Black Oystercatcher (*Haematopus bachmani)*
Reproductive Success
California Central Coast, Monterey Bay Region
2025

Northern Monterey County
(Point Lobos State Natural Reserve to City of Monterey)
and
Northern Santa Cruz County to Southern San Mateo County
(Natural Bridges State Beach to Pescadero State Beach)

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Prepared for

Monterey Audubon Society

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SUMMARY OF 2025 REPRODUCTIVE SUCCESS

During the 2025 breeding season in the **Monterey Bay region**, a total of 84 Black Oystercatcher territories were monitored, 73 territorial pairs were identified, but only 49 pairs (67%) were observed nesting for a total of 58 nesting attempts (49 breeding pairs + 9 re-nesting attempts, also referred to as "replacement clutches"). From the observed breeding pairs (also referred to as "nesting pairs"), there were at least 124 eggs laid, 67 chicks hatched, and 28 chicks fledged, for an **overall reproductive success rate of 0.57 per pair,** with 22 of the 49 breeding pairs (45%) producing fledglings. The 0.57 reproductive success per pair for the Monterey Bay region is just above the modeled productivity of ~0.50 rate necessary to maintain a stable population (Weinstein et al. 2024).

In the Monterey Bay **South Coast** study area, a total of 24 breeding pairs and four re-nesting attempts were recorded, for a total of 28 nesting attempts. A minimum of 61 eggs and 27 chicks were produced, with a total of eight fledglings from 24 breeding pairs, resulting in a reproductive success of 0.33 per pair.

In the Monterey Bay **North Coast** study area, a total of 25 breeding pairs and five re-nesting attempts were recorded, for a total of 30 nesting attempts. A minimum of 63 eggs and 40 chicks were produced, with a total of 20 fledglings from 25 breeding pairs, resulting in a reproductive success of 0.80 per pair. The Monterey Bay North Coast study area accounted for 71% of the region's fledglings, more than two times the number of fledglings produced in the Monterey Bay South Coast study area.

INTRODUCTION

Monterey Bay Region & Study Areas

The Monterey Bay region runs from Point Lobos State Natural Reserve in the south to Pescadero State Beach in the north, covering coastal sections in three counties and approximately 160 kilometers (100 miles) of coastline. The Monterey Bay region is separated into two study areas: Monterey Bay South Coast (northern Monterey County) and Monterey Bay North Coast (northern Santa Cruz County and southern San Mateo County) (Figure 1). The separation of the Monterey Bay region into two study areas was done for the following reasons: 1) there is a large stretch of sandy shoreline of about 55 kilometers (34 miles) that separates the two study areas; 2) one side of the coast had more monitoring history; and 3) the separation allows for a clear comparison of the productivity between the two study areas.

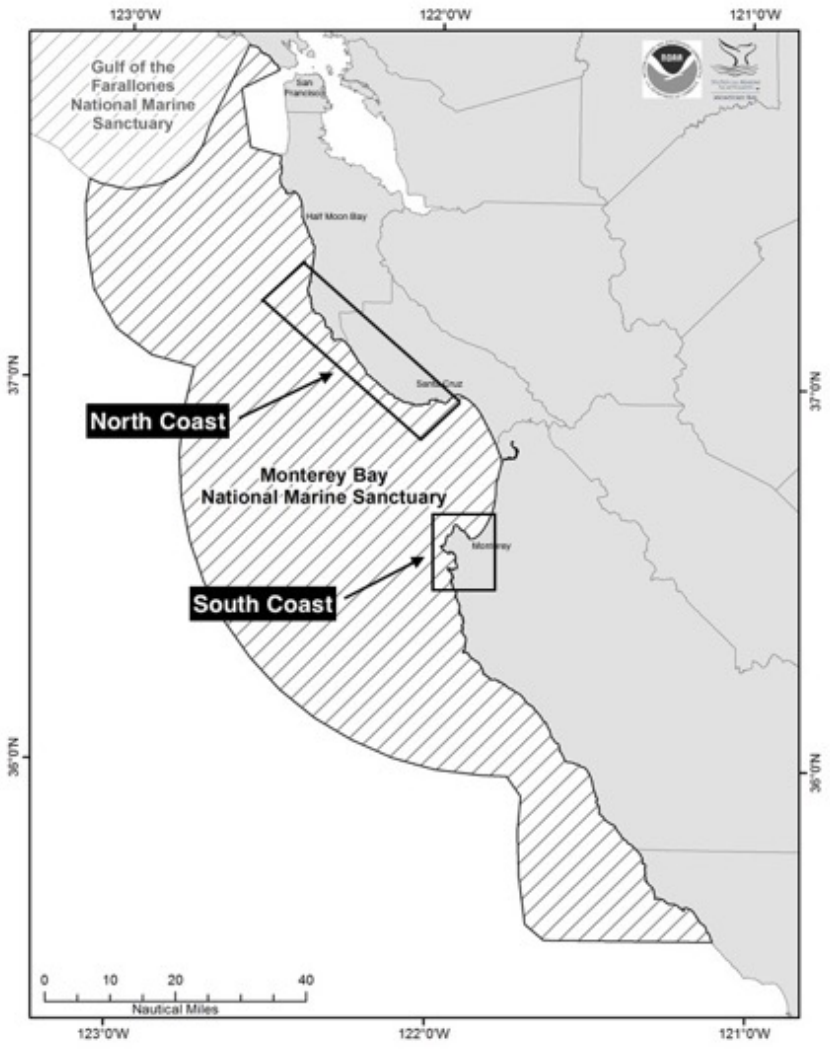

Figure 1. *Map showing Monterey Bay South Coast and North Coast Study Areas.*

The Monterey Bay South Coast study area (South Coast) is located along the northern portion of the Monterey County coast extending north from the south end of Point Lobos State Natural Reserve to the east side of the Coast Guard Pier in the City of Monterey and is broken into three monitoring sections: 1) Point Lobos (PL) (Point Lobos State Natural Reserve); 2) Pebble Beach (PB) (Stillwater Cove to Point Joe); and 3) Monterey Peninsula (MP) (Asilomar State Beach to Monterey). Both the Monterey Peninsula monitoring section and the Point Lobos monitoring section are completely covered, while the Pebble Beach monitoring section has a number of small breaks due to private property access restrictions.

The Monterey Bay North Coast study area (North Coast) extends north from the south end of Natural Bridges State Beach to the north end of Pescadero State Beach and consists of two monitoring sections: 1) northern Santa Cruz County coast (SC) and 2) southern San Mateo County coast (SM). It should be noted that each of the monitoring sections in the North Coast do not include the entire area of their respective section of coastline. The Santa Cruz monitoring section includes Natural Bridges State Beach and the University of California Santa Cruz's

Younger Lagoon Reserve, then a break until Wilder Ranch State Park's Wilder Beach to Three-Mile Beach, then a break until Shark Fin Cove to Davenport, and finally a break until Pelican Rock to Greyhound Rock. The San Mateo monitoring section consists of the coastline of Pescadero State Beach and the area around Pigeon Point Light Station State Historic Park, including a short stretch of Peninsula Open Space Trust coastal property and a stretch of San Mateo Recreation and Parks Department coast property, both on the east side of the State Parks property. The San Mateo monitoring section excludes Año Nuevo State Park.

Black Oystercatcher Project

The California Central Coast Black Oystercatcher Project is part of the larger California coastwide project to assess the status of the Black Oystercatcher (*Haematopus bachmani*), a species of conservation concern, and hereafter occasionally referred to as BLOY, using the International Ornithologists' Union's common name abbreviation. The initial California coastwide project was managed by Audubon California partnering with local Audubon chapters, the California Coastal National Monument, California State Parks, and several other local coastal organizations. The local project focuses on the Monterey Bay region from the northern portion of the Monterey County coast to the southern portion of the San Mateo County coast.

The California coastwide Black Oystercatcher monitoring project (BLOY Project) began in 2011 with four basic objectives: 1) identify distribution and abundance (number of BLOYs along the California Coast); 2) determine reproductive success (number of fledglings from territorial/breeding pairs); 3) assess the habitat and threats to the habitat (reasons for nesting failure); and 4) develop conservation measures (protective measures and outreach actions) to assist with the long-term success of the species.

The field effort of the BLOY Project was initiated in 2011 with a targeted survey measuring distribution and abundance using a standardized protocol developed specifically for detecting Black Oystercatchers during the early breeding season, when pair fidelity to breeding territories is highest and movement is lowest. Approximately 18% of the rocky habitat of the California coast was covered during the first and third weeks of June (Weinstein et al. 2014).

The initial 10-year (2012-2021) reproduction monitoring portion of the project began in five California coastal regions - San Luis Obispo, Monterey Bay, San Francisco Bay, Sonoma Coast, and Mendocino Coast. The data from the initial 10-year BLOY reproduction monitoring, as well as the 2022 reproduction monitoring along the California coast, were combined and analyzed with the Oregon BLOY reproduction monitoring data and the resulting report was published in *Marine Ornithology* (Weinstein et al. 2024).

For the 10 years of the initial monitoring in the Monterey Bay region, the results of each breeding season are in reports for each year (Roberson 2012, Ceja et al. 2013, Ceja & Hanks 2014, Ceja & Hanks 2015, Ceja & Hanks 2016, Ceja & Hanks 2017, Ceja & Hanks 2018, Parkin et al. 2019, Parkin et al. 2020 & Parkin et al. 2021). In 2022, the second California coastwide 10-year BLOY monitoring initiative began, but this time the five regional efforts are coordinated by local entities. The Monterey Bay region is under Monterey Audubon Society in collaboration with the California Coastal National Monument, Pacific Grove Museum of Natural History, and Point Lobos Docents. The results of the 2022, 2023, and 2024 breeding seasons are also in

individual reports (Parkin et al. 2022, Parkin et al. 2023 & Parkin et al. 2024). All 13 of the individual monitoring season reports are available on the Monterey Audubon Society website at: https://www.montereyaudubon.org/bloy.

METHODS

The monitoring methodology used is based on the Black Oystercatcher standardized protocols for monitoring population size and reproductive success developed by the US Geological Survey (Elliott-Smith & Haig 2011), with slight modifications adapted by Audubon California. The primary monitoring is conducted during the breeding season from mid-April through the end of September.

The field work is conducted by a staff consisting of a Regional Coordinator, a Project Biologist, and an Assistant Biologist and it is currently operated as a community science venture using more than 45 volunteer monitors.

