

Hawaiian Monk Seal

Top Threats

A small and growing number of monk seals reside in the main Hawaiian Islands (MHI). Over 100 individual seals have been sighted here in recent years. However, despite the increase of animals in the MHI, the total population across their entire range, including the Northwestern Hawaiian Islands (NWHI), is in decline. Although more research is needed to fully understand all threats to monk seals, it is known that in the NWHI the seals face lack of food, entanglement in marine debris, and shark attacks on pups. Seals do not appear to lack food in the MHI, yet face additional threats, including: human disturbance, infectious disease, fishery interactions, and habitat loss.

Human Disturbance

Monk seals are very sensitive to human presence. They can become agitated and sometimes aggressive if people approach too closely or are too loud. Disturbing them on the beach may also interrupt their resting period. They need to conserve their energy to hunt and reproduce. A mother seal may even abandon her pup if she is bothered, and every pup's survival is important for the recovery of the species. People feeding monk seals will cause them to lose their wild behavior, which may adversely change their natural foraging instincts. Hawaiian monk seals have been living in the islands for millions of years. This is their home, too, and we need to do our best to co-exist with them.

Infectious Disease

There is concern that monk seals in the MHI could get sick from diseases found in livestock, feral animals, pets, or humans. If these seals are infected, they could possibly spread the disease to the larger monk seal population in the NWHI. As the population of monk seals increases in the MHI, so does the risk that exposure to infectious diseases of humans and other animals will harm the population as a whole. There have already been a few instances where seals in the MHI acquired diseases from other animal species. In August 2003 and August 2005, two monk seals that died on the Big Island of Hawaii were found to be possibly infected with *Leptospira* bacteria. Leptospirosis can be transmitted by domestic and wild animals like rodents, mongoose, pigs, cattle, livestock and dogs. The disease transmitted by the bacteria, Leptospirosis, is a serious concern for monk seals and the full extent of its threat to monk seals is not yet well understood. Two adult seals also died in the MHI from another disease called Toxoplasmosis. The most common carriers of this disease are domestic and feral cats. One monk seal died on Kauai in January 2004 and the other on Oahu in September 2005. Keeping pets away from monk seals will help to prevent the spread of some diseases to the monk seals and keep your pet safe as well.

Habitat Loss

Hawaiian monk seals generally need sandy or rocky beaches where they can haul-out for resting, pupping, and nursing. Females prefer to pup on sandy beaches in areas with shallow, protected water near shore. Monk seals also use the vegetation behind the beaches as a shelter from wind and rain. Most beaches in the MHI that were likely used by monk seals in the past are now used by people for recreational activities or are being considered for development. As these impacts to their habitat increase, Hawaiian monk seals may be forced to use less favorable locations in the MHI to give birth to their young and search for food.

Fishery Interactions

Hawaiian monk seals hunt for food outside the immediate shoreline areas, generally away from areas where shore-cast fishing and/or throw-netting occurs. However, monk seals and fishermen do, on rare occasions, use the same areas. When a monk seal interacts with fishing gear there are many dangers for the seal. If it gets entangled in



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a net and cannot surface to breathe, the seal will drown. Infections caused by hooks and fishing line that become imbedded in their flesh can lead to death. A swallowed hook could puncture internal organs and also kill a seal.

During 1982-2006, there were 55 reported instances of seals interacting with fishing equipment throughout the Hawaiian Archipelago. During this same time period, 38 seals with embedded hooks were reported in the MHI. In 1994, one monk seal was found dead in a lay gill net, and in 1995, a second seal was found dead with a hook lodged in its esophagus. Two monk seals were entangled and drowned in lay gill nets on Oahu; one in 2006 and the other in 2007.

The majority of fishing is done without harm to monk seals, however new regulations have recently been put into place to better regulate and restrict the effort and use of lay nets. In March 2007, the State of Hawaii approved the following amendments to the rules that regulate the use of lay nets on Oahu, Molokai, Lanai, Kauai and Niihau:

- registration and identification of all lay nets
- maximum dimensions limits
- fishing or soak times limited to not more than four hours in daylight hours
- required attendance and inspection of nets when fished
- limited use of one net per person per day
- prohibited use in streams and stream mouths

The rule amendments also prohibit lay net use in state waters around the entire island of Maui and certain areas on Oahu. The islands of Molokai, Lanai, Kauai and Niihau do not have banned areas for lay net use. Existing rules in West Hawaii will continue. Violations of lay net rules are subject to civil and/or criminal penalties.

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