

**SCIENTIFIC RESEARCH AND
COLLECTING PERMIT**

Grants permission in accordance with the attached
general and special conditions



United States Department of the Interior
National Park Service

Glacier Bay NP & PRES

Study#: GLBA-00058

Permit#: GLBA-2004-SCI-0005

Start Date: Mar 01, 2004

Expiration Date: Dec 31, 2010

Coop Agreement#: n/a

Optional Park Code: n/a

Name of principal investigator:

Name: Ms Lisa Etherington Phone: 907-697-2625 Email: letherington@usgs.gov

Name of institution represented:

USGS - BRD

Co-Investigators:

No co-investigators

Project title:

Glacier Bay Oceanographic Patterns

Purpose of study:

The oceanographic patterns within Glacier Bay drive a large portion of the spatial and temporal variability of the ecosystem. A program that monitors oceanographic patterns is essential for understanding the marine ecosystem and to differentiate between natural variation and anthropogenic disturbance. The objective of this project is to study the spatial and temporal (seasonal and yearly) variation in a variety of oceanographic parameters, including salinity, temperature, water density, light levels, turbidity (sediment load), and chlorophyll-a (productivity).

Locations authorized:

Glacier Bay proper

Transportation method to research site(s):

USGS research vessel Alaskan Gyre, 50 ft.

USGS research vessel Sigma-T, 26 ft.

Collection of the following specimens or materials, quantities, and any limitations on collecting:

No collections

Name of repository for specimens or sample materials if applicable:

n/a

Specific conditions or restrictions (also see attached conditions):

1. Access into any seasonally closed non-motorized waters is not authorized under this research permit.
2. The captain(s) of the R/V Alaskan Gyre and Sigma T will contact the Visitor Information Station and receive a vessel orientation prior to the start of the first sampling trip in Glacier Bay National Park.
3. The captain(s) of the R/V Alaskan Gyre and Sigma T will abide by all park regulations including those to protect the endangered humpback whale. While sampling within the park boundaries, the vessel will not approach any humpback whale closer than 1/4 mile, maintain a mid-channel course wherever possible or >1 mile from the shoreline.

Recommended by park staff(name and title):

Mary Kralover, Acting Res. Mgmt Chief

Approved by park official:

[Signature]
ACTING FOR JONIE LAA

Reviewed by Collections Manager:

Yes No

Date 3/9/04

Approved: JCS

I Agree To All Conditions And Restrictions Of this Permit As Specified
(Not valid unless signed and dated by the principal investigator)

[Signature]
(Principal investigator's signature)

3/12/04
(Date)

THIS PERMIT AND ATTACHED CONDITIONS AND RESTRICTIONS MUST BE CARRIED AT ALL TIMES WHILE CONDUCTING RESEARCH ACTIVITIES IN THE DESIGNATED PARK(S)