For 2025, with key funding from an anonymous donor and a few donations from various individuals, the California Central Coast Black Oystercatcher Project was able to continue the funding of two part-time biologists– the Project Biologist and the Assistant Project Biologist. The Project Biologist covered all the North Coast Black Oystercatcher territories once a week and all of the South Coast Black Oystercatcher territories once a month, while the Assistant Project Biologist covered all of the South Coast Black Oystercatcher territories once a week. Collectively, this provided a consistent monitoring base for each of the 84 Black Oystercatcher territories throughout the Monterey Bay region (See Appendix 1 for Google Earth maps of BLOY territories within each monitoring section).

Black Oystercatcher territory size was determined based on observations made of the individual Black Oystercatcher pair's foraging distance, encounters with neighboring pairs, and distance covered during territorial chases of interloping Black Oystercatchers, as well as areas traveled with young to forage post fledging. Google Earth Pro was used to obtain GPS coordinates, map nest locations, and delineate territory size.

Data collected from observations were entered into Google Sheets set up by each known territory to record the date, time of observation, nest stage, number of adults, adult behavior, number of eggs, stage of eggs, number of chicks, stage of chicks, disturbances, and quality of survey. A note section at the end allows for any other information observed (i.e., tide, weather, where the pair was observed in the territory, and other interesting observations).

Black Oystercatcher pairs were classified by stage (i.e., nest building, incubating, young, empty, or unknown). Pairs with an unknown status were counted as not having nested. A territory classified as "abandoned" is a territory that was once occupied by a Black Oystercatcher territorial pair, but regular monitoring has indicated that the territory is no longer occupied by a territorial pair. Lastly, a "neutral zone" is an area without a territorial Black Oystercatcher pair, but does consist of unattached Black Oystercatchers, including sub-adults, single adults, and newly paired Black Oystercatchers without established territories.

Observations were made using binoculars and spotting scopes from land at each Black Oystercatcher territory for a minimum of 30 to 60 minutes at least once a week during the initial portion of the breeding season. At nesting sites with incubation, the minimal observation time may be reduced to about 10 to 20 minutes, while for those nesting sites with chicks, the observations may need to be increased to 60 minutes or more while chicks were present or if other Black Oystercatcher activity warranted much longer observations. In some cases, volunteer monitors with assigned territories made observations almost daily, but at a minimum once a week. Nesting sites with known hatching dates, chicks, or near areas with high human disturbance were monitored more frequently than the minimum in order to document nesting success, predation, human interaction, and inform people about wildlife disturbance and Black Oystercatchers. In the North Coast, part of the Wilder Ranch State Park portion in the Santa Cruz monitoring section includes approximately 6.5 kilometer (4 miles) of a coastline trail with only one main access point. This required the use of a bicycle to efficiently monitor 10 territorial pairs within a reasonable amount of time.

NUMBER OF MONITORS, MONITORING HOURS & OBSERVATIONS

The California Central Coast Black Oystercatcher Project used a total of 46 community science monitors, along with a small BLOY Project staff consisting of the Regional Coordinator, the Project Biologist, and the Assistant Project Biologist, creating a cadre of 49 monitors for the 2025 BLOY breeding season. A large majority of the community science monitors (91%) were distributed throughout the South Coast with 42 monitors – 28 in the Monterey Peninsula monitoring section, eight in the Pebble Beach monitoring section, and six for the Point Lobos monitoring section. For the North Coast, there were four community science monitors for the southern portion of the Santa Cruz monitoring section. The Project Biologist monitored all territories in both the North Coast and South Coast study areas, while the Assistant Project Biologist monitored the South Coast study area. Throughout the breeding season, the Regional Coordinator tracked the monitoring for the entire region and monitored territories in all the Monterey Peninsula and Point Lobos monitoring sections, as well as territories in the North Coast study area as needed.

The number of monitors, monitoring hours, and observations were determined based on data entries on the Google Sheets set-up for each of the five monitoring sections monitored (MP, PB, PL, SC & SM). The number of monitoring hours and the number of observations between 15 April and 10 October were calculated for each individual monitor. For example, a single Google Sheets entry with two monitors listed for 30 minutes of monitoring was counted as two individual observations with 30 minutes of observation for each monitor (two observations for a total of one hour).

For the 84 Black Oystercatcher territories monitored in the Monterey Bay region in 2025, there were a total of 2,137 hours of monitoring from 3,921 observations – 1,520 hours from 2,812 observations in the South Coast and 617 hours from 1,109 observations in the North Coast (Table 1). Throughout the Monterey Bay Region, the community science volunteers conducted 1,042 monitoring hours from 1,885 observations or 49% of all monitoring hours and observations. Together, the individual monitoring hours and observations for the Regional Coordinator, Project Biologist, and the Assistant Project Biologist totaled 1,095 hours and 2,036

observations or 51% of all monitoring hours and observations conducted during the 2025 breeding season.

Table 1. *2025 Black Oystercatcher Monitoring Hours & Observation Numbers - Monterey Bay Region.*

Study Areas & Monitoring Sections	# of Monitoring Hours	# of Observations
Monterey Bay South Coast		
Monterey Peninsula (MP)	702	1,165
Pebble Beach (PB)	489	1,027
Point Lobos (PL)	329	620
Sub-Totals	**1,520**	**2,812**
Monterey Bay North Coast		
Santa Cruz County (SC)	306	759
San Mateo County (SM)	311	350
Sub-Totals	**617**	**1,109**
Grand Totals	**2,137**	**3,921**

RESULTS

Territorial Distribution

Monterey Bay South Coast

The South Coast study area had a total of 43 territorial pairs – 16 along the Monterey Peninsula (Appendix 1, Image 1), 14 along Pebble Beach (Appendix 1, Image 2), and 13 at Point Lobos (Appendix 1, Image 3). Of the 43 territorial pairs, there were a total of 24 nesting pairs and 19 pairs with an unknown status during the breeding season. In the Monterey Peninsula (MP) monitoring section, three territories (MP3, MP15 & MP17) are considered abandoned. One formerly abandoned territory (MP8) was reoccupied with a new pair and a new territorial pair (MP19) has taken a portion of the MP10 territory at Hopkins. In the Pebble Beach (PB) monitoring section, two territories (PB5 & PB13) are considered abandoned, and one territory (PB9) has remained a neutral zone. One new territorial pair (PB17) nested at Point Joe. Along the Point Lobos (PL) monitoring section, three territories are considered abandoned territories (PL9, PL11 & PL12).

Monterey Bay North Coast

The North Coast study area had a total of 30 territorial pairs – 18 along the Santa Cruz monitoring section (Appendix 1, Images 4, 5 & 6) and 12 along the San Mateo monitoring section (Appendix 1, Images 7, 8 & 9). Of the 30 territorial pairs, there were a total of 25 nesting pairs and 5 pairs with an unknown status. In the Santa Cruz (SC) monitoring section, two territories are classified as abandoned (SC11 & SC19). One new territorial pair (SC20) nested in the southern portion of the SC1 territory at Natural Bridges State Park. In the San Mateo (SM) monitoring section one territory (SM11) is considered abandoned and one formerly abandoned territory (SM13) was reoccupied.

Timing of Breeding

In 2025, the Monterey Bay region had a total of 58 nesting attempts, including renesting attempts (replacement clutches). Of these, most nests were observed within one to seven days of initiation. Some nests were back calculated from the hatching date or first sighting of chick(s) or fledgling(s) date to determine the approximate nest initiation dates and were included in the nesting attempts.

In the Monterey Bay region, nesting started in late April with a single clutch (Figure 2) followed by an equal number of clutches (17) laid in early May and in late May. The earliest nesting attempt, during the last week of April, was observed in the Monterey Peninsula monitoring section (MP13). The 17 nesting attempts from May 1 to May 15 consisted of two in the South Coast and 15 in the North Coast. The 17 nesting attempts from May 16 to May 31 consisted of 10 in the South Coast, including one replacement clutch (MP16.2), and six in the North Coast. In early to mid-June there were nine nesting attempts, with seven in the South Coast and two in the North Coast. A total of five nesting attempts occurred in mid to late June with two nesting attempts in the South Coast including one replacement clutch (MP2.2) and two replacement clutches (SC6.2 & SM4.2) in the North Coast. In 2025, there were more nesting attempts (n=9) during the month of July than in previous years. Between July 1 and July 15, a total of six nesting attempts, one new attempt (MP7) and one replacement clutch (PB11.2) in the South Coast and two new attempts (SC1 & SM1) and two replacement clutches (SC7.2 & SM2.2) were initiated in the North Coast. The last nesting attempts of the 2025 breeding season occurred between July 15 and July 31 with a total of three nesting attempts, one new attempt (PB14) and one replacement clutch (PB3.2) in the South Coast and one replacement clutch (SC8.2) in the North Coast. There were no third nesting attempts this year.

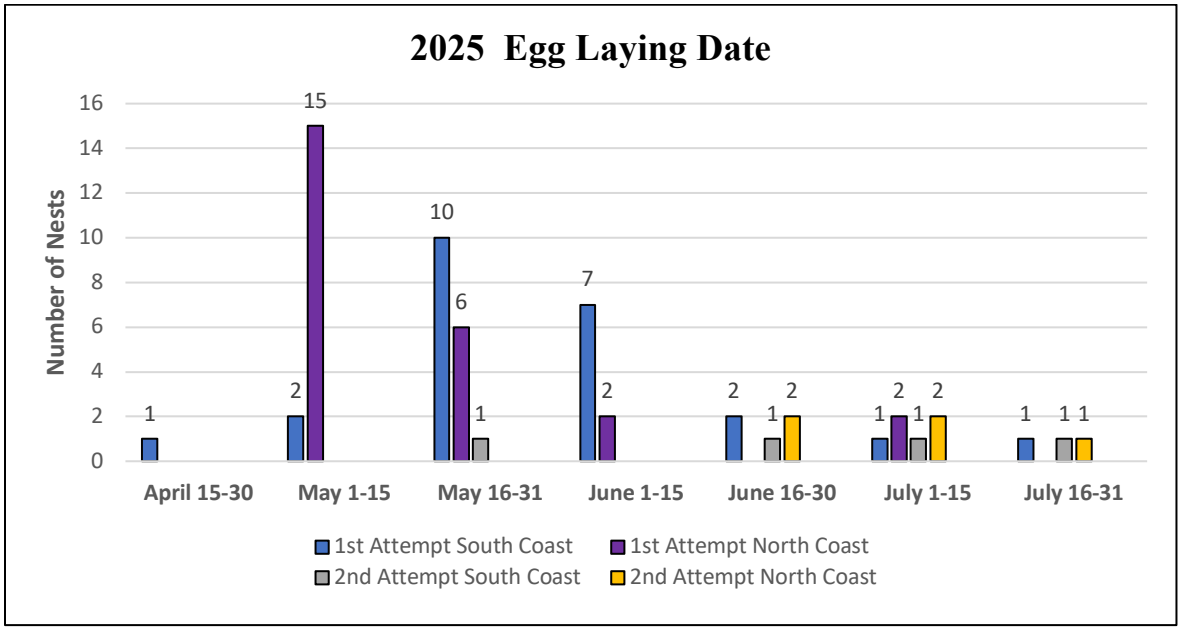

Figure 2. *2025 Monterey Bay region Black Oystercatcher egg laying dates.*

Reproductive Success

2025 Breeding Season

Due to the diverse coastal topography throughout the Monterey Bay region, exact clutch size for all nesting attempts was not attainable. Some nesting sites could only be successfully viewed with spotting scopes from distant observation points onshore; therefore, when confirmation was not possible, a nesting attempt was given an estimated clutch size of two eggs, an average number within the Monterey Bay region. Most chicks were recorded at hatching and were observed throughout the course of the summer. When this, however, was not possible but a fledgling or fledglings were observed, then an estimated number of chicks was made based on the number of fledglings.

