

Eulachon Monitoring Protocol for Klondike Gold Rush National Historical Park, Skagway, Alaska

Standard Operating Procedure (SOP) # 1

Preparations and Equipment Setup Prior to the Field Season

Version 2.00 (October 2017)

Revision History Log:

Previous Version #	Revision Date	Author	Changes Made	Reason for Change	New Version #
1	7/31/17	Andrew Waldo	Edits	Completion of protocol after first full field season	2.0

Prior to the field season each year, usually beginning early April, before eulachon enter the Taiya River, all crew members should review this entire protocol, including SOPs. Review of sex/spawning status identification for adult eulachon (see SOP #4) is particularly important, as crew members will need to be able to do this in the field without much time to consult references. This SOP also gives a brief description of how eulachon monitoring should be scheduled. The timing of eulachon runs vary from year to year, so it is important to be flexible in scheduling. Preseason planning facilitates the completion of eulachon surveys. All of the equipment and supplies listed in SOPs should be organized and made ready for the field season.

I. General Preparation And Review

Procedures:

1. Eulachon monitoring database and datasheet examples should be reviewed to identify events that may be encountered. Datasheets for the survey year should be printed on Rite-in-the-Rain paper and stored in organized folders. Field notebooks should be issued for additional observations, comments suggestions, etc. Data management begins with information recorded on datasheets so it is imperative that they are filled out correctly and are easy to read.
2. Eulachon runs vary in intensity from year to year. A large run can make adult sampling a chaotic experience if crew members are not prepared. Prior knowledge of differences in sex and spawning status of adult eulachon will aid crew members in preparing for a busy sampling period. Therefore, appendices and additional references listed in SOPs should be thoroughly reviewed prior to the eulachon run. Laminated copies of these materials should be carried into the field as quick reference in helping to determine an unknown sex or spawning status of an adult eulachon.

3. All crew members should review each SOP together well before the start of the run. It is particularly important to be familiar with SOP #4 as adult capture will be the first part of the monitoring season. Other SOPs can be reviewed again later.
4. All crew members and individuals participating in any part of the project should review the project JHA's and refer to the Crew Leader or Biologist with any questions.
5. All crew members should read the State of Alaska Department of Fish and Game Fish Resource permit and know its requirements. Note the due dates for each report. Also be sure to contact Richard Chapell, the Haines/Skagway area management biologist for final authorization before starting to sample that season. Note and record the time and date that he was contacted.
6. All crew members should read Eulachon: A Review of Biology and an Annotated Bibliography (Wilson et. al. 2006). This article provides great information about Eulachon.
7. Reference photos from the 2017 season. This will help you better understand what is going on. The photos are located at: P:\e-LIBRARY (DO NOT DELETE)\PHOTOGRAPHS\PHOTOS (RECENT)\Resource Photos\Natural Resources Inventory & Monitoring\Eulachon Project photos 2017 A.Waldo.
8. Dispose of hazardous waste from the season before during the community hazardous waste disposal day. This pertains to the used Formalin in the fire locker in the Mascot Garage.
9. Ensure trap is ready for the upcoming season.

II. Scheduling Field Work

Procedures:

1. The adult eulachon trap will be installed within the first week of April.
2. As wildlife activity increases in the Taiya Inlet, one crew member will scout the Taiya River to look for signs of eulachon entering the river.
3. Adult sampling will begin the day that eulachon are observed entering the river. This usually occurs in late April to early May, although run timing varies from year to year. Sampling will occur three times per day, Monday-Friday. Adult sampling will end when no new eulachon are entering the river and the trap will be removed.
4. Crew should familiarize themselves with the larval sampling sites as soon as adult sampling ends, or potentially during adult sampling if the run is particularly long and overlaps with larval/egg sampling.
5. Larval/egg outdrift sampling at the Lower Taiya site will begin three weeks after the first day that eulachon entered the Taiya River. Sampling will occur once per day, three days per week. Sampling will end six weeks after larval/egg outdrift sampling began.
6. Additional distribution sites will be sampled for larvae/eggs. Sampling at these sites will begin four weeks after the first day that eulachon entered the Taiya River. Sampling will occur once per week for four weeks, or until larvae or eggs are detected.
7. Some larvae/egg samples will need to be processed during the sampling period to reduce the need for sampling jars. Other lab work can be done after the field season, or as time allows.

