April 2015

To My Salmon Fishing Friends:

This is the time of year when I go through my journals carefully and try to make sense of the last season.

The 2014 Fishing Season

Niels Bohr, the Danish physicist, made the comment “Prediction is difficult, especially about the future.” I agree fully. What a year!

I was expecting that 2014 would have cool water off the coast and good ocean conditions for the salmon. It turned out to be the warmest water that I have ever seen and the fishing was poor throughout the season.

At the beginning of June the ladies at the Bella Bella airport told me that the spring herring fishery and the herring on kelp spawn in the local area was three weeks earlier than normal.

The early season started out well, and Clint at North King Lodge reported really excellent chinook fishing from May 23 through the first week of June when it went dead, pretty much as I started my season at Whale Channel. At Whale we found that the salmon were moving through quickly in small groups and were not feeding, and there was nothing in their stomachs. Later in Milbanke Sound we found that they had either empty stomachs or a few sand lance (needlefish) but no adult herring. On the depth sounder I saw a few small schools of sand lance but very few schools of mature herring. Although during the summer I saw many humpback whales they were in small groups and were doing virtually no bubble feeding. Not many eagles and those that were around seemed to be starving – one flew down and picked up my flasher! Lots of tiny bait in the area but few rhinoceros auklets, suggesting that the sand lance population was suffering (the tiny bait was likely immature herring). The kelp was stunted -- 2014 was the poorest kelp growth I have ever seen, suggesting water very low in nutrients. Jellyfish everywhere. First the little white ones (moon jellies) and the big red ones (lion’s mane), then a little blue jellyfish that floated on the top of the water with a sail (Velella velella, I had never seen those before).

In Milbanke Sound I caught mackerel while fishing for salmon, then later while waiting for guests I borrowed a spinning rod to cast for mackerel from the dock. There was a school of thirty or forty mackerel right at the lodge for several weeks and one afternoon I saw them basking at the surface in the shade of the staff barge. Most years I do not see ocean sunfish (a huge warm water fish that feeds on jellyfish) but last summer they were common in August and I sighted them on successive days. And in mid July we had a very intense bloom of bright green algae, during a period when the water usually begins to clear and turn blue. The algae and murky green water conditions continued through to the end of August and had a big impact on the fishing.

I took water temperature profiles every couple of days for the entire fishing season, which for me began June 4 in Whale Channel and ended August 31 in Milbanke Sound. During June I found a surface layer of cool water on top of a layer of warmer water. By late June the warm water was dropping deeper, then in early July it mixed with the cooler water and the profile became more normal (this was about the time that the bright green algae bloom began and the ocean fog started to roll in).

In the Sports Fishing Institute (SFI) September fishing report Owen Bird mentioned warm water: "Although the (salmon) numbers were good along most of the coast, some later arrivals and unusual migration routes occurred in some areas. Factors that are, as usual, not clear but may have contributed to these changes include warmer ocean temperatures". However during the November SFI conference the lodge operators were silent: "It was a great year, with excellent fishing up and down the coast".

In late November I came across a CBC news video about warmer than normal water along our coast (http://www.cbc.ca/news/canada/british-columbia/record-north-pacific-temperatures-threatening-b-c-marine-species-1.2845662). The CBC interviewed Bill Peterson, an oceanographer with NOAA, and Richard Dewey, associate director with the ocean observatory operator Ocean Networks Canada which is based in Victoria. They found that the water temperatures were three to four degrees Celsius above normal and far beyond any previously recorded value. "We've never seen this before, that's why it's so puzzling." They also said that an El Nino with warm water ocean current was expected to arrive in December 2014, providing a "double whammy".

"The Blob"

In September after the season ended I learned that scientists at NOAA were well aware of the warm water and had been tracking it for some time, and Nicholas Bond at the Joint Institute for the Study of the Atmosphere and Ocean (JISAO) had named it "the blob" (NOAA and JISAO are great and I have enormous respect for their scientists).

