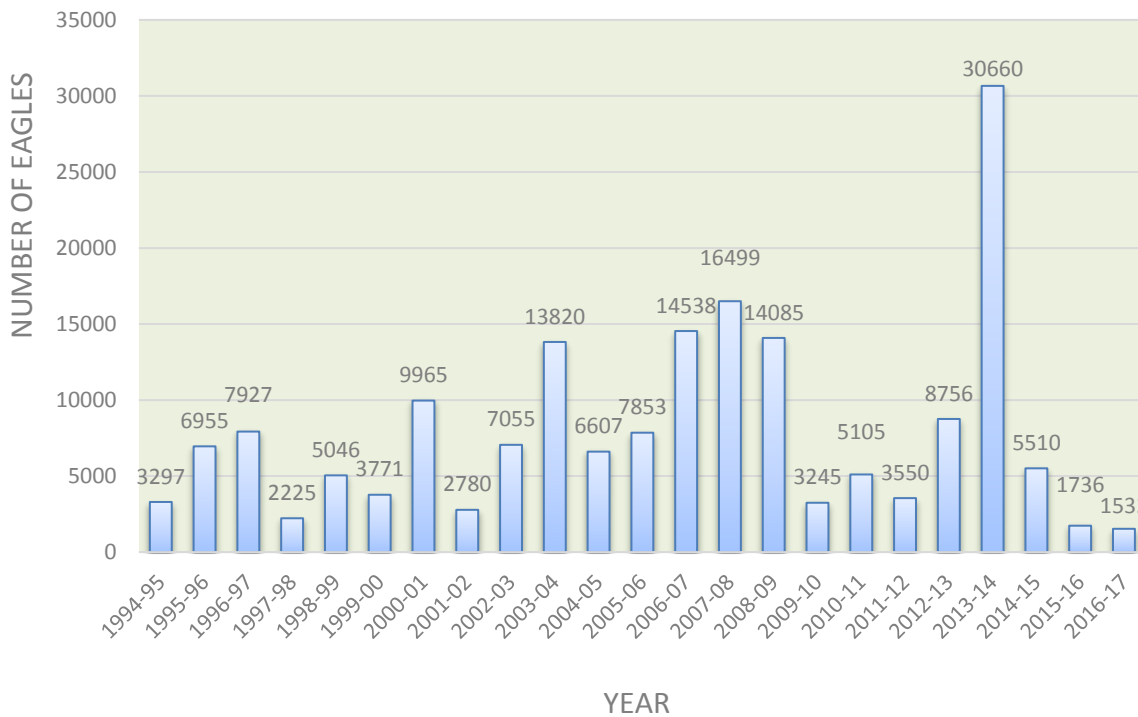


Figure 5. Graph of total number of eagles sighted 1994-2017 season

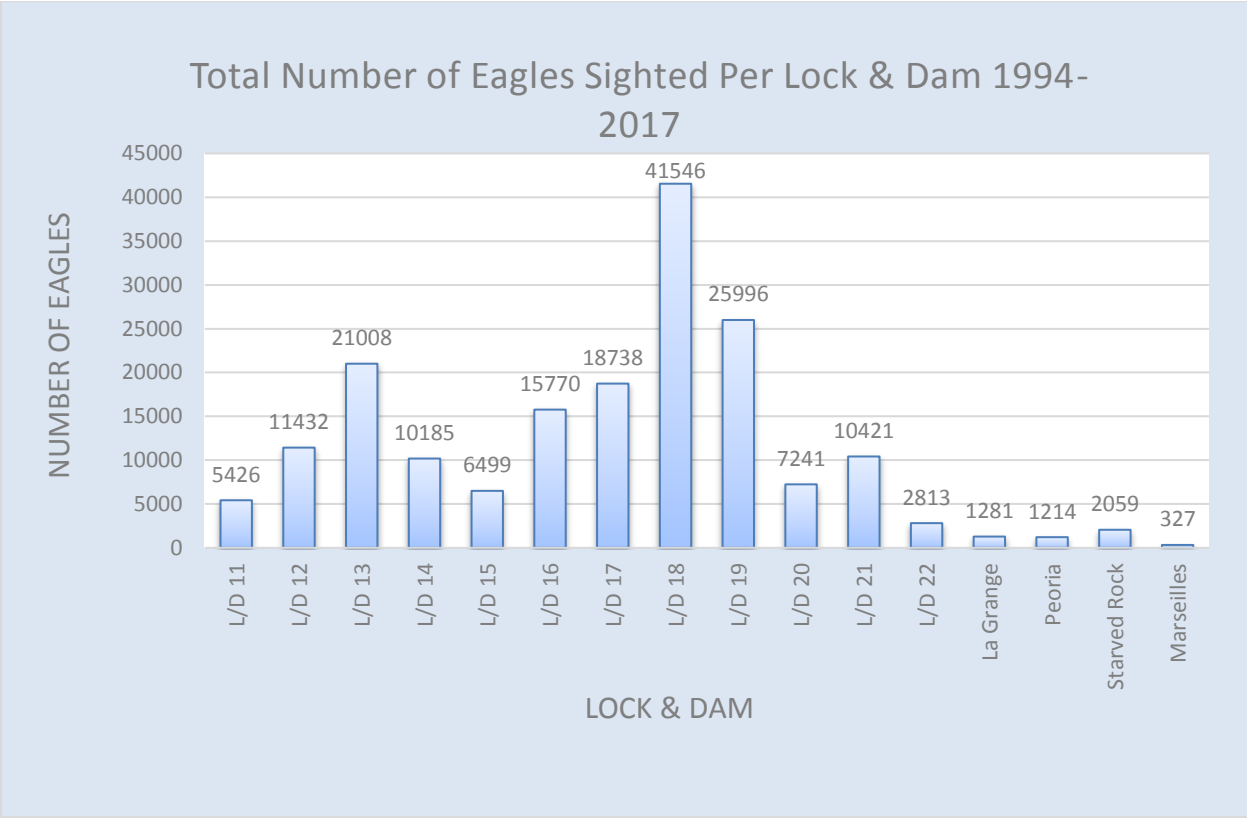
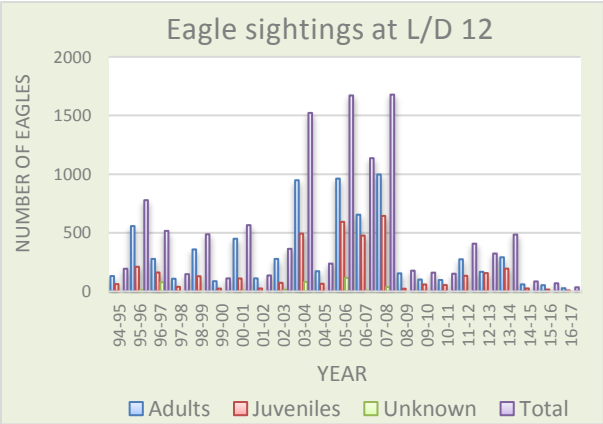
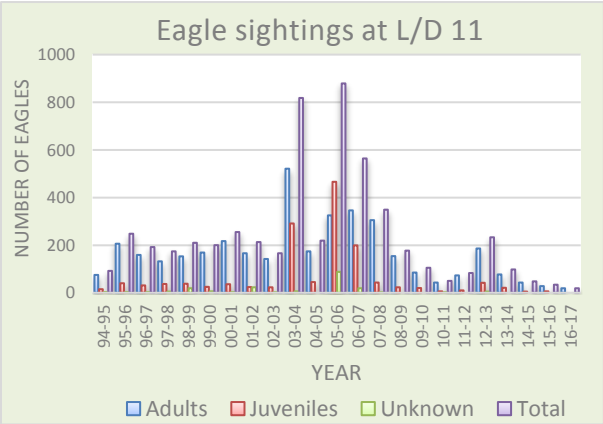
