



## Tips for collecting steelhead scales for genetic research

**Have packets in your vest and accessible:** Before you hit the water, make sure you have a knife and collection packets in an easily accessible outside pocket. Many times anglers found themselves thinking "oh this is just a small exploration run" and they ended up hooking piles of fish without the materials to collect data. It helps to keep your knife and envelopes in a convenient place (front pocket in fly vest, jacket pocket, etc).

**Use a net:** Many anglers said that a net is almost mandatory in order to keep the fish in the water as long as possible. A net also ensures that the angler doesn't lose their fish at the river's edge, and allows them to keep the fish in shallow water with just their back out of the water while collecting scale samples.

**Use the buddy system, whenever possible:** If you are fishing with a partner, have one angler hold the fish securely while you collect scales. If you are fishing solo but near another angler, ask if they would be willing to help you net and hold the fish while you collect the sample. Typically, scales are easier to collect from females than males. In this case, it really helps to have a second angler handle fish for you.

**Collect scales on your knife, set your knife on the river bank, and then worry about releasing the fish:** Many anglers found it was difficult to collect scales and immediately put the scales into the envelope.

**SOLUTION:** Collect the scales by 'plucking' them from the fish using the tip of the knife (be careful not to puncture the skin). Collect the scales on your knife, make sure you can see scales on the knife, and then set the knife with scales onto the river bank. You can then take a quick photo and release the fish. After the fish is released, find your envelopes, place scales in envelope, fill out data on envelope, and keep fishing.

**Collect samples from other anglers, only if they give you permission:** One way to improve your scale collection numbers in 2017 is to collect scale samples from fish caught by anglers fishing next to you. **BE SURE TO GET PERMISSION BEFOREHAND, AND REDUCE CONFRONTATION THAT COULD ARISE.** Don't be afraid to tell anglers around you that you are helping with the project, and ask them if it would be ok to collect scales from the fish they catch prior to them catching one.

**Store your envelopes in a dry place at the end of each day or trip:** At the end of the day, take your envelopes out of your waders/storage bag and set them somewhere to dry. The scales and DNA material on them will dry out in the envelope, as long as the envelope gets dry. The envelopes that are provided to you will dry out relatively quickly. As long as they are separated from each other, the scales and DNA will dry out appropriately. A good place to keep them is in a desk drawer or on a shelf that is not in direct sunlight. **NEVER TAKE THE SCALES OUT OF THE ENVELOPES.**

**Turn in your envelopes regularly:** Mail or use dropbox located at French River. A 2<sup>nd</sup> box on the upper shore is in the works.

**Other things to consider:** Some anglers found that scraping scales off the knife blade onto their Velcro cuff on their wading jacket made transferring scales into the envelope much easier and faster. The Velcro held onto them nicely. If you do this, **BE SURE THAT NO SCALES REMAIN ON THE VELCRO BEFORE YOU CATCH THE NEXT FISH.** Contaminated (duplicate) scale samples were found in scales collected in 2016.

An instructional video showing how to collect scales is provided here: <https://www.youtube.com/watch?v=vbAOVW95NI4>