

Black Oystercatcher (*Haematopus bachmani*)
Reproductive Success
2013 Monitoring Report
Point Pinos to Asilomar, Monterey Peninsula,
Pacific Grove, California

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Executive Summary

For 2013, monitoring the success of Black Oystercatcher reproduction was conducted at the tip of the Monterey Peninsula, which was divided into three contiguous monitoring areas – Area A (Point Pinos), B (South Gull Roost), and C (The Gazebo). In total these three monitored areas had five Black Oystercatcher pairs, five nests (i.e., Nest Sites A-1, A-2, B-1, B-2, and C-1), and 18 eggs (i.e., three for each nest), including one attempt to re-nest. Out of 18 eggs, nine hatched, and only two chicks fledged. For the first time in three years of monitoring (i.e., 2011-2013), Area A had chicks that successfully fledged (i.e., one from Nest Site A-1 and one from Nest Site A-2).

Nesting Sites A-1 and A-2 were roped off and signed by California Coastal National Monument personnel. The roping and signing effort appears to be the primary reason for successful fledging at the two nesting sites in Area A of the five nesting sites monitored in all three areas.

Human disturbance may be an important factor impacting Black Oystercatcher nesting success on the Monterey Peninsula. Although frequency of human disturbance is high in the monitoring areas, the actual predation of eggs or chicks appears to be primarily from other avian species (e.g., raptors, gulls, and corvids). Predation by non-avian species, both wild and domestic, is always a possibility. During the monitoring period, however, no direct predation was observed, but there was secondary evidence from broken eggs and the remains of one 20-day old oystercatcher chick.

Monitoring Black Oystercatcher reproductive success on the Monterey Peninsula needs to continue. At least five to ten years of monitoring are needed for a sufficient sample to determine a trend in reproductive success.

Continued roping off and signing for each nesting site at risk of impacts from frequent foot traffic is very important, as is increasing agency contacts with people visiting the vicinity of nest sites. Visitor contact provides people with information on Monterey Peninsula biological resources and the various federal and state protective designations within the immediate vicinity. Visitor outreach should include why these resources and protective designations are important and how the individual visitor can help to protect the resources for which they have may have traveled thousands of miles to view.

Formally closing, whether temporarily, seasonally or permanently, this high-profile portion on the California Coastal National Monument merits serious consideration. Continued coordinated efforts with the City of Pacific Grove, the California Department of Fish and Wildlife, and the California Department of Parks and Recreation would provide the Bureau of Land Management

(BLM) with greater opportunity to protect “unique habitat for biota” as intended by the Presidential Proclamation that created the California Coastal National Monument.

Monitoring Areas

In the past two years, Black Oystercatcher surveys (2011) and reproductive success monitoring (2012) in Monterey County, California, have encompassed a major portion of the county’s rocky coast habitat. For 2013, Black Oystercatcher reproductive success monitoring was limited to the the Monterey Peninsula from the west side of the Pacific Grove Rock Pile (the rocks just west of the intersection of Asilomar Drive and Ocean View Boulevard-Sunset Drive) to the south end of Asilomar State Beach, all within the City of Pacific Grove, California. This portion of the Monterey Peninsula was divided into three monitoring areas: Area A, B, and C. Each of the three monitoring areas differed in frequency of public use, size, and accessibility.



Figure 1- Black Oystercatcher nest sites and the approximate territory for each nesting pair

The three monitoring areas are briefly discussed (from north to south) as follows:

Area A - Point Pinos: Area A extends from the Pacific Grove Rock Pile to the south side of the Point Pinos Islet. Area A has the largest rock surface area exposed at high tide and the most public use by both local residents and tourists of the three monitoring areas. During low tide, the exposure of smaller rocks provides pathways for people to explore the intertidal area that is

otherwise covered at high tide. Two Black Oystercatcher nesting sites were located within this monitoring area. Nest Site A-1 is located on the east side of the Point Pinos Islet cluster, while Nest Site A-2 is on the west side of the cluster.



