Go with the Flow

Dang it…
Dang it, dang it, DANG IT!!!

That's what I kept saying to myself as I stood there on the side of Highway 61, cursing my own stupidity at 6 in the morning. It was bad enough that I didn't have a jacket on. To add insult to injury, it was 36 degrees outside and raining steadily with a stiff northeast wind whipping off of Lake Superior. Did I mention the truck was still running and I was 12 miles from everywhere?

15 minutes earlier I had jumped out of the truck to check a small tributary for signs of a fresh steelhead run, and had inadvertently dragged an arm over the manual lock on my door. I rummaged around in my pockets for the 20th time in the vain hope that I had an extra key with little success.

Fortunately for me I spotted an underground cable-marker on the opposite side of the road, and was able to break into my truck after about 20 minutes of trying, getting thoroughly soaked in the process. After jumping in and warming up, I roared off to my destination.

Upon arriving and rigging up, I hot footed it down to a likely spot then began methodically working a run just below some big rocks. Despite the dirty water, I could see that there were a good number of fish coming in on the increasing flow. I was at least 100 yards from the big lake, but the strong winds were blowing spray into my face as I hooked fish after fish. I was soaked through and shivering. My hands were so useless that I could barely crank the reel let alone hold the net; and I was having the time of my life. So goes the life of a North Shore steelheader.

One of the fundamental elements in fishing for migratory species like steelhead lies in understanding the interactions between flow and fish movement. Naturalized strains of Knife River Steelhead and stocked Kamloops Rainbows are potadromous. That is to say they migrate from the fresh water of Lake Superior into the freshwater tributaries every spring to spawn.

In a typical spring, flows on the Lower North Shore begin increasing dramatically just a week or two after ice-out. Warmer daytime temperatures and nights that hover just around freezing contribute to snowmelt and increased runoff. In the streams, this cycle begins to increase erosion of the remaining ice, and also carries sediments into the water. As runoff and turbidity increases, more and more of the chemicals that give each stream its unique signature are carried out into the lake where they are picked up by increasing numbers of staged fish.

These staged fish, both Kamloops Rainbows and Steelhead, have already begun their transformation from single wallflower to spawning machine. Biological changes in their bodies such as kyping jaws, egg and milt production, and color changes have been triggered by changes in water temperatures as well as photoperiod - the increasing length of daylight- and they are now beginning the process of locating the streams they imprinted on as juveniles. As melt increases and rain begins to fall instead of snow, discharge becomes stronger and the fish begin to make their way upstream.

To understand why flow is so critical to fishing, one needs to first have a basic handle on how these fish evolved. Steelhead have been "programmed" biologically through evolution. Fish that run on increased flows are better able to navigate obstructions and falls in the lower portions of streams. Increased flows allow them to make it into the uppermost reaches of a watershed where water tends to be shallower later in the year. These upper reaches offer the best spawning and rearing habitat in that they tend to have more gravel and less silt, are better oxygenated, and tend to remain within the temperature ranges most suitable for the survival of young fish as well as providing good forage. These reaches also tend to have the cover necessary for the young fish to hide in to escape predators. Each of these factors contribute to higher survival rates which in turn contributes to greater numbers returning to spawn later on in their life cycle. Those fish that were not able to make it as far are less successful, have fewer young survive, and pass on less of their genetic material.

Kamloops Rainbows retain this same basic programming. Kamloops are simply a different phenotype or "Life-Form-History" from steelhead. They are very closely related to steelhead stocks genetically, having started as what we think of as classic steelhead. At some time in the not too distant geologic past, ocean running fish were trapped in the Kamloops region of British Columbia. These fish adapted from running from saltwater to fresh, to running from freshwater lakes into freshwater streams to spawn. With a new diet and different habitat, their physical characteristics changed, but genetically they are very similar to steelhead. They are in fact the same species by definition and can interbreed.

Understanding this biological programming helps to diagnose when the fishing will be hot, and when it's gonna be a long day. These fish have an overpowering desire to run as flows increase. It helps the fisherman as well since you can construct a plan of not only when to fish, but where. Steelhead will stop to rest in very distinct and predictable locations when the flow is up. Very often on those magical days, you can fish a single stretch or two as wave after wave of fish come to you. So get out and hit those increasing flows for some fantastic fishing, just don't lock your keys in the truck.