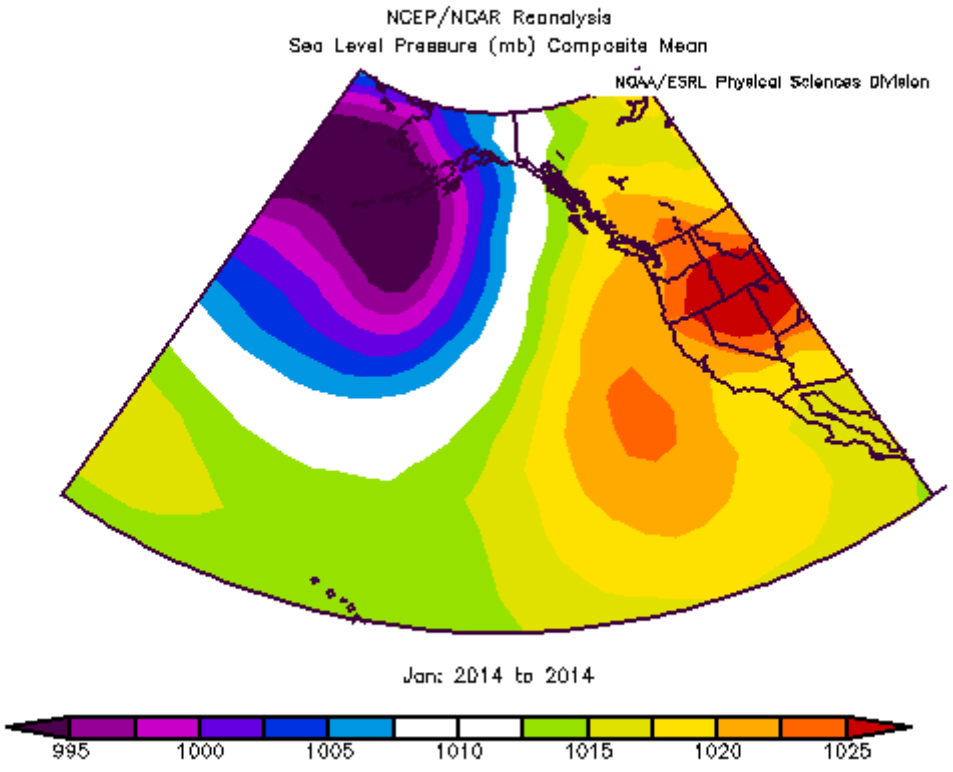
This month Nicholas Bond, Howard Freedland (Fisheries and Oceans Canada) and Nate Mantua published a short paper on the blob which is well worth reading: https://www.documentcloud.org/documents/1819111-pacificwarmblob.html. They note extremely low chlorophyll levels (caused by water low in nutrients), a skipjack tuna caught near the mouth of the Copper River in Alaska in July 2014, ocean sunfish and a thresher shark caught off the coast of SE Alaska, a record high northern diversion rate of Fraser River sockeye salmon (most of the salmon migrated by way of Queen Charlotte Strait at the northern end of Vancouver Island), rhinoceros auklets in BC preying on saury (a baitfish from subtropical waters) rather than sand lance, and widespread strandings of Velella jellyfish from BC to California during July and August.

They summarize with: "A prominent mass of positive temperature anomalies developed in the NE Pacific Ocean during winter of 2013 – 2014. This development can be attributed to strongly positive anomalies in sea level pressure, which served to suppress the loss of heat from the ocean to the atmosphere, and lead to a lack of the usual cold advection in the upper ocean. The extra mixed layer heat persisted

through the summer of 2014, and may have represented a significant contribution to the unusually warm summer (in some locations record high temperatures) observed in the continental Pacific Northwest."

In short the warm water was the result of an odd weather pattern that developed the previous winter, now referred to as the "Ridiculously Resilient Ridge". This weather pattern caused the drought in California and the east coast "polar vortex" that we heard so much about in the news.

Daniel Swain at the California Weather Blog (http://www.weatherwest.com/) provides an outstanding analysis of general weather patterns in the Pacific Northwest with an emphasis on California, where he lives and works. In this blog page (http://www.weatherwest.com/archives/date/2014/09) Daniel describes the "Ridiculously Resilient Ridge" which is shown in the figure below.