During the 2025 breeding season, a total of 73 territorial pairs were identified with 49 pairs (67%) observed nesting. These 49 breeding pairs produced a minimum of 124 eggs. A total of 37 breeding pairs produced young resulting in 64% nesting success (# of clutches that produced young / # of clutches) with a survival to fledging (# of chicks fledged / # of chicks) of 42%. A total of 28 chicks fledged in the Monterey Bay region with a reproductive success per pair (# of fledglings / # of breeding pairs) of 0.57 or 57% (Table 2).

Table 2. *2025 Black Oystercatcher Reproductive Success – Monterey Bay Region.*

Study Areas	# of Breeding Pairs	# of Eggs	# of Chicks	# of Fledglings	# of Nest Attempts	Nesting Success (%)	Hatching Success (%)	Per Pair	Per Nest	Survival to Fledging (%)
Monterey Peninsula (MP)	8	24	15	4	10	60.0	62.5	0.50	0.40	26.7
Pebble Beach (PB)	9	23	6	3	11	45.5	26.1	0.33	0.27	50.0
Point Lobos (PL)	7	14	6	1	7	42.9	42.9	0.14	0.14	16.7
Monterey Bay South Coast	**24**	**61**	**27**	**8**	**28**	**50.0**	**44.3**	**0.33**	**0.29**	**29.6**
Santa Cruz County (SC)	13	34	23	11	16	75.0	67.7	0.85	0.69	47.8
San Mateo County (SM)	12	29	17	9	14	78.6	58.6	0.75	0.64	52.9
Monterey Bay North Coast	**25**	**63**	**40**	**20**	**30**	**76.7**	**63.5**	**0.80**	**0.67**	**50.0**
Monterey Bay South + North Coast	**49**	**124***	**67**	**28**	**58**	**63.8**	**54.0**	**0.57**	**0.48**	**41.8**

In the South Coast study area, there were a total of 24 nesting pairs and four renesting attempts for a total of 28 nesting attempts. A minimum of 61 eggs were produced which resulted in 50% nesting success (# of clutches that produced young / # of clutches) (Table 2). The total number of hatched chicks recorded was 27 with 30% surviving to fledging (# of chicks fledged / # of chicks). The total number of fledglings in the South Coast study area was eight from seven pairs, bringing the reproductive success to 0.33 per pair in 2025 (# of fledglings / # of breeding pairs). In the Monterey Peninsula monitoring section, two pairs (MP5 & MP16.2) successfully fledged one chick each, and one pair (MP13) fledged two chicks. In the Pebble Beach monitoring section, three pairs (PB3.2, PB6 & PB8) fledged one chick each, and in the Point Lobos monitoring section, one pair successfully fledged one chick (PL1).

In the North Coast monitoring section, there were a total of 25 nesting pairs and five renesting attempts for a total of 30 nesting attempts. A minimum of 63 eggs were produced that resulted in 77% nesting success (Table 2). The total number of hatched chicks recorded was 40 with 50% surviving to fledging. The North Coast study area had a total of 20 fledglings from 15 pairs and a reproductive success of 0.80 per pair in 2025. In the Santa Cruz monitoring section, eight pairs successfully fledged 11 chicks. Six pairs (SC5, SC10, SC12, SC15, SC17 & SC18) successfully fledged one chick each, one pair (SC1) produced two fledglings, and one pair (SC4) successfully fledged three chicks. In the San Mateo monitoring section, seven pairs successfully fledged a total of 9 chicks. Five pairs (SM3, SM4.2, SM7, SM8 & SM9) produced one fledgling each and two pairs (SM1 & SM6) successfully fledged two chicks each. Tables 3 through 7 in Appendices 2 through 6 show detailed 2025 productivity results for each territory within each monitoring section.

Comparison of 2016-2025 Reproductive Success

The Monterey Bay South Coast and North Coast study areas have provided two robust and comparable 10-year data sets to enable an initial assessment of how the BLOY population of the Monterey Bay region is doing. A more detailed assessment of the 10-years of BLOY monitoring data will be done over the next few months, but there are a few observations that can be made now. First, the South Coast study area has consistently shown a much lower reproductive success per pair with a mean of 0.27 (SD = 0.13, n = 10) for the last ten years and has suffered two years (2016 & 2021) that had extremely low reproductive success. The North Coast study area has generally done much better with a mean of 0.65 (SD = 0.19, n = 10) per pair. The reproductive success of the entire Monterey Bay region (South and North Coast study areas combined) with a mean of 0.44 (SD = 0.12, n = 10) has ranged from a low of 0.19 per pair in 2021 to a high of 0.62 per pair in 2023 (Table 8).

The fluctuations in reproductive success indicate that when the North Coast study area has years where reproductive success is lower, the entire Monterey Bay region reflects the impact. Those years, however, may be an anomaly since they included a year (2020) with heavy smoke in August and September from a major wildfire adjacent to much of the North Coast study area (CZU Lightning Complex fire burned through the Santa Cruz Mountains for two months and was the largest fire in Santa Cruz County history) and the COVID-19 pandemic that started in March 2020 and lasted through 2022, but brought a large increase of people flocking to the California Central Coast seeking outdoor relief from confinement due to the pandemic.

Table 8. *Black Oystercatcher Reproductive Success Per Pair for 2016 through 2025 - Monterey Bay Region.*

Site	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Monterey Bay South Coast	0.14	0.21	0.31	0.24	0.36	0.04	0.33	0.50	0.20	0.33
Monterey Bay North Coast	0.82	0.84	0.74	0.71	0.27	0.46	0.43	0.73	0.68	0.8
Monterey Bay South Coast + North Coast	**0.40**	**0.46**	**0.50**	**0.48**	**0.32**	**0.19**	**0.38**	**0.62**	**0.45**	**0.57**

Ref.: Ceja & Hanks 2016, 2017 & 2018; Parkin et al. 2019, 2020, 2021, 2022, 2023, 2024 & 2025

The National Audubon literature review of BLOY reproductive success (mostly in Alaska & British Columbia), as well as the reproductive success of other shorebirds, resulted in the development of an initial population model suggesting that a pair productivity rate of ~0.65 or

greater is likely a good sign for a healthy local population, while pair productivity estimates below 0.35 are likely a sign of caution for a population at risk (Meehan et al. 2018). In addition, an average productivity rate of ~0.50 is necessary to maintain a stable population (Weinstein et al. 2024).

Applying this model to the Monterey Bay North Coast and South Coast study area data, the Monterey Bay region population would be considered a population to watch because the overall reproductive success has not been above 0.65 per pair for a healthy population and has only twice (2023 & 2025) been above 0.50 per pair for a stable population (Figure 3). In fact, there are several years (2016, 2020, 2021 & 2022) where the population was near or below the at-risk stage of <0.35 per pair.

The North Coast study area has had a reproductive success per pair at or above the 0.65 mark for seven out of the ten years (2016-2025) of this study. However, the South Coast study area has hovered closer to or below the 0.35 mark nine of the ten years over the same time period. Overall, seven of the 10 years have been below the stable level and three at or below the at-risk level. With a 10-year average of 0.44 that is midway between the at-risk level and the stable level (Figure 3), indications are the Monterey Bay region's BLOY population is clearly a population of concern.

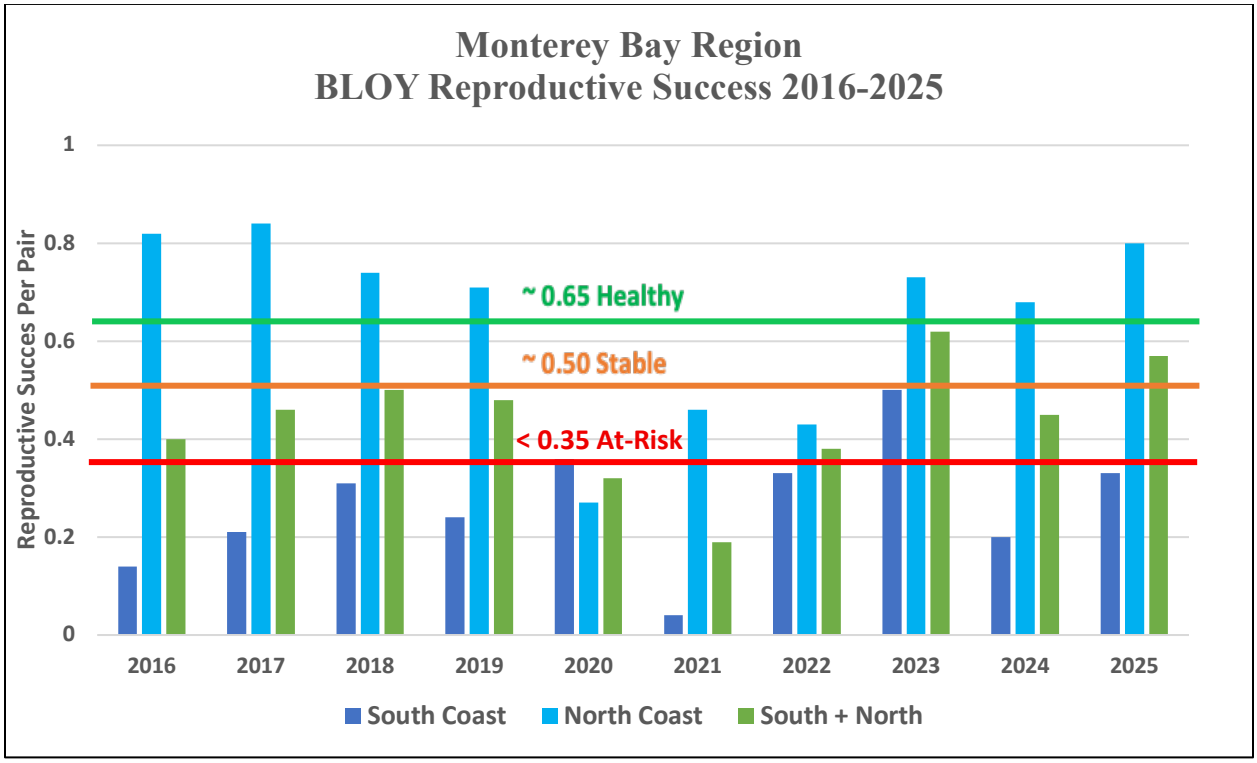

Figure 3. *Monterey Bay Region BLOY Reproductive Success 2016-2025 with At-Risk population level represented with red line, Stable Population level represented with orange line, and Healthy Population level represented with green line.*