Image 1: Nest Site A-1 on eastern side of Point Pinos Islet



Image 2: Nest Site A-2 western side of Point Pinos Islet

Area B - South Gull Roost: Area B passes from the south side of the Point Pinos Islet to the intersection of Lighthouse Avenue and Sunset Drive. This monitoring area also has public use, but does not accommodate tour buses and provides only a fraction of the parking area provided at Area A. Area B has two large rocks and many smaller rocks that are covered at high tide. Two Black Oystercatcher nesting sites were also located within this monitoring area. Nest Site B-1 is on the large rock closest to shore, which is accessible by people during all but the highest tides. Nest Site B-2 is on the large outer rock that is separated from the mainland by a small water channel even at low tide.



Image 3: Nest Site B-1 at South Gull Roost



Image 4: Nest Site B-2 at South Gull Roost in Area B; Note roosting Brown Pelicans and a few cormorants

Area C - The Gazebo: Area C starts at the intersection of Lighthouse Avenue and Sunset Drive and runs to the south end of Asilomar State Beach at Spanish Bay. The area has a state park observation gazebo and boardwalk, plus a cable-lined hiking trail along much of the coastline of the monitoring area. The monitoring area has fairly high foot traffic, but public access to the rocks is much more limited than in the other two areas. This monitoring area has a relatively smaller surface area exposed above high tide. The one Black Oystercatcher nesting site in this monitoring area, Nest Site C-1, is located on a stand-alone rock that is fully surrounded by water during all tides.



Image 5: Chick blending in on rock at Nest Site C-1



Image 6: Nest Site C-1 at The Gazebo

A Review of Monitoring in 2011 and 2012

During the breeding season in 2012, twelve volunteers surveyed the reproductive success of Black Oystercatchers by following specific pairs and their nesting attempts along the Monterey County coast. Twenty-one Black Oystercatcher pairs were monitored, of which only four pairs succeeded in fledging young. By comparison, during 2011 two of these pairs had young. One of the four successful sites in 2012, the rock off of The Gazebo in Area C, had one chick successfully fledge. Both pairs at Point Pinos had a successful clutch of eggs, two eggs each, but they failed to hatch. Both pairs re-nested at the site, but in different locations. Their attempts at a second clutch also failed. In 2011, both nesting sites had two eggs. However, Nest Site A-2 failed. At Nest Site A-1, one chick hatched but was lost to predation within the first week. Data on South Gull Roost were not mentioned in the 2012 Reproductive Survey Report.

Protective Measures at Point Pinos

Protective measures at Point Pinos were put in place by California Coastal National Monument personnel. These included installing initial “Sensitive Wildlife Area” signs in 2012 (Image 7), with the assistance of the City of Pacific Grove, and roping off and signing nesting rocks (Image 8) to reduce human disturbance and increase fledging success. The signs attached to the ropes have a message that reads: “Keep Off, Do Not Disturb Nesting Birds.”

Roping off nesting rocks in 2013 was done after the first nest with eggs was spotted. The upper access point to Nest Site A-1 was roped off (Image 9) to keep human traffic off the top of the nesting rock. Ropes and signage did not, however, prevent a few people from occasionally accessing the nesting rock from a lower access point. Most of the Nest Site A-2 rock was roped off. After periodic observations of people finding other access points, the BLM roped off the entire west side of the rock. The roping and signing effort appears to be the primary reason for successful fledging at the two nesting sites in Area A, of all five nesting sites monitored in 2013.

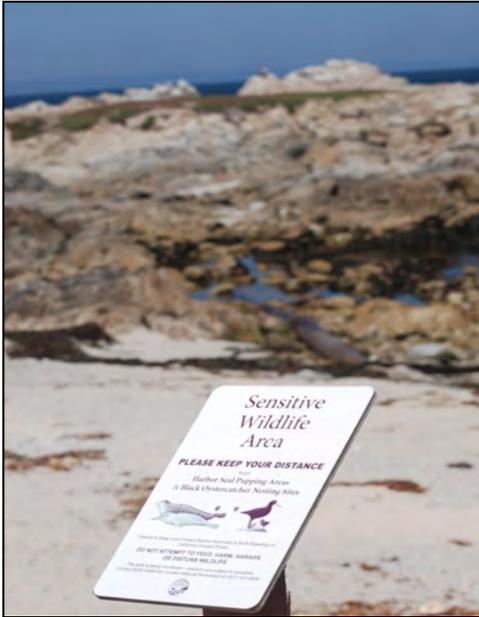


Image 7: Sensitive wildlife area sign at edge of Point Pinos parking area at Area A. Note Point Pinos Islet in background

