

Osprey Restoration in Iowa

2022 Nesting Report – Iowa DNR

The Osprey restoration program in Iowa began in 1997 and involved translocating young birds from Minnesota and Wisconsin to strategic locations across Iowa. The last year that birds were released was 2016 and currently, the objective is to monitor nesting activity. There are three main areas in the state where Osprey have become well established: the Iowa City to Waterloo corridor, Des Moines and vicinity, and Spirit Lake and vicinity. There are also two nesting pairs on the western border of Iowa south of Sioux City and new nest sites were found in Butler and Guthrie Counties in 2022 (Figure 1).

Monitoring of nest sites is accomplished primarily by volunteers. Volunteers are assigned to a particular nest or nests and new nests are reported opportunistically. Volunteers visit the nest multiple times during the breeding season and try to gather information on nest activity at the start of the nesting season and whether the pair is successful in fledging young towards the end of the nesting season. Some opportunistic reports of nesting activity are also accepted if no formal data is available.

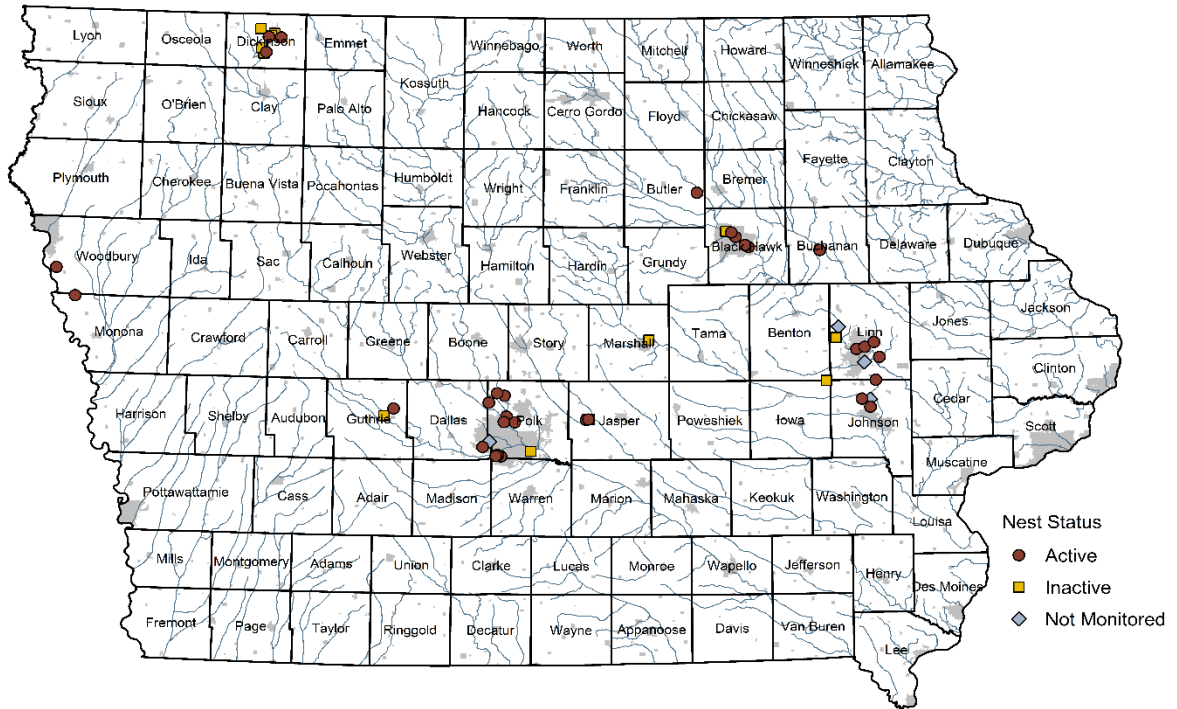
There were 52 Osprey nests that were designated as active (active in the last 3 years) or with unknown status (no updates on the nest recently; Figure 2) in 2022. Six new nests were reported this year. A total of 48 nests were reported on during or after the nesting season (Table 1 and 2). Sixteen of these 48 nests were reported as inactive in 2022, with 32 having some Osprey activity on or near the nest. Of the active nests, 5 had no reported outcome, 7 failed to produce young, and 19 were successful in producing young.

