THE **HEAT** IS **ON**

Species feeling the effects of climate change

Hawaiian Monk Seal

Monachus schauinslandi

Region:
Pacific Ocean

Area affected:
Northwest Hawaiian Islands

Climatic change:
Sea-level rise

Impact:
Habitat loss

ABOUT THIS SPECIES

Their Hawaiian name translates to "dog running in rough seas," and Hawaiian monk seals are indeed having a rough time right now. Although it has been protected under the Endangered Species Act since 1976, the Hawaiian monk seal population continues to decline at a rate of about 3 percent per year. With only about 1,100 remaining in the wild, these seals are one of our most endangered marine mammals. Most are found in the Northwest Hawaiian Islands, a series of small, low, coral atolls built on the remnants of the oldest volcanically formed islands, which extend for hundreds of miles northwest of the inhabited Hawaiian Islands. The seals forage in the waters surrounding these islands, diving to pursue fish, squid, octopus and eels. Several of these atolls, particularly the French Frigate Shoals, are critically important to the seals for giving birth and nursing their pups, and resting during molt periods.

DESCRIPTION OF IMPACT

The Northwest Hawaiian Islands are part of a national wildlife refuge, surrounded by the enormous Papahānaumokuākea Marine National Monument, which protects the reefs and the seabirds, fish and other marine wildlife that depend on this environment. However, that designation is not sufficient to protect the low-lying atolls from the effects of sea-level rise, which is compounding the natural effects of erosion common there. For instance, **from 1985 to 1996, nearly 35 percent of the region's monk seal pups were born on Whaleskate Island in the French Frigate Shoals, but by the late 1990s this island—once the second most important breeding site in the area—was completely submerged.** A large number of mother seals crowded onto nearby Trig Island, where pup survival was much lower, possibly due to an increase in shark predation facilitated by overcrowding. There is also evidence that young monk seals have higher survival rates when regional ocean temperatures are cooler, which means they may face additional problems as the oceans warm.

References

Baker, J.D., C.L. Littman, D.W. Johnston. 2006. Potential effects of sea level rise on the terrestrial habitats of endangered and endemic megafauna in the Northwestern Hawaiian Islands. *Endangered Species Research* 2: 21–30. http://www.int-res.com/articles/esr2006/2/n002p021.pdf

NOAA Fisheries. Hawaiian Monk Seal Natural History. http://www.pifsc.noaa.gov/hawaiian_monk_seal/natural_history.php

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