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.

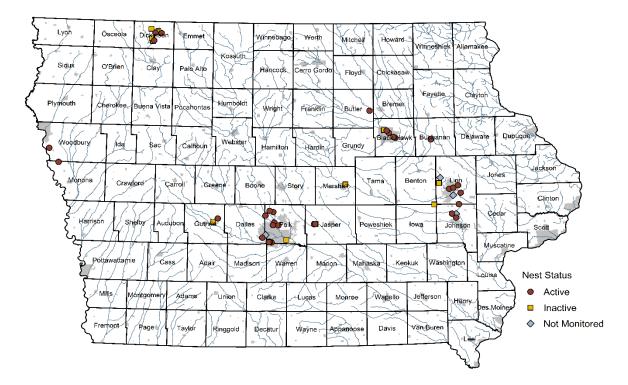
There were 52 Osprey nests that were designated as active (active in the last 3 years) or with unknown status (no updates on the nest recently; Figure 2) in 2022. Six new nests were reported this year. A total of 48 nests were reported on during or after the nesting season (Table 1 and 2). Sixteen of 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).

	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 1. Summary of 2022 Nesting Results

18DallasActiveFailed035WoodburyActiveFailed0105PolkActiveFailed0142PolkActiveFailed0143Black HawkActiveFailed0151LinnActiveFailed033PolkActiveFailed034PolkActiveSuccessful235PolkActiveSuccessful236PolkActiveSuccessful237PolkActiveSuccessful238PolkActiveSuccessful239BuchananActiveSuccessful231Black HawkActiveSuccessful231BuchananActiveSuccessful232PolkActiveSuccessful231PolkActiveSuccessful232PolkActiveSuccessful233PolkActiveSuccessful234PolkActiveSuccessful235InnActiveSuccessful236Black HawkActiveSuccessful237PolkActiveSuccessful238PolkActiveSuccessful239DickinsonActiveSuccessful2314JasperActiveSuccessful235Li	Nest ID	County	2022 Activity	Outcome	Young Fledged	
105PolkActiveFailed0142PolkActiveFailed0143Black HawkActiveFailed0151LinnActiveFailed0155PolkActiveSacesful033PolkActiveNestGone/NotFound02MononaActiveSuccessful234DickinsonActiveSuccessful235PolkActiveSuccessful236PolkActiveSuccessful237BuchananActiveSuccessful237BuchananActiveSuccessful237PolkActiveSuccessful237PolkActiveSuccessful231PolkActiveSuccessful232PolkActiveSuccessful232PolkActiveSuccessful233JasperActiveSuccessful234JasperActiveSuccessful235InnActiveSuccessful236Black HawkActiveSuccessful237DickinsonActiveSuccessful236Black HawkActiveSuccessful236Black HawkActiveSuccessful237DickinsonActiveSuccessful236Black HawkActiveSuccessful	18	Dallas	Active	Failed	0	
142PolkActiveFailed0143Black HawkActiveFailed0151LinnActiveFailed0155PolkActiveFailed033PolkActiveNestGone/NotFound02MononaActiveSuccessful234DickinsonActiveSuccessful235PolkActiveSuccessful236PolkActiveSuccessful211Black HawkActiveSuccessful211BuchananActiveSuccessful211PolkActiveSuccessful211PolkActiveSuccessful2114LinnActiveSuccessful2115JasperActiveSuccessful2124JasperActiveSuccessful2135IninActiveSuccessful2136Black HawkActiveSuccessful2137DickinsonActiveSuccessful2138PolkActiveSuccessful2154PolkActiveSuccessful1157DickinsonActiveSuccessful3158Black HawkActiveSuccessful3154LinnActiveSuccessful3155LinnActiveSuccessful3156GuthrieActiveSuccesf	35	Woodbury	Active	Failed	0	
143Black HawkActiveFailed0151LinnActiveFailed0155PolkActiveFailed033PolkActiveNestGone/NotFound02MononaActiveSuccessful23DickinsonActiveSuccessful28PolkActiveSuccessful211Black HawkActiveSuccessful211Black HawkActiveSuccessful212PolkActiveSuccessful213BuchananActiveSuccessful214Black HawkActiveSuccessful2111PolkActiveSuccessful2112PolkActiveSuccessful2114LinnActiveSuccessful2115JasperActiveSuccessful2124JasperActiveSuccessful2135Black HawkActiveSuccessful2136Black HawkActiveSuccessful2152LinnActiveSuccessful2154PolkActiveSuccessful3154PolkActiveSuccessful3155LinnActiveSuccessful3154Black HawkActiveSuccessful3155LinnActiveSuccessful3154Black HawkActive <td>105</td> <td>Polk</td> <td>Active</td> <td>Failed</td> <td colspan="2">0</td>	105	Polk	Active	Failed	0	