The completeness of monitoring reports improved in 2022; 15.6% of monitored nests that were active had an unknown outcome (i.e. we do not know if the nest successfully fledged young or failed) compared to 27.6% of nests in 2021. This lower proportion of nests with unknown fate is much more similar to average rates over the last 6 years than were rates in 2021.

In 2022, 59.4% of monitored active nests were successful (19 nests; Figure 3) and a minimum total of 35 young were fledged (Figure 4). An average of 1.35 young were produced per known-outcome active nest (Figure 5). In 2018, there were a record 5 active nests in the Spirit Lake area but only two active nests were documented in 2021. This year, 3 active nests were reported. Additional years of nesting data will help us understand the stability of this segment of the population.

In future years, the DNR will continue to monitor Osprey nest sites with the partnership of volunteers. One ongoing challenge is the fact that Osprey like nesting on cell phone towers. Osprey don't generally cause damage to the towers but conflicts can arise when work must be done on a tower during the nesting season, especially since over half of Iowa nest sites are on towers. We will continue to work with partners on managing this potential conflict.

Finally, a huge thank you to all the volunteers who are vital to tracking the recovery of this species! You are invaluable. Please contact the Volunteer Wildlife Monitoring Program coordinator if you are interested in helping with monitoring in the future; vwmp@dnr.iowa.gov.



Produced by Iowa DNR Wildlife Diversity Program, December 2022

Figure 1. Statewide map showing 2022 nest locations (32 active, 16 inactive, 4 not monitored).

Table 1. Summary of 2022 Nesting Results

	2016	2017	2018	2019	2020	2021	2022
Number of Nests with Active Status	30	NA	40	41	43	45	52
Number of Nests Reported On	30	28	32	28	43	42	48
Number of Inactive Nests	5	NA	3	3	14	13	16
Number of Active Nests	24	28	29	25	29	29	32
Number of Nests Failed	2	5	8	10	9	6	7
Number of Nests Successful	22	23	16	12	18	15	19
Monitored Nests with Unknown Outcome	NA	NA	5	3	2	8	5
Minimum Total of Young Produced	42	47	30	24	36	26	35
Average Young per Nest	1.75	1.68	1.25	1.14	1.33	1.24	1.35

Table 2. 2022 Nest Site Activity in Iowa

Nest ID	County	2022 Activity	Outcome	Young Fledged
18	Dallas	Active	Failed	0
35	Woodbury	Active	Failed	0
105	Polk	Active	Failed	0
142	Polk	Active	Failed	0
143	Black Hawk	Active	Failed	0
151	Linn	Active	Failed	0
155	Polk	Active	Failed	0
33	Polk	Active	NestGone/NotFound	0
2	Monona	Active	Successful	2
3	Dickinson	Active	Successful	2
8	Polk	Active	Successful	2
11	Black Hawk	Active	Successful	2
17	Buchanan	Active	Successful	2
32	Polk	Active	Successful	2
111	Polk	Active	Successful	2
114	Linn	Active	Successful	1
122	Polk	Active	Successful	2
124	Jasper	Active	Successful	2
129	Dickinson	Active	Successful	2
132	Linn	Active	Successful	2
136	Black Hawk	Active	Successful	1
138	Polk	Active	Successful	2
152	Linn	Active	Successful	2
154	Polk	Active	Successful	2
156	Guthrie	Active	Successful	1
157	Dickinson	Active	Successful	1
158	Black Hawk	Active	Successful	3
15	Linn	Active	Unknown	0
120	Johnson	Active	Unknown	0
123	Johnson	Active	Unknown	0
144	Jasper	Active	Unknown	0

