

## FEATURE ARTICLES

### COLONIZATION, POPULATION GROWTH, AND NESTING SUCCESS OF BLACK OYSTERCATCHERS FOLLOWING A SEISMIC UPLIFT

VERENA A. GILL<sup>1,3</sup>, SCOTT A. HATCH<sup>1</sup> AND RICHARD B. LANCTOT<sup>2</sup>

<sup>1</sup>U.S. Geological Survey, Biological Resources Division, Alaska Science Center, 1011 East Tudor Road, MS 701, Anchorage, AK 99503

<sup>2</sup>U.S. Fish and Wildlife Service, Migratory Bird Management, 1011 East Tudor Road, MS 201, Anchorage, AK 99503

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<sup>3</sup>Present address: U.S. Fish and Wildlife Service, Marine Mammals Management, 1011 East Tudor Road, MS 341, Anchorage, AK 99503. E-mail: [verena\\_gill@fws.gov](mailto:verena_gill@fws.gov)

**Abstract.** We present data on the colonization of Middleton Island, Alaska, by Black Oystercatchers (*Haematopus bachmani*) following the creation of an extensive rocky intertidal zone after the Alaskan earthquake of 1964. The first pair of oystercatchers was detected in 1976, and it was another 5 years before the population increased to three pairs. Oystercatcher numbers increased steadily thereafter, with a population explosion occurring in the 1990s. By 2002, there were 171 territorial pairs on the island. The total number of birds increased from two in 1976 to 718 in 2002. Breeding-pair densities on Middleton Island are the highest recorded for any portion of Alaska, averaging more than 5 pairs per km of shoreline in 2002. Nesting success in 2001 and 2002 was greater (83% or more of the eggs laid hatched) than that reported for any other population of oystercatchers in Alaska or along the Pacific Coast. We attribute this exponential growth rate and exceptionally high reproductive success to the large area of available and suitable habitat, the low number of avian predators and the complete lack of mammalian predators, low rate of nest loss to high tides and storm surges, and a low level of human disturbance. We propose nominating Middleton Island as a regional Western Hemisphere Shorebird Reserve Network site because a high percentage of the world's and region's population of Black Oystercatchers resides there during the breeding season. Further, since Middleton Island may be the single most important site in Alaska for Black Oystercatchers, we suggest it be protected from future development.

**Key words:** Alaska, Black Oystercatcher, colonization, earthquake, *Haematopus bachmani*, nesting success, population ecology.