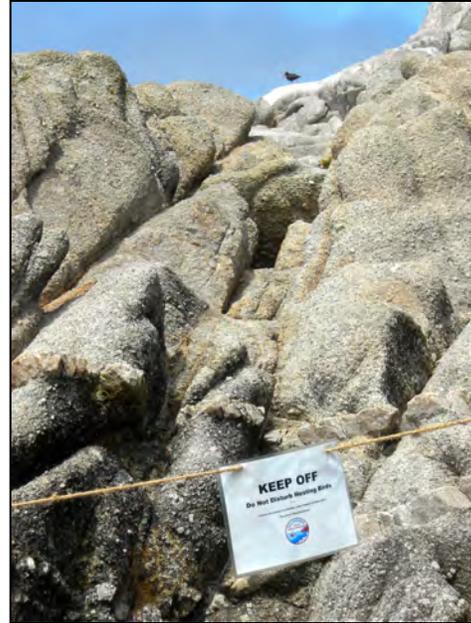


Image 8: Keep off sign on rope at Nest Site A-2 on Point Pinos Islet



Image 9: Low roping with keep off signs along upper access point to Nest Site A-1 at Point Pinos

Human Disturbance

Human disturbance was documented on Nesting Sites A-1, A-2, and B-1, the three most accessible nesting sites that were monitored. Area A is probably the most visited part of the entire California Coastal National Monument. Foot traffic is heavy when the islet is accessible at low tide. More than 100 people have been observed on the Point Pinos Islet over a four-hour period. At various times during the incubation period for the two Point Pinos pairs in Area A, tour buses, occasionally two at a time, were observed dropping off passengers. When the tour buses had adventurous visitors, they sometimes swarmed the islet. During another instance, four individuals disregarded the “Keep Off” sign and were observed taking photographs within a few meters of one Black Oystercatcher parent and chick near Nest Site A-1.

Visitors at Point Pinos are also attracted to the high rock area of Nest Site A-2 at the far end of the islet. Although the rope and signs were very successful in keeping most people from climbing on the nest site, a few individuals climbed along the outside of the rope to the back side of Nest Site A-2 and to the top, before ropes and signs were subsequently placed on the back side as well. After the entire nesting rock was roped off, only a few cases were observed where people climbed over the rope and onto the top of the rock. Most of these incidents occurred after the chick had grown and was able to move safely away from human intruders.

While the chicks on Nest Site A-1 and A-2 were growing, the Black Oystercatcher parents on both nests were particularly alert, especially when people brought their dogs out on the islet. Large dogs off-leash were a major concern and put both Black Oystercatcher pairs in extreme alert mode. Apart from people with dogs, the human activities that caused the most inadvertent disturbance included tide pooling, fishing, and photography.



Image 10: People climbing rocks, tide pooling, and walking through Area 1 and near Nest Site A-1 on Point Pinos Islet



Image 11: People walking in Area A near low rope and sign near Nest Site A-1 on Point Pinos Islet

Nesting Success

In total, Areas A, B, and C contained five Black Oystercatcher pairs, five nests, and a total of eighteen eggs (i.e., three eggs for each nest and one re-nesting attempt). A total of nine eggs hatched: Area A (Point Pinos) hatched three chicks (Nest Site A-1 with two chicks and Nest Site A-2 with one chick); Area B (South Gull Roost) hatched three chicks (Nest Site B-2); and Area C (The Gazebo) hatched three chicks (Nest Site C-1). Only one pair (i.e., Nest Site B-2) had a re-nesting attempt, but the second nest of three eggs failed as well.