The overall up and down trend of the Monterey Bay region's BLOY population is consistent with the findings of the recent analysis of the California and Oregon BLOY monitoring data that

among other things, identified a lack of any temporal trend in productivity (Weinstein et al. 2024). Assessing the comparison of the 2016-2025 Monterey Bay region's BLOY reproductive success highlights the need for continued monitoring of the region's BLOY population. Further analysis of factors influencing population health is recommended to identify what variables should be addressed to help perpetuate the species.

Nest Location

In 2025, a total of 58 nesting attempts (including renesting) occurred in the entire Monterey Bay region. Of those, 50% (n=29) nested on offshore rocks (rocks separated from coastal access during higher tides), 41% (n=24) nested on rocky shores (bluffs, onshore rocks, ledges, and outcroppings), and 9% (n=5) nested on sand/gravel beaches. Of the 58 total nesting attempts, the South Coast study area had 29% (n=17) nesting on offshore rocks, 1% (n=9) nesting on rocky shores, and 5% (n=3) nesting on sand/gravel beaches. In the North Coast study area 21% (n=12) nested on offshore rocks, 26% (n=15) nested on rocky shores, and 3% (n=2) nested on sand/gravel beaches. Because these two study areas have diverse and different coastal topographies, there is a distinct difference in the number of nest locations predominantly used. In the South Coast study area, there are more nests occurring on offshore rocks and in the North Coast study area, there are more nests occurring on ledges below bluffs along the rocky shore.

There were 36 nesting attempts that produced young, of those, 58% (n=21) nested on offshore rocks, 31% (n=11) nested on rocky shores, and 11% (n=4) nested on sand/gravel beaches. There were 21 nesting pairs that fledged at least one chick with 57% (n=12) nesting on offshore rocks, 33% (n=7) nesting on rocky shores, and 10% (n=2) nesting on sand/gravel beaches. Three renesting attempts resulted in fledged young (MP16.2, PB3.2 & SM4.2), one nest was located on offshore rocks, and two nests were located on rocky shores.

The 2025 Black Oystercatcher territories and nest locations for the three monitoring sections of the Monterey Bay South Coast study area – Monterey Peninsula, Pebble Beach, and Point Lobos are shown on Images 1, 2, and 3 in Appendix 1. The entire stretch of the Santa Cruz monitoring section with the Black Oystercatcher territories and nest locations are shown on Image 4 in Appendix 1, while Images 5 and 6 in Appendix 1 show these territories and nest locations in more detail. The entire stretch of the San Mateo monitoring section with the Black Oystercatcher territories and nest locations are shown on Image 7 in Appendix 1, while Images 8 and 9 in Appendix 1 show these territories and nest locations in more detail.

Disturbance

Black Oystercatchers nesting in all five sections of the Monterey Bay region experienced varying degrees of natural and human caused disturbances. A disturbance was recorded when a pair or one individual of a pair was seen chasing or flying away, making alert, alarm, or territorial calls toward a threat (including other BLOYs in the area). Disturbances are recorded as part of the regular monitoring of each BLOY territory.

In 2025, the most frequently observed natural disturbance for the entire Monterey Bay region was from Black Oystercatcher interlopers (224 observations). BLOY are very territorial, especially during the breeding season, and will readily chase away other BLOY entering their

territory, even leaving eggs or chicks unattended. This behavior can have a huge impact on the survival of eggs and young due to increased vulnerability to predation and less provisioning to young.

Various avian species caused the second most frequently observed natural disturbance with a total of 97 observations. This includes 16 observations of disturbance from gull species, 10 from raptor species, seven from corvid species, and 64 from "other" avian species, predominantly Brown Pelican (BRPE), Brandt's Cormorant (BRCO), and Pelagic Cormorant (PECO). Many of these species use the same ledges, bluffs, offshore rocks, and areas above high tide to roost. This can disturb resting BLOY and prevents BLOY from accessing prime nesting spots. Also, many of these avian species are a predation threat to BLOY eggs and chicks. Trampling of eggs and predation of chicks have been observed over the course of this study. It should be noted that many WEGU pairs are observed nesting near BLOY pairs without any incidence and many of these pairs have been observed to collaboratively defend their nests and their young from potential predators and even other gulls.

Human disturbance contributed a total of 75 observations of disturbance, 44 of which were by non-research related incidences. These were all incidences of people walking out on coastal rocks and causing disturbance to BLOYs. The research related incidences included project staff roping off rocks at the beginning and end of the breeding season, repairing broken ropes during the breeding season, specific nest checks on some nests, academic research from various institutions, and drone research flights.

Disturbance due to unauthorized drone activity was observed a total of 19 times with seven observations in the Monterey Peninsula monitoring section, one observation each in the Pebble Beach and Point Lobos monitoring sections, and 10 observations in the San Mateo monitoring section.

In 2025, a total of 20 observations were recorded from disturbances caused by waves (n=7), fishing (n=4), pets (n=3), and native land mammals (n=6). Observations for these categories, as well as the drone category, are only made while someone is monitoring an area; therefore, these disturbances may occur more often than is represented here. Also, predation on eggs and chicks from native land animals may occur more frequently at night than during the day.

There were nine observations of disturbance with an unknown cause. Generally, this category has ranged from 10-24 observations during each year of this study. The unknown category is used when a monitor observes a BLOY reaction such as alert or alarm calls and cannot find the source of the disturbance.

PROTECTIVE MEASURES

Vulnerability to Human Disturbance

The five monitoring sections of the Monterey Bay region differ greatly in topography, accessibility, land use, and regulations, making each area distinctively different in its vulnerability. The three monitoring sections of the South Coast study area, having a lot of human access points, are among the most vulnerable sections in the entire Monterey Bay region. Along their coastline are recreational trails, substantial coastline development, special events along the rocky bluffs (especially at Pebble Beach), street parking, parking pullouts, as well as numerous rocky outcroppings that are very accessible, especially at low tide. To prevent human related access, it is extremely important to use protective measures at select Monterey Peninsula, Pebble Beach, and Point Lobos monitoring section nesting spots.

The North Coast monitoring section has a mixture of State Parks, rugged topography, and accessible coastline. There are many bluff-top trails along the coast with varying levels of accessibility. Some of the more vulnerable areas in the Santa Cruz monitoring section include Natural Bridges State Beach, where people can access the rocky shoreline at lower tides and Greyhound Rock where there is access to this large mudstone rock at low tide. The San Mateo monitoring section is another highly vulnerable area especially at Pescadero State Beach due to parking above the beach and easy access to the rocky shore and offshore rocks during low tide. It is important to use protective measures in this area to decrease the disturbances to foraging and nesting BLOY.

Physical Protection Measures

In a continuing attempt to minimize human disturbance to nesting pairs, protective measures using a variety of signing techniques were put in place at nesting locations known to have high human activity. The extent of protective measures used depended on what was feasible for the particular nesting area and in what jurisdiction they were located. In 2025, the seasonal protective measures were implemented from April through October.

Physical protective measures were used for 22 territories with 21 nesting attempts in all five of the Monterey Bay region's monitoring sections (Table 9, Appendix 7). These seasonal measures provided protection for a total of 18 nesting pairs, 11 of which fall within the jurisdiction of the California Coastal National Monument, with three nesting pairs in the Monterey Peninsula monitoring section (MP2, MP5 & MP16) and eight in the San Mateo monitoring section (SM3, SM5, SM6, SM7, SM8, SM9, SM10 & SM13). The other six nesting pairs fall under the jurisdiction of the City of Pacific Grove (MP6), Pebble Beach Company (PB8, PB11 & PB17), University of California Santa Cruz (SC1), Natural Bridges State Park (SC20), and private property (MP1). Protective measures were put in place at two additional nesting site locations (MP3 & PL14) based on early indications of a nesting pair (i.e., rock tossing), but the pairs never nested this season.

A standard sign was used on California Coastal National Monument rocks (Image 10). At the Monterey Peninsula, ropes and signs were placed around the entire area of High Rock and Pyramid Rock on the Point Pinos Islet, protecting the MP16 1st nesting attempt located on

Pyramid Rock on the islet's western half. Also, on Point Pinos Islet, the same measures were placed entirely around Sentinel Rock protecting the MP5 nesting site on the eastern side of the islet and the MP16 2nd nesting attempt on the western side of the rock. With the MP16 pair taking its chick back and forth between the northeast side of Pyramid Rock and the western portion of Sentinel Rock, a rope with a sign was stretched between the southeastern corner of Pyramid Rock and the southwestern corner of Sentinel Rock (Image 11). Ropes with signs were also placed around Gull Rock East and extended on the eastern side of the rocks to protect the MP2 nesting attempts.

H.E. Hanks


H.E. Hanks

Images 10 & 11. *Standard sign used with ropes on California Coastal National Monument rocks & islets (left); Sign on rope on southwest corner of Sentinel Rock on Point Pinos Islet, Monterey County (right).*

In addition, the City of Pacific Grove, as part of the implementation of the Memorandum of Understanding signed in 2024 between the City of Pacific Grove and the Monterey Audubon Society, redid the line of golf course-style cord strung through green wooden stakes to extend about 20 meters, replaced the older sun-bleached signs with new signs, and this season placed the signs on low stakes situated behind the cord. These limited protection efforts appear to have kept most people from standing on the cliff edge above the MP6 nesting site (Images 12, 13 & 14).


