The Northern Elephant Seal

*Mirounga angustirostris*
Recovery from near extinction

In 1892 Doctor Townsend and myself were sent to Guadalupe Island by the State Department to secure evidence of the occurrence there of fur seals, and found, to the surprise of all naturalists, nine of the supposed extinct elephant seals. Acting again on the plan of saving them from the oil barrel, we shot seven, only three of which we were able to take from the beach, owing to the heavy surf.
Dive pattern of seal GM778
Comparison of Diving Ability

<table>
<thead>
<tr>
<th>Depth in Feet</th>
<th>Northern Elephant Seal</th>
<th>Sperm Whale</th>
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<tbody>
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<td>SEA LEVEL</td>
<td>Scuba Diver</td>
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<td>Harbor Seal</td>
<td>WWII Submarine</td>
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<td>Modern Submarine</td>
<td>Sea Lion</td>
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</tbody>
</table>

- Northern Elephant Seal: able to dive to 7000 feet
- Sperm Whale: able to dive to 7000 feet
Adaptations to the Marine Environment

- Shape
- Body Temperature
  - Blubber
  - Countercurrent heat exchange
  - Metabolic rate
  - Blood flow control
- Oxygen
  - Storage
  - Bradycardia
- Salt
- Vision
- Fasting
  - Protein conservation
  - Water conservation
Elephant Seal Diet
Approximate Ocean Depths
Piedras Blancas Rookery

35 feet

15 Feet
Friends of the Elephant Seal
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www.elephantseal.org
Thank You
Friends of the Elephant Seal Activities

- Protection of seals from harassment.
- Public Education
- Seal rescue
- Identifying and logging tagged seals