The nesting success at Point Pinos (Area A) may be due to the signing and roping off of the two nesting sites. The public may easily disturb nesting pairs when they are unaware of a nesting site in the vicinity or of their potential to disturb a nest. In previous years, roping and signing were done too late in the nesting period, and both the initial nesting and the re-nesting failed. In 2013, roping and signing was done early enough to thwart people from disturbing the nesting pairs during incubation and chick nurturing.

In Area A, Point Pinos, the pair from Nest Site A-1 was seen nesting on 24 May. The pair incubated for at least 20 days. On 13 June, one chick was spotted, while the two remaining eggs were still being incubated. On 16 June, two chicks were observed walking around among the dark portion of the rock a few meters north of the nest site. The third egg was found broken. Later that same day, the two chicks were observed down on the wrack among the rocks and sand, while the parents foraged both in the immediate area or flew in with food for the chicks. On 3 July, the remains of one of the chicks were discovered on the rock outcropping about 20 meters from the nest site. A raptor may have been the cause, since the tearing and the skinning to expose the muscle is characteristic of a sharp beak of a raptor.



Image 12: Two new chicks blending in with the rock and standing with parent on Nest Site A-1 rock at Point Pinos



Image 13: Two new Nest Site A-1 chicks among rocks and sand on wrack below nesting rock at Point Pinos

The exact date when the pair from Nest Site A-2 started incubating is not known. Although nesting behavior was observed earlier, the location of the nest was not found until 31 May. On 16 June, two eggs were found to have been lost to unknown reasons, and a single chick was observed.

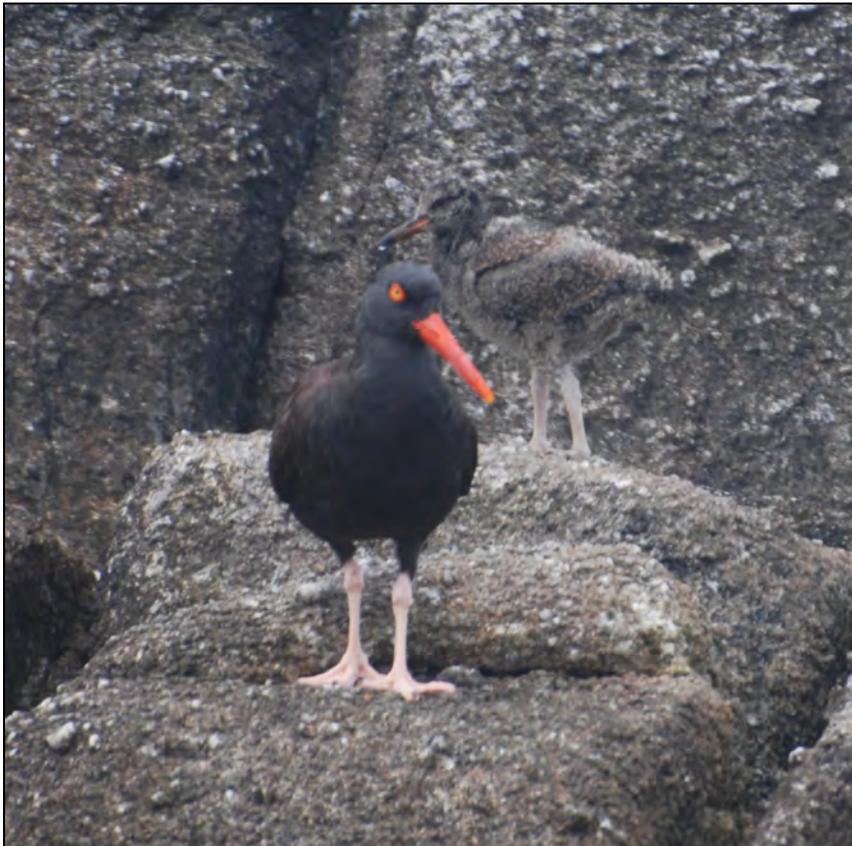


Image 14: A-2 parent with 3½ week old chick on Nesting Rock A-2 at the end of Point Pinos

In Area B, South Gull Roost, Nest Site B-1 lost its three eggs approximately five days after they were laid. Nest Site B-2 hatched three eggs, but all three chicks disappeared approximately five days later. The success for Nest Site B-2 could be due to the fact that the nesting rock is just far enough out into the tidal area to make it difficult for people to get to during low tide. Only during extremely low tide can people approach the Nest Site B-2 rock, but even then access to the rock is dangerous across slippery rocks and a narrow channel of water. During the monitoring period, no one was seen on or near the nesting rock. The nest is more than 200 meters from the road with no obvious pathway.

