

Peregrine Falcon Restoration in Iowa

2022 Nesting Report –Iowa DNR

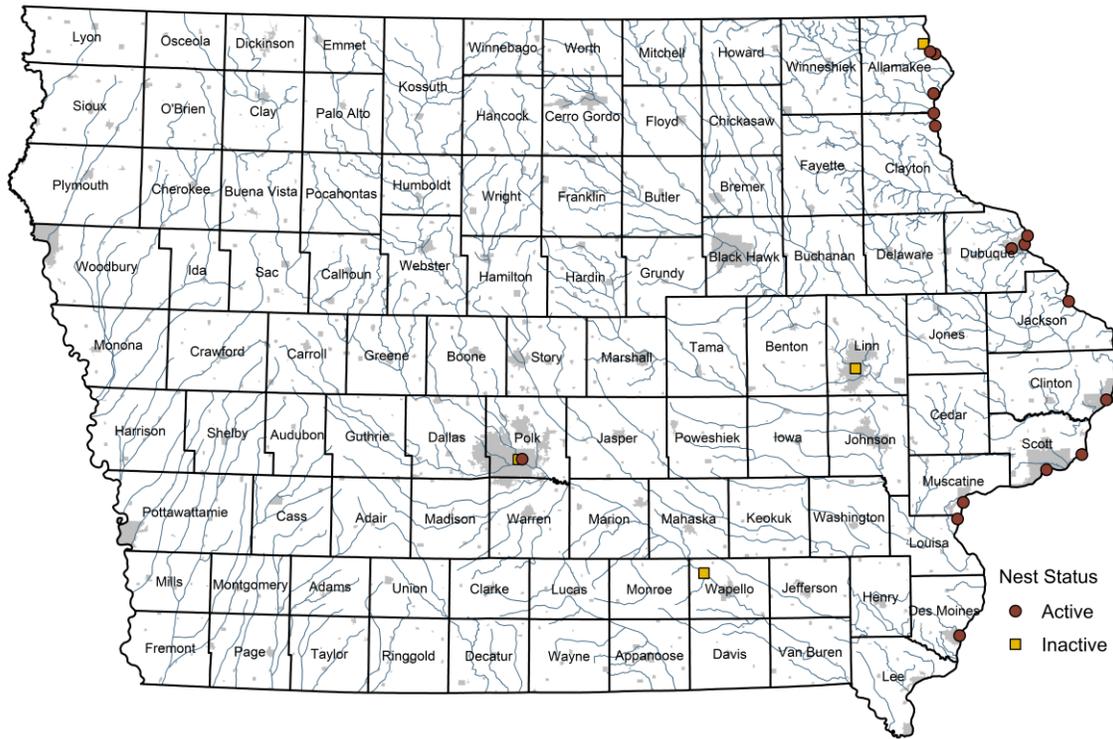
The Peregrine Falcon (*Falco peregrinus*) restoration program in Iowa began in 1989 with 23 birds released in Cedar Rapids followed by another 19 released in Des Moines in 1991. Between 1989 and 2003, a total of 169 captively reared birds were released in Iowa, feeding into a regional restoration effort that saw 875 birds released across the Midwest. In 1999, a further milestone was reached in Iowa when the first pair of birds nested on their historic nesting grounds along the Mississippi River bluffs. As of 2022, most of the Peregrine Falcon nesting occurs in the eastern half of the state in three main environments: Urban, Mississippi River bluff faces, and energy plant towers (Figure 1).

Monitoring of nest sites is accomplished by a network of volunteer and professional surveyors. The Raptor Resource Project monitors and bands a number of Peregrine nest sites in the Northeastern corner of the state. Several of the nest sites are on power plants which have restricted access so we rely on employees who not only monitor the nest sites but are often wonderful stewards for the birds. Surveyors collect data on the nest's activity and whether the pair are successful in producing fledglings. Some opportunistic reports of nesting activity are also accepted if no formal data is available.

There were 20 known nest sites in 2022 which have recently been active or were suspected active. Reports were received on all 20 nest sites in 2022 (Table 1 and Table 2). Four nest sites were inactive this year. One of these was also inactive in 2021, one was not monitored in 2021, and two were active in 2021. Of the 16 active nests, 5 failed to produce young, 8 were successful, and 3 had an unknown outcome (Table 1 and Table 2).

