Black Oystercatcher

Resource Brief

October 2011

Importance

The black oystercatcher is a common and conspicuous member of the rocky and gravel intertidal marine communities of park shorelines. This species is completely dependent on nearshore marine habitats for all critical life history components, including foraging, breeding, chick rearing, and resting, but is highly susceptible to human disturbance. The black oystercatcher serves as "keystone" species, which is important in structuring nearshore ecosystems.

Black oystercatchers attempt to deflect attention from their eggs and chicks by leaving their nests when perceived danger is present.

Long-term Monitoring

SWAN staff have been monitoring black oystercatcher breeding density, nest productivity, and feeding behavior along the rocky intertidal coast of Katmai National Park and Preserve (KATM) since 2006 and in Kenai Fjords National Park (KEFJ) since 2007. Based on the information collected to date, the current sampling design should allow biologists to detect trends for black oystercatcher nest density, productivity and diet (especially prey size).

Black oystercatcher nest with chick and egg. Nests are poorly defined; however, the eggs and chicks are well camouflaged.

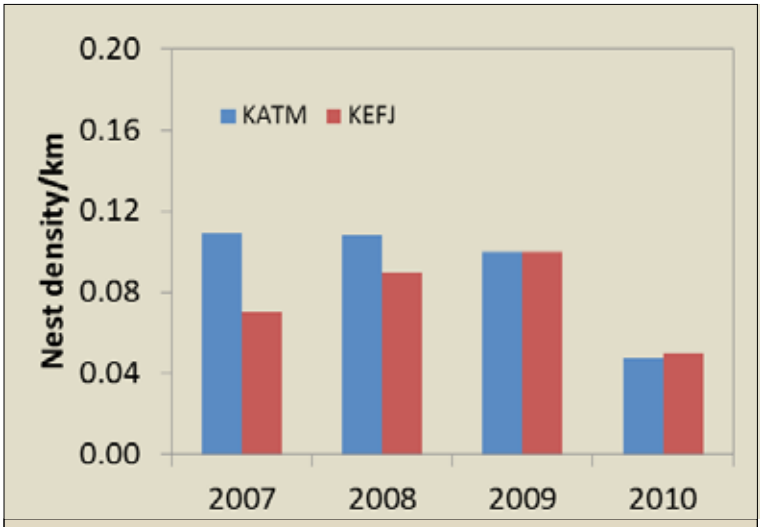

Figure 1. Active black oystercatcher nests/km in KATM and KEFJ, 2007-2010.

Discussion

Active nest density was similar in KATM and KEFJ in 2009 and 2010; however in 2010 nest densities for both parks were the lowest observed since the implementation of the monitoring protocols (Fig. 1). Productivity, the number of eggs and chicks per nest, of active nests was higher in KATM than KEFJ. Reasons for diminished nest density in both parks and low productivity in KEFJ observed in 2010 are unclear. Our results indicate that limpets (predominantly *Lottia persona* and *Lottia pelta*) and mussels (*Mytilus trossulus*) are the dominant food source for black oystercatchers in both KATM and KEFJ. Based on size distribution estimates of *L. persona* and *M. trossulus*, black oystercatchers feed on the larger limpets and mussels. As black oystercatcher densities change, we may see concurrent changes in size distributions of their prey.

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