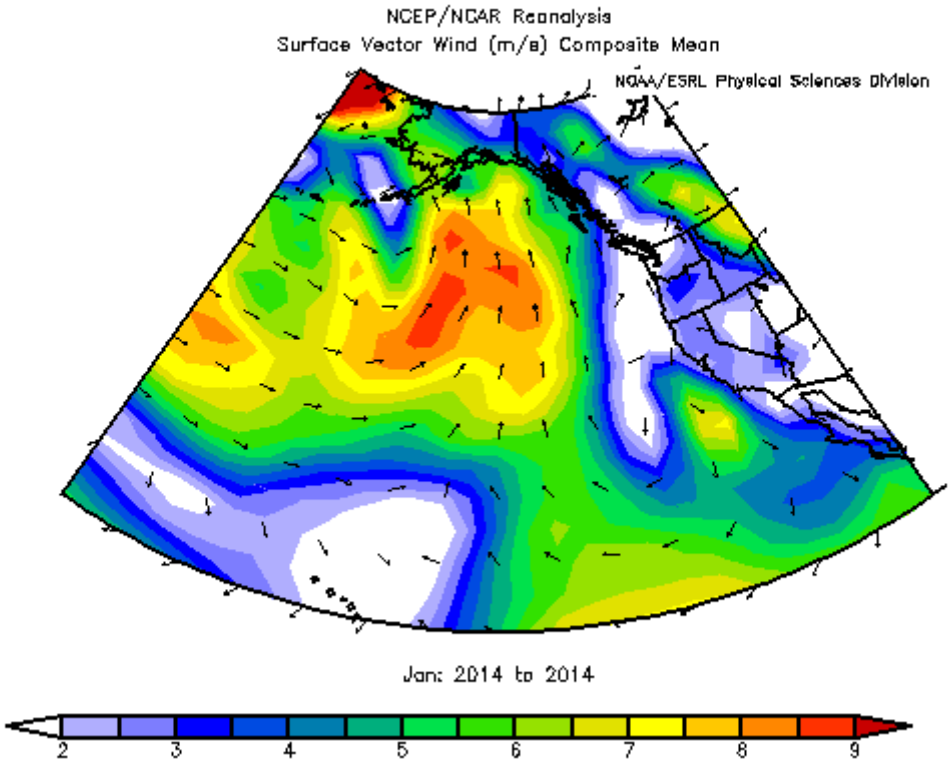


"Ridiculously Resilient Ridge" During January 2014

The high pressure ridge over California is shown in red above and a very intense Arctic Low is shown in blue. Wind direction around the high is clockwise, and around the low is counter clockwise – the result is that the wet winter storms are pushed along the white band to northern Canada, bypassing California

and most of the west coast. From northern Canada they turn south and run down the east side of the high pressure ridge, resulting in the “Polar Vortex” which brought cold arctic air to the Midwest and east coast during the winter of 2013/2014. Unfortunately the ridge has been in the same position again this winter and the sea level pressure diagram for January 2015 was almost identical.

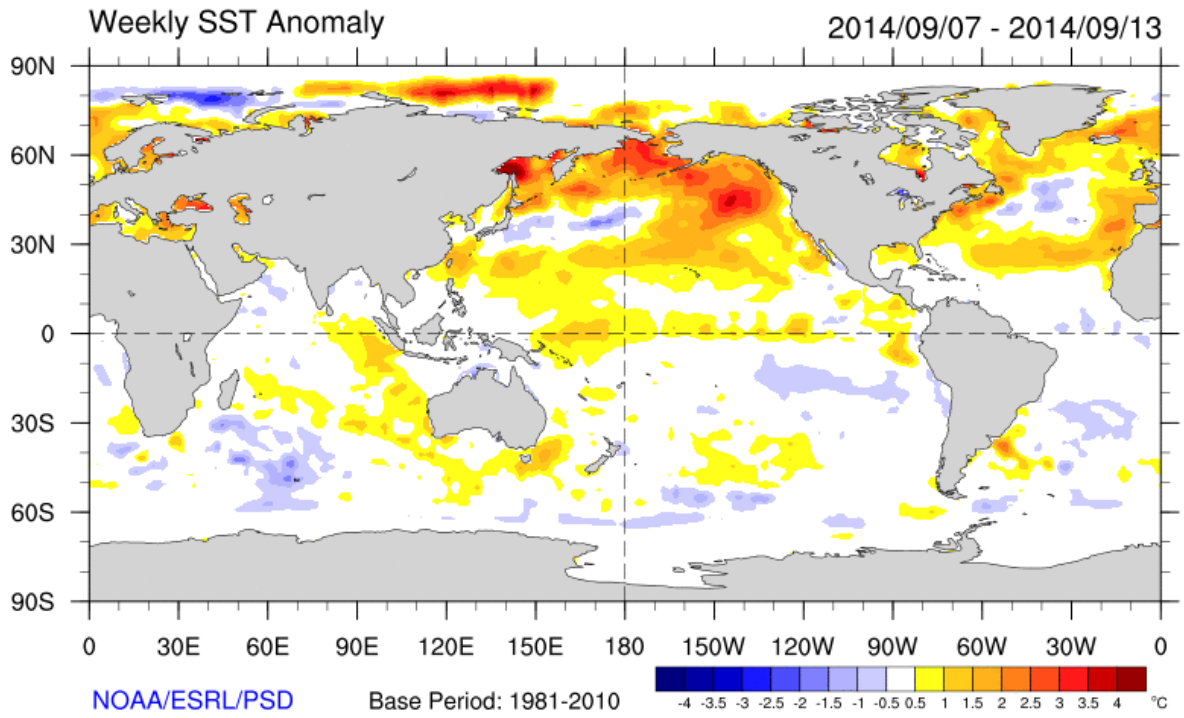
During the summer months California is normally protected by a high pressure ridge, giving it a warm dry Mediterranean climate, and receives rain during the winter months when the ridge moves south or breaks up. However for the past three years this ridge has persisted through the winter months and the result has been record drought in California with record warm temperatures throughout 2014 and again during spring 2015.