Comparing 2022 data to recent years indicates that 2022 was a slightly below average year for breeding Peregrines, with the same number of active/recently active nest sites as in 2021 (Figure 2) but with a lower percentage of successful nests (50%) than in 2020 (62%) and 2021 (63%; Figure 3). A minimum of 21 Peregrine Falcons fledged in Iowa in 2022, slightly lower than the past two years (Figure 4). There was an average of 1.62 young produced per nest in 2022 which was lower than the 6-year average of 2.01 young per nest between 2016 and 2021 (Figure 5). In 2022, Peregrine Falcons and other birds faced a unique disease challenge, the spread of a new strain of Highly Pathogenic Avian Influenza (H5N12.3.4.4). Highly Pathogenic Avian Influenza (HPAI) predominantly effects wild waterfowl but can also be spread to species that eat waterfowl, such as Peregrine Falcons and Eagles. In 2022 the Iowa DNR documented the loss of one nesting Peregrine to HPAI. Overall, Iowa's nesting population of Peregrine Falcons appears to be stable, with birds generally returning to historic nesting sites each year, but this recovering population continues to warrant annual monitoring.

The DNR will continue to monitor Peregrine Falcon nest sites with the partnership of volunteers and others who care about falcons in Iowa. Falcon nest sites can be very challenging to monitor because of their location and the territoriality of the birds so any data received is much appreciated. Thanks to wonderful volunteers, all nest sites were monitored in 2022, but let the Volunteer Wildlife Monitoring Program coordinator know if you'd like to help in the future, vwmp@dnr.iowa.gov.



Produced by Iowa DNR Wildlife Diversity Program, December 2022

Figure 1. Statewide map showing 2022 nest locations (16 active, 4 inactive, 0 not monitored).

Table 1. Summary of Nesting Results, 2016-2022.

	2016	2017	2018	2019	2020	2021	2022
Number of Nests with Active Status	18	18	20	18	19	20	20
Number of Nests Reported On	18	18	16	15	16	17	20
Number of Inactive Nests	0	1	2	1	3	1	4
Number of Active Nests	18	17	14	14	13	16	16
Number of Nests Failed	4	6	2	5	2	5	5
Number of Nests Successful	14	10	8	5	8	11	8
Monitored Nests with Unknown Outcome	0	1	4	4	3	0	3
Minimum Total of Young Produced	36	21	20	9	22	28	21
Average Young per Nest	2.00	1.31	2.00	1.80	2.20	1.75	1.62

Table 2. 2022 Nest Site Activity in Iowa.

Nest ID	County	2022 Activity	Outcome	Young Fledged
22	Jackson	Active	Failed	0
29	Allamakee	Active	Failed	0
134	Dubuque	Active	Failed	0
148	Clayton	Active	Failed	0
153	Dubuque	Active	Failed	0
6	Clinton	Active	Successful	4
21	Clayton	Active	Successful	2
27	Allamakee	Active	Successful	3
31	Polk	Active	Successful	2
42	Scott	Active	Successful	3
130	Dubuque	Active	Successful	2
131	Muscatine	Active	Successful	3
133	Allamakee	Active	Successful	2
36	Scott	Active	Unknown	0
37	Des Moines	Active	Unknown	0
43	Louisa	Active	Unknown	0
19	Linn	Inactive	No Activity	0
20	Polk	Inactive	No Activity	0
30	Allamakee	Inactive	No Activity	0
38	Wapello	Inactive	No Activity	0