151LinnActiveFailed0155PolkActiveFailed033PolkActiveNestGone/NotFound02MononaActiveSuccessful23DickinsonActiveSuccessful28PolkActiveSuccessful211Black HawkActiveSuccessful212BuchananActiveSuccessful213BuchananActiveSuccessful214PolkActiveSuccessful2111PolkActiveSuccessful2112PolkActiveSuccessful2114LinnActiveSuccessful2115DickinsonActiveSuccessful2114LinnActiveSuccessful2125DickinsonActiveSuccessful2136Black HawkActiveSuccessful2137DickinsonActiveSuccessful2138PolkActiveSuccessful2154InnActiveSuccessful2155LinnActiveSuccessful3154PolkActiveSuccessful3155LinnActiveSuccessful3154Black HawkActiveSuccessful3154JohnsonActiveSuccessful3154JohnsonActive <td< td=""><td>142</td><td>Polk</td><td>Active</td><td>Failed</td><td>0</td></td<>	142	Polk	Active	Failed	0	
155PolkActiveFailed033PolkActiveNestGone/NotFound02MononaActiveSuccessful23DickinsonActiveSuccessful28PolkActiveSuccessful211Black HawkActiveSuccessful212BuchananActiveSuccessful211PolkActiveSuccessful211PolkActiveSuccessful2111PolkActiveSuccessful2112PolkActiveSuccessful2114LinnActiveSuccessful2125PolkActiveSuccessful2126JasperActiveSuccessful2137Black HawkActiveSuccessful2138PolkActiveSuccessful2139DickinsonActiveSuccessful2154PolkActiveSuccessful2155LinnActiveSuccessful3154Black HawkActiveSuccessful3155LinnActiveSuccessful3154JahsonActiveSuccessful3155LinnActiveSuccessful3154Jack HawkActiveSuccessful3154JahsonActiveSuccessful3154JahsonActiveU	143	Black Hawk	Active	Failed	0	
33PolkActiveNestGone/NotFound02MononaActiveSuccessful23DickinsonActiveSuccessful28PolkActiveSuccessful211Black HawkActiveSuccessful217BuchananActiveSuccessful232PolkActiveSuccessful2111PolkActiveSuccessful2112PolkActiveSuccessful2114LinnActiveSuccessful2124JasperActiveSuccessful2125DickinsonActiveSuccessful2136Black HawkActiveSuccessful2138PolkActiveSuccessful2154InnActiveSuccessful2155LinnActiveSuccessful2154Black HawkActiveSuccessful2155LinnActiveSuccessful3157DickinsonActiveSuccessful3158Black HawkActiveSuccessful3154LinnActiveSuccessful3155LinnActiveSuccessful3154JohnsonActiveUnknown0123JohnsonActiveUnknown0	151	Linn	Active	Failed	0	
2MononaActiveSuccessful23DickinsonActiveSuccessful28PolkActiveSuccessful211Black HawkActiveSuccessful217BuchananActiveSuccessful232PolkActiveSuccessful2111PolkActiveSuccessful2114LinnActiveSuccessful2114LinnActiveSuccessful2124JasperActiveSuccessful2125DickinsonActiveSuccessful2136Black HawkActiveSuccessful2138PolkActiveSuccessful2154PolkActiveSuccessful2155LinnActiveSuccessful2156GuthrieActiveSuccessful2157DickinsonActiveSuccessful2158Black HawkActiveSuccessful315LinnActiveSuccessful315LinnActiveSuccessful3153JohnsonActiveUnknown0120JohnsonActiveUnknown0	155	Polk	Active	Failed	0	
3DickinsonActiveSuccessful28PolkActiveSuccessful211Black HawkActiveSuccessful217BuchananActiveSuccessful232PolkActiveSuccessful2111PolkActiveSuccessful2114LinnActiveSuccessful2122PolkActiveSuccessful2124JasperActiveSuccessful2125DickinsonActiveSuccessful2136Black HawkActiveSuccessful2138PolkActiveSuccessful2154PolkActiveSuccessful2155LinnActiveSuccessful2156GuthrieActiveSuccessful2157DickinsonActiveSuccessful2158Black HawkActiveSuccessful3154JohnsonActiveSuccessful3155LinnActiveSuccessful3154JohnsonActiveSuccessful3154JohnsonActiveUnknown0120JohnsonActiveUnknown0	33	Polk	Active	NestGone/NotFound	0	
