

Sharing the Near-Shore Ecosystem with Sea Otters in Alaska



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Sea Otters and You

Sea otters provide wonderful viewing opportunities along most of the Alaska coast.



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Sea Otters and You

These abundant and seemingly relaxed sea otters can be disturbed, distressed, even injured or killed by our activities.



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Important Facts About Sea Otters

1. Their resting **metabolism** is 2-3 times higher than a terrestrial animal of the same body size.
2. They rely on the insulating value of their **fur** for warmth.
3. They may need to spend 50-60% of their day **feeding**.
4. Female sea otters produce a single pup annually – **reproduction** and pup rearing require a lot of energy.



1. Metabolism

Important Facts

The main activities for sea otters are: **Grooming, Feeding, and Resting**

- **Grooming helps insulate by maintaining the downy fur next to the skin**
- **Feeding provides the energy needed to keep warm and the raise pups**
- **Resting is needed to restore energy reserves**

Grooming



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Feeding



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Resting



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1. Metabolism

Potential Impacts

- Any activity that prevents sea otters from grooming, foraging, or resting can deplete their energy reserves
- Spending time avoiding boats and kayaks can be particularly harmful to females with pups



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1. Metabolism



When Boating and Kayaking You Can Help By

- **Maintaining a safe distance (50yds)**
- **Avoiding making loud noises**
- **Avoiding moving directly toward sea otters**
- **Moving away from pups: mom may be foraging near by**



2. Fur

Important Facts

- Fur is the sole source of thermal insulation, they have no blubber layer like other marine mammals
- Fur of the pup is so dense that the pup can not dive until it gets it's adult fur

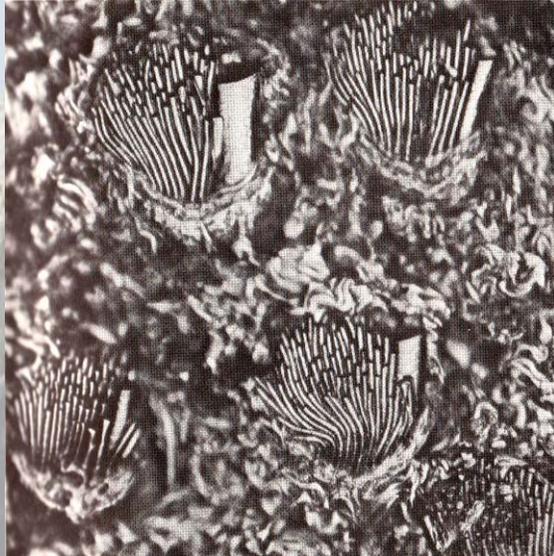
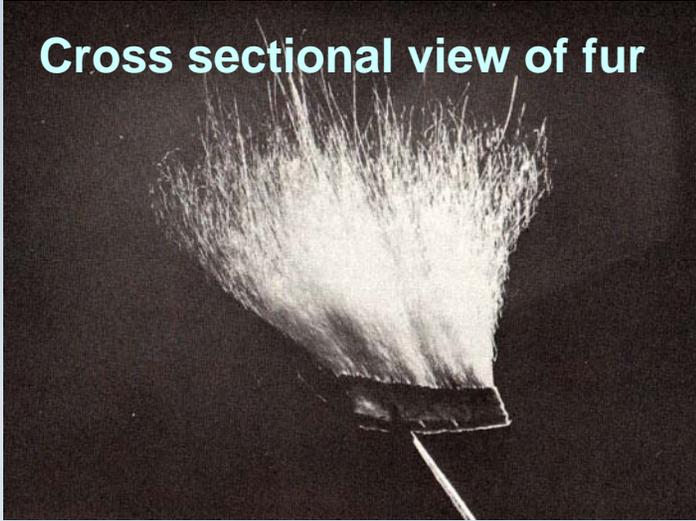


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2. Fur

Cross sectional view of fur



Important Facts

- It is more dense than any other mammal and is composed of stout guard hairs and shorter, finer underhairs
- Each hair bundle contains one guard hair and up to 100 underhairs per follicle
- Grooming “felts” the guard hairs and repels water over the sea otter



2. Fur



Potential Impacts

- Pollutants floating on the water surface, such as oil soils the fur and lowers its insulating value
- Soiled fur can cause hypothermia and potentially death