Nest ID	County	2022 Activity	Outcome	Young Fledged
159	Butler	Active	Unknown	0
10	Black Hawk	Inactive	NestGone/NotFound	0
110	Polk	Inactive	NestGone/NotFound	0
118	Guthrie	Inactive	NestGone/NotFound	0
140	Iowa	Inactive	NestGone/NotFound	0
14	Linn	Inactive	No Activity	0
45	Jasper	Inactive	No Activity	0
119	Dickinson	Inactive	No Activity	0
125	Jasper	Inactive	No Activity	0
126	Jasper	Inactive	No Activity	0
127	Jasper	Inactive	No Activity	0
128	Dickinson	Inactive	No Activity	0
137	Dickinson	Inactive	No Activity	0
139	Dickinson	Inactive	No Activity	0
141	Dickinson	Inactive	No Activity	0
145	Jasper	Inactive	No Activity	0
150	Marshall	Inactive	No Activity	0
13	Linn	Not Monitored	N/A	0
25	Johnson	Not Monitored	N/A	0
28	Linn	Not Monitored	N/A	0
113	Dallas	Not Monitored	N/A	0

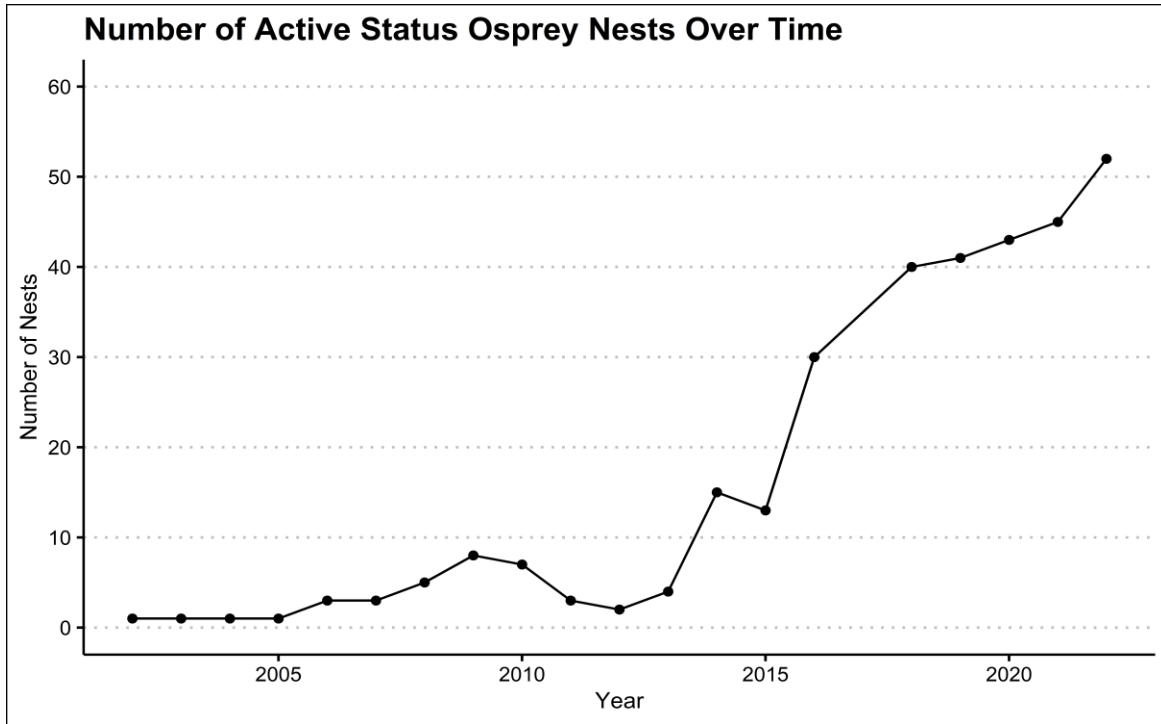


Figure 2. The total number of active status osprey nests in Iowa from 2002-2022.