8PolkActiveSuccessful211Black HawkActiveSuccessful217BuchananActiveSuccessful232PolkActiveSuccessful2111PolkActiveSuccessful2114LinnActiveSuccessful2122PolkActiveSuccessful2124JasperActiveSuccessful2135DickinsonActiveSuccessful2136Black HawkActiveSuccessful2138PolkActiveSuccessful2154PolkActiveSuccessful2155GuthrieActiveSuccessful2154Black HawkActiveSuccessful2155LinnActiveSuccessful1157DickinsonActiveSuccessful3158Black HawkActiveSuccessful3153LinnActiveSuccessful3154JohnsonActiveSuccessful3155LinnActiveSuccessful3154JohnsonActiveUnknown0120JohnsonActiveUnknown0123JohnsonActiveUnknown0	2	Monona	Active	Successful	2	
11Black HawkActiveSuccessful217BuchananActiveSuccessful232PolkActiveSuccessful2111PolkActiveSuccessful2114LinnActiveSuccessful1122PolkActiveSuccessful2124JasperActiveSuccessful2129DickinsonActiveSuccessful2136Black HawkActiveSuccessful2138PolkActiveSuccessful2152LinnActiveSuccessful2154PolkActiveSuccessful2155GuthrieActiveSuccessful2156SuthiActiveSuccessful1157DickinsonActiveSuccessful1158Black HawkActiveSuccessful1158InnActiveSuccessful3154JohnsonActiveSuccessful3158JohnsonActiveSuccessful3150JohnsonActiveUnknown0120JohnsonActiveUnknown0123JohnsonActiveUnknown0	3	Dickinson	Active	Successful	2	
17BuchananActiveSuccessful232PolkActiveSuccessful2111PolkActiveSuccessful2114LinnActiveSuccessful1122PolkActiveSuccessful2124JasperActiveSuccessful2129DickinsonActiveSuccessful2132LinnActiveSuccessful2134Black HawkActiveSuccessful2135Black HawkActiveSuccessful2154PolkActiveSuccessful2155GuthrieActiveSuccessful2156Black HawkActiveSuccessful1157DickinsonActiveSuccessful1158Black HawkActiveSuccessful1158Black HawkActiveSuccessful1158JohnsonActiveSuccessful3150LinnActiveSuccessful3150JohnsonActiveSuccessful3150JohnsonActiveUnknown0151JohnsonActiveUnknown0152JohnsonActiveUnknown0153JohnsonActiveUnknown0154JohnsonActiveUnknown0155LinnActiveUnknown0154JohnsonAc	8	Polk	Active	Successful	2	
32PolkActiveSuccessful2111PolkActiveSuccessful2114LinnActiveSuccessful1122PolkActiveSuccessful2124JasperActiveSuccessful2129DickinsonActiveSuccessful2132LinnActiveSuccessful2134Black HawkActiveSuccessful2135Black HawkActiveSuccessful2154PolkActiveSuccessful2154PolkActiveSuccessful2155LinnActiveSuccessful2156GuthrieActiveSuccessful1157DickinsonActiveSuccessful1158Black HawkActiveSuccessful315LinnActiveSuccessful3154JohnsonActiveUnknown0120JohnsonActiveUnknown0	11	Black Hawk	Active	Successful	2	
111PolkActiveSuccessful2114LinnActiveSuccessful1122PolkActiveSuccessful2124JasperActiveSuccessful2129DickinsonActiveSuccessful2132LinnActiveSuccessful2134Black HawkActiveSuccessful1138PolkActiveSuccessful2152LinnActiveSuccessful2154PolkActiveSuccessful2155GuthrieActiveSuccessful2156GuthrieActiveSuccessful1157DickinsonActiveSuccessful3158Black HawkActiveSuccessful3159LinnActiveSuccessful3150JohnsonActiveUnknown0120JohnsonActiveUnknown0123JohnsonActiveUnknown0	17	Buchanan	Active	Successful	2	
114LinnActiveSuccessful1122PolkActiveSuccessful2124JasperActiveSuccessful2129DickinsonActiveSuccessful2132LinnActiveSuccessful2136Black HawkActiveSuccessful2138PolkActiveSuccessful2152LinnActiveSuccessful2154PolkActiveSuccessful2155GuthrieActiveSuccessful1157DickinsonActiveSuccessful1158Black HawkActiveSuccessful315LinnActiveSuccessful315JohnsonActiveSuccessful3120JohnsonActiveUnknown0123JohnsonActiveUnknown0	32	Polk	Active	Successful	2	