H.E. Hanks

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Images 12, 13 & 14. *"Help Save Our Coastal Birds" sign used on City of Pacific Grove properties (middle); and golf course style stakes with cord & signs behind cord (left) & above MP6 nesting site (right).*

At the north end of Asilomar State Beach, State Parks once again placed A-frames with attached temporary closure notices at the various stairways to minimize access to Gazebo Rock and they extended the cable to the furthest end of the State Parks property to reduce passage to the "Rock

House Beach". With the closure notices, State Parks used a "virtual roping" technique. The notice included an aerial view of the coastline surrounding Gazebo Rock with an outline of the closure area (Image 15). In addition, once it was determined that the MP1 pair was nesting on the north side of the cove and not on Gazebo Rock this season, State Park set up a trail camera on the fence near the MP1 nesting site.

Point Lobos State Natural Reserve (SNR), State Parks maintained the temporary closure at PL14 on "Engagement Rock" near the Piney Woods coastal parking area. State Parks used the "virtual roping" technique here as well, with a notice that included an aerial view of the coastline surrounding Engagement Rock and an outline of the closure area. The notice was posted on portable signposts at access points and key spots along the trail (Image 16). In addition, State Parks maintained the extended rods and cables along both sides of the two railroad tie stairs and left a short gap for shoreline access but closed it off with a yellow plastic chain (Images 17 & 18). Unfortunately, the plastic chain is subject to breakage.

H.E. Hanks


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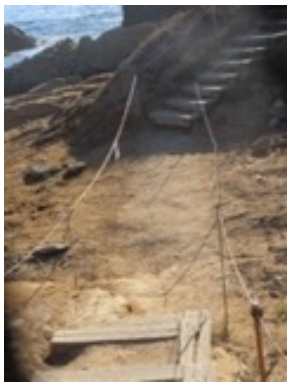
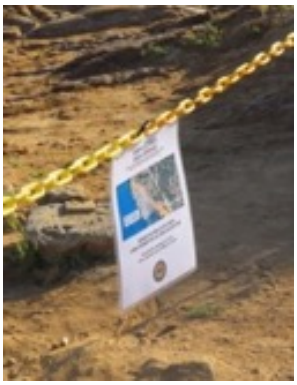

H.E. Hanks


H.E. Hanks

Images 15, 16, 17 & 18. *State Parks posted closure notice on A-frame stand at MP1 in Gazebo Rock area at north end of Asilomar State Beach (right); State Parks closure notice on portable post at Engagement Rock on Point Lobos State Natural Reserve (center left); & cables along both sides of trail & stairs near Engagement Rock (center right) & plastic chain near Engagement Rock (right) at Point Lobos SNR.*

At Pebble Beach's Bird Rock pullout along 17-Mile Drive, the Pebble Beach Company continued the signage they developed to provide protection to the "Sensitive Nesting Habitat for Black Oystercatchers". The signs were attached to the cables extended through metal eye-rods (Images 19 & 20) and to the permanent redwood, two-strand fence (Image 21), providing unbroken fencing and cable coverage along the entire parking area and trail at the south end of the Bird Rock pullout. The Pebble Beach Company also had signs and cable in place at Point Joe/China Rock, protecting the PB11 nesting attempt and signs on the fence at Point Joe (Image 22) for the new SC17 pair nesting attempt. At the Fanshell Beach pullout signs were placed on the fencing to help protect the unmonitored Fanshell Beach BLOY pair and other BLOYs foraging in the area.

H.E. Hanks


H.E. Hanks

H.E. Hanks

J.L. Parkin

Images 19, 20, 21 & 22. *Pebble Beach Company sign attached to cable (left) through eye-rods (center left) & posted on two strand redwood fencing (center right) at PB7 & PB8 at Bird Rock pullout and at Point Joe pullout (right) along 17-Mile Drive at Pebble Beach, Monterey County.*

In the Santa Cruz monitoring section, University of California Santa Cruz personnel posted a sign on the bluff above the SC1 nesting site area at the Younger Lagoon Reserve, part of the University of California Natural Research Reserve System (Image 23). The sign was placed at the access point to a popular spot for surfers to rappel down the bluff. In addition, Natural Bridges State Park posted a sign on a traffic A-frame at the tidepool access near the SC20 nesting site. The sign read: *Nesting Oystercatchers Along Tidepool Shelf - Please exercise caution, be respectful, and keep your distance* (Image 24). State Parks also placed *Do Not Enter-Bird Nesting Area* signs on the fence at the parking overlook near the park entrance (Image 25).

J.L. Parkin

J.L. Parkin

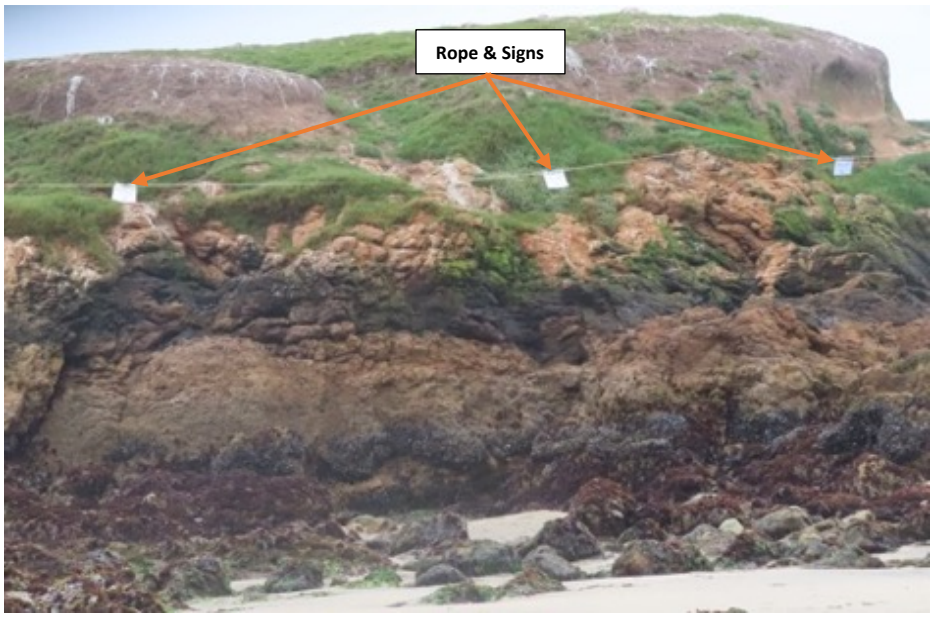
J.L. Parkin

Images 23, 24 & 25. *Sign made by Younger Lagoon Reserve and placed on the bluff above the SC1 nesting site (left); signs posted at Natural Bridges State Park tidepool access near SC20 nesting site (center) & signs on fence at the parking overlook (right).*

In the San Mateo monitoring section, ropes with signs were strung around the entire eastern side and across most of the northern portion of Pescadero Rock off Pescadero State Beach (Images 26 & 27). This provided protection for the SM3, SM5, SM7, SM9, SM10, & SM13 territorial pairs. In addition, ropes with signs were placed at the climbing locations on the rocks of the SM6 and SM8 nesting sites along Pescadero State Beach.

In total, the physical protection measures that protected the 22 territorial pairs, produced 11 of the region's 28 fledglings (39%) of the region's 2025 fledgling production.

H.E. Hanks



H.E. Hanks

Images 26 & 27. *Putting up ropes & signs on northern portion of Pescadero Rock (left). Ropes & signs were placed above the high tide line around the eastern & northern sides of Pescadero Rock, a California Coastal National Monument islet off Pescadero State Beach on the San Mateo County coast (2025).*

Outreach

Some outreach continued in the form of contacts between monitors and curious locals and coastal visitors from around the state and around the country, as well as a wide variety of international tourists. When appropriate, the wildlife disturbance brochure and the card with the City of Pacific Grove's ordinances related to drone operation and wildlife disturbance were handed out.

This was the second year of implementing the Memorandum of Understanding (MOU) between the City of Pacific Grove and the Monterey Audubon Society regarding a protection protocol for BLOY nesting along the City's coastline. This partnership initiative is intended to provide an orderly approach to the installation and removal of physical protective measures and/or implementation of other measures, including but not limited to docent activities and public education, associated with BLOY nesting sites on the City of Pacific Grove jurisdiction. Similar arrangements are already in existence with the California Coastal National Monument, California State Parks Monterey District, Pebble Beach Company, and University of California Santa Cruz Younger Lagoon Reserve. In 2025, the City of Pacific Grove redid the line of golf course-style cord strung through green wooden stakes and replaced the sun-bleached signs with new signs to serve as a visible barrier to help prevent people from getting too close to the MP6 pair's nesting site.

RELATED MONITORING ITEMS

BLOY California Coastwide "Index Survey" & Monterey Bay Region

Beginning in 2022, the California Coastwide BLOY Project initiated a 10-year "Index Survey" of the BLOY breeding pairs in the five BLOY monitoring regions – Mendocino Coast, Sonoma Coast, San Francisco Bay, Monterey Bay, and San Luis Obispo Coast. The 10-year Index Survey (or "Index Monitoring") initiative is needed to ensure the continual monitoring and assessment of the reproductive success of the BLOY population in the event the regions cannot continue to monitor the full amount of breeding pairs as covered during the 2012-2021 10-year monitoring initiative. The 2022-2031 10-year "Index Survey" is intended to be the consistent monitoring of a selected sample of the BLOY breeding pairs monitored during the five-year period of 2017-2021. A 25% non-randomly selected sample was applied using a stratified unaligned probability sampling strategy with the monitoring sections serving as the sampling strata and breeding pairs as the sampling units. For the Monterey Bay region, this involved the selection of 12 breeding pairs with two in the Point Lobos monitoring section (PL1 & PL6); two in the Pebble Beach monitoring section (PB1 & PB3); three in the Monterey Peninsula monitoring section (MP1, MP6 & MP9); three in the Santa Cruz monitoring section (SC3, SC4 & SC18); and two in the San Mateo monitoring section (SM2 & SM9). The 2025 fourth year results are shown in Table 10 in Appendix 8.

In 2025, seven fledglings were produced by the 12 "Index Survey breeding pairs". Two of the "Index Survey breeding pairs" did not nest this season; therefore, the reproductive success of the territorial pairs (# of fledglings / # of territorial pairs) is 0.58, while the reproductive success of the Index Survey pairs that nested (# of fledglings / # of breeding pairs) is 0.70. With a reproductive success of 0.57 for all the monitored BLOY pairs in the Monterey Bay region in 2025, that is a difference of +0.13 per pair. It should, however, be noted that the Index Survey data for the Monterey Bay region is for use with the Index Survey data from the other four BLOY monitoring regions in order to obtain a projected reproductive success rate for the entire California coastwide effort.