At Area C, The Gazebo, Nest Site C-1 hatched three eggs, and the chicks survived for approximately thirty days. The nest was located on a large rock about 20 meters off the state park observation gazebo, boardwalk and cabled recreational trail. The nesting rock is separated from the mainland rocks by a small four-meter wide channel of water. During the monitoring period, no one was observed trying to climb the rocks during low tide.



Image 15: C-1 parent with one of three chicks (center) on nesting rock off The Gazebo at Asilomar State Beach

Fledging Success

Out of nine hatchlings, only two Black Oystercatcher chicks fledged. For the first time in three years of monitoring (i.e., 2011-2013), Area A, Point Pinos, had chicks that successfully fledged.

- Nest Site A-1 had two chicks. On 29 July, the A-1 chick was observed flying short distances with the A-1 parents.
- Nest Site A-2 had one chick. On 5 August, the chick was observed flying with one of the A-2 parents.

For the two previous years of monitoring in 2011 and 2012, Area A failed to have a chick successfully fledged. This year's early intervention by roping and signing the two Area A nesting sites redirected human traffic to less critical parts of the area. When they had the opportunity, the Black Oystercatcher monitors spoke to individuals who were walking dogs without leashes and to people who were getting too close to the nest sites. This interaction with the public helps to prevent unnecessary disturbances and may have contributed to the fledging success for the chicks. The roping and signing may have been a major factor to the fledging success by keeping people from encroaching on the Black Oystercatcher nesting sites.



Image 16: A-1 fully fledged chick with parents on wrack at east side of Point Pinos Islet



Image 17: A-1 fledgling flying with parent following east of Point Pinos Islet



Image 18: A-2 chick about to fledge at outer end of Point Pinos Islet

Causes of Nesting Failures

During the monitoring period, there was no direct observation of predation of eggs or chicks. Human disturbance, however, was an obvious factor for three of the five nesting sites (i.e., A-1, A-2, and B-1). The roping and signing of Nesting Sites A-1 and A-2 may have contributed to preventing nest failure on these two sites. The location of Nest Site B-1 was subject to human traffic during just about any tidal stage. The nest site is less than 50 meters from the road, allowing people from the beach to easily reach the rock. The loss of eggs may have been due to people climbing on the rock and scaring the nesting adults, and providing an opportunity for avian predators (corvids or gulls) to maraud unattended eggs. After the B-1 nesting pair abandoned the nest, close inspection revealed an oystercatcher shell broken possibly by another avian species (Image 19).

The loss of chicks from Nest Site B-2 at South Gull Roost appeared to result from predation. People cannot get to Nest Site B-2 easily; therefore, the loss of chicks may be due to predation by gulls, raptors (e.g., owl), or even Brown Pelicans (*Pelecanus occidentalis*). The rock is heavily used by gulls, cormorants (*Phalacrocorax* spp.), and Brown Pelicans. The B-2 nesting pair attempted to re-nest, but failed to attend the eggs, probably because of the high number of roosting Brown Pelicans and cormorants on the rock.

The Area C-1 nesting pair had the least observed human disturbance. The loss of the three C-1 chicks is not known, but due to the location of the nest, the reasonable explanation for their disappearance points to predation. On two occasions a Red-shouldered Hawk (*Buteo lineatus*) was seen perching on a small pole near the recreation trail, but it was never observed flying above or perching on nesting rock. The C-1 pair was seen copulating once after losing the chicks, but the pair was not seen re-nesting so late in the season.

