



*Alagnak*

*Aniakchak*

*Katmai*

*Kenai Fjords*

**Lake Clark**

# 2014 Spring Update: LACL

## Lichen Inventory and Vegetation Monitoring

From June through September, the SWAN vegetation crew will survey forest monitoring sites in LACL. In July, SWAN will collaborate with specialists from North America and Europe on a lichen inventory in forest and alpine habitats across the park. The six-member team will be collecting lichens in the forests near Lake Clark and Portage Lake, in the alpine near Turquoise Lake, Slope Mt, and Saddle Mt., and along the coastline of Chinitna Bay.

## Freshwater Monitoring

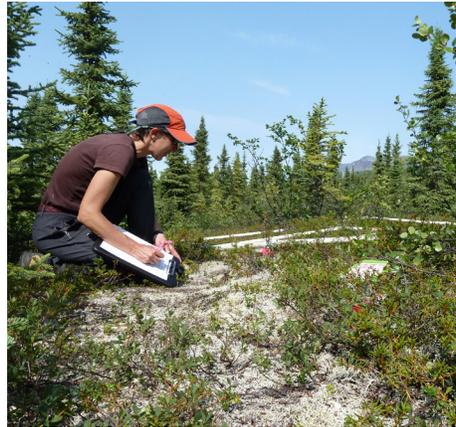
The SWAN freshwater field crew will make three trips to LACL during the 2014 field season. During the first and last trips, in May and September, the crew will visit two temperature arrays in LACL to download data loggers and perform annual maintenance. The crew will also visit the outlet of Kijik Lake in May and September to set up a new site for discharge and water level monitoring. In July, the crew's second trip to LACL will focus on monitoring core water quality parameters - temperature, pH, dissolved oxygen, specific conductivity, and turbidity at 17 lakes by vertical profile sampling. These parameters also will be measured hourly at the outlet of Lake Clark from May through September.

## Recent Publications

Chuck Lindsay. 2014. SWAN Climate Monitoring Annual Report (2013).



March 2014  
<http://science.nature.nps.gov/im/units/swan/>



Surveying vegetation in a lichen-rich forest near Two Lakes. Photo: M. Shephard, NPS



Monitoring water quality with a multi-parameter sonde at the Lake Clark outlet. Photo: J. Nelson, NPS.



Inner workings of the Snipe Lake Remote Automated Weather Station. Photo: C. Lindsay, NPS.

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

## 2014 SWAN Field Plans

### May

Bald Eagle Nest Monitoring  
Dates: Two Surveys, Early and Late May  
Contacts: Tammy Wilson, Buck Mangipane

Chigmit Mountains Weather Station Maintenance  
Dates: May 19 - 30, TBD  
Contact: Chuck Lindsay

Water Quality Monitoring- Temperature Arrays and Surface Hydrology- Water Level Discharge  
Dates: May 19 - 30  
Contact: Krista Bartz, Dan Young

### June

Climate Station Removal/Maintenance  
Dates: June 7 - 10 (TBD, 2 days)  
Contact: Chuck Lindsay

Vegetation Monitoring  
Dates: June 9 - July 14  
Contacts: Amy Miller, James Walton

### July

Bald Eagle Productivity Monitoring  
Dates: Late July  
Contact: Tammy Wilson, Buck Mangipane

Lichen Inventory  
Dates: July 9 - 20  
Contacts: James Walton, Amy Miller

Water Quality Monitoring: Vertical Lake Profiles  
Dates: July 14 - 31  
Contact: Krista Bartz, Dan Young

### August

Precipitation Gauge Installation - Telaquana Lake  
Dates of field work: August 28 - September 2  
Contact: Chuck Lindsay

Vegetation Monitoring  
Dates: August 23 - September 3  
Contact: Amy Miller, James Walton

### September

Vegetation Monitoring  
Dates: September 8-12  
Contacts: Amy Miller, James Walton

Water Quality Monitoring- Temperature Arrays and Surface Hydrology- Water Level Discharge  
Dates: September 22 - October 3  
Contact: Krista Bartz, Dan Young