2. Fur



How You Can Help By

- Reducing the amount of chemicals, soapy, and oily materials in the marine environment
- Disposing of any of these materials at an appropriate waste facility in your community
- Promoting safe shipping and transport practices



3. Feeding



Important Facts

- Sea otters may eat up to 25% of their body weight per day
- Sea otters feed on a variety of marine invertebrates
- Because of the quantity and diversity of food they eat, sea otters are considered a *Keystone Species* in the near-shore marine environment



3. Feeding

Important Facts

- The average dive time is about 1.5 min
- When foraging in soft sediments, they can dig pits up to 1 meter deep for prey



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3. Feeding

Potential Impacts

- Sea otters sometimes forage on fish waste, which can result in increased parasite loads and lethal intestinal blockages
- Concentrated dumping of waste may attract sea otters to an area
- Untreated sewage dumped in the near-shore marine environment can transmit terrestrial diseases.
- An example is *Toxoplasma gondii*, from cat feces, which affects the central nervous system of otters



3. Feeding

You Can Help By

- Reducing the amount of chemicals and oily materials in the marine environment
- In addition to fouling the fur, these substances may accumulate in marine invertebrates that sea otters forage on
- Getting involved with your community to ensure high quality sewage and waste material management



4. Reproduction

Important Facts

- Sea otters can produce a pup at any time of the year
- The pup has natal fur until 13 weeks of age and is unable to dive during that period
- The pup is dependant on its mother for food and development of survival skills for 6 months



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4. Reproduction

Important Facts

Female sea otters expend a lot of energy rearing pups

- **She still needs to forage 50-60% of the day while nursing and providing “hard” food to the hungry pup**
- **She may leave the pup resting on the surface of the water while she forages**



4. Reproduction

You Can Help By

- **Moving away from pups- mom may be foraging near by**
- **Slowing down, sea otters lie low in the water, and may at times be unable to get out of the way of motor boats**
- **If you see an injured or stranded sea otter, you can call the Alaska Sealife Center's stranding hotline, 1-888-774-7325**



Sharing the Near-Shore Ecosystem

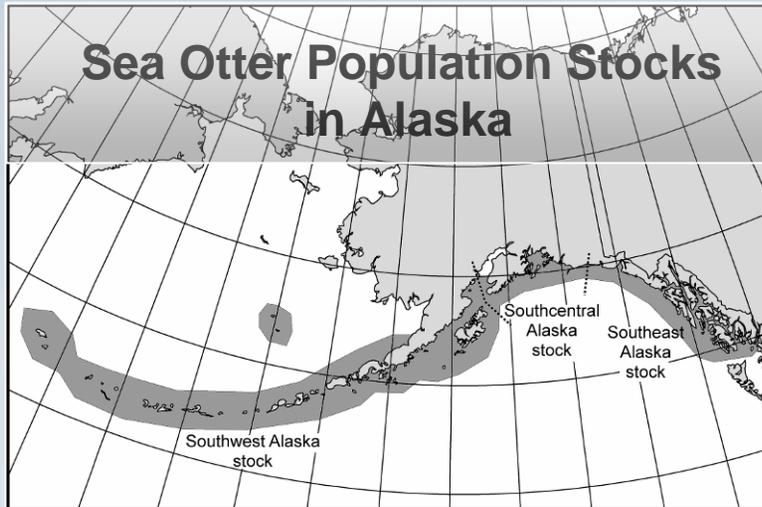


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- When viewing, maintain a safe distance (50yds) and do not directly approach sea otters by boat or kayak
- Discard waste (pollutants, fish waste, net) in appropriate areas
- Do not pick up pups even if you think they are abandoned or sick. Call the Alaska Sealife Center's stranding hotline, 1-888-774-7325
- Get involved with your community to ensure high quality sewage and waste material management



Contact Information



**Marine Mammals Management
U. S. Fish and Wildlife Service
1011 E. Tudor Road
Anchorage AK 99503**

1-800-362-5148

Website:

<http://alaska.fws.gov/fisheries/mmm/index.htm>

Stranding Website:

<http://alaska.fws.gov/fisheries/mmm/strandings.htm>



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