



*Alagnak*

*Aniakchak*

*Katmai*

*Kenai Fjords*

*Lake Clark*

# 2016 Spring Update: KATM

## Marine Nearshore Monitoring

In June, SWAN staff and cooperators will conduct annual nearshore marine monitoring along the coast of KATM. In addition to our annual nearshore marine monitoring, our Changing Tides project will be in its second year. We are maximizing our field time along the KATM coast to complete the monitoring data collection as well as conduct collections of bivalves to be used for genetic and physiological analysis for the Changing Tides project.

During the first low tide in June, a multi-agency crew will be working along the coasts of LACL and KATM in continuation of a BOEM-funded project assessing nearshore coastal resources. Partners include UAF, CIRCAC, NOAA, and BOEM.

## Freshwater Monitoring

In June and September, the freshwater crew will visit temperature arrays in Naknek Lake and Lake Brooks to download data loggers and perform annual maintenance. They also will visit the outlets of these lakes to measure discharge and install or remove water level loggers. In August, the crew will measure water quality parameters at 41 sites in Naknek Lake and Lake Brooks.

Additionally, the crew will conduct three short-term projects this summer: (1) to quantify drivers of mercury in lake trout, (2) to assess dragonflies as indicators of mercury status, and (3) to measure water temperature in habitats used for sockeye salmon spawning and rearing.



## Alpine Vegetation Monitoring

Several alpine areas in KATM will be surveyed in August 2016, including sites near Pfaff Peak, Mirror Lake, Hammersly Lake, and Wolverine Lake.

Alpine plant communities are expected to be affected by changing environmental conditions, including increasing climate variability, encroachment of shrubs and trees into tundra areas, increasing pollutant loads, and increasing variability in plant pathogens and pests.

## Weather/Climate Monitoring

In June, SWAN's physical scientist and a visiting scientist from Harvard University, Dr. Andrew Richardson, will install prototype phenology camera systems at Coville, Contact Creek, and Pfaff Mine stations to study the timing of seasonal vegetation and snow patterns in Katmai. They will also install soil moisture and temperature sensors at Three Forks and Pfaff Mine.



## 2016 SWAN Field Schedule

*All dates are flexible and subject to change based on weather and other conditions.*

### May

Bald Eagle Surveys-Nest Initiation  
Dates: May 10, 20  
Contact: Tammy Wilson

### June

Marine Nearshore Monitoring-BOEM  
Dates: June 1 - 8  
Contact: Heather Coletti, Carissa Turner

Freshwater Monitoring

Dates: June 6 - 14  
Contact: Krista Bartz, Troy Hamon

Climate Station Maintenance  
Coville, Three Forks, and Pfaff Mine  
Dates: June 6 - 14  
Contact: Peter Kirchner

Lake Trout Mercury Project  
Dates: June 14 - 30  
Contact: Krista Bartz, Troy Hamon

### July

Marine Nearshore Monitoring  
Approximate Dates: June 29 - July 8  
Contact: Heather Coletti, Carissa Turner

Climate Station Maintenance  
Four Peak (helicopter)  
Dates: July 22 - 26  
Contact: Peter Kirchner

Lake Trout Mercury Project  
Dates: July 25 - 29  
Contact: Krista Bartz, Troy Hamon

Bald Eagle Surveys-Productivity  
Dates: July 27  
Contact: Tammy Wilson

### August

Freshwater Monitoring  
Dates: August 1 - 11  
Contacts: Krista Bartz, Troy Hamon

Alpine Vegetation Monitoring  
Dates: August 8 - September 2  
Contact: Amy Miller, James Walton

Dragonfly Mercury Project  
Dates: August 12 - 15  
Contacts: Evan Booher, Krista Bartz

### September

Freshwater Monitoring  
Dates: September 1 - 9, 26 - 30  
Contacts: Krista Bartz, Troy Hamon