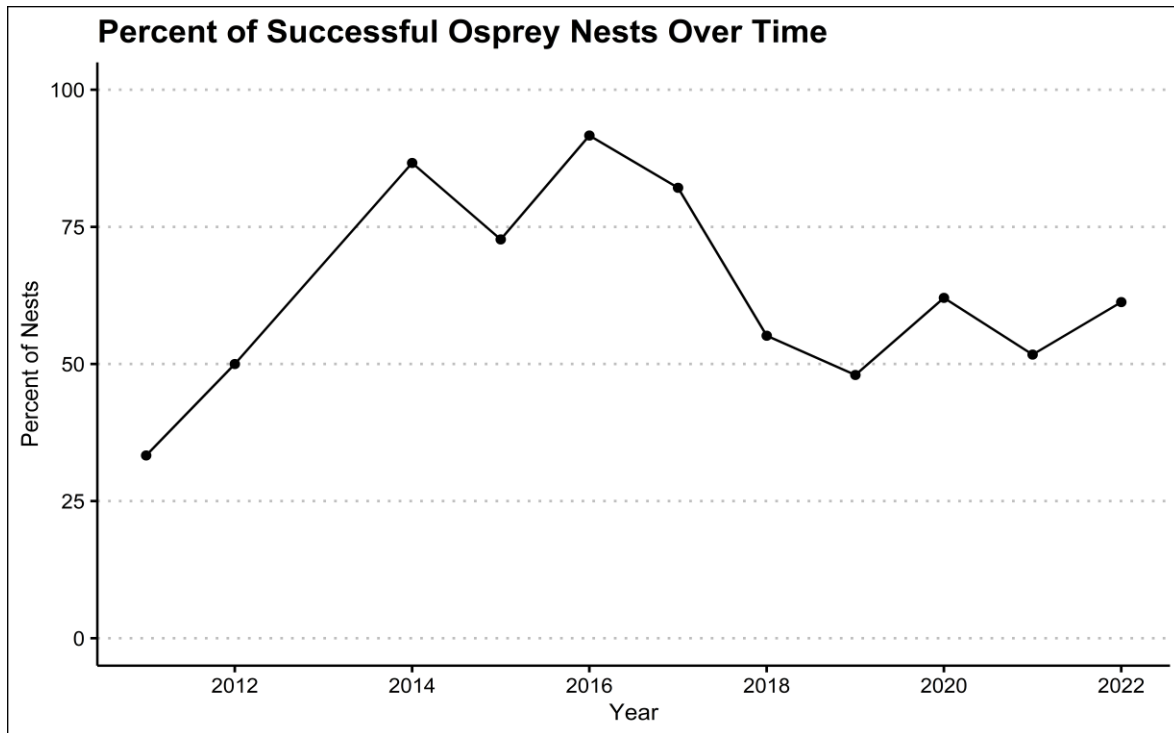


Figure 3. The percent of active and successful nests (out of total nests monitored) from 2011-2022.

