HERON AND EGRET MONITORING RESULTS AT GOLD HILL: 2013 NESTING SEASON

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Audubon Canyon Ranch (ACR) has been monitoring the number and productivity of nesting herons and egrets at the Gold Hill colony site since 1991 as part of ACR's ongoing, regional Heron and Egret Project. This colony is located on private property in the northwest corner of the Suisun Marsh complex. Surrounding land is dominated by managed wetlands and agriculture.

The data collection team this year consisted of ACR biologist Sarah Millus and volunteer field observer Ann Romer. We made 14 visits and spent a total of 27 hours observing the colony. We calculated nest survival (proportion of nests that raised at least one young) for Great Egret (*Ardea alba*), Snowy Egret (*Egretta thula)* and Black-crowned Night-Heron (*Nycticorax nycticorax*). We estimated productivity of successful nests based on prefledging brood size in nests with young at least 5-7 weeks of age for Great Egret and at least 2 weeks of age for Snowy Egret and Black-crowned Night-Heron.

Great Egret

The peak number of Great Egret nests this year was 116, the second highest since monitoring began (Figure 1). We first observed Great Egrets on 26 March, at which time pairs had begun incubating. Chicks were first observed on 23 April, and an average of 1.8 ± 0.16 (SE; n = 41) chicks fledged per successful nest. We followed 61 focal nests, 56 of which were successful, corresponding to a nest survival rate of 92 ± 4%.

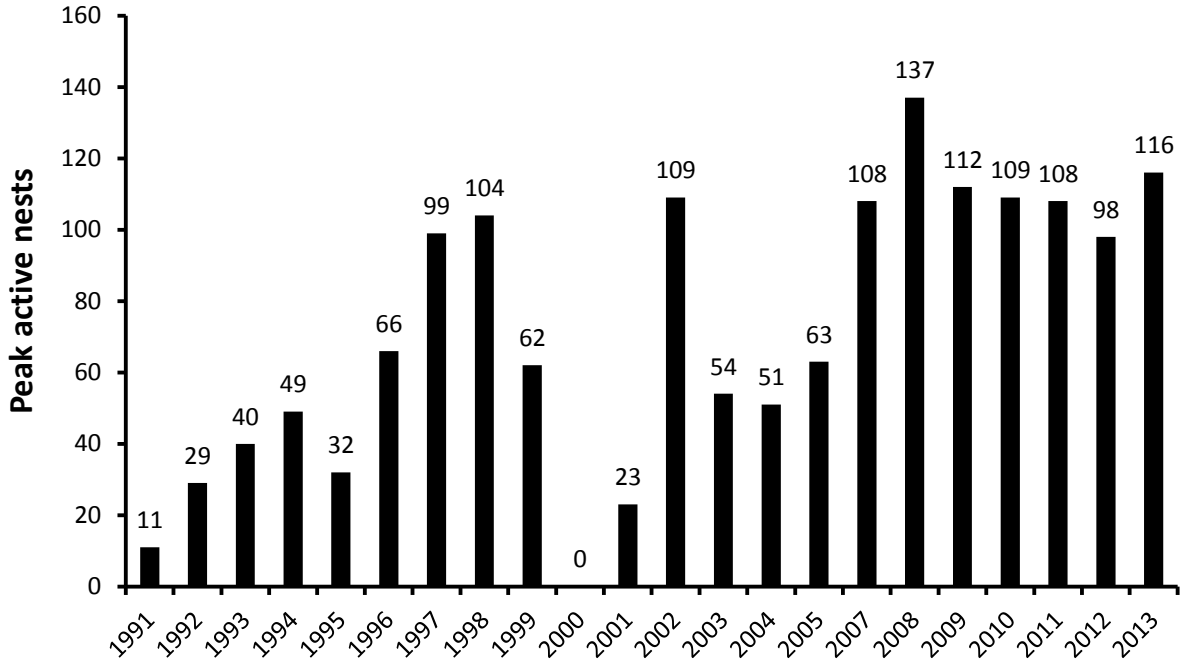

Figure 1. Peak number of active Great Egret nests at the Gold Hill colony 1991-2013. Numbers above bars are peak number of nests.

