SAN FRANCISCO BAY
BIRD OBSERVATORY

2025 SNOWY PLOVER RECOVERY AT HAYWARD REGIONAL SHORELINE, ALAMEDA COUNTY, CALIFORNIA

Photo taken at OBN by Josh Scullen, 2023

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SUMMARY

From March to September 2025, the San Francisco Bay Bird Observatory (SFBBO) monitored western snowy plover (*Anarhynchus nivosus nivosus*; snowy plover) population size, nesting and fledging success, and identified potential predators at Hayward Regional Shoreline (Hayward Shoreline) in Alameda County. Hayward Shoreline is co-owned by Hayward Area Recreation and Park District (HARD) and East Bay Regional Parks District (EBRPD). SFBBO monitored four sites within Hayward Shoreline: Franks Dump West (FDW), Franks Dump East (FDE), Oliver Brothers North (OBN), and Pond 3B (Figure 1).

As part of the Pacific Coast winter window survey (January 18 – 26, 2025) we counted zero snowy plovers at Hayward Shoreline. As part of the Pacific Coast breeding season window survey (May 17 – 25, 2025), we counted 18 adult snowy plovers at Hayward Shoreline (Table 1).

SFBBO staff monitored 15 nests at FDW, six nests at OBN, and two nests at Pond 3B. Eleven nests at FDW and all six nests at OBN successfully hatched at least one egg. An additional two nests at FDW and five nests at OBN were detected as broods (Table 2).

SFBBO color-banded 17 chicks and one adult across Hayward Shoreline. Of these 17 banded chicks, we have confirmed that nine have survived to fledge (28 days post hatching). We conducted a band re-sight survey at the end of the season on FDW, a location where adult and juvenile snowy plovers from across the South Bay flock prior to fall migration. From this band re-sight survey, we confirmed that three chicks from FDW and one chick from another site in Santa Clara County had fledged.

Avian predator surveys showed that the most common predator species observed at Hayward Shoreline were California gulls (*Larus californicus*), white-tailed kites (*Elanus leucurus*), common ravens (*Corvus corax*), and other unidentified gull species (Table 3). SFBBO did not conduct targeted mammalian predator surveys, though observations of mammalian predators were recorded opportunistically. Biologists observed a feral cat (*Felis catus*) at OBN, which was successfully trapped and removed from the site with coordination from EBRPD and the United States Department of Agriculture – Animal and Plant Health Inspection Service (USDA-APHIS).

INTRODUCTION AND BACKGROUND

The Pacific Coast population of snowy plover breeds along or near tidal waters and is behaviorally distinct from the interior population (Funk 2006). Coastal-breeding snowy plovers have declined as a result of poor reproductive success, likely due to habitat loss, habitat alteration, human disturbance, and increasing predation pressure (Page et al. 1991, USFWS 2007). In response to this decline, the U.S. Fish and Wildlife Service (USFWS) listed the Pacific Coast western snowy plover population as federally threatened in 1993 (USFWS 1993). They are listed as a species of special concern in California (CDFW 2025). USFWS divides the Pacific Coast snowy plover range into six geographical recovery units. In addition to range-wide recovery goals, each recovery unit must meet its own goals in order for the Pacific Coast population to be de-listed. The most recent 5-year review (USFWS 2024), which reviewed all available data in all six recovery units, determined that the population remains threatened due to the same threats described above.

Western snowy plover recovery unit 3 (RU3) consists of the San Francisco Bay Estuary and includes Alameda, Contra Costa, Napa, Santa Clara, and Solano counties, plus the Bay-facing portions of Marin, San Mateo, and Sonoma Counties (USFWS 2007). Snowy plovers in this Recovery Unit nest almost exclusively in dry salt panne habitat provided by former salt evaporation ponds, as well as on pond berms, levees, and in dry, degraded marsh habitat. In 1992, the Don Edwards San Francisco Bay National Wildlife Refuge (the Refuge) began surveying for snowy plovers on Refuge lands.

SFBBO took over snowy plover monitoring activities from the Refuge in 2003, and since then has conducted annual snowy plover monitoring and research within the South San Francisco Bay in support of the goals set for RU3. In 2025, SFBBO: 1) identified areas used by snowy plovers through regular surveys of all potential nesting habitat from March through September, 2) participated in USFWS-coordinated range-wide breeding and winter window counts, 3) recorded nest fates, nest densities, and chick fledging rates through nest-monitoring and chick-banding, 4) surveyed for potential avian predators, and 5) identified areas of potential disturbance from predators, trespass, construction activities and other human activities. The activities at Hayward Shoreline detailed in this report are consistent with this larger framework of SFBBO's snowy plover population monitoring and research in the South Bay.

METHODS

Study Area

SFBBO staff conducted snowy plover and avian predator surveys at Hayward Shoreline, which is owned by HARD, managed by EBRPD, and includes 1,841 acres of salt, fresh, and brackish water marshes, seasonal wetlands, and public trails.

SFBBO surveyed four different sites within Hayward Shoreline that contain suitable nesting habitat for snowy plovers: FDE, FDW, OBN, and Pond 3B. FDE and FDW are two parcels of land bordered by Sulphur Creek to the north and separated by a historical landfill that is now upland habitat (Figure 1). OBN is a historical salt pond complex that is located at the southwestern edge of Hayward Shoreline. It is bordered by Highway 92 to the south and the San Francisco Bay to the west (Figure 1). Pond 3B is the westernmost pond within Hayward Marsh, a series of ponds used for wastewater treatment that are owned by EBRPD and the Union Sanitary District (USD). It is bordered by water channels to the north and south, Pond 3A to the east, and San Francisco Bay to the west. A section of the Bay Trail runs along the western edge of the pond (Figure 1). Pond 3B is unable to be flooded due to a silted-in intake structure, and provides suitable nesting habitat for snowy plovers when dry.

