

Fish Monitoring in the Bleak (but Beautiful) Northeast Oregon Midwinter at Midnight

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When December arrives, most of our river research projects have wrapped up for the year. Seasonal field technicians have hung up their waders, put away their worn-out wading boots, and given back the key to the door. The work trucks have been emptied of old flagging, stray socks, and random food wrappers. Staff members finally have quiet time to work on annual reports and start preparing for next year's field season. At this time of year, it feels right to tuck things in and wait out the winter. Unless, that is, you work for the Oregon Department of Fish and Wildlife (ODFW) on the Life Cycle Monitoring (LCM) project.

Back in December, the LCM crew had a job to do. We spent three weeks snorkeling the Grande Ronde River, Lostine River, and Catherine Creek. Oh, and we snorkel at night. Why did you do this, a sensible person might ask? Well, our job is to monitor juvenile Chinook salmon winter survival and growth. Fish are nocturnal during the winter, moving at night so birds and other fish predators do not see their flashy silver

bodies moving through the water.

Snorkeling the rivers of the upper Grande Ronde River Watershed on a warm summer day is exciting work; add freezing winter temperatures, ice, and the darkness of long nights, and it becomes exhausting. I have a love/hate relationship with winter snorkeling. I love the uniqueness of it but really hate getting out of the warm truck and sliding into the icy water. I am fascinated by the fish's behavior at night; however, I am extremely claustrophobic, so it can be unnerving to put on multiple constricting layers of thick clothing and a dry suit. The moment I walk out of the creek and river water, everything starts to freeze: my zipper to freedom (and essential to urinate), my gloves, my hair, the fish net, the buckets, and sometimes our desire to work until late into the night.

The nights can be long, but they are rarely boring. A typical day consists of driving to the pre-selected site, sometimes on snowy roads that see very little traffic. We arrive in the mid-afternoon to assess the ice. Any ice present will need to be broken up and removed to provide the crew with a safe place to snorkel. Breaking ice sucks. It just does. Depending on the thickness of the ice, this task can require several hours of picking with heavy ice picks. The layers of ice are all so unique that I can almost read a weather forecast by them. An increasingly common challenge is working around and through newly constructed log jams. The ice puts its grips on the logs, making it very difficult to chop, swim, or catch fish around them.

After removing literally tons of ice with heavy ice picks, we retreat to our work pickups, with arms and backs tired, and wait until dark for the fish to return to their favorite hiding spots. When it comes time to "suit and boot," there is a strategy to preparing for the night's work. We want to be warm and dry under our suits but need to be able to move and net fish in the river current. It's a battle. Sometimes this battle leaves us all sweating, but sweating is the last thing we want to do when we are about to get into zero-degree water. After the "suit and boot" process is over, we grab a bucket, bubbler, hand net, and dive light, and we ungracefully and uncomfortably walk to the snorkel site.



An icy stream waits to be surveyed.
(Photo: Shannon Powers)



The first step in monitoring juvenile Chinook salmon is to break the ice in order to get to them. ODFW employees work sometimes for hours to provide this needed access. (Photo: Scott Favrot)