Snowy Egret

Following the dramatically high numbers at Gold Hill last year, Snowy Egrets numbers decreased in 2013. This species was first observed at the colony on 9 April. The peak number of Snowy Egret nests this year was 77 (Figure 2). The first Snowy Egret chicks were observed on 7 May. Fifty-four focal nests were followed, of which 31 were successful at fledging at least one chick, for a success rate of 57 ± 7%. An average of 2.5 ± 0.15 (n = 26) chicks fledged per successful nest.

Black-crowned Night-Heron

Black-crowned Night-Heron nesting numbers also decreased compared to last year. They were first observed in the colony on 23 April. The peak number of nests was 18. Twenty-two focal nests were followed, only five of which were successful at fledging at least one chick, for a success rate of 23 ± 9%. An average of 2.0 ± 0.19 (n = 8) chicks fledged per successful nest.

Disturbance

On May 14 observers noted a large branch had fallen off of the northern tree. At least one Snowy Egret nest was located on the branch and was lost. The branch falling was likely the result of the high winds normally experienced in this area. Common Raven (*Corvus corax*) and Red-tailed Hawk (*Buteo jamaicensis*) were both observed at the colony, but no disturbance to the nesting herons or egrets was observed.

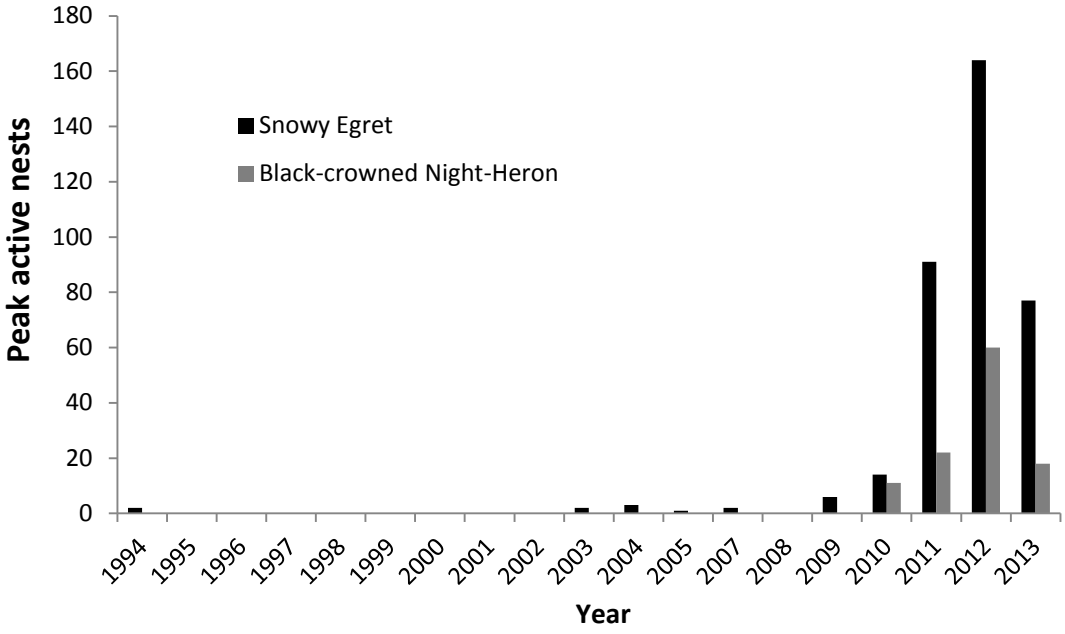

Figure 2. Peak number of active Snowy Egret and Black-crowned Night-heron nests at the Gold Hill colony 1994-2013.