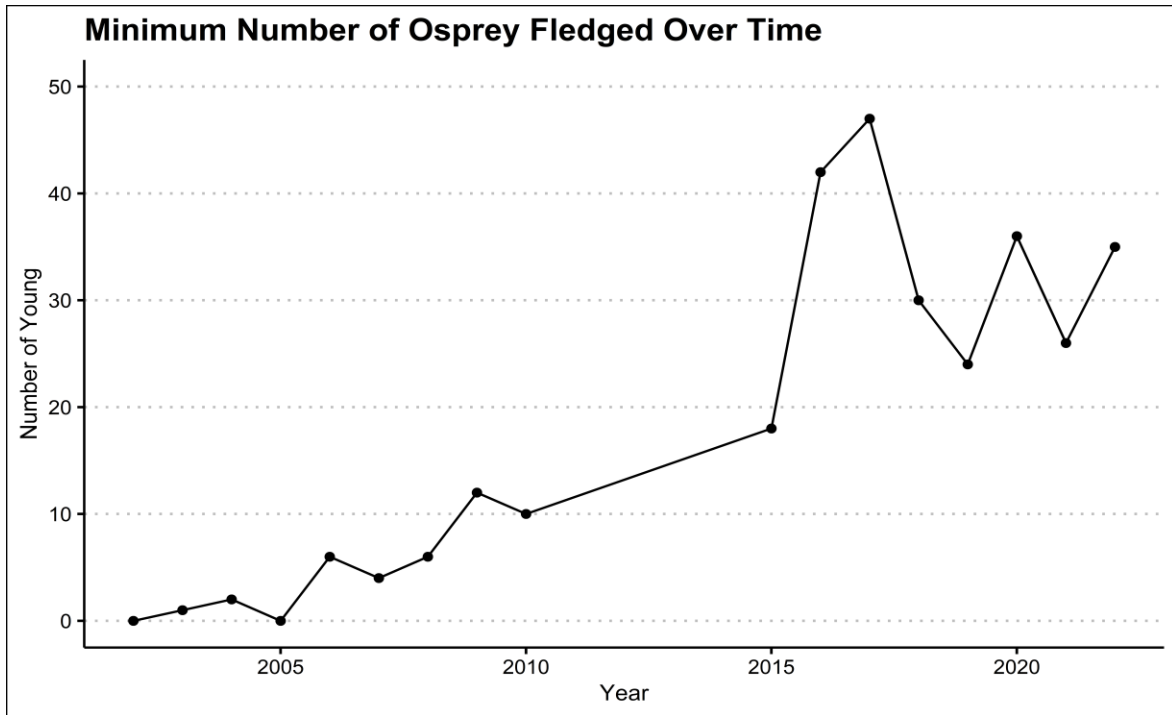


Figure 4. The minimum number of young fledged per year from 2002-2022 (data from 2011-2014 was incomplete, thus not shown here).

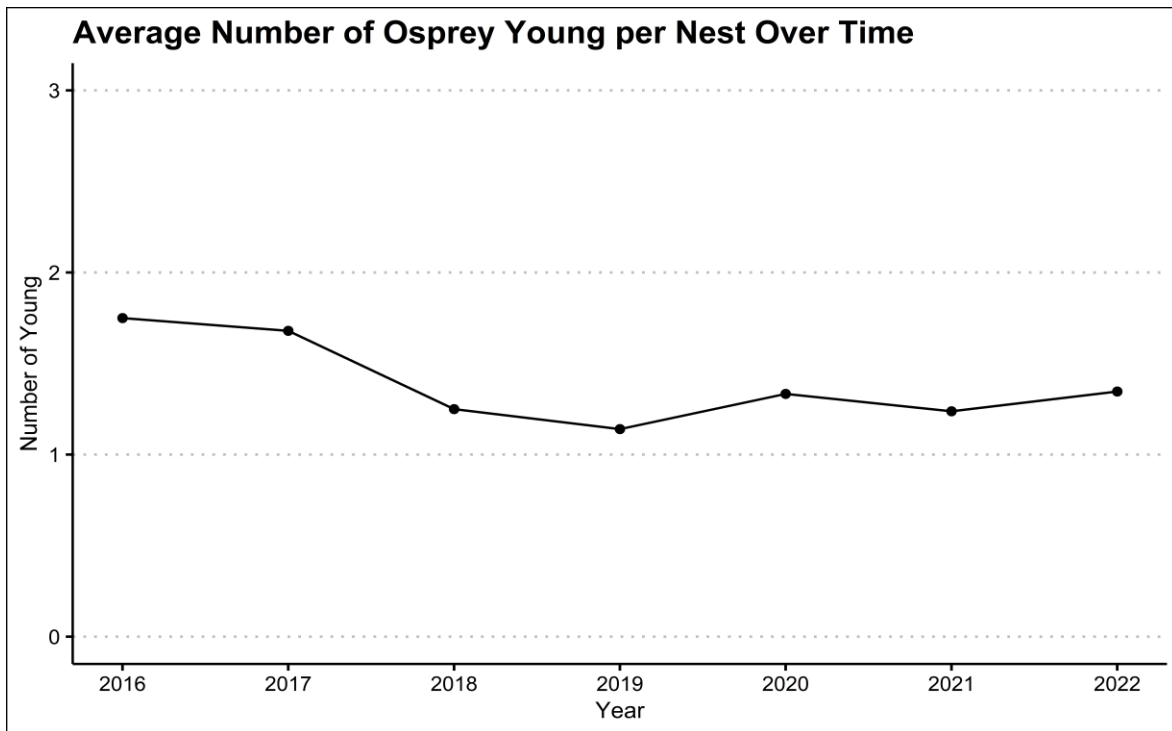


Figure 5. The average number of young fledged per nest from 2016-2022.