Surveys

Snowy Plover Breeding Surveys

SFBBO surveyed FDE, FDW, OBN, and Pond 3B from the week of March 2 to the week of September 14, 2025. All four sites were inundated for the first several weeks of the breeding season due to winter rainfall. Therefore, SFBBO conducted surveys every other week to monitor water levels and assess when suitable breeding habitat would become exposed. From the date the

first snowy plover was observed at each site, survey frequency increased to weekly. Weekly surveys began the week of March 23 at FDW and FDE, the week of April 30 at Pond 3B, and the week of May 11 at OBN.

SFBBO biologists conducted surveys by driving slowly on the levees or walking levees without vehicle access. We stopped frequently to scan for snowy plovers with spotting scopes and binoculars. During each survey, we recorded the number and behavior of all snowy plovers present, identified the sex and age class of each individual using plumage characteristics (Page et al. 1991), and marked the approximate location of sightings using the Field Maps by Esri mobile application. We also recorded the color-band status and combination of any banded snowy plover sighted. Any observed instances of intraspecies aggression between snowy plovers and interspecies aggression between snowy plovers and other shorebirds and/or seabirds were also recorded.

Each year, the USFWS coordinates two week-long window surveys which aim to census all Pacific Coast snowy plovers during both the non-breeding and breeding seasons. From January 18 to 26, 2025, SFBBO participated in the Pacific Coast snowy plover winter window survey, and from May 17 to 25, 2025, we participated in the Pacific Coast snowy plover breeding window survey. SFBBO used the same survey techniques described above and surveyed all four sites detailed in this document during both window surveys.

Band Re-Sight Surveys

Band re-sighting is a crucial aspect of assessing snowy plover fledging and survival rates. SFBBO always opportunistically records the band combinations of any snowy plovers we see during every breeding survey. However, at the end of the season when breeding activity at a site is fully completed, we will also perform specialized band re-sight surveys with the specific goal of reading as many color bands as possible.

During these surveys, biologists first locate a large flock of roosting or foraging birds. After reading as many band combinations as possible from the levee, the biologists will walk onto the pond bottom and strategically flush the flock just enough for the birds to stand up and reveal their color bands. This is accomplished by slowly and quietly walking several steps at a time and pausing whenever the birds start to move. Band re-sight surveys are best done in pairs where one person walks towards the flock at a time while the other person watches through a scope. Because these surveys involve walking on the pond and into a flock, we only conduct band re-sight surveys once no broods remain on the pond in order to avoid any disturbance to snowy plover chicks.

Nest Monitoring

We located snowy plover nests by scanning for incubating females during weekly and monthly surveys. If we found an incubating female at FDW, FDE, or OBN, we searched for its nest on foot and entered the nest location into the Field Maps by Esri mobile application. During the first nest visit, we recorded the number of eggs or chicks in the nest, and floated eggs that were not in the process of hatching to estimate egg age. Using the estimated egg age, we calculated the nest initiation date and predicted hatch date based on an average egg-laying-to-hatching period of 30 days in RU3 (SFBBO unpublished data). In order to minimize disturbance, we did not visit the

nest again until it was within five days of the estimated hatch date, but confirmed its status through a scope during each survey. When there were no longer eggs in the nest, we assigned each nest a fate (hatched, depredated, flooded, abandoned, unknown, or other) based on evidence seen at the nest (Mabee 1997). Despite surveyors' best efforts, some nests were not discovered before they hatched. If we observed chicks at a time when we were not monitoring any nests close to hatch, we deduced that we had missed a nest. These missed nests were included in our nest totals and classified as "detected at brood stage."

In accordance with the advice of EBRPD staff, we did not walk onto Pond 3B due to potential health hazards caused by wastewater influx at the site. Nests at this site were only monitored from the public trail using a spotting scope during weekly surveys. Without any egg float data or observations from nest visits, biologists based their nest fate determinations solely on visual observations from the trail. In some cases, there was not enough evidence to make a determination of a nest's fate and so the fate was recorded as unknown.

Avian Predator Surveys

To identify avian predators in the area that might impact breeding snowy plovers, SFBBO biologists conduct predator surveys concurrently with weekly snowy plover surveys. Throughout each snowy plover survey, observers would simultaneously scan for avian predators. We recorded the number, species, and habitat type at the time of sighting of any predators present, and the approximate locations of the predators using the Field Maps app. In addition, observers documented any predator nests in the area and their fates when possible. We calculated the average number of predators observed per survey at each pond during the season. While most predators likely have a larger territory than a single pond (Strong et al. 2004), we feel it meaningful to present indices of predator abundance at the pond scale since both predator and snowy plover surveys are conducted at this level.

We defined avian predators as any species that could potentially prey on a snowy plover nest, chick, or adult. This includes most raptors, gulls, corvids, herons, and egrets (

) found at Hayward Shoreline. While a number of potential non-avian predators (Table 5), and their signs (e.g., tracks) were recorded opportunistically, these surveys were not designed to detect these species, particularly since many mammals are nocturnal. Among all predators, we considered northern harriers (*Circus hudsonius*), peregrine falcons (*Falco peregrinus*), common ravens, California gulls, and mammals (especially coyotes [*Canis latrans*], red fox [*Vulpes vulpes*], and striped skunk [*Mephitis mephitis*]) to be the most critical potential predators to snowy plovers due to previous documentation of predation.

