Black Oystercatcher

Resource Brief

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.

NPS

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

Long-term Monitoring

Black oystercatcher breeding density, nest occupancy, and prey data were collected along five 20-km transects centered on each rocky intertidal sites in Katmai NPP (KATM) and Kenai Fjords NP (KEFJ). In 2008, transect widths were extended offshore ~1 km to encompass islands, which will be used in the analysis of diet and nest occupancy. In addition, oystercatcher abundance, productivity, and diet data were collected from a selected site at Ninagiak Island and surrounding islets (Hallo Bay , KATM).

NPS

Two adults with two chicks on rocky outcrop. Adults are vigilant protectors of their young.

Discussion

Results indicate that limpets and mussels account for the majority of the black oystercatcher diet in KATM and KEFJ. In 2008, mussels comprised the largest portion of the black oystercatcher diet in KEFJ (Table 1). This is consistent with a greater proportion of mussels observed in the sea otter diet in KEFJ, and suggests both sea otters and black oystercatchers have a greater reliance on these key resources in KEFJ. Results also revealed that black oystercatchers selected mussels and limpets near the largest sizes measured at the rocky intertidal sites, suggesting size-selective predation by the adult oystercatchers. Densities of active nesting pairs of black oystercatchers and nest productivity were slightly higher at KATM than KEFJ during 2008 (table 1). This may be due to the greater availability of appropriate black oystercatcher habitat in KATM.

Table 1. Nest success and diet data from KATM and KEFJ collected in 2008.

	KATM	KEFJ
Nest Success		
Nest density (#/km^2)	0.11	0.09
Nest Productivity (eggs + chicks/nest)	1.83	1.4
Diet		
Mussel proportion	0.25	0.53
Limpet proportion	0.73	0.41

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