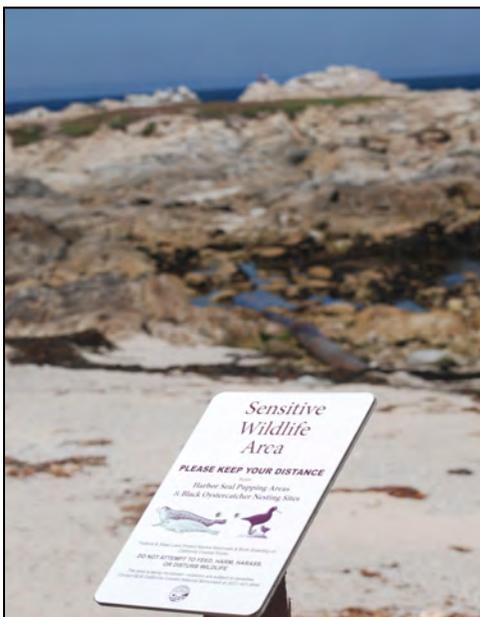


Image 7: Sensitive wildlife area sign at edge of Point Pinos parking area at Area A. Note Point Pinos Islet in background

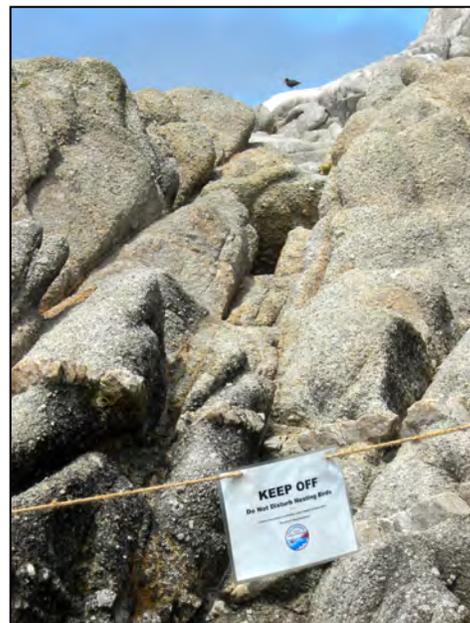


Image 8: Keep off sign on rope at Nest Site A-2 on Point Pinos Islet



Image 19: Broken eggshell at Nest Site B-1 near Gull Roost



Image 20: Broken eggshell from Nest Site A-1 on Point Pinos

Predation by non-avian species is also a possibility. During the 2013 monitoring period, predation by animals such as coyote (*Canis latrans*), gray fox (*Urocyon cinereoargenteus*), raccoon (*Procyon lotor*), otters, skunks, rodents, or even domestic cats (*Felis catus*) or dogs (*C. familiaris*) was not in evidence. In 2011, however, predation of the lone chick on Nesting Site A-1 appeared from a coyote, based on a single set of canine tracks, with no accompanying human tracks, going straight in and out of the nesting site. During the 2013 monitoring, Black Oystercatcher adults on Nest Sites A-1 and A-2 were observed on several occasions chasing California ground squirrels (*Spermophilus beecheyi*) away from their nest site areas.

Recommendations

Based on observations in 2013 and in previous years, we recommend the following:

1. Continue monitoring the success of Black Oystercatcher reproduction on the Monterey Peninsula. At a minimum, monitoring should cover Point Pinos, South Gull Roost, and The Gazebo. At least five to ten years of monitoring are needed for a sufficient sample to determine a trend in reproductive success. Also, consider including additional monitoring areas on the Monterey Peninsula, such as the one or two nesting sites between Point Pinos and the Stanford University Hopkins Marine Station.
2. Continue signing and roping off each nesting site vulnerable to impacts from foot traffic before nesting and incubation begin. Roping off both nest sites at Point Pinos (Nest Sites A-1 and A-2) and Nest Site B-1 near South Gull Roost would contribute to greater nesting or fledging success. The timing for roping off and signing areas is important to provide the most protection during incubation. Provisional timing could be two weeks before the dates recorded this year or in other years when the first eggs were seen. Attention to monitoring the behavior of the Black Oystercatchers before egg laying would help to identify with more certainty the best time for roping off and signing the nesting sites.
3. Make contact, whenever possible, with people visiting the vicinity of the nest sites. Contact would provide visitors with information on Black Oystercatchers and other biological resources of the area, as well as information on the California Coastal National Monument

and other federal and state protective designations within the immediate vicinity. In addition, the visitors would learn how they could help protect Black Oystercatchers, their habitat, and other nearby resources. Outreach would develop better-informed visitors, increase habitat protection, and promote heightened success of Black Oystercatcher nesting and fledging.