Unusual Number of BLOY Gatherings in Weston Cove & ORNZ Continued During 2025

The unusual number of BLOY gatherings in Weston Cove at Point Lobos State Natural Reserve and in and around the Ocean Road Neutral Zone (ORNZ) at Pebble Beach continued at various times throughout the 2025 BLOY breeding season. It is not unusual to see small numbers of BLOY (6 to 12) flocking together in a specific area at Point Lobos or in the ORNZ during cold periods in the non-breeding season (i.e., 20 BLOY on Pyramid Rock between Middle Rocks and Bird Island on December 2020) or even a few interloping BLOY hanging out with the territorial pair until just before the beginning of the breeding season (i.e., East Rock on the east side of Cannery Point in the PL7 territory at Whaler's Cove). It has, however, been very unusual to see larger numbers of BLOY remain in an occupied BLOY territory throughout an entire breeding season, but that was the case in the PL4 territory and northern end of the PL3 territory. The first recorded observation was in March when a flock of 18 BLOY was observed (Image 28).

H.E. Hanks

Image 28. *17 of 18 resting BLOY observed on the north side of Weston Cove at Point Lobos State Natural Reserve, Monterey County, in March 2025.*

Throughout the early months of the breeding season, there were occasional reports of "a large number of Black Oystercatchers" sighted at Weston Cove. Shortly after these reports, surveys indicated that two to six additional BLOY were occasionally on the north side of Weston Cove in the PL4 territory. The PL4 pair, sporadically attempted to chase off some of the interloping BLOY. By August, however, numbers were higher, with monitors recording nine to 13 BLOY on the north side of the Weston Cove. When it was reported that 30 to 40 BLOY were seen at Weston Cove, a confirmation survey was done on September 23. A total of 25 BLOY, including two subadults and the two Weston Cove territorial pairs, were observed that day (Image 29).

H.E. Hanks

Image 29. *View from southeast side of Weston Cove of a group of 22 BLOY on north side of Weston Cove, while three more BLOY were observed at the same time on the south side of the cove, September 23, 2025.*

At the ORNZ, there were reports of a high number of BLOY appearing in early November after the end of the 2025 breeding season. On November 7, 2025, at least 28 BLOY were observed gathered on a rock in the ORNZ during the King Tides (a non-scientific term for the highest and lowest tides of the year) (Image 30).

L.J. Wilsey

Image 30. *At least 28 BLOY congregating on a rock with a Whimbrel and a few Black Turnstones during a King Tide in the Ocean Road neutral zone at Pebble Beach in Monterey County, California.*

Last year, however, still outnumbered these 2025 season counts. In late September 2024, 49 BLOY were recorded gathering in Weston Cove at Point Lobos State Natural Reserve (Parkin et al. 2024).

In Weston Cove, the unusual element in 2025 was that interloping BLOY remained in an occupied territory through the entire breeding season, and as in 2024, the number of interloping BLOY was unusually large by the end of the breeding season (49 in 2024 & at least 28 in 2025). Regardless of the presence of the territorial pairs (PL3 & PL4), the Weston Cove area appears to be functioning as a neutral zone (i.e., an area usually without a territorial BLOY pair and regularly consisting of unattached BLOYs, including sub-adults, single adults and newly paired BLOYs without established territories). Since the BLOY Project has been continually monitoring at Point Lobos since 2016, the PL4 territorial pair has never nested and the various times the PL3 attempted to nest, it was in the southern portion of the territory at least a half mile (0.8 km) away from Weston Cove. These facts coupled with Weston Cove providing a good foraging location for BLOY may have helped create the conditions to attract other BLOY and establish a de facto BLOY neutral zone.

Leucistic BLOY Appeared at Pebble Beach in Late Spring

In mid-June 2025, a male leucistic Black Oystercatcher was observed with other BLOY in the Ocean Road Neutral Zone (ORNZ) situated between Bird Rock and China Rock along the northern coastline of Pebble Beach in Monterey County, California. Leucism is the result in reduced pigmentation causing a partial loss of color. A key distinguishing factor between leucism and albinism is that leucistic animals typically have normally colored eyes. By late June, no further observations of the leucistic BLOY were recorded.

Mark Chappell

Della Bossart

Images 31 & 32. *The male leucistic BLOY observed resting with other unattached BLOYs.*

Della Bossart

Mark Chappell

Images 33 & 34. *Male leucistic BLOY on the wrack; leucistic animals typically have normally colored eyes.*

ACKNOWLEDGEMENTS

A very special thank you to all of the volunteers from the Bureau of Land Management's California Coastal National Monument, Pacific Grove Museum of Natural History, and Point Lobos State Natural Reserve. Your continued monitoring work, dedicated effort, and passion for the protection of the Black Oystercatcher is the core value of this project.

We are particularly appreciative for the funding the California Central Coast Black Oystercatcher Project received in 2025. It covered a contract with the Project Biologist and the Assistant Project Biologist. This funding would not have been possible without an extremely generous $15,000 grant from an anonymous donor to which we are tremendously grateful. Once again, we are forever grateful for our anonymous donator who saved our monitoring effort and ensured the successful completion of our 13th year of the BLOY monitoring project in the Monterey Bay region.

We are also appreciative for a variety of small donations from a number of individual donors. We thank you all!

A special thank you to Monterey Audubon Society for taking the BLOY Project under its wing and for managing the project's funds and hiring the Project Biologist and Assistant Project Biologist.

A thanks to the Pacific Grove Museum of Natural History for continuing the California Central Coast Black Oystercatcher Project as one of the museum's community science programs.

Thanks to the BLM's California Coastal National Monument for also continuing the California Central Coast Black Oystercatcher Project as a community science initiative and providing technical guidance as needed.

And thanks to the Monterey District of California State Parks for permitting access to continue monitoring at Point Lobos State Natural Reserve and Asilomar State Beach. And a special thank you to the Monterey District's Resources staff for continuing the closures and signing around Gazebo Rock to protect the nesting MP1 nesting site at Asilomar State Beach and at Engagement Rock on Point Lobos State Natural Reserve to protect the PL14 nesting site.

A thank you to Younger Lagoon Reserve at the University of California Santa Cruz for placing their protection signage on the bluff near Seymour Marine Discovery Center to prevent people from rappelling down the bluff to the beach area where the SC1 pair nested.

Thank you to Natural Bridges State Park for placing signage along the exposed shelf north of the beach to protect the new SC20 pair from the public accessing tide pools in that area.

And a grateful thanks to the Pebble Beach Company for maintaining the signing and extension of the two-strand redwood fencing and cable to provide unbroken coverage along the entire parking area and trail at the south end of the Bird Rock pullout and north of China Rock.

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MONTEREY BAY REGION
BLACK OYSTERCATCHER TERRITORIES & NESTING SITES
2025

Image 1. *2025 Black Oystercatcher territories and nest locations for the Monterey Peninsula (MP) monitoring section.*

APPENDIX 1-1

Image 2. *2025 Black Oystercatcher territories and nest locations for the Pebble Beach (PB) monitoring section.*

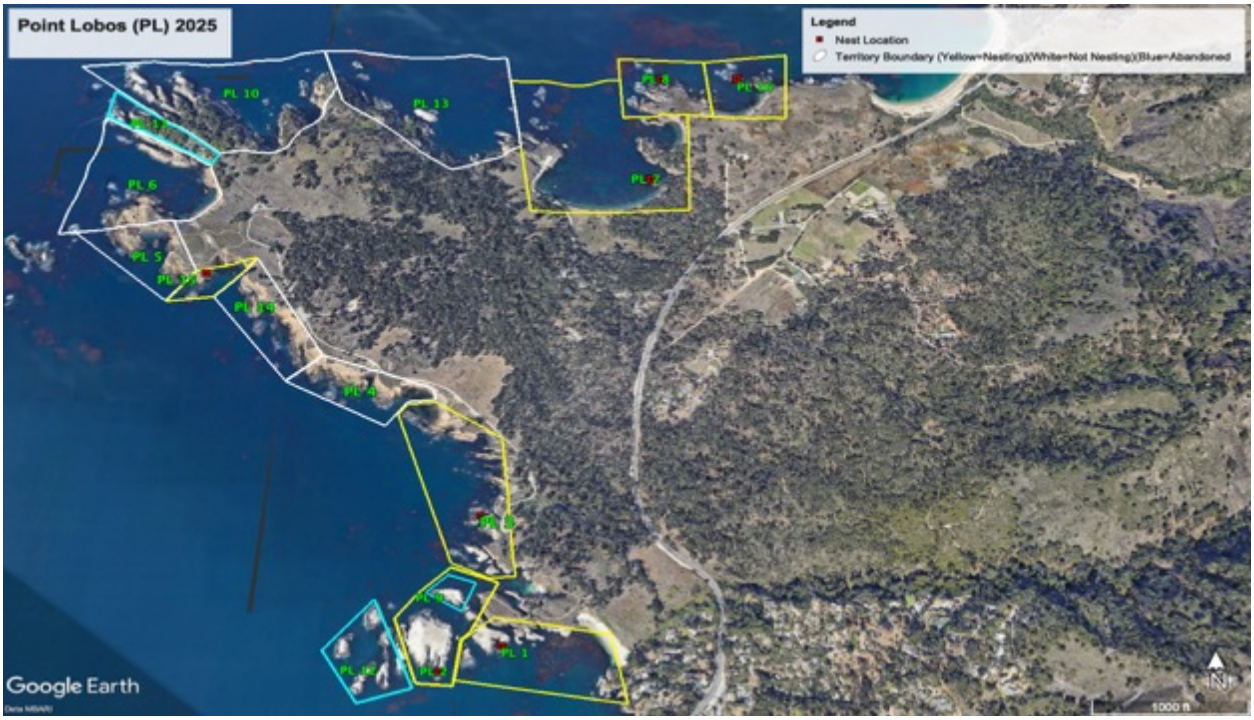

Image 3. *2025 Black Oystercatcher territories and nest locations for the Point Lobos (PL) monitoring section (Point Lobos State Natural Reserve).*

APPENDIX 1-2

Image 4. *2025 Black Oystercatcher territories and nest locations for the Santa Cruz County (SC) monitoring section.*

Image 5. *2025 Black Oystercatcher territories and nest locations for the Santa Cruz County (SC) monitoring section's southern portion (Natural Bridges State Beach to 3-Mile Beach, Wilder Ranch State Park).*