122PolkActiveSuccessful2124JasperActiveSuccessful2129DickinsonActiveSuccessful2132LinnActiveSuccessful2136Black HawkActiveSuccessful1138PolkActiveSuccessful2152LinnActiveSuccessful2154PolkActiveSuccessful2156GuthrieActiveSuccessful1157DickinsonActiveSuccessful1158Black HawkActiveSuccessful315LinnActiveSuccessful315LinnActiveUnknown0120JohnsonActiveUnknown0	111	Polk	Active	Successful	2	
124JasperActiveSuccessful2129DickinsonActiveSuccessful2132LinnActiveSuccessful2136Black HawkActiveSuccessful1138PolkActiveSuccessful2152LinnActiveSuccessful2154PolkActiveSuccessful2156GuthrieActiveSuccessful1157DickinsonActiveSuccessful1158Black HawkActiveSuccessful315LinnActiveUnknown0120JohnsonActiveUnknown0	114	Linn	Active	Successful	1	
129DickinsonActiveSuccessful2132LinnActiveSuccessful2136Black HawkActiveSuccessful1138PolkActiveSuccessful2152LinnActiveSuccessful2154PolkActiveSuccessful2156GuthrieActiveSuccessful1157DickinsonActiveSuccessful1158Black HawkActiveSuccessful315LinnActiveUnknown0120JohnsonActiveUnknown0	122	Polk	Active	Successful	2	
132LinnActiveSuccessful2136Black HawkActiveSuccessful1138PolkActiveSuccessful2152LinnActiveSuccessful2154PolkActiveSuccessful2156GuthrieActiveSuccessful1157DickinsonActiveSuccessful1158Black HawkActiveSuccessful315LinnActiveUnknown0120JohnsonActiveUnknown0123JohnsonActiveUnknown0	124	Jasper	Active	Successful	2	
136Black HawkActiveSuccessful1138PolkActiveSuccessful2152LinnActiveSuccessful2154PolkActiveSuccessful2156GuthrieActiveSuccessful1157DickinsonActiveSuccessful1158Black HawkActiveSuccessful315LinnActiveUnknown0120JohnsonActiveUnknown0123JohnsonActiveUnknown0	129	Dickinson	Active	Successful	2	
138PolkActiveSuccessful2152LinnActiveSuccessful2154PolkActiveSuccessful2156GuthrieActiveSuccessful1157DickinsonActiveSuccessful3158Black HawkActiveSuccessful315LinnActiveUnknown0120JohnsonActiveUnknown0	132	Linn	Active	Successful	2	
152LinnActiveSuccessful2154PolkActiveSuccessful2156GuthrieActiveSuccessful1157DickinsonActiveSuccessful1158Black HawkActiveSuccessful315LinnActiveUnknown0120JohnsonActiveUnknown0123JohnsonActiveUnknown0	136	Black Hawk	Active	Successful	1	
154PolkActiveSuccessful2156GuthrieActiveSuccessful1157DickinsonActiveSuccessful1158Black HawkActiveSuccessful315LinnActiveUnknown0120JohnsonActiveUnknown0123JohnsonActiveUnknown0	138	Polk	Active	Successful	2	
156GuthrieActiveSuccessful1157DickinsonActiveSuccessful1158Black HawkActiveSuccessful315LinnActiveUnknown0120JohnsonActiveUnknown0123JohnsonActiveUnknown0	152	Linn	Active	Successful	2	
157DickinsonActiveSuccessful1158Black HawkActiveSuccessful315LinnActiveUnknown0120JohnsonActiveUnknown0123JohnsonActiveUnknown0	154	Polk	Active	Successful	2	
158Black HawkActiveSuccessful315LinnActiveUnknown0120JohnsonActiveUnknown0123JohnsonActiveUnknown0	156	Guthrie	Active	Successful	1	
15LinnActiveUnknown0120JohnsonActiveUnknown0123JohnsonActiveUnknown0	157	Dickinson	Active	Successful	1	
120JohnsonActiveUnknown0123JohnsonActiveUnknown0	158	Black Hawk	Active	Successful	3	
123 Johnson Active Unknown 0	15	Linn	Active	Unknown	0	
	120	Johnson	Active	Unknown	0	
144 Jasper Active Unknown 0	123	Johnson	Active	Unknown	0	
	144	Jasper	Active	Unknown	0	

