

HERON AND EGRET MONITORING SUMMARY

Site 156: Sears Point (Sonoma County, CA)

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INTRODUCTION

Audubon Canyon Ranch (ACR) has been monitoring the number and productivity of nesting herons and egrets at the Sears Point site since 2011, when it was first reported to us by Robin Leong. Since then, this site has been included in ACR's ongoing, regional monitoring of all known heron and egret nesting sites in the San Francisco Bay area, and is tracked annually with repeated visits during the nesting season (approximately March-June). For more information on the Heron and Egret Project, please see www.egret.org/heron_egret_project and www.egret.org/atlas. This nesting site is located on the property of the Wing and Barrel Ranch (Kenwood BPSC Hunt Club, LLC), just east of the intersection of Highways 121 and 37 in the Petaluma-Napa Marsh region. Less than a mile to the southwest lies the Sears Point Wetland Restoration Project (Sonoma Land Trust), a 1,000 acre tidal marsh basin that was flooded in the fall of 2015 to provide important ecosystem services and create habitat for native species such as *Ardeids*. Of the waders tracked by the Heron and Egret Project, Great Blue Herons (*Ardea herodias*) and Great Egrets (*Ardea alba*) have been observed nesting at the Sears Point site.

SUMMARY OF RESULTS

We describe nesting activity at the Sears Point site with three metrics: 1) peak colony size, or the greatest number of active nests observed on a single visit, 2) nest survivorship, or the proportion of nests that raised at least one young, and 3) productivity of successful nests, or the mean brood size just prior to fledging (young at least and 5-7 weeks of age).

Great Blue Heron

Great Blue Herons were observed nesting at the Sears Point site in the years 2011 through 2014. Nest numbers peaked in 2012 with four nests. The following year in 2013, only a single nest that failed to fledge chicks was observed. In 2014 two active nests were observed, each containing a brood unguarded by adult herons (one brood with a single chick, the other a brood of two).

Year	Peak colony size	Nest survivorship (sample size)	Mean brood size \pm SE (sample size)
2011	2	data not available	data not available
2012	4	100% (2)	1 \pm 0 (2)
2013	1	0% (1)	-
2014	2	data not available	1.5 \pm 0.34 (2)
2015	0	-	-
2016	0	-	-

Great Egret

Great Egrets were observed nesting at the Sears Point site in the years 2011 through 2015. Nest numbers were highest in 2011, then declined in subsequent years until 2014 when they increased from 10 nests in 2013 to 15 nests in 2014. The following year however, only six nests that fledged no chicks were established, and in 2016 no Great Egrets were observed nesting at Sears Point.

Year	Peak colony size	Nest survivorship (sample size)	Mean brood size \pm SE (sample size)
2011	17	data not available	data not available
2012	14	67% (9)	2.14 \pm 0.13 (7)
2013	10	100% (10)	data not available
2014	15	data not available	2.25 \pm 0.22 (4)
2015	6	0% (6)	data not available
2016	0	-	-

Disturbance

Although Great Egrets did not nest at this site in 2016, regional monitoring has shown that many colonies are reoccupied after temporary disturbance (Kelly 2014, Kelly et al. 2007). In 2013, observers reported an expansion of the gun club activities that may have impacted nesting, however no direct responses of the birds to such activities were observed. No disturbances by potential nest predators were observed, although Great Horned Owl, Common Raven, and Red-Tailed Hawk—species that are commonly associated with active heronries—have been seen in the colony trees.

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LITERATURE CITED

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