

## Reptiles – Introduction

Only 4 species of reptiles, all marine turtles representing 2 families, have been documented within the state's borders. Marine turtles are uncommon to casual visitors to Alaska's Gulf Coast waters (Wing 2004), and are considered a natural part of the state's marine ecosystem. Based on occurrences since 1960, Leatherback Seaturtles are considered uncommon (19 reports), Green Seaturtles are rare (15 reports), and Olive Ridley Seaturtles (3 reports) and Loggerhead Seaturtles (2 reports) are casual visitors to Alaska waters (Wing 2004; Wing and Hodge 2002). Currently, all 4 species are listed as threatened or endangered under the U.S. Endangered Species Act.

Prior to 1993, marine turtle sightings were mostly of live Leatherback Seaturtles; since then, most observations have been of Green Seaturtle carcasses (Wing 2004). At present it is not possible to determine if this is related to changes in oceanographic conditions or to changes in population size and distribution.

Reports of Garter Snakes from the mainland of Southeast Alaska have not been substantiated and thus remain hypothetical. Targeted surveys and specimens are needed to document their occurrence.

### Leatherback Seaturtle

#### A. Species description

**Common name:** Leatherback Seaturtle

**Scientific name:** *Dermochelys coriacea*

#### B. Distribution and abundance

##### Range:

Global range comments: Wide ranging in Atlantic, Indian, and Pacific Oceans; generally forage in temperate waters, nest on beaches in tropical and subtropical latitudes; cold-tolerant species, nonbreeders often seen at high latitudes.

State range comments: Marine turtles are associated with the North Pacific Ocean and the interface between these waters and the shoreline of Alaska. Leatherbacks probably occur here as part of their normal habits, because they are a cold-water species that feeds on jellyfish (B. Wing, NOAA, personal communication).

##### Abundance:

Global abundance comments: Unknown, listed as critically endangered by IUCN, and endangered under the U.S. Endangered Species Act

State abundance comments: Uncommon, 19 records from 1960 to 2003

**Trends:**

Global trends: Declining throughout its range

State trends: Few records from the state make it difficult to establish trends, but probably similar to global trends. Historically, occurrences in high latitudes of the North Pacific Ocean were associated with warm-water years; however, occurrences since 1960 do not reflect this connection. From 1960 to 1983, most sightings were of live leatherbacks; however, since 1983, few have been documented.

**References:** Eckert 2003; Hodge and Wing 2000; MacDonald 2003; Wing 2004

**C. Problems, issues, and concerns for species**

- Very little is known about any aspect of Leatherback Seaturtle ecology in Alaska.
- Concerns in Alaska are unknown but outside the state include: habitat loss, incidental catch in commercial fisheries, and harvest of eggs and adults.

**D. Location and condition of key or important habitat areas**

Alaska marine waters – pristine

**E. Concerns associated with key habitats**

- Lack of information concerning occurrence and habitat use in Alaskan waters.
- Several live turtles were caught in commercial fishing gear and subsequently died.

**F. Goal:** Ensure Leatherback Seaturtle populations remain sustainable throughout their range within natural population-level variation and historical distribution in Alaska.

**G. Conservation objectives and actions**

**State conservation and management needs:**

**Objective:** Maintain Leatherback Seaturtle populations that occur within Alaskan waters.

**Target:** Stable trend in annual occurrences of Leatherbacks in Alaskan waters over 25-year period.

**Measure:** Documented occurrences of Leatherback Seaturtles in Alaska.

**Issue:** Little is known about Leatherback Seaturtle ecology in Alaskan waters.

**Conservation actions:**

- a) Continue to monitor presence of Leatherbacks and other turtles in Alaska.
- b) Gather information on turtle sightings from fishermen and residents of coastal communities.
- c) Develop protocol for persons who find or capture live turtles.
- d) If numbers increase, attempt to learn about habitat use in Alaska.
- e) Develop and distribute educational materials about marine turtles in Alaska, specifically Leatherback Seaturtles; permit requirements to handle turtles; and what to do if a turtle is seen alive or found dead.

**Global conservation and management needs:**

Participate and assist, to the degree appropriate, in national and international efforts to conserve these species.

**H. Plan and time frames for monitoring species and their habitats**

The USFWS Service has jurisdiction over marine turtles on land, while NOAA Fisheries has jurisdiction over marine turtles in water. In the past, B.L. Wing, NOAA, has monitored occurrences of marine turtles in Alaskan waters and hopefully will continue to do so and serve as a clearinghouse for additional data on seaturtle occurrences in Alaskan waters. A report on additional information should be submitted prior to the revision of this plan in 10 years.

**I. Recommended time frame for reviewing species status and trends**

Review at 10 years.

**J. Bibliography**

Eckert, K.L. 1993. The biology and population status of marine turtles in the north Pacific Ocean. NOAA Technical Memo NMFS-SWFSC-186. 156 p.

Hodge, R.P. and B.L. Wing. 2000. Occurrences of marine turtles in Alaska waters: 1960-1998. Herpetological Review 31:148–151.

MacDonald, S.O. 2003. The amphibians and reptiles of Alaska: a field handbook, PDF available at <http://aknhp.uaa.alaska.edu/herps/index.htm>. 44 p.

Wing, B.L. 2004. Alaska marine turtles: an update. Conference proceedings and reports from the first statewide conference on Alaska's amphibians. March 30–April, 2004. Juneau, AK.

Wing, B.L. and R.P. Hodge. 2002. Occurrence terminology for marine turtles. Marine Turtle Newsletter 95:15–16.