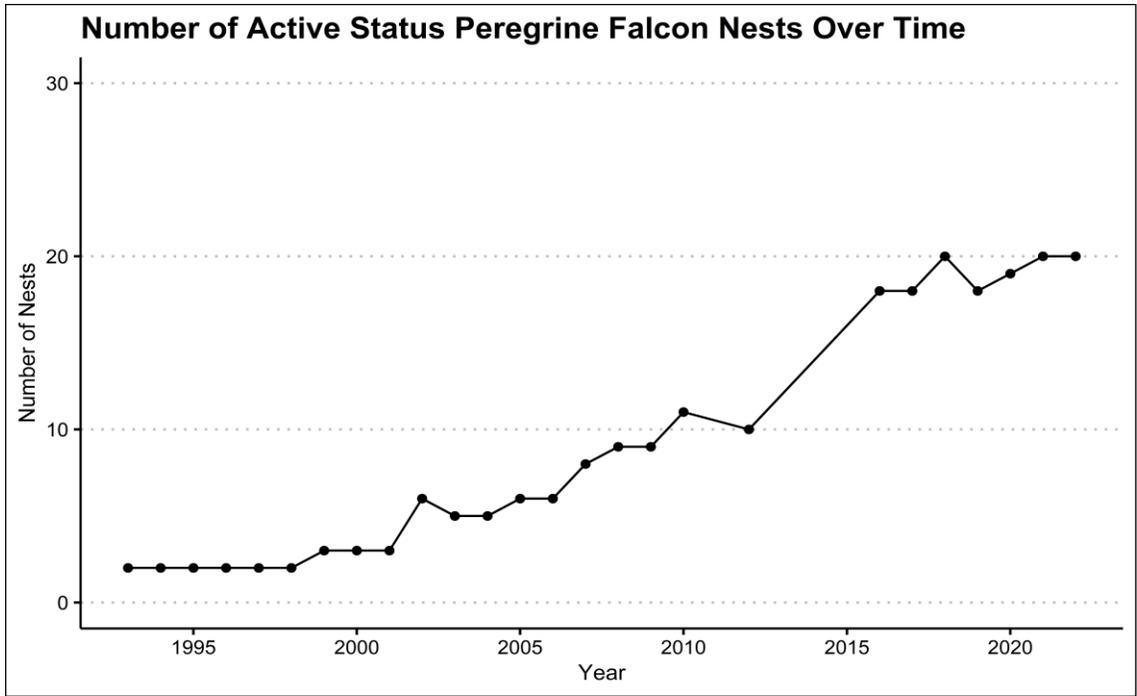


Figure 2. The total number of active status nests from 1993-2022 (data from 2012-2015 was incomplete, thus not shown here).

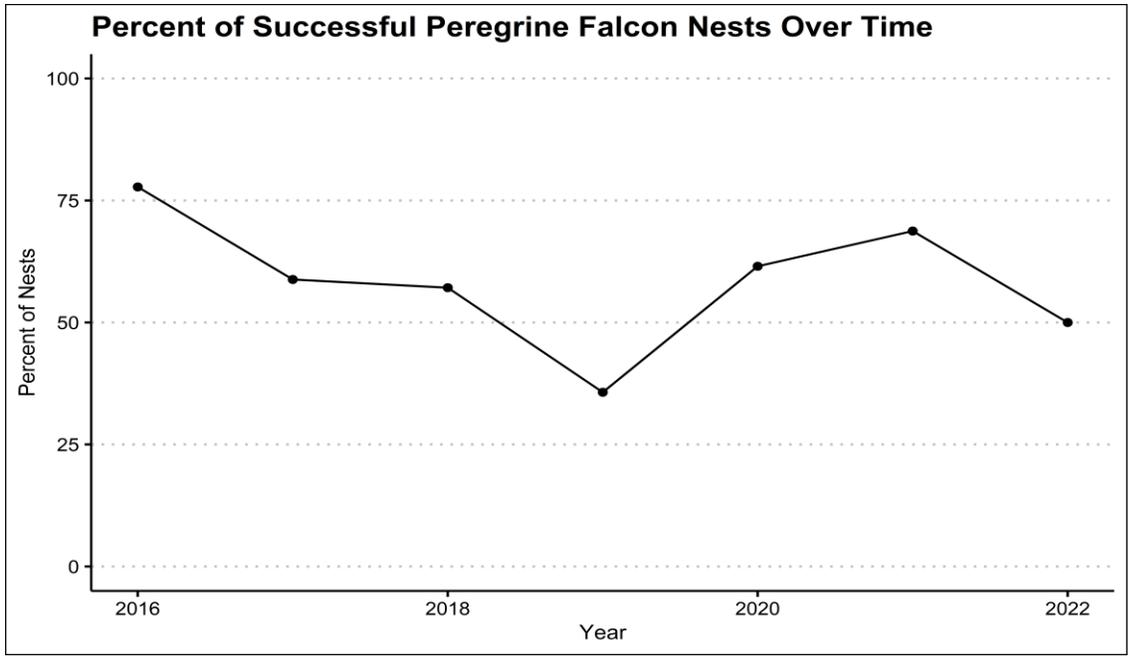


Figure 3. The percent of active and successful nests (out of total nests monitored) from 2016-2022.

