Salmon Watching Protocol 2019—Salmon Watching Reaches

Major question answered: How do numbers of spawning salmon compare from year to year in the creek of interest? **Summary:** Walk an assigned stretch of creek, count live and dead salmon/trout, collect dead salmon/trout fin clips. Locate, mark, record (with GPS coordinates) and monitor any redds along the reach. Open to Salmon Watchers who have one previous year of experience.

Frequency: Once per week from October 1-December 31.

Equipment: Write in the rain notebook and datasheet, 2 pencils, flagging (pink), sharpie, camera, pocket knife, GPS recorder, and DNA sampling kit.

Procedure:

- 1. Visit your section of stream and determine a starting and ending point for your stream reach. This will be the same for each visit and ideally from year to year. If your reach has been walked in the past look for a description of start and end points and try to locate them. If you are starting out this year as the first reach walker write a description of the start and end point of your reach and record in our online data portal. If you have GPS capability please record the starting and ending coordinates.
- **2.** For data collection: Record background info on the datasheet (name, date, reach walk number, etc). Start at the downstream end of your reach and walk upstream. This increases your chances of seeing fish before they see you.
- **3.** Record number and species of live fish and dead fish. Cut open belly of dead fish looking for eggs or sperm to see if the fish has been spawned.
- **4.** Flag, label, describe, and GPS any redds you find.

If you find a live fish: note species, presence or not of an adipose fin. If you cannot identify the fish with confidence record as unidentified.

If you find a dead fish: note species if possible and if they have spawned (cut open to see if there are eggs or sperm left inside). Note whether the adipose fin is clipped or not. Take a photo. Take a hole punch or cut a piece of one of the fins and put on whatman filter paper and slip into the envelope provided. Take home and let the sample dry out completely. Write your name, stream name, date, possible species and GPS coordinates on the envelope. Give to Kelly Keenan or Bianca Perla.

How to identify a red: Redds are most accurately identified by fish behavior (a spawning pair, or a female digging the red or guarding an area). Redds can also be identified physically (shallow depressions where rocks have been flipped and are light colored compared to surrounding rocks). When in doubt leave it out, don't count redds unless you are relatively certain. Feel free to contact Kelly Keenan if you need help identifying a redd.

Marking a red: tie flagging on one side of the stream near the redd. Write a number (start with 1 for the first red and go up from there through the season) on the flagging. Write the date you found the redd on the flagging. Then write the number of steps upstream/downstream from the flagging to the redd and the number of steps into the stream from the flagging to the redd. Example flagging label: 10/5/14, #1 2U4. This means a redd located on Oct. 5 2014 and it was the first redd located. It is 2 steps upstream from the flagging and 4 steps into the creek from the flagging. If you have GPS take a reading. Take a photo.

Notes: Record any additional things of interest including other species that may be of interest or anything you see that requires management intervention (for example: American Dipper, or trash dumps, etc).

Upload data to the reach walk portal at: vashonnaturecenter.org/salmonwatchers

If you see fish email Kelly at <u>kellykeenan.vnc@gmail.com</u> so she can notify the other salmon watchers. If you have questions email at the aforementioned address or call: 281-222-8282.