Calculated Metrics

Nest Success

Snowy plover nests are typically a 3 egg clutch. We defined a nest as successful if it hatched at least one egg. We calculated apparent nest success as the percentage of nests that successfully hatched at least one egg divided by the total nests monitored.

Fledge Success

We defined a fledged chick as one that survived to 28 days of age, at which point it is considered capable of flight (Warriner et al. 1986). We calculated apparent fledging success as the percentage of fledged, banded chicks out of the total chicks banded. Re-sighting banded chicks on large salt ponds is difficult, so this method of estimating fledging success has significant limitations and is a conservative estimate.

RESULTS

Snowy Plover Surveys

From March 3 through September 19, we observed a mean of 54.4 snowy plovers per week at Hayward Shoreline, as shown in Figure 2. Looking at abundance per site, FDW supported the largest numbers of snowy plovers at Hayward Shoreline, with a mean of 36.1 snowy plovers observed per week. OBN had a mean of 20.4 of the plovers observed per week, and Pond 3B had a mean of 3.7 plovers observed per week. No snowy plovers were observed at FDE throughout the duration of the breeding season. All abundances by pond are shown in Figure 3.

Early and Late Season Trends

At the beginning of the breeding season, all of OBN, Pond 3B, and FDE were flooded with minimal habitat available for snowy plovers to utilize. Therefore, no birds were seen at these sites until sufficient habitat was exposed. At FDW, even when the pond is mostly flooded, two higher elevation strips of land form islands that are utilized for nesting by snowy plovers, American avocets (*Recurvirostra americana*) and black-necked stilts (*Himantopus mexicanus*). These islands were present at the beginning of the nesting season, and snowy plovers were first observed there the week of March 23. Snowy plovers were first observed at Pond 3B the week of April 27 and at OBN the week of May 11.

Towards the end of the breeding season we observed large post-breeding flocks of snowy plovers at FDW. These flocks form when snowy plovers are no longer breeding, but instead either molting, staging for migration, or gathering into winter flocks. Between August 7 and September 19, a mean of 109.7 plovers was observed per week at FDW, a notable increase from the March 3 – July 31 mean of 11.6 plovers per week (Figure 3). On September 12, we recorded this year's high count for all of Hayward Shoreline at 192 snowy plovers, observed between FDW and OBN (Figure 2). However, 181 of those birds were observed at FDW while only 11 birds were observed at OBN (Figure 3).

Band Re-Sight Surveys

One band re-sight survey was conducted at FDW on September 22, 2025. During the survey, SFBBO staff observed 24 banded snowy plovers in a flock of approximately 100, four of which were confirmed as new fledges. Three originated from nests on FDW and one was banded by SFBBO at a pond in the Alviso complex within the Refuge.

By the time broods were no longer seen during weekly surveys at OBN, flocks of significant size were no longer using OBN ponds to roost. Therefore, band re-sight surveys were not conducted at OBN. Band re-sight surveys were not conducted at Pond 3B in accordance with advice of

EBRPD staff to not walk on the pond because of potential contamination from wastewater. Band-re-sight surveys were not conducted at FDE as no snowy plovers were seen there in 2025.

Snowy Plover Nesting

Nesting Abundance and Success

Over the course of the breeding season, we monitored a total of 23 nests across Hayward Shoreline: 15 nests at FDW (Figure 4), two nests at Pond 3B (Figure 5), and six nests at OBN (Figure 6). Eighteen of these nests hatched at least one egg, resulting in a 78% hatch success for all monitored nests. Of the 72 eggs monitored across Hayward Shoreline, 57 hatched, resulting in a 79% hatch rate per egg (Table 2). An additional seven nests were detected as broods and are not included in the hatch rate calculations.

Of the five nests that did not hatch, one failure was attributed to depredation, three failed due to unknown causes, and one nest is unknown whether it hatched or failed. Of the four nests with unknown fates, depredation is a possible fate in three cases. The remaining nest failed due to unknown reasons; it was found with the eggs knocked out of the nest bowl due to an unknown, non-human cause, and was subsequently abandoned.

Snowy plover nesting activity at Hayward Shoreline occurred in two waves in 2025. The first wave occurred only at FDW, before OBN had dried. Nest initiation there began in mid-April, and the number of active nests hit its first peak in late May. A second wave of nest initiations occurred in late June, and the number of active nests peaked again in early July (Figure 7). This second wave of nesting activity was larger than the first as it occurred after OBN had dried, which allowed for nesting on both ponds.

Snowy Plover Color Banding

Earlier in the breeding season SFBBO's banding efforts were focused at other snowy plover nesting sites, so banding at Hayward Shoreline in 2025 did not start until late July. Between July 21 and August 4, 2025, nine chicks and one adult were banded from three broods at OBN and eight chicks were banded from four broods at FDW. Of these 17 chicks banded across Hayward Shoreline, nine have been confirmed as fledged, providing a fledge rate of 53% for chicks banded at this location.