4. Increase efforts in documenting other species that inhabit the monitoring sites. Other species like seals and their pups and migrating shorebirds have all been observed during the monitoring period. This information may be useful in determining possible times when these sites should be closed to the public for further protection of other migratory birds and marine mammals.
5. Close the California Coastal National Monument portion of the monitoring area to public access. Closure could either be temporary, seasonal, or permanent, depending on what might be the most reasonable approach and public response to outreach. The part of the monitoring areas in need of immediate attention is within Area A (Point Pinos). On the Point Pinos Islet cluster, the species diversity and habitat values are high, as is the human foot traffic in comparison to the rest of the monitoring areas. The opportunity to ensure protection for the “unique habitat for biota” in support of the Presidential Proclamation that created the California Coastal National Monument provides high visibility for collaborative conservation among the multiple partners with jurisdictions over natural resources of the Monterey Peninsula.
6. Tally numbers of visitors and types of disturbances at monitoring areas when Black Oystercatcher nest monitoring is underway. Correlations between the quantity of human presence and impacts to Black Oystercatchers are not well quantified. These resulting data would be valuable to determine human carrying capacity at these natural sites without resulting in loss of the natural quality of these sites.

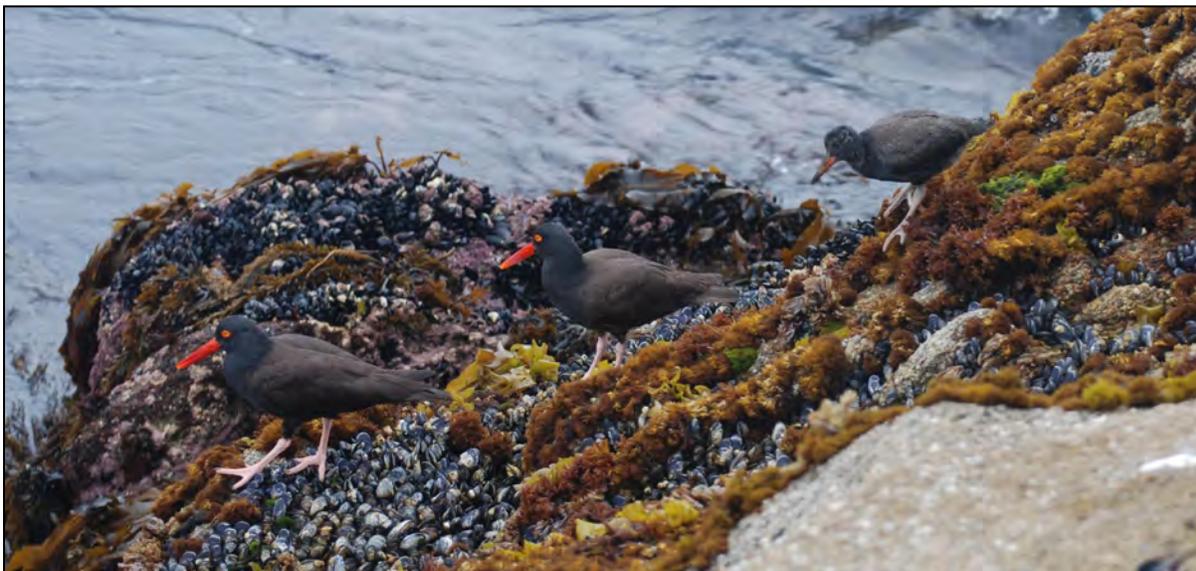


Image 21: A-2 partners with growing chick on mussel bed at western end of Point Pinos Islet