APPENDIX 1-3

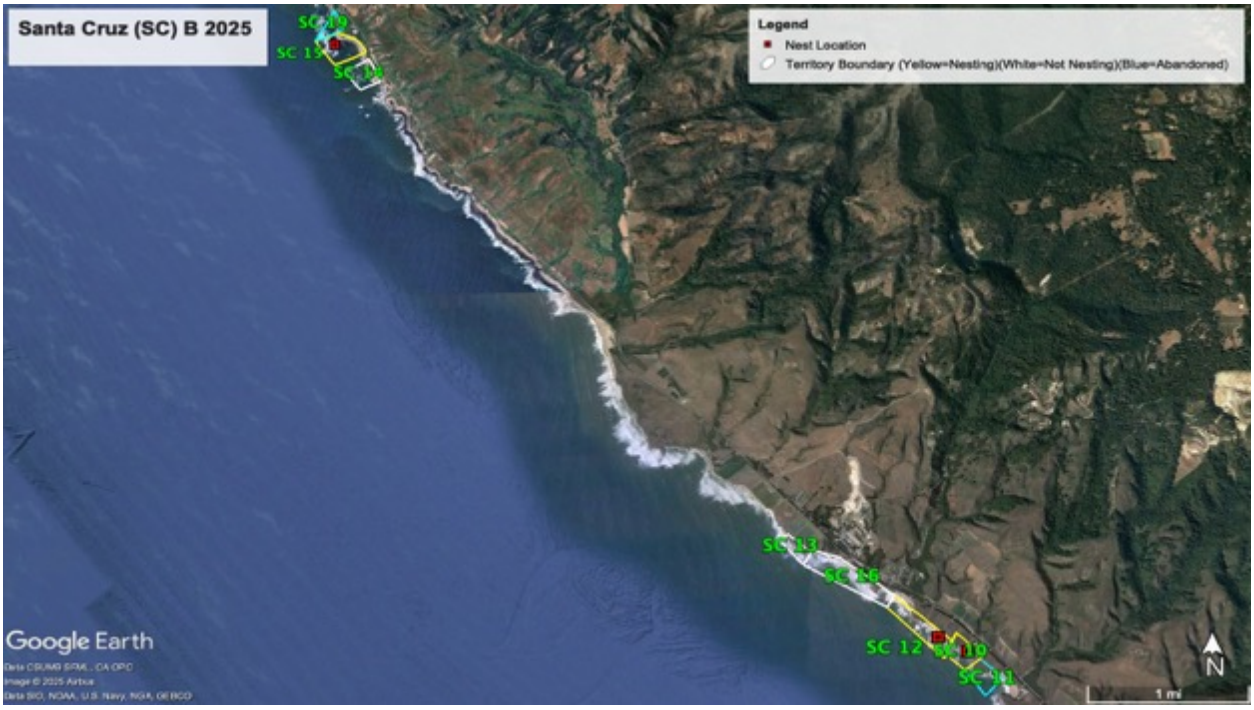

Image 6. *2025 Black Oystercatcher territories and nest locations for the Santa Cruz County (SC) monitoring section's northern portion (Shark Fin Cove to Greyhound Rock).*

Image 7. *2025 Black Oystercatcher territories and nest locations for the San Mateo County (SM) monitoring section.*

APPENDIX 1-4

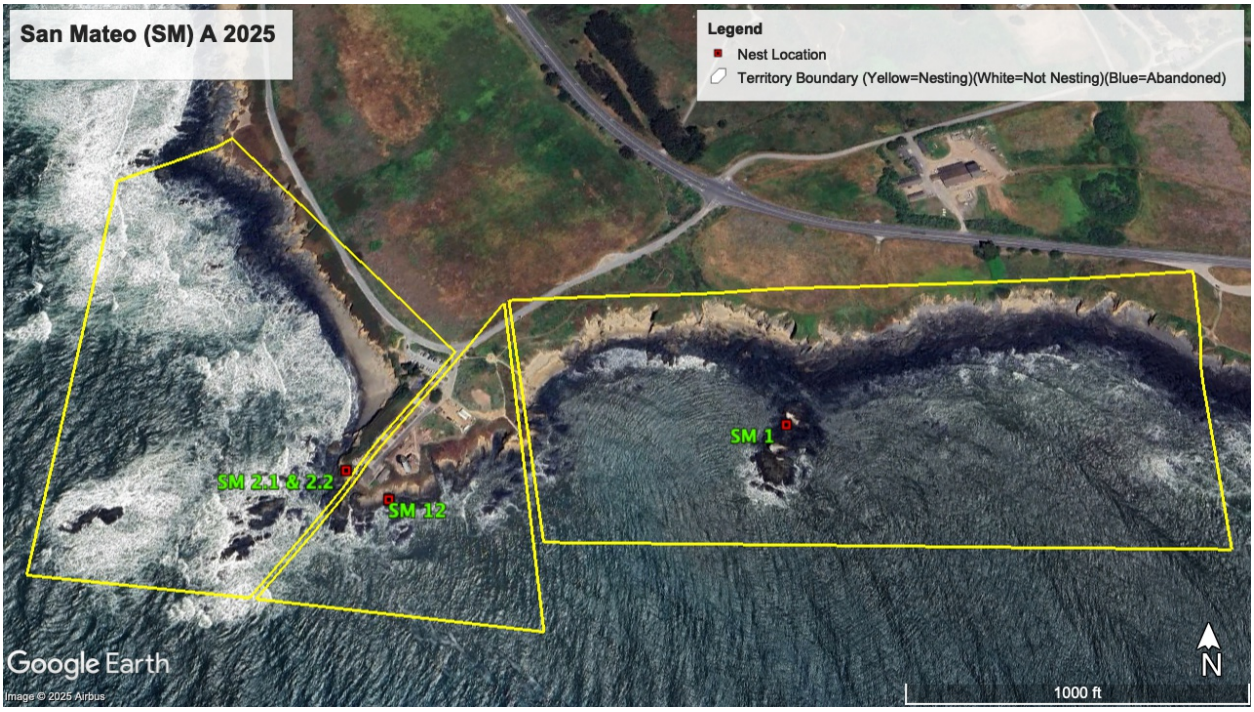

Image 8. *2025 Black Oystercatcher territories and nest locations for the San Mateo County (SM) monitoring section's southern portion (Prisoner Rock and Pigeon Point).*

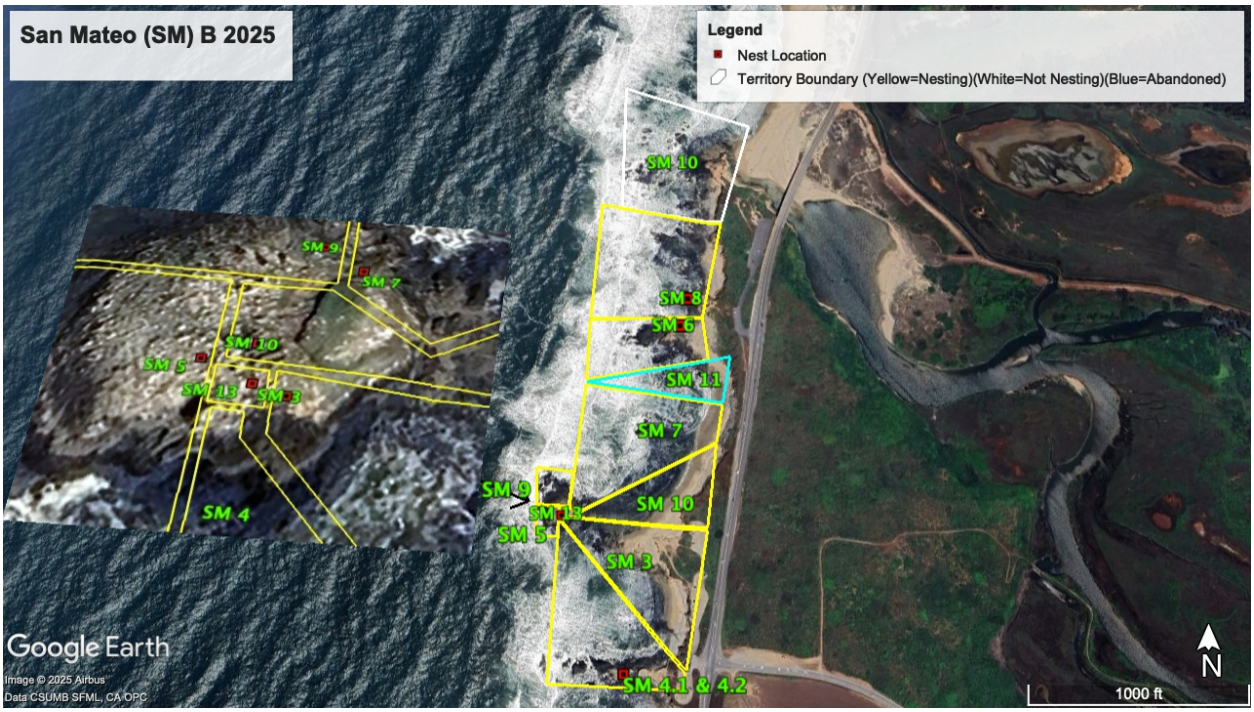

Image 9. *2025 Black Oystercatcher territories and nest locations for the San Mateo County (SM) monitoring section's northern portion off the shoreline of Pescadero State Beach.*

APPENDIX 1-5

MONTEREY BAY REGION
BLACK OYSTERCATCHER REPRODUCTIVE PRODUCTIVITY
2025

Table 3. *Monterey Bay South Coast Productivity – **Monterey Peninsula** (MP) Monitoring Section.*

Nest #	Name	# of Eggs	# of Chicks	# of Fledglings
MP1	Gazebo	3	3	0
MP2	Gull Rock West	2*	0	0
MP2.2	Gull Rock West	2*	2*	0
MP3	Barnacle Rock	**ABANDONED**	0	0
MP4	Point Pinos West	0	0	0
MP5	Point Pinos East	2*	2	1
MP6	13th Street	3	3	0
MP7	Hopkins West	2*	2	0
MP8	Hopkins East	2*	0	0
MP9	Lover Point West (Oak Rock)	0	0	0
MP10	Hopkins North	0	0	0
MP11	Asilomar	0	0	0
MP12	Crespi Cove	0	0	0
MP13	Coast Guard Pier (El Torito)	3	2	2
MP14	3rd Street	0	0	0
MP15	John Denver Rock East	**ABANDONED**	0	0
MP16	Point Pinos Middle	2*	0	0
MP16.2	Point Pinos Middle	3	3	1
MP17	Perkins Park	**ABANDONED**	0	0
MP18	Charthouse	0	0	0
Total:		**24***	**15***	**4**