Avian Predators

During avian predator surveys at FDW we counted white-tailed kites as the most numerous avian predators (0.14/survey), followed by common ravens (0.11/survey). At FDE, red-tailed hawks were the most numerous observed predator (0.14/survey), followed by common ravens (0.11/survey). At Pond 3B, California gulls were the most numerous observed predator (0.13/survey), followed by common ravens and northern harriers (0.04/survey each). At OBN, California gulls were the most numerous observed predator (7.92/survey), followed by unidentified gulls (6.67/survey) (Table 3). Gull species were usually observed roosting in large flocks the on dry pond bottom. Common ravens were usually observed transiting over the ponds, though on one occasion they were observed hunting on the pond bottom at FDW. On May 22,

2025, a biologist observed common ravens constructing a nest in a power tower south of Highway 92 near OBN, but the nest was never completed.

Mammalian Predators

Biologists observed a feral cat on the levees around OBN during surveys on June 26 and July 3, 2025. The cat was seen again on July 20 and 21, at which point SFBBO alerted EBRPD and HARD about the cat to see if it could be removed. Trapping efforts were coordinated between EBRPD, HARD, USDA-APHIS, and Oakland Animal Services beginning on July 23, and the cat was eventually captured on August 9 and removed from the site. We did not see any direct evidence of the cat depredating any snowy plover adults or chicks.

Human Disturbance

At both OBN and FDW we observed signs of human disturbance. On June 26, 2025, footprints from a HARD-led summer camp group were found on the levees and pond bottom of the northwestern OBN ponds. This was also the day we found the first nest of the season at OBN, which was likely initiated a few day earlier. These summer camp groups were not aware of snowy plover nesting activity at the time. Beginning on July 3, 2025, SFBBO provided summer camp administrators with mapped locations of snowy plover nests with 600-foot avoidance buffers, and continued to provide weekly updates throughout the remainder of the nesting season. Following communications from SFBBO, the summer camp groups avoided the area. We do not believe activity from summer camp groups caused any nest destruction or abandonment.

At FDW, we directly observed trespassers and unleashed dogs on the pond as well as finding footprints, dog prints, and bicycle tracks on the pond bottom. The fence at the western end of the northern levee of FDW was cut before the 2023 breeding season, but has never been repaired. Multiple people and unleashed dogs were observed going through this hole in the fence on several occasions in 2025. Additionally, it is possible that a nest located on a raised berm that runs along the southern edge of the pond was trampled by a trespasser and destroyed. SFBBO staff found the crushed remains of eggs in the nest during a nest visit on May 22, 2025. On the same date, we noted footprints elsewhere along the berm, though no footprints were seen directly on top of the nest. The crushed eggs seem to indicate that they were not eaten by a predator, but not enough evidence was present to determine that the nest was definitely trampled by a human. Later in the season, a trespasser was seen walking along this southern berm, suggesting that this may be a regular walking route for this individual, and possibly others as well.

DISCUSSION

Population Size

Zero snowy plovers were observed at Hayward Shoreline during the 2025 winter window survey, as all four sites were fully inundated. The number of snowy plovers observed at Hayward Shoreline during the 2025 breeding window survey increased to 18 compared with 13 in 2024. The number of snowy plovers observed during the breeding window survey at Hayward Shoreline is generally correlated with the amount of available habitat within the complex. For example, the highest count of snowy plovers recorded during a breeding window survey was 54

in 2021. There was an exceptionally low amount of rainfall in the 2020-2021 water year, resulting in OBN being completely exposed during the 2021 breeding window survey. During this year's breeding window survey, exposed islands provided nesting habitat at FDW, and six nests had already been recorded since the start of the season, but the lower elevation areas were still inundated. OBN was still fully flooded from winter rainfall and nesting activity had not yet begun at that site.

During the 2025 breeding window survey at other locations throughout the Bay Area, SFBBO observed the highest count of breeding adults in RU3 ever recorded at 389 birds. This suggests that moderate window survey counts of snowy plovers at Hayward Shoreline can be attributed to lack of available nesting habitat, and is not representative of a larger trends within the RU3 population (Table 1).

Nest Abundance and Success

Despite only a moderate increase in window survey numbers from 2024 to 2025, nest abundance greatly increased at Hayward Shoreline from 2024 (13 nests) to 2025 (30 nests). This increase in nesting may be due in part to increased habitat availability earlier in the nesting season at FDW. The exposed islands at FDW provided attractive nesting habitat for snowy plovers, allowing for nesting to begin there over one month earlier than it did in 2024. American avocets and black-necked stilts that also nested on these islands likely afforded some protection to the snowy plover nests, as these species will readily mob predators to defend their nesting colonies.

Although nest abundance increased from 2024 to 2025, the hatch rate at Hayward Shoreline decreased from 100% in 2024 to 78% in 2025. This is not unexpected, as an increase in monitored nests is likely to yield a larger variety of nest fates. However, this hatch rate remains high compared to other nesting sites in Bay Area.

Snowy Plover Banding

Chick Fledging Success

Our banding effort in 2025 began later in the season than usual due to a number of factors. The earliest nests of the season in May at FDW were concentrated on two small islands in the pond. These were difficult to access and required wading through over 200 meters of standing water to reach. Additionally, nests of American avocets, black-necked stilts, and snowy plovers were all concentrated on these islands, and banding chicks at one nest would have caused a significant disturbance to all nests on the island.

Banding efforts in June and July were focused just south of Hayward Shoreline at Eden Landing Ecological Reserve as part of a research project specific to that location. Therefore, banding at Hayward Shoreline did not begin until late July. Despite the late start, we were able to band chicks from four of the 15 monitored nests at FDW and three of the six monitored nests at OBN.