The diagram above shows surface wind direction for January 2014. Note in the North Pacific the very strong (orange and red) winds from the south. This acted like a fire hose to deliver warm tropical water (poor in nutrients) to the Gulf of Alaska and our local area. The plot for January 2015 is very similar.

These wind anomalies pushed warm water to the Gulf of Alaska and BC coast, shown in the sea surface temperature (SST) diagram below for September 2014. In his blog article, Daniel Swain talks about "the blob", which is a body of warm surface water in the Gulf of Alaska and is shown in red below. Swain says that "the blob" has "garnered considerable interest in oceanographic circles". I should expect so!

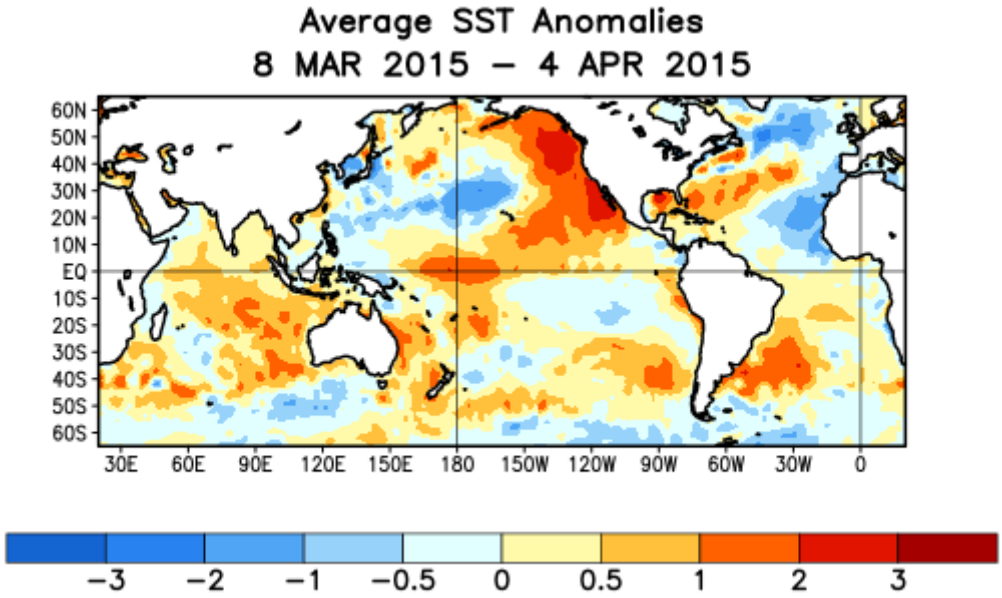
Another interesting point in the diagram is the exceptionally warm water in the Bering Sea and Arctic Ocean, which later in the season affects the winter ice cover. I believe the extent of Arctic ice affects the position of the Aleutian low during the winter, which in turn drives the winds in the North Pacific. It is all inter-related and may be a consequence of global warming.



"The Blob" During September 2014

Michael Milstein at the NOAA Northwest Fisheries Science Center has written an outstanding article on "the blob" http://www.nwfsc.noaa.gov/news/features/food_chain/index.cfm and describes the likely impact on the salmon food chain. He quotes Nate Mantua, who is one of the giants in physical oceanography and with Steven Hare is a co-discoverer of the Pacific Decadal Oscillation.