III. Organizing Supplies and Equipment

Procedures:

1. An equipment list should be compiled, and equipment organized and made ready several weeks in advance of the field season. This allows time to make needed repairs and order equipment. Crew members should be informed of their responsibility to provide personal gear that will enable them to work in the field without injury or discomfort. See SOPs for equipment lists and recommended personal gear items.
2. Lost, damaged, or missing equipment should be reported immediately so it can be replaced or repaired.

IV. Backcountry Travel

Procedures:

1. Familiarize yourself with radio communications and important call numbers.
2. Save the ARCC Backcountry Travel Plan form on your desk top. It is much easier to access and attach to emails for submission this way.
3. When submitting a form it should be emailed to both ARCC and your supervisor, if your supervisor is not at work email it to the next in line who is at work.
4. A backcountry travel plan should be submitted any time you are using a raft, going up West Creek trail, White Pass area, or up the Chilkoot Trail.
5. ARCC form should be filled out as completely as possible. See Appendix A for an example of a completed ARCC Backcountry Travel Plan.

Appendix A.

Page 1 of ARCC Backcountry Itinerary.

or send to arcc_submit_forms@nps.gov

NPS ARCC BCI V 5.0.1 11/11/2015

ARCC
Backcountry Itinerary

Dates of Mission: 06/30/17 to 06/30/17

Check-In Times: AM Check-In: 0600 PM Check-In: 1800

Radio Identifier: 614 (Use when contacting 702.)

Park: Klondike Gold Rush

Leader

Trip Leader Name: Andrew Waldo Supervisor Name: Jami Belt

Trip Leader Phone: (253) 737-8274 Supervisor Phone: (907) 983-9228

Trip Leader Sat (# or Name): None SPOT/PLB (Serial # or Name): None

Party Information

Party Member Name:	Party Member Clothing Color:	Equipment Carried:
Andrew Waldo	Yellow coat, gray pants	☒ Compass ☐ Avalanche Beacon
Benjamin Hayes	Blue coat, tan pants	☒ Radio ☒ Weapon(s): bear spray
		☒ Whistle ☐ Tent (describe): Tent Color:
		☐ Space Blanket ☒ GPS Fly Color:
		☐ Signal Devices ☒ Pack (color): blue and black

Transportation

☐ Aircraft (You MUST file a flight plan.)	☒ Car or Truck	☒ Foot	☐ Packraft/Raft	Color/Descriptions:
N-Number:	Make: Ford	☐ ATV	☐ Kayak/Canoe	
☐ Motor V. (You MUST file a float plan.)	Model: Escape	☐ Ski/Snowshoe	Days of Fuel:	
Name:	Color: White	☐ Snowmachine	Days of Food: 1	
	Plate: Gov	☐ Dog Sled	Num. of Dogs:	
	Location: Skagway			

Mission

Mission purpose and objectives:
To sample out drifting larval hooligan on the Taiya River.

Risk

Risk management considerations (glacier travel, river crossings, helicopter operations, etc.):
Driving to and from the field, wading in the river, Handling gear.

Dead Spots

Describe any potential radio dead spots:
Possible dead spots in Dyea area or along Chilkoot trail.

Detailed Itinerary

Comprehensive Itinerary (Use next page for additional legs, detailed route information, via points, camps, etc):

Leg - Start	Leg - End	Additional Information
1) Chilkoot trail head	Chilkoot trail head	We will hike to canyon city and back.
2)		
3)		
4)		
5)		

Dispatch

Primary Dispatch: ARCC

Dispatch Transfer Information

Transfer To ARCC: Date: *Time:

Transfer From ARCC: Date: *Time:

Brief Comment (Use next page for additional details):

*Use 24-hour time.

PHONE: (907) 683-9555 EMAIL: DENA_CommCenter@NPS.GOV FAX: (907) 683-9640

Sat Phone: 8816-3145-8390

Clear Form

KLGO 614

06/30/17 to 06/30/17

Page 2 of ARCC Backcountry Itinerary

ARCC		Dates of Mission		Check-In Times		Radio Identifier:
Backcountry Itinerary				AM Check-In:	PM Check-In:	(Use when contacting 700.)
		06/30/17	to 06/30/17	0600	1800	614
Comments: We will hike from the trail head to Canyon city and we will be stopping along the Taiya river to collect larval hooligan. Sample collection will involve wading in knee deep water.						

Supplemental Information

KLGO 614

06/30/17 to 06/30/17

PHONE: (907) 683-9555 EMAIL: DENA_CommCenter@NPS.GOV FAX: (907) 683-9640

Sat Phone: 8816-3145-8390

Clear Form