Table 2. 2022 Nest Site Activity in Iowa

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	lowa	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

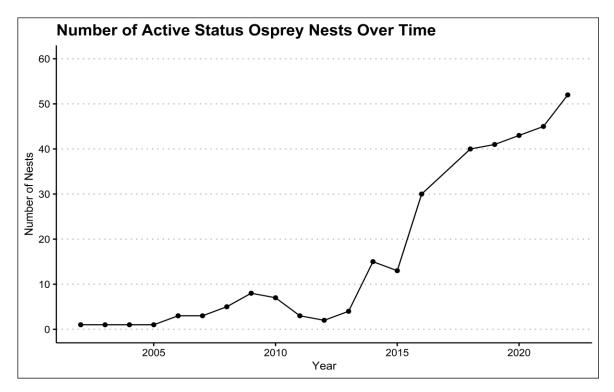


Figure 2. The total number of active status osprey nests in Iowa from 2002-2022.

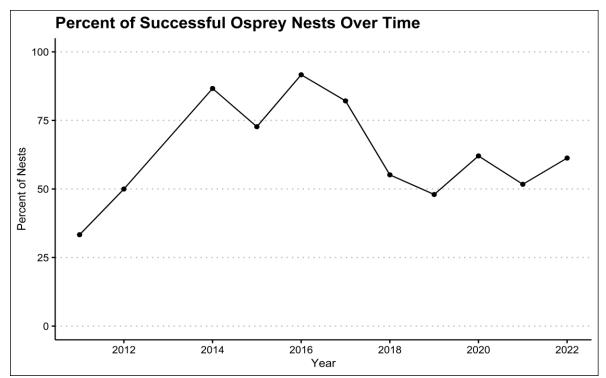


Figure 3. The percent of active and successful nests (out of total nests monitored) from 2011-2022.

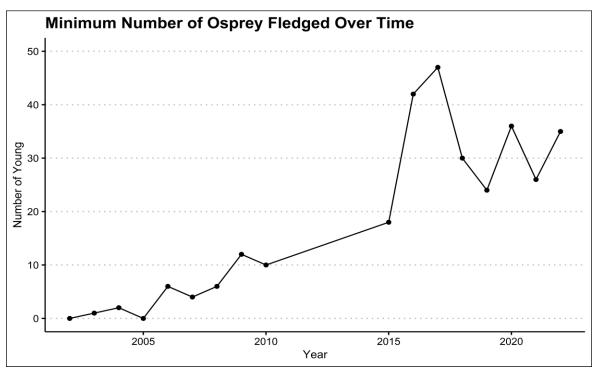


Figure 4. The minimum number of young fledged per year from 2002-2022 (data from 2011-2014 was incomplete, thus not shown here).

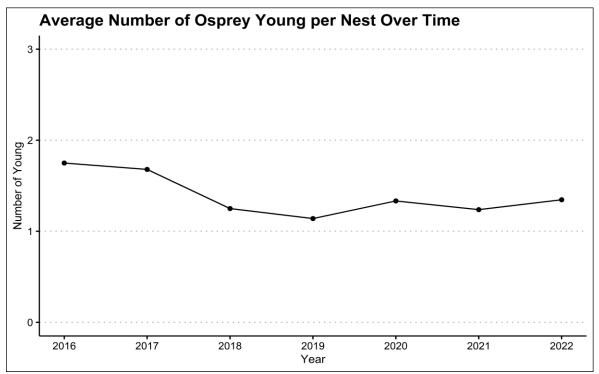


Figure 5. The average number of young fledged per nest from 2016-2022.