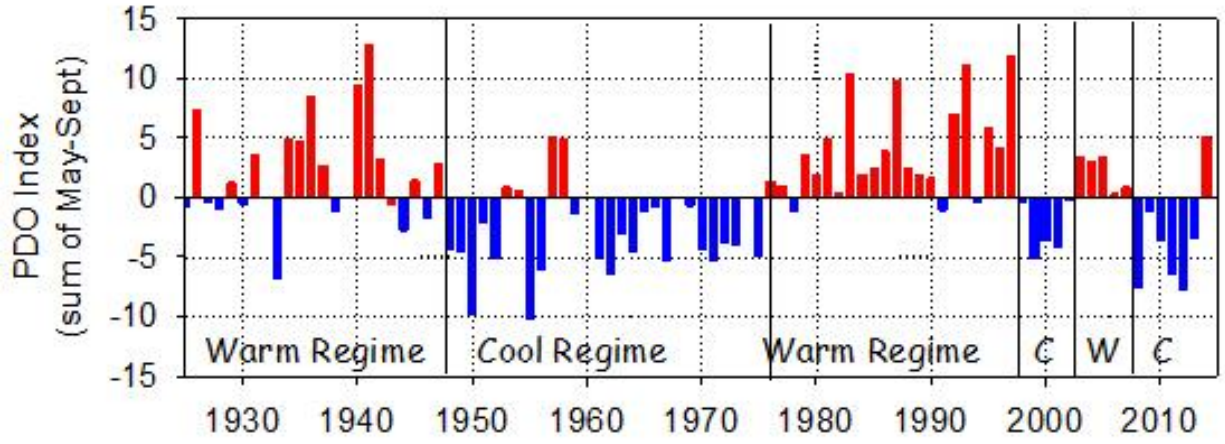
The plot below shows average surface water temperatures (relative to normal) for March 2015. The winter storms have mixed the surface layer so this plot provides a good indication of the warmth of the underlying water (the top 100 meters). Note that the water along the BC coast is several degrees warmer than normal, and there is a body of colder than normal water northwest of Hawaii. Some of the warm water off our coast is left over from last summer, and some has been pushed north by the mild El Nino this winter.



And a recent paper by Dennis Hartmann https://www.documentcloud.org/documents/1819029-hartmann-2015-geophysical-research-letters.html suggests that the atmospheric anomalies that generated the “Ridiculously Resilient Ridge”, the “polar vortex” and “the blob” were in turn caused by “observed warm sea surface temperature anomalies in the tropical western Pacific”, a body of warm water roughly under the cross hairs in the diagram above. It’s all part of the transport of heat from the tropics to the poles. This is all wonderfully complex and will likely take several more years to figure out.

Pacific Decadal Oscillation

We are roughly ten years into a cool phase of the Pacific Decadal Oscillation (PDO) and this normally provides cooler water and excellent ocean conditions for the salmon. However in 2014 the PDO went strongly positive, as shown in the diagram below. This was unexpected. The change from cool conditions to warm conditions was particularly abrupt.



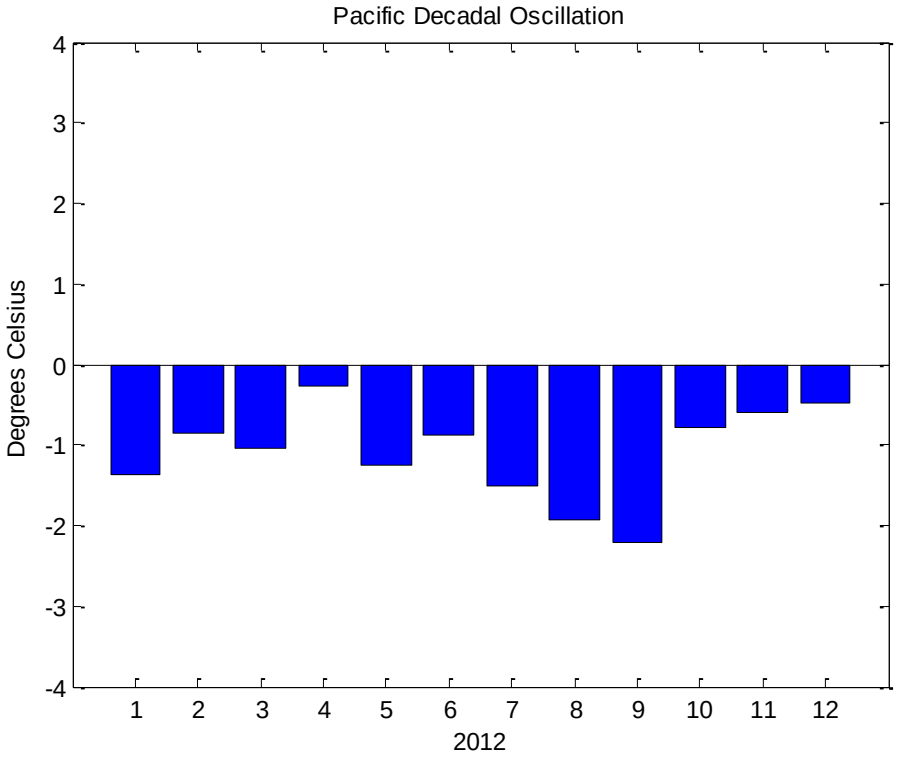
Source: NOAA Northwest Fisheries Science Center

