

Bolinas Lagoon

Heron and Egret Summary 2011



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Picher Canyon

Great Egret:

Great egrets (*Ardea alba*) were first seen in the canyon on March 5, and pairs had begun incubating by April 4 (Table 1). The peak number of nests was 66, which occurred on May 6. The first chicks hatched on May 2, and at least 48 chicks fledged from the colony. An average of 0.5 ± 0.08 (SE) chicks fledged per nest attempt, and an average of 1.8 ± 0.08 chicks fledged per successful nest attempt. The last day that egret chicks were observed in the canyon was July 29.

Seventy-nine (79) nests, or 75% of all nest attempts, failed to fledge any chicks. Of all nest attempts, 7 (7%) were lost to abandonment before eggs hatched and ten pairs (10%) failed to lay eggs. Five nests (5%) laid eggs, but they failed to hatch. For the remainder of the failed nests, the reason for failure could not be positively determined. For 22 (22%) of all nest attempts, predation of chicks could be inferred based on available evidence. No predation was directly observed in the canyon this year. Two Common Raven (*Corvus corax*), as well as a Turkey Vulture (*Cathartes aura*), were seen eating out of one nest, although an attack on the chicks was not observed. For 30 (30%) of nest attempts, the nests were hidden and not well observed, and the fate of nests could not be determined. Other potential causes of nest failure include starvation, disease, parasites, and accidents.

Great Blue Heron:

There were no nesting attempts by Great Blue Heron (*Ardea herodias*) this year in Picher Canyon. Adult herons were seen in and near the nesting trees on several occasions during the first half of April, but no courting or nest building behavior was observed.

Snowy Egret:

A single Snowy Egret (*Egretta thula*) was observed in the nesting trees on July 8. No courting or nest building behavior was observed.

Kent Island and Bolinas Mainland

There were four Great Blue Heron nests on Kent Island this year. All nests were successful, fledging a total of eight chicks. On the Bolinas mainland this year, there were seven nest attempts by Great Blue Heron, five of which were successful and fledged 12 chicks. An average of 1.7 ± 0.47 chicks were fledged per nest attempt.

This year was the first year that Great Egrets attempted to nest at Bolinas. There were 4 nest attempts, all of which failed. Egrets first appeared on June 3. One nest hatched chicks, and the other three were abandoned before chicks hatched.

Variable	Year				
	2007	2008	2009	2010	2011
PICHER CANYON					
Great Egret					
Arrival date	March 12	March 13	March 20	March 9	March 5
Peak nesting date	May 18	June 3	May 18	May 24	May 6
First egg laid	March 27	March 25	April 6	March 17	April 4
First chick hatched	April 27	April 22	May 4	April 16	May 2
First chick fledged	June 8	June 13	June 29	June 7	July 1
Peak nests	73	66	59	86	66
Nest attempts	82	78	63	106	106
Successful nests	59	35	46	48	27
% nest success	72%	45%	73%	45%	25%
Min. chicks fledged	105	70	100	106	48
Avg. chicks fledged per nest attempt	1.3 ± 0.10	0.9 ± 0.12	1.6 ± 0.14	1.0 ± 0.12	0.5 ± 0.08
Avg. chicks fledged per successful nest	1.8 ± 0.06	2.0 ± 0.10	2.2 ± 0.08	2.2 ± 0.08	1.8 ± 0.08
Final fledge date	August 8	August 11	August 6	August 15	July 29

Variable	Year			
	2008	2009	2010	2011
BOLINAS				
(a) Great Blue Heron				
Arrival date	n/a	March 6	March 6	February 28
Peak nesting date	n/a	May 19	May 4	April 4
First egg laid	n/a	March 20	April 13	March 11
First chick hatched	n/a	April 25	May 4	April 11
First chick fledged	n/a	June 14	June 17	July 5
Peak nests	1	4	5	6
Nest attempts	n/a	4	5	7
Successful nests	1	3	3	5
% nest success	n/a	75%	60%	71%
Min. chicks fledged	2	5	4	12
Avg. chicks fledged per nest attempt	2.0 ± 0	1.25 ± 0.75	1.00 ± 0.71	1.7 ± 0.47
Avg. chicks fledged per successful nest	2.0 ± 0	2.5 ± 0.5	1.7 ± 0.67	2.4 ± 0.24
Final fledge date	n/a	> July 3	>July 5	>Aug. 1
(b) Great Egret				
Arrival date	—	—	—	June 3
Peak nesting date	—	—	—	July 5
First egg laid	—	—	—	June 3
First chick hatched	—	—	—	July 5
First chick fledged	—	—	—	n/a
Peak nests	—	—	—	4
Nest attempts	—	—	—	5
Successful nests	—	—	—	0
% nest success	—	—	—	0%
Total chicks fledged	—	—	—	0
Avg. chicks fledged per nest attempt	—	—	—	0
Final fledge date	—	—	—	n/a

Variable	Year			
	2008	2009	2010	2011
KENT ISLAND				
Great Blue Heron				
Arrival date	February 29	March 6	March 6	February 28
Peak nesting date	March 21	April 6	April 3	April 25
First egg laid	March 21	March 18	March 13	March 11
First chick hatched	April 28	April 25	April 19	April 18
First chick fledged	June 12	June 14	June 14	July 18
Peak nests	1	6	4	4
Nest attempts	2	6	4	4
Successful nests	1	4	4	4
% nest success	50%	67%	100%	100%
Min. chicks fledged	1	7	9	8
Avg. chicks fledged per nest attempt	0.5 ± 0.50	1.4 ± 0.40	2.25 ± 0.25	2.00 ± 0
Avg. chicks fledged per successful nest	1 ± 0	1.75 ± 0.25	2.25 ± 0.25	2.00 ± 0
Final fledge date	June 12	July 1	June 30	July 18