

UPDATE ON SHOREBIRD USE OF THE NEWLY RESTORED  
GIACOMINI WETLANDS

Report prepared for  
The Point Reyes National Seashore

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## Winter Counts Immediately Following the Breach

Audubon Canyon Ranch has monitored shorebird use on Tomales Bay since 1989. After the levees in the Giacomini restoration area were breeched last October, we expanded our shorebird count areas to include the newly restored Giacomini Wetlands. As most of the shorebird use in the bay is by winter residents, ACR's monitoring program focuses on obtaining intensive estimates of winter shorebird abundance. ACR also tracks shorebird abundances during fall and spring migration periods, although the dynamic pace of migration leads to considerable variation in the number of shorebirds recorded. Long-term monitoring may reveal changes in the value of the Giacomini Wetlands to shorebirds during migration as well as during winter.

In the months immediately following the breach, shorebird use of the Giacomini Wetlands was low relative to other established feeding areas on Tomales Bay. Raptors however, immediately responded with increased numbers, as the flooding evicted an abundance of small mammal prey from their pasture homes. On one early December count, 19 White-tailed Kites and 17 Red-tailed Hawks were observed in the restoration area. Other species that took early advantage of the newly flooded habitat were Great Blue Herons, Great Egrets, Snowy Egrets, Greater Yellowlegs, Killdeer, and Wilson's Snipe—all species that are known to feed in flooded pastures.

As the vegetation and flooding regime changed over the winter months, the abundance and diversity of shorebirds seemed to increase slightly. Least Sandpipers, which were observed in low numbers during our first two counts (November and early December) turned up in higher numbers during mid-winter. Our late-winter counts revealed a pulse of Sanderling use, and suggested slight increases in numbers of Great Egrets, Snowy Egrets, Killdeer, and Wilson's Snipe, relative to early winter numbers.

### SPECIES OBSERVED DURING ACR WINTER SURVEYS

SPECIES	11/17/2008	12/4/2008	12/16/2008	1/29/2009	2/12/2009	2/27/2009
Great Blue Heron	7	8	7	10	12	6
Great Egret	3	3	20	13	14	10
Snowy Egret	1	1	1	4	7	7
White-tailed Kite	9	15	19	6	3	3
Northern Harrier	4	6	2	7	6	1
Red-tailed Hawk	2	7	17	4	3	0
Red-shouldered Hawk	2	3	1	5	2	0
Sharp-shinned Hawk	0	1	0	0	0	0
Osprey	1	0	0	0	2	0
American Kestrel	1	4	2	4	2	1
Perigrine Falcon	0	0	0	2	1	0
Killdeer	30	17	0	12	55	32
Greater Yellowlegs	21	2	3	11	13	0
Sanderling	0	0	0	0	120	0
Western Sandpiper	0	0	8	0	0	0
Least Sandpiper	26	3	90	95	0	20
Short-billed Dowitcher	3	0	0	0	0	0

Dowitchers (species unknown)	0	0	0	2	0	0
Wilson's Snipe	18	5	8	8	27	8

### Spring and Fall Migration Counts

As one of the key coastal wetland stepping stones for migrating shorebirds along the Pacific coast, Tomales Bay provides a crucial stopover feeding habitat. Individuals may stay only a few days to refuel before moving on, or they may stay longer. During fall migration, first year birds select wintering areas they will return to in subsequent years. Little is known about this selection process, but most of them will probably make this choice by mid-November. The Giacomini Wetlands were first flooded by tides at the end of October 2008, so the gradual process of wetland habitat restoration probably had little effect on recruitment choices of shorebirds in 2008. Consistent with this idea, we saw relatively low use of the area by shorebirds in the winter months following the breach.

So far during the 2009 fall migration period, we have seen increased overall shorebird abundance, with our August count totaling nearly three times as many birds as our highest winter estimate. This increase in numbers was mostly due to a spike in the number of Least Sandpipers observed. In addition to the species seen during the winter of 2008-2009, Western Sandpipers, Dunlin, and Willets were also observed in spring and fall. A notable influx of 27 Greater Yellowlegs was recorded on the spring count along with a single Lesser Yellowlegs. Dowitchers were recorded in respectable numbers for the first time in fall. A group of Red-necked Phalaropes, seen on the east side during spring and fall, was also a welcome addition to the diversity of the Giacomini Wetlands.

Though the distributions of shorebirds varied among counts, shorebird use of the restoration area continued to concentrate in the areas we call the East Giacomini Marsh (Shallow Shorebird Area) and the Triangle Marsh Area (Tomasini Triangle Marsh). These ponded areas of the newly restored Giacomini Wetland provide suitable habitat for a number of species. To date, not many shorebirds have been observed in the densely vegetated west side of the restoration area, however we have yet to see what the importance of this habitat will be for shorebirds during wet years, especially during periods of high run-off coupled with high tides.

### SPECIES OBSERVED DURING ACR MIGRATION SURVEYS

SPECIES	4/24/2009	8/25/2009
White Pelican	0	3
Great Blue Heron	2	3
Great Egret	8	44
Snowy Egret	1	2
White-tailed Kite	0	2
Northern Harrier	0	1
Red-tailed Hawk	4	2
Red-shouldered Hawk	0	0
Osprey	4	1

Semi-palmated Plover	0	8
Killdeer	8	2
Greater Yellowlegs	27	5
Lesser Yellowlegs	1	1
Willet	3	24
Sanderling	0	1
Western Sandpiper	1	101
Least Sandpiper	181	371
Dunlin	2	0
Short-billed Dowitcher	0	66
Long-billed Dowitcher	0	5
Wilson's Snipe	4	0
Red-necked Phalarope	8	53

ACR is always interested in recruiting experienced birders with the requisite skills and availability for these surveys. Please contact Emiko Condeso (415-663-8203, [emiko@egret.org](mailto:emiko@egret.org)) for more information.