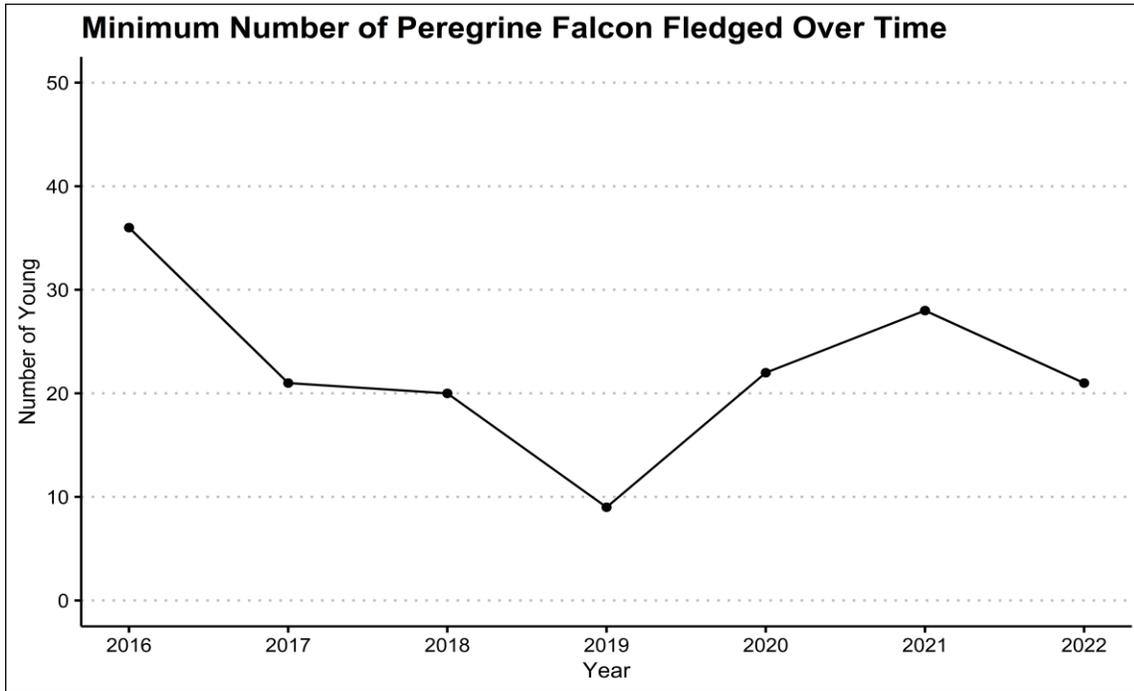


Figure 4. The minimum number of young fledged per year from 2016-2022.

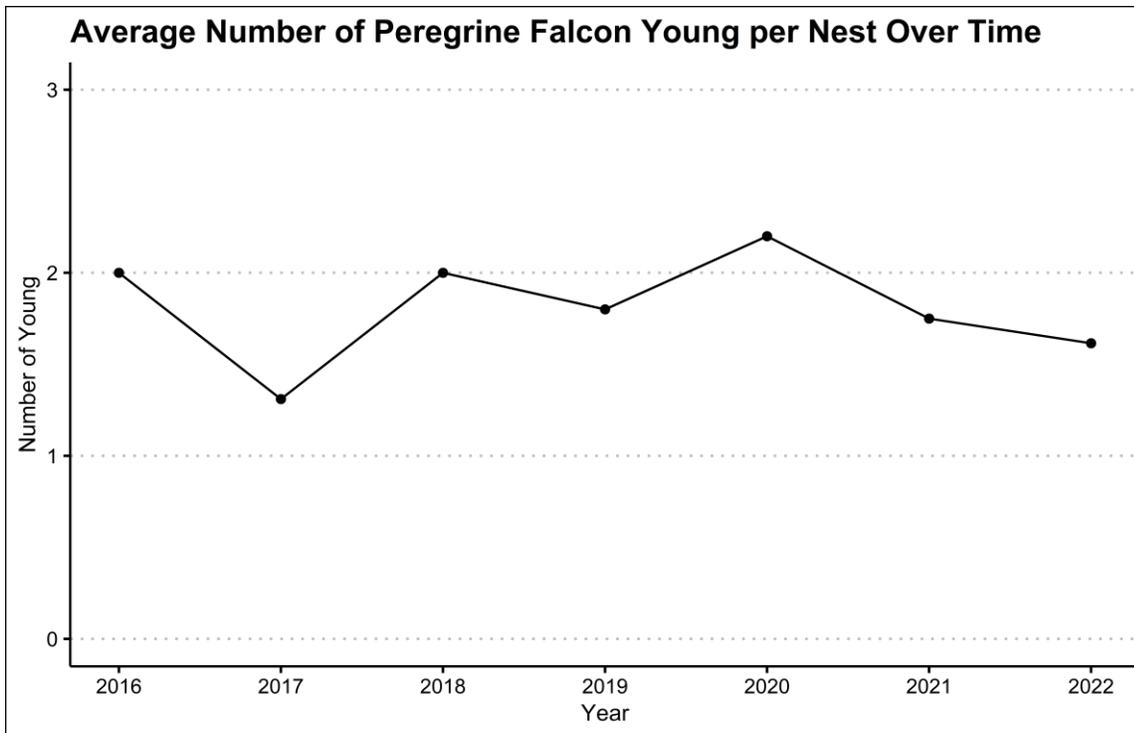


Figure 5. The average number of young fledged per nest from 2016-2022.