**Unknown clutch size; at least two eggs were believed to be present &/or the estimated number of chicks.*

APPENDIX 2

MONTEREY BAY REGION BLACK OYSTERCATCHER
REPRODUCTIVE PRODUCTIVITY – 2025 (Cont'd)

Table 4. *Monterey Bay South Coast Productivity – **Pebble Beach** (PB) Monitoring Section.*

Nest #	Name	# of Eggs	# of Chicks	# of Fledglings
PB1	Stillwater Cove East	2*	0	0
PB2	Stillwater Cove South	2*	1	0
PB3	Stillwater Cove North	2*	0	0
PB3.2	Stillwater Cove North	3	1	1
PB4	Ghost Tree (Stillwater Point)	0	0	0
PB5	Lone Cypress	**ABANDONED**	0	0
PB6	Cypress Point Lookout	2*	1	1
PB7	Bird Rock South	0	0	0
PB8	Bird Rock North	2*	2	1
PB9	Ocean Road Neutral Zone (ORNZ)	0	0	0
PB10	China Rock South	0	0	0
PB11	Point Joe/China Rock North	2*	1	0
PB11.2	Point Joe/China Rock North	2*	0	0
PB12	Stillwater Cove Pescadero Rock	2*	0	0
PB13	Stillwater Cove Northeast	**ABANDONED**	0	0
PB14	Bird Rock West	2*	0	0
PB15	Cypress Point North	0	0	0
PB16	Bird Rock East	0	0	0
PB17	Point Joe	2*	0	0
Total:		**23***	**6**	**3**

**Unknown clutch size; at least two eggs were believed to be present.*

APPENDIX 3

MONTEREY BAY REGION BLACK OYSTERCATCHER
REPRODUCTIVE PRODUCTIVITY – 2025 (Cont'd)

Table 5. *Monterey Bay South Coast Productivity – **Point Lobos** (PL) Monitoring Section.*

Nest #	Name	# of Eggs	# of Chicks	# of Fledglings
PL1	Bird Island SE	3	3	1
PL2	Bird Island NE	2*	1	0
PL3	China Cove (Weston South)	2*	0	0
PL4	Sand Hill Cove (Weston South)	0	0	0
PL5	Sea Lion Cove	0	0	0
PL6	Headland Cove South	0	0	0
PL7	Whalers Cove	1	0	0
PL8	Moss Cove	2*	2	0
PL9	Middle Rock North	**ABANDONED**	0	0
PL10	Cypress Cove	0	0	0
PL11	Headland Cove North	**ABANDONED**	0	0
PL12	Bird Island Rocks	**ABANDONED**	0	0
PL13	Guillemot Rock	0	0	0
PL14	Engagement Rock	0	0	0
PL15	Sand Hill Cove	2	0	0
PL16	Moss Cove/Escobar Rocks	2*	0	0
Total:		**14***	**6**	**1**

**Unknown clutch size; at least two eggs were believed to be present.*

APPENDIX 4

MONTEREY BAY REGION BLACK OYSTERCATCHER
REPRODUCTIVE PRODUCTIVITY – 2025 (Cont'd)

Table 6. *Monterey Bay North Coast Productivity – **Santa Cruz** (SC) Monitoring Section.*

Nest #	Name	# of Eggs	# of Chicks	# of Fledglings
SC1	Natural Bridges	2*	2	2
SC2	Wilder Beach	0	0	0
SC3	Fern Grotto Beach South	2*	2	0
SC4	Fern Grotto Beach North	3	3	3
SC5	Sand Plant Beach North	3	3	1
SC6	Sand Plant Beach South	2*	2	0
SC6.2	Sand Plant Beach South	2	0	0
SC7	Strawberry Beach North	2*	1	0
SC7.2	Strawberry Beach North	2	0	0
SC8	3 Mile Beach South	3	0	0
SC8.2	3 Mile Beach South	1	0	0
SC9	3 Mile Beach North	0	0	0
SC10	Shark's Tooth Rock	2*	2	1
SC11	Shark's Tooth Cove South	**ABANDONED**	0	0
SC12	Davenport South	2*	2	1
SC13	Davenport North	0	0	0
SC14	Pelican Rock	0	0	0
SC15	Greyhound Rock	2*	2	1
SC16	Davenport Bluff Middle	0	0	0
SC17	Ohlone Bluff	3	2	1
SC18	Strawberry Beach West	1	1	1
SC19	Greyhound Rock North	**ABANDONED**	0	0
SC20	Natural Bridges South	2*	1	0
Total:		**34***	**23**	**11**

**Unknown clutch size; at least two eggs were believed to be present.*

APPENDIX 5

MONTEREY BAY REGION BLACK OYSTERCATCHER
REPRODUCTIVE PRODUCTIVITY – 2025 (Cont'd)

Table 7. *Monterey Bay North Coast Productivity – **San Mateo** (SM) Monitoring Section.*

Nest #	Name	# of Eggs	# of Chicks	# of Fledglings
SM1	Prisoner Rock	2*	2	2
SM2	Pigeon Point	2*	0	0
SM2.2	Pigeon Point	2*	0	0
SM3	Pescadero 1	2*	1	1
SM4	Pescadero 2	2*	0	0
SM4.2	Pescadero 2	2*	1*	1
SM5	Pescadero 3	2*	1*	0
SM6	Pescadero 4	3	3	2
SM7	Pescadero 5	2*	2	1
SM8	Pescadero 6	2*	2	1
SM9	Pescadero 7	2*	1*	1
SM10	Pescadero 8	2*	1*	0
SM11	Pescadero 9	**ABANDONED**	0	0
SM12	Pigeon Point South	2*	2	0
SM13	Pescadero 10	2*	1*	0
Total:		**29***	**17***	**9**

**Unknown clutch size; at least two eggs were believed to be present &/or the estimated number of chicks.*

APPENDIX 6

MONTEREY BAY REGION
BLACK OYSTERCATCHER PHYSICAL PROTECTION MEASURES
FOR POTENTIAL & ACTUAL NESTING SITES
2025

Table 9. *Monterey Bay Region BLOY Physical Protection Measures.*

Region & Section	Nest #	Nest Location	Protection Method	# of Eggs	# of Chicks	# of Fledglings
Monterey Bay South Coast						
Monterey Peninsula	MP1	Gazebo Rock (Stone House shoreline)	Posted Closure & Trailcam	3	3	0
	MP2 (CCNM)	Gull Rock East	Ropes & Signs	2*	0	0
	MP2.2 (CCNM)	Gull Rock East	Ropes & Signs	2*	2*	0
	MP3 (CCNM)	Barnacle Rock	Ropes & Signs	0	0	0
	MP4 (CCNM)	Point Pinos West	Ropes & Signs	0	0	0
	MP5 (CCNM)	Point Pinos East	Ropes & Signs	2	2	1
	MP6	13th Street	Stakes, Cord & Signs	3	3	0
	MP16 (CCNM)	Point Pinos Middle	Ropes & Signs	2*	0	0
	MP16.2 (CCNM)	Point Pinos Middle	Ropes & Signs	3	3	1
Pebble Beach	PB7	Bird Rock South	Cable, Fence & Signs	0	0	0
	PB8	Bird Rock North	Cable, Fence & Signs	2*	2	1
	PB11	Point Joe/China Rock	Cable & Signs	2*	1	0
	PB11.2	Point Joe/China Rock	Cable & Signs	2*	0	0
	PB17	Point Joe	Signs	2*	0	0
Point Lobos	PL14	Engagement Rock	Posted Closure & Signs	0	0	0
Monterey Bay North Coast						
Santa Cruz	SC1	Natural Bridges	Signs	2	2	2
	SC20	Natural Bridges South	Signs	2*	1	0
San Mateo	SM3 (CCNM)	Pescadero Rock 1	Ropes & Signs	2*	1*	1
	SM5 (CCNM)	Pescadero Rock 3	Ropes & Signs	2*	1*	0
	SM6 (CCNM)	Pescadero Rock 4	Ropes & Signs	3	3	2
	SM7 (CCNM)	Pescadero Rock 5	Ropes & Signs	2*	2	1
	SM8 (CCNM)	Pescadero Rock 6	Ropes & Signs	2*	2	1
	SM9 (CCNM)	Pescadero Rock 7	Ropes & Signs	2*	1*	1
	SM10 (CCNM)	Pescadero Rock 8	Ropes & Signs	2*	1*	0
	SM13 (CCNM)	Pescadero Rock 10	Ropes & Signs	2*	1*	0
			TOTAL:	**46***	**31***	**11**

**Estimated number of eggs*
(CCNM) *Nesting rock on part of California Coastal National Monument offshore unit*

APPENDIX 7

MONTEREY BAY REGION
BLACK OYSTERCATCHER "INDEX SURVEY"
BREEDING PAIR STATUS
2025

Table 10. *Monterey Bay Region BLOY "Index Survey".*

Monitoring Sections	Breeding Pairs	Status	Eggs	Chicks	Fledglings	Notes
Point Lobos	PL1 Bird Island South	Fledged	3	3	1	2 chicks lost – Medium **1 fledgling**
	PL6 Headland Cove	N/A	0	0	0	No nesting
Pebble Beach	PB1 Stillwater East	Failed	2*	0	0	No chicks
	PB3 Stillwater North	Failed	2*	0	0	No chicks
	PB3.2 Stillwater North	Fledged	3	1	1	1 egg lost & 1 egg addle **1 fledgling**
Monterey Peninsula	MP1 Gazebo Rock	Failed	3	3	0	3 chicks lost -- Small downy
	MP6 13th Street	Failed	3	3	0	3 chicks lost – Small downy
	MP9 Oak Rock	N/A	0	0	0	No nesting
Santa Cruz	SC3 Fern Grotto South	Failed	2*	2	0	2 chicks lost – Large
	SC4 Fern Grotto North	Fledged	3	3	3	**3 fledglings**
	SC18 Strawberry North	Fledged	1	1	1	**1 fledgling**
San Mateo	SM2 Pigeon Point	Failed	2*	0	0	No chicks
	SM2.2 Pigeon Point	Failed	2*	0	0	No chicks
	SM9 Pescadero 7	Fledged	2*	1	1	**1 fledgling**
Totals	**12 territorial pairs** **10 breeding pairs**		**28***	**17**	**7**	

**Unknown clutch size; at least two eggs were believed to be present &/or the estimated number of chicks.*

APPENDIX 8