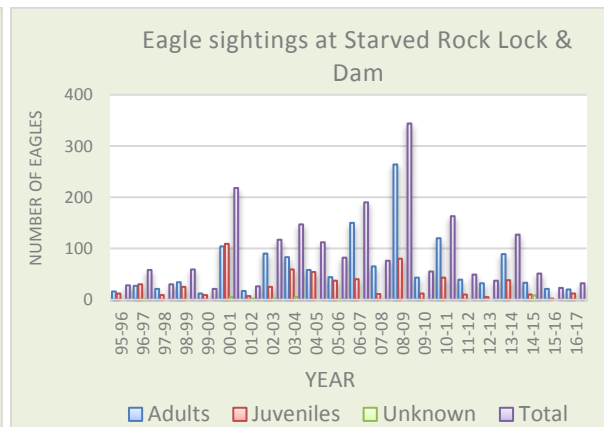
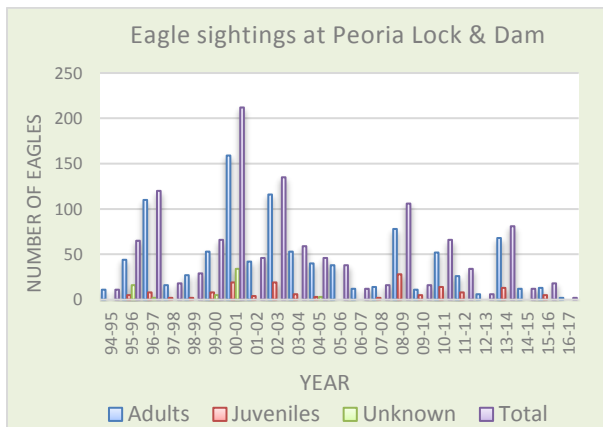
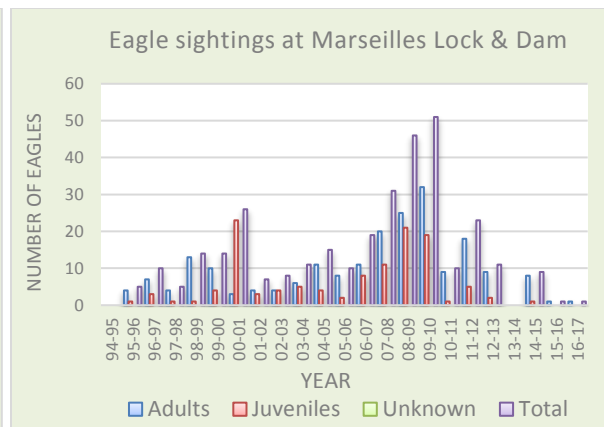
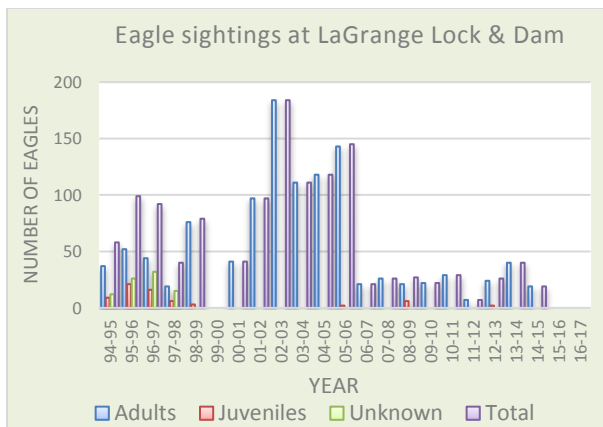
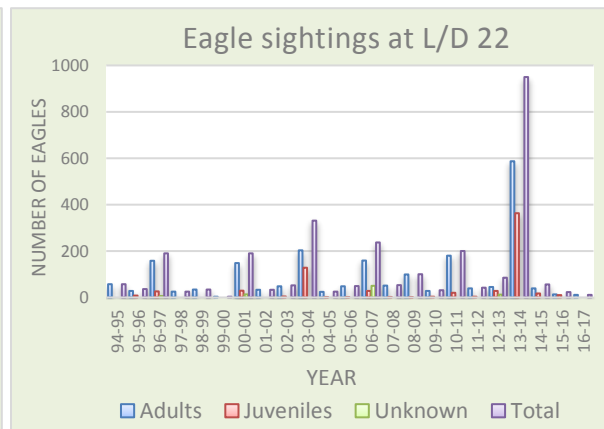
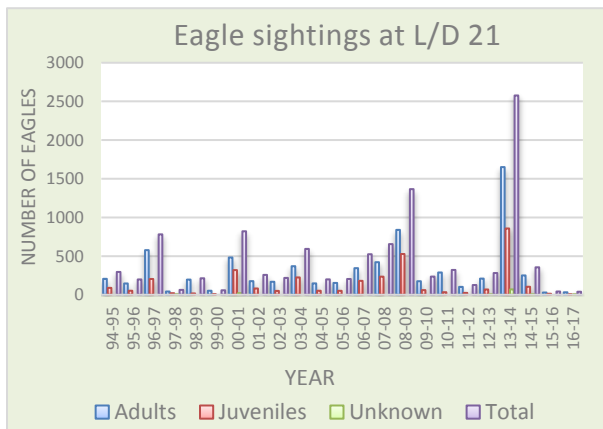


Figure 6. Eagles sighted per Lock & Dam 1994-2017 seasons





A special thanks to all the lockmasters and their assistants—without their participation and efforts, this long history and seasonal information would not be available.