

Salmon and Electric Fields – Part 1



A Chinook Caught With a “Black Box”

The alarm jolts me from a deep sleep. My body is not pleased but it is 4:45 am and time to start the day. I turn off the alarm and as I remove my earplugs I can hear the noisy breathing of my two roommates. I put on my headlamp and quietly dress in the dark, then step outside and walk down the float to the dining room.

I'm a guide at a fishing lodge on the BC central coast near Bella Bella. It's pitch black outside with no hint of dawn. The temperature is mild and there are no stars, just a light drizzle and fortunately no wind. The warm front that I had noticed approaching yesterday is closer but has not yet arrived.

In the dining room I pick up a small plate of scrambled eggs, a sausage and a muffin. Although I'm not hungry I eat anyway, knowing that it might be some time before I have another opportunity. This is the final day of a four day trip and last night I was assigned a “priority” guest for the morning. After finishing my breakfast I check the weather board on my way to the drying room. High slack was two hours ago and the next low is at 9:34 am. Maybe the flood tide has brought in some salmon. My new guest is Darris, and I see on the guest board that for the past three days he has been fishing with his wife and it looks like he has been letting her take most of the fish. This is late in the season and the big runs of spring and coho have passed, with the fishing slowing noticeably the past week. Darris's wife has limited out but he has only two springs in the low twenties and a couple of coho.

In the drying room I pull on my foul weather gear which thankfully is warm and dry, then walk down to the boat. It is still very dark and using my headlamp I inspect the fishing lines for nicks and replace the leaders. I verify that I have enough brined bait for the morning, get a couple more packages of herring from the freezer for the afternoon and settle down to cutting bait while I wait for my guests. My preference is to cut the herring immediately before I use it so that it leaks blood and juices freely in the water, but I also like to have a few cut plugs in the brine tank ready to go for the times when the bite is on and every second counts.

The drizzle has stopped and the sky is beginning to lighten as Darris and his friend Bob join me in the boat. I learn that Darris has been on many lodge trips, this is his fourth trip this summer, and he seems quite experienced. He would like to catch his four salmon limit this morning but realizes that this is

unlikely because the fishing has been slow and we only have two hours to fish. It's changeover day and we must be back at the dock by 8:00 am as the planes will begin arriving at 9:00 am.

It is still relatively dark when we leave the dock at 6:00 am to make the five minute run to a nearby point, one of my favourite spots. This location can be difficult to fish in a northwest wind but fortunately today is flat calm and we are one of the first boats on the water. After reducing the motor speed to idle I hook up a cut plug herring on the starboard rod and set the downrigger to 27 feet, using my headlamp to read the depth counter. The port rod is also rigged with a cut plug and set to 37 feet. In the half light of dawn we follow the 60 ft depth contour on a winding course next to the rocks and kelp. Darris watches his rod carefully and is very quick. We've been fishing for less than a minute when his rod twitches and he leaps to his feet to strike a salmon -- a lot of guests would have missed that strike. The heavy spring begins a long run away from shore while Bob reels in his line and I bring up the downriggers, then we follow the salmon at idle speed. No problem here, the fish is headed into deeper water and there are no other boats in the immediate area. Darris plays the salmon carefully as it makes a series of runs, then a few minutes later we have it in the net -- a lovely 27 lb chinook and already Darris's best salmon of the week.

Smiles all around while I replace the bait and then we begin our second pass. Bob's rod dives and he is into a tail walking 16 lb coho. The salmon makes several screaming runs and lots of jumps, then it is at the boat and in the net.

Dawn has finally broken and the visibility has improved considerably by the third pass, when a small bump on Darris's rod causes him to again leap to his feet and strike. I'm wondering if it might be kelp or a small rockfish but the rod bends double and the large spring takes off on a sizzling run with the reel screaming. This is a big adrenalin rush, there is no way to control this fish and all I can do is follow with the boat as line peels off the reel. Then the fish turns toward us and I quickly back the boat away as Darris reels furiously. This fish is fast and makes several more long runs before finally approaching the boat and rolling with his tail out of the water. A beautiful sight, this is a large tail. Ten minutes later he fills the net and I am careful to lift him into the boat by the mesh, to avoid straining my back. We learn later that he weighs exactly forty pounds. Yes, I think the flood tide did bring in some salmon.

We set up for a fourth pass and pick up an 18 lb spring then on later passes more big coho. Finally at 7:45 am Darris indicates that it has been a great morning and he is ready for breakfast. We've made nine passes and caught eight nice salmon, two of which we have released. Most of our time has been spent fighting strong fish, and this late in the season when the runs are winding down.

Darris and Bob are very happy and have big smiles. Many of the guests who had slept in this morning gather around as we pose with the fish for pictures, then Darris and Bob head upstairs for breakfast while I fillet the catch.

After breakfast Darris hunted me down and asked what I had done this morning that was different. I had to think about it. We were fortunate that a few nice springs had come in with the flood tide. Also many of the guides had "tubbed out" their guests the night before, so the guides could sleep in on changeover day and there were fewer boats on the water than normal -- I could fish close to the rocks the way I wanted without being crowded by other boats. However a significant factor was that Darris and Bob were using bait casting style level wind reels. I found the reels awkward and as a short cut I had been setting the cut plugs about six feet behind the downrigger release clips.

Most fishermen, myself included, normally run their gear thirty to fifty feet behind the downriggers. This gives the flashers the opportunity to rotate freely in a wide arc and reduces the possibility of the boat disturbing the salmon, especially when fishing shallow. In this case I was running naked cut plugs, no flashers, and we had almost all of our action at 27 feet. I don't think the salmon were disturbed at all by the presence of the boat. Setting the gear close to the downriggers allowed the cut plugs to closely follow the path of the boat as I fished a few feet from the rocks at the point.

However in hindsight I also believe a big factor was electrical. We were using a welded aluminum boat with stainless steel downrigger cables, attached to bare lead downrigger balls with stainless steel swivels and snaps. The “natural voltage” of the gear was likely in the order of 0.5 volts, close to the voltage chinook and coho prefer, and by running the cut plugs very close to the downrigger line and weights I was unwittingly taking advantage of the electric field.

This happened to me in late August 2009. Four years later I did another lodge trip where I also think electric voltage made a difference. On this trip I was fishing at a lodge in Caamano Sound with my friend Tom Miller, who at the time was an absolute newbie salmon fisherman. The first afternoon we fished for pinks so Tom could get some experience playing salmon with single action reels. His first chinook, ever, was a 23 lb spring that he caught that evening.

His second chinook was a 41 lb spring he landed the next morning, and the day after that he hooked up with a salmon that I believe was much larger -- we lost it after a long fight. Then we picked up four springs at 20 lbs each and a 36 lb halibut on the salmon rod.

Overall the trip was a great success, however the two largest salmon and most of the chinook were on Tom’s rod. I had been setting the gear and wondered why my rod wasn’t getting more action. When I thought about it later I realized that my downrigger had been spooled with one of the new ultra-high molecular weight braided polyethylene lines which do not conduct electricity, while Tom’s older downrigger had stainless steel line. Again it was a welded aluminum boat.

These are only two lodge trips out of well over a hundred that I’ve done over the years as a guide or guest but they stand out from the rest. I am now a strong believer that salmon are very sensitive to electric fields, and getting the voltage right can make a big difference to your fishing. I’ll describe the scientific research in part 2.

Bill Haymond is author of “The Science of Salmon Fishing”, which is available at www.thescienceofsalmonfishing.com.