As stated in the results, we recorded a 53% fledge rate for all chicks banded at Hayward Shoreline. Despite this being a decrease from 2024's 75% fledge rate, it is still the highest fledge rate out of all monitored snowy plover nesting areas in the South Bay for 2025. Because of the difficulty in detecting banded birds, this is a conservative estimate. It is possible that the fledge

rate will increase slightly as more banded birds are re-sighted during the winter and 2026 nesting season.

Avian Predators

Although unidentified gulls and California gulls were the most numerous predator species observed at Hayward Shoreline (Table 3), most were observed roosting in large flocks at OBN rather than actively foraging, and thus we believe that their impact on breeding snowy plovers was limited. Typically common ravens are one of the biggest threats to snowy plover breeding success; footage from nest cameras at Eden Landing Ecological Reserve shows common ravens were responsible for 66% of all photographed nest depredations from 2009 to 2022. However, it is difficult to gauge how much impact ravens had on Hayward Shoreline in 2025, since only one nest was depredated, and we could not confirm which species was responsible. Nevertheless, ravens have the potential to greatly impact snowy plover nesting success if they were to begin targeting snowy plover nests at Hayward Shoreline as a food source.

In order to reduce the impact of ravens on breeding snowy plovers at Hayward Shoreline in future years, it is important that ravens are not allowed to nest on or near the property. Recent research has found that ravens provision their chicks with a higher proportion of other bird's eggs and chicks when close to a high density nesting area (Harju et al. 2021). In the past, the California Department of Fish and Wildlife (CDFW) and the Refuge have worked in cooperation with the USDA-APHIS and the Pacific Gas & Electric Company (PG&E) to remove the nests of ravens and other predators from power towers near Eden Landing Ecological Reserve and on Refuge lands, including along Highway 92. If EBRPD and HARD were to join in this program by scouting power towers and other potential nesting sites within and adjacent to Hayward Shoreline, this could further strengthen the effectiveness of this program and limit raven predation on snowy plover eggs and chicks.

In addition to preventing ravens from nesting nearby, lethal predator control is an important tool that could be used to reduce the amount of eggs and chicks taken by predators in future years, especially by ravens, which can learn to target nesting snowy plovers. Elsewhere in the Pacific coast snowy plover range, lethal removal of predators has been associated with an increased hatch rate (Neuman et al. 2004; Dinsmore et al. 2017). As a component of using this method, plover volunteer docents stationed along trails could also keep watch on breeding areas and notify SFBBO, EBRPD, and HARD staff when ravens and other predators are hunting in ponds.

Human Disturbance

Consistent with the trends observed in past years, pedestrian and cyclist use of trails at Hayward Shoreline remained high in 2025. Although trespass into sensitive areas was observed on multiple occasions and may have resulted in the destruction of one nest, the impact on breeding plovers was likely minimal overall. Nevertheless, it is important to reduce human disturbance at nesting sites wherever possible. At FDW, installing a low fence around the western and northern perimeter would signify the area is off-limits, and would deter trail users and off-leash dogs from easily walking onto the pond when it is dry. It would be important to add anti-perching devices such as bird spikes to the fence to deter use by avian predators. We recommend that such a fence

be considered as a component of the project design when levee repairs are made along Sulphur Creek to the north of FDW.

Additionally, since most plover breeding areas in the South Bay have relatively few trail users, the high trail use at Hayward Shoreline provides a unique opportunity in the Bay Area to conduct outreach with the public. Stationing docents near FDW and OBN would allow biologists to reach a much greater amount of the public, hopefully resulting in less trespass and greater support for pond dependent breeding species like snowy plovers.

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Figure 1. Snowy plover breeding areas in HARD/EBRPD's Hayward Regional Shoreline, Hayward, California.

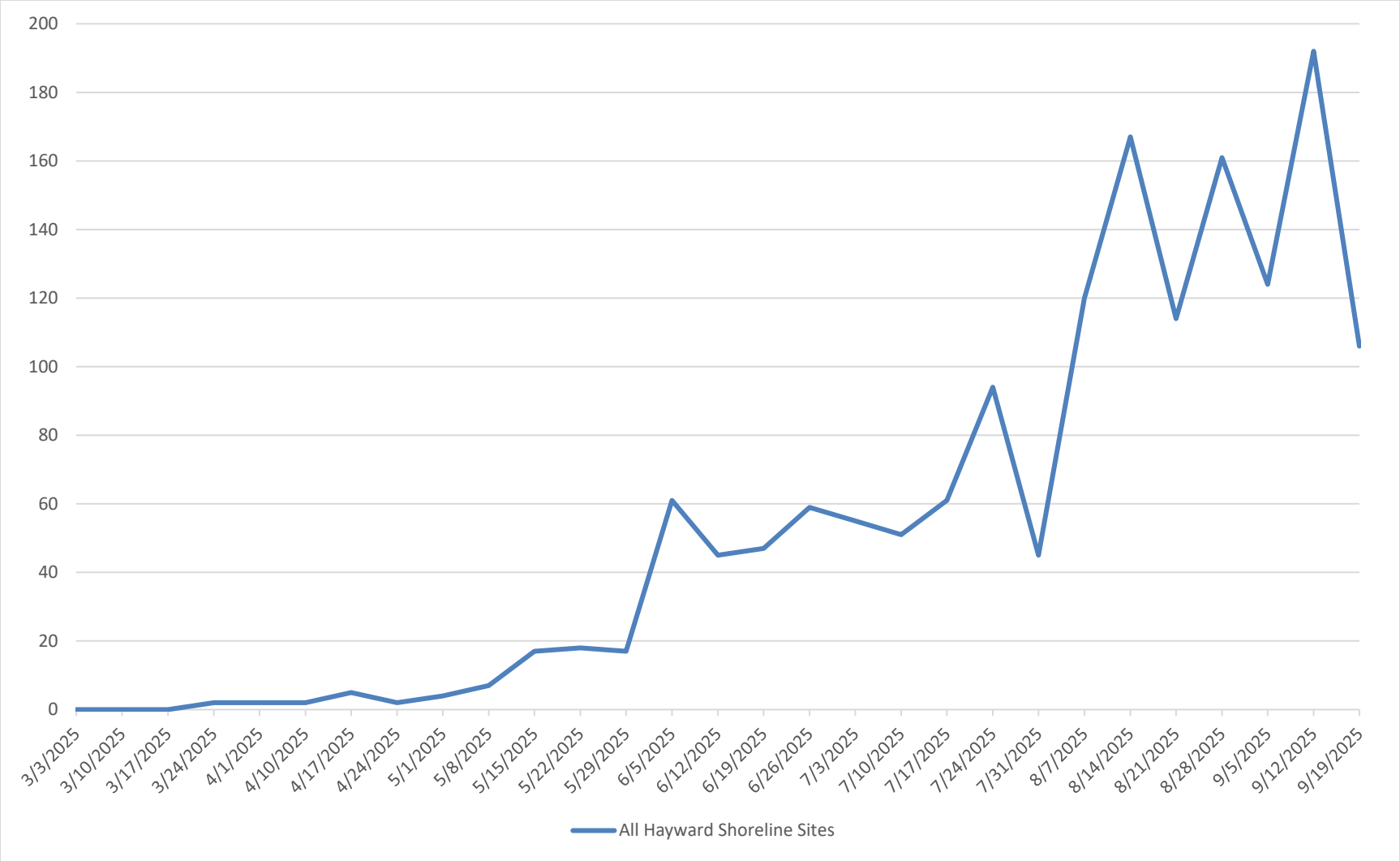

Figure 2. Weekly counts of snowy plovers at Hayward Regional Shoreline, Alameda County, California, 2025.

Due to high water levels at all locations, ponds were surveyed every other week until the first observation of a snowy plover in the pond. After that, each pond was surveyed weekly until the end of the season. For FDW, the first observation date was March 24, for Pond 3B, the first observation date was May 1, and at OBN the first observation date was May 15.