An excellent web page describing the PDO is located at http://www.nwfsc.noaa.gov/research/divisions/fe/estuarine/oeip/ca-pdo.cfm.

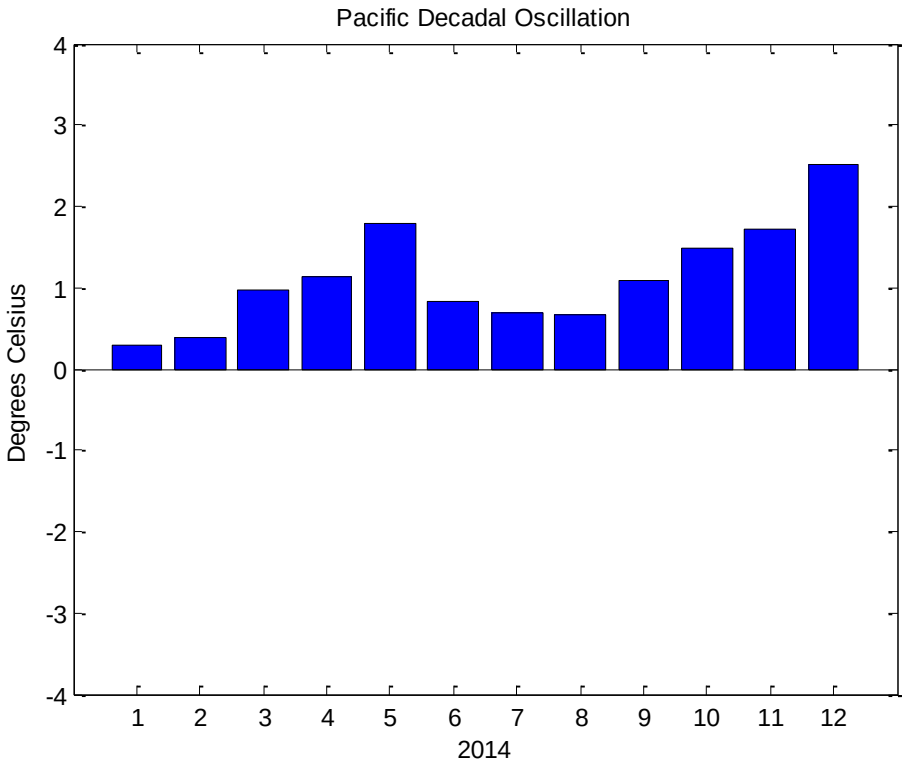
I have my fingers crossed that the positive (red) anomaly for 2014 was temporary and that by late 2015 we will be back in the blue (cool water conditions) again. However Nicholas Bond at JISAO says that climate models predict the anomaly will persist through the end of this year.

The PDO represents sea surface temperatures off the coast of Washington and Oregon. The PDO plot for 2012 (which was a particularly good year for the juvenile salmon entering the ocean) is provided below as a reference. Note the negative temperature anomalies and the very strong upwelling (cooler water temperatures) from May through September (months 5 through 9), driven by northwest winds off the coast.

The water temperatures usually rise from January through April as warm tropical water is pushed north by the winter winds, then drops quickly from May through September as the summer northwest winds cause upwelling which brings cool nutrient rich water to the surface. Beginning in October the winter winds push more tropical water north and the temperatures rise again.