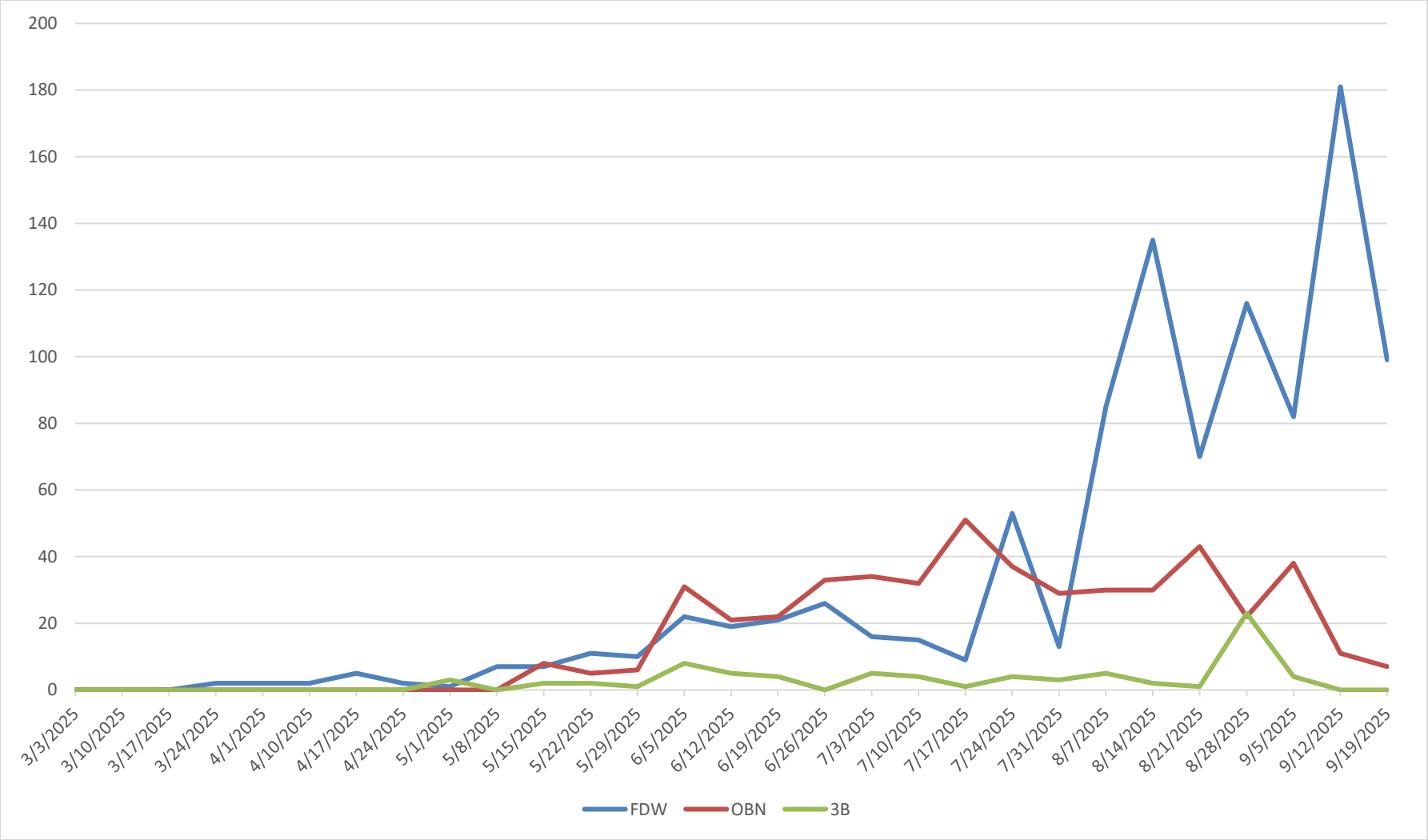

Figure 3. Weekly counts of snowy plovers observed from March 3-September 19, 2025, at FDW, Pond 3B, and OBN, Hayward Shoreline. No birds were observed at Frank's Dump East throughout the breeding season.

Figure 4. Locations of snowy plover nests at Frank’s Dump West, 2025.

Figure 5. Approximate locations of snowy plover nests at Pond 3B, 2025. Nests were not visited on this pond, so precise location data was not collected.

Figure 6. Locations of snowy plover nests at the Oliver Brothers North ponds, 2025.

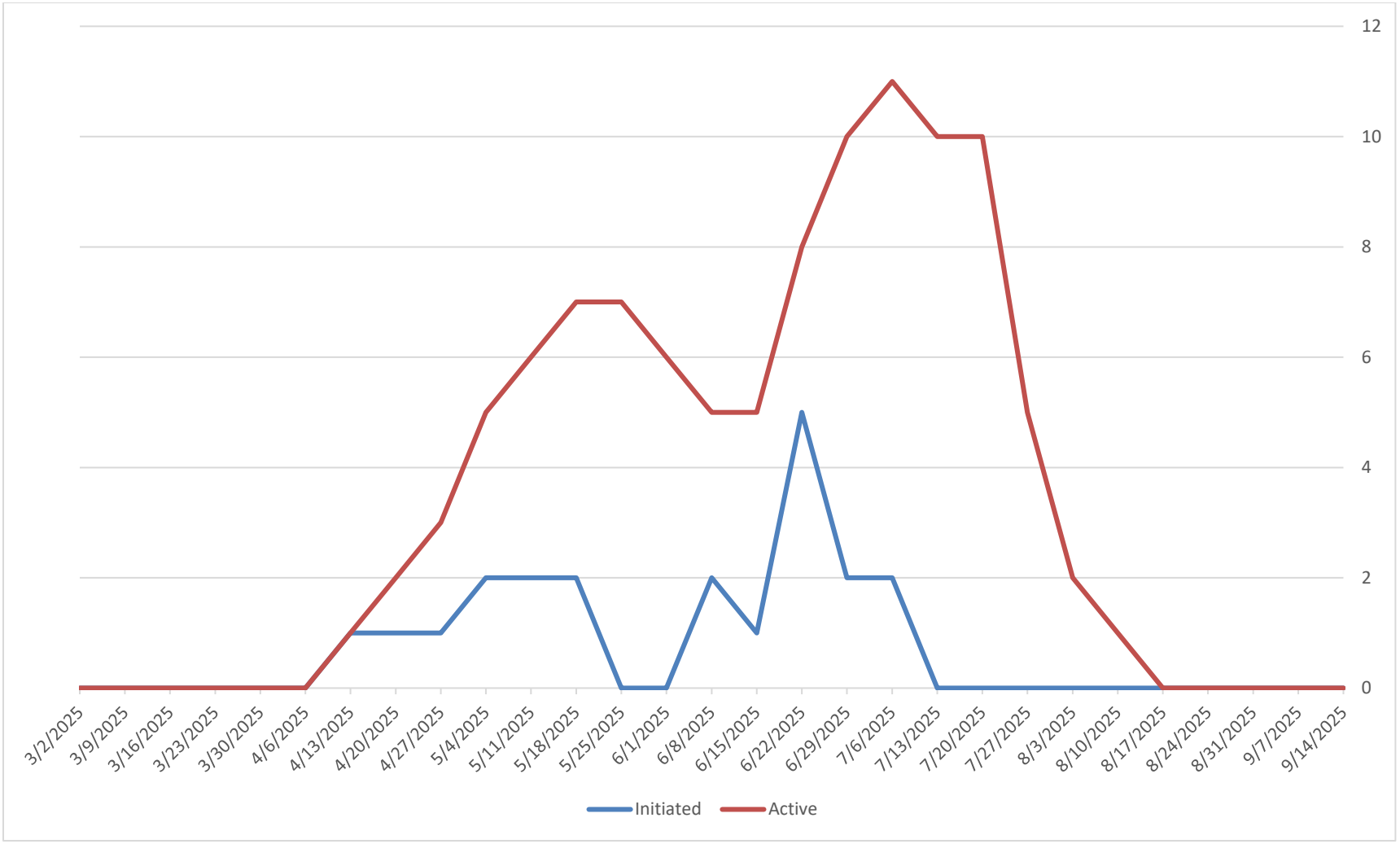

Figure 7. Active and initiated snowy plover nests by week at Hayward Regional Shoreline during the 2025 breeding season. Because the two nests at Pond 3B were not floated, their initiation dates could not be calculated. As such, these nests are not represented in this figure.

Table 1. Number of western snowy plovers observed at Recovery Unit 3 sites during annual breeding window surveys in May, 2011-2025. A dash in place of a number indicates that the site was not surveyed.

REGION	SITE	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Alameda	Eden Landing	185	82	97	94	76	120	144	142	117	115	44	89	116	123	148
	Coyote Hills	0	0	0	0	0	1	0	0	1	0	8	4	1	6	5
	Crown Beach	-	-	-	0	0	0	-	-	-	-	0	0	0	0	-
	Dumbarton	0	0	0	0	0	0	2	7	2	-	16	12	55	15	14
	Hayward	8	9	32	7	2	4	0	7	12	19	56	36	5	13	22
	Warm Springs	17	3	1	11	24	14	2	20	7	-	5	5	18	24	8
Marin	Hamilton Wetlands	-	-	-	-	-	0	-	0	0	2	0	5	9	8	14
Napa	Napa	1	0	3	10	10	0	-	2	2	-	0	4	0	0	0
San Mateo	Ravenswood	27	33	59	45	68	42	76	51	48	-	67	74	84	81	67
	Redwood City Salt Pond	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9
Santa Clara	Alviso	11	20	10	0	1	21	19	4	1	-	23	39	70	38	76
	Mountain View	-	-	-	11	0	0	0	2	0	8	35	8	1	0	0
Solano	Montezuma Wetlands	-	-	-	-	14	6	3	0	0	3	9	5	4	13	21
	Cullinan Ranch East	-	-	-	-	-	-	-	-	-	-	-	0	5	0	5
Total Unit 3		**249**	**147**	**202**	**178**	**195**	**208**	**246**	**235**	**190**	**147**	**263**	**281**	**368**	**321**	**389**

Table 2. Snowy plover nest fates in 2025 at Hayward Regional Shoreline, Hayward, CA.

	Hatched		Depredated		Unknown		Total Monitored		Detected as Brood		Total	
Pond	**Nests**	**Eggs**	**Nests**	**Eggs**	**Nests**	**Eggs**	**Nests**	**Eggs**	**Nests**	**Chicks**	**Nests**	**Eggs**
FDW	11	34	1	3	3	9	15	46	2	6	17	52
OBN	6	20	0	0	0	0	6	20	5	12	11	32
3B	1	3	0	0	1	3*	2	6	0	0	2	6
Total	18	57	1	3	4	12	23	72	7	18	30	90

*Because nests at Pond 3B were not visited, it is assumed but not confirmed that this nest contained 3 eggs.

Table 3. The average number of predators observed per survey at Frank's Dump East, Frank's Dump West, Oliver Brothers North Ponds, and Pond 3B Hayward Regional Shoreline, Hayward, California, March-September 2025. The number of surveys conducted is in parentheses.

Predator Species	OBN (24)	3B (23)	FDW (28)	FDE (28)
American Crow	0	0	0.07	0.07
American Kestrel	0	0	0.04	0
California Gull	7.92	0.13	0	0
Common Raven	0.04	0.04	0.11	0.11
Domestic Dog	0.04	0	0	0
Feral Cat	0.13	0	0	0
Unidentified Gull	6.67	0	0	0
Herring Gull	0.04	0	0	0
Northern Harrier	0	0.04	0.04	0.04
Osprey	0	0.00	0.04	0
Red-tailed Hawk	0.04	0	0	0.14
Western Gull	0.08	0	0	0
White-tailed Kite	0.04	0	0.14	0.04

Table 4. Potential avian predator species.

Common Name	Scientific Name
American kestrel	*Falco sparverius*
Merlin	*Falco columbarius*
Peregrine falcon	*Falco peregrinus*
Prairie falcon	*Falco mexicanus*
Bald eagle	*Haliaeetus leucocephalus*

Golden eagle	*Aquila chrysaetos*
Cooper's hawk	*Astur cooperii*
Red-tailed hawk	*Buteo jamaicensis*
White-tailed kite	*Elanus leucurus*
Northern harrier	*Circus hudsonius*
California gull	*Larus californicus*
Western gull	*Larus occidentalis*
Herring gull	*Larus smithsonianus*
Glaucous-winged gull	*Larus glaucescens*
Short-billed gull	*Larus brachyrhynchus*
Ring-billed gull	*Larus delawarensis*
American crow	*Corvus brachyrhynchos*
Common raven	*Corvus corax*
Black-crowned night heron	*Nycticorax nycticorax*
Western cattle-egret	*Ardea ibis*
Great blue heron	*Ardea herodias*
Great egret	*Ardea alba*
Snowy egret	*Egretta thula*
Loggerhead shrike	*Lanius ludovicianus*

Table 5. Potential non-avian predator species.

Common Name	**Scientific Name**
Red Fox	*Vulpes vulpes*
Grey Fox	*Urocyon cinereoargenteus*
Striped Skunk	*Mephitis mephitis*

Virginia Opossum	*Didelphis virginiana*
Domestic Cat	*Felis catus*
Coyote	*Canis latrans*
North American Racer	*Coluber constrictor*
California Kingsnake	*Lampropeltis californiae*
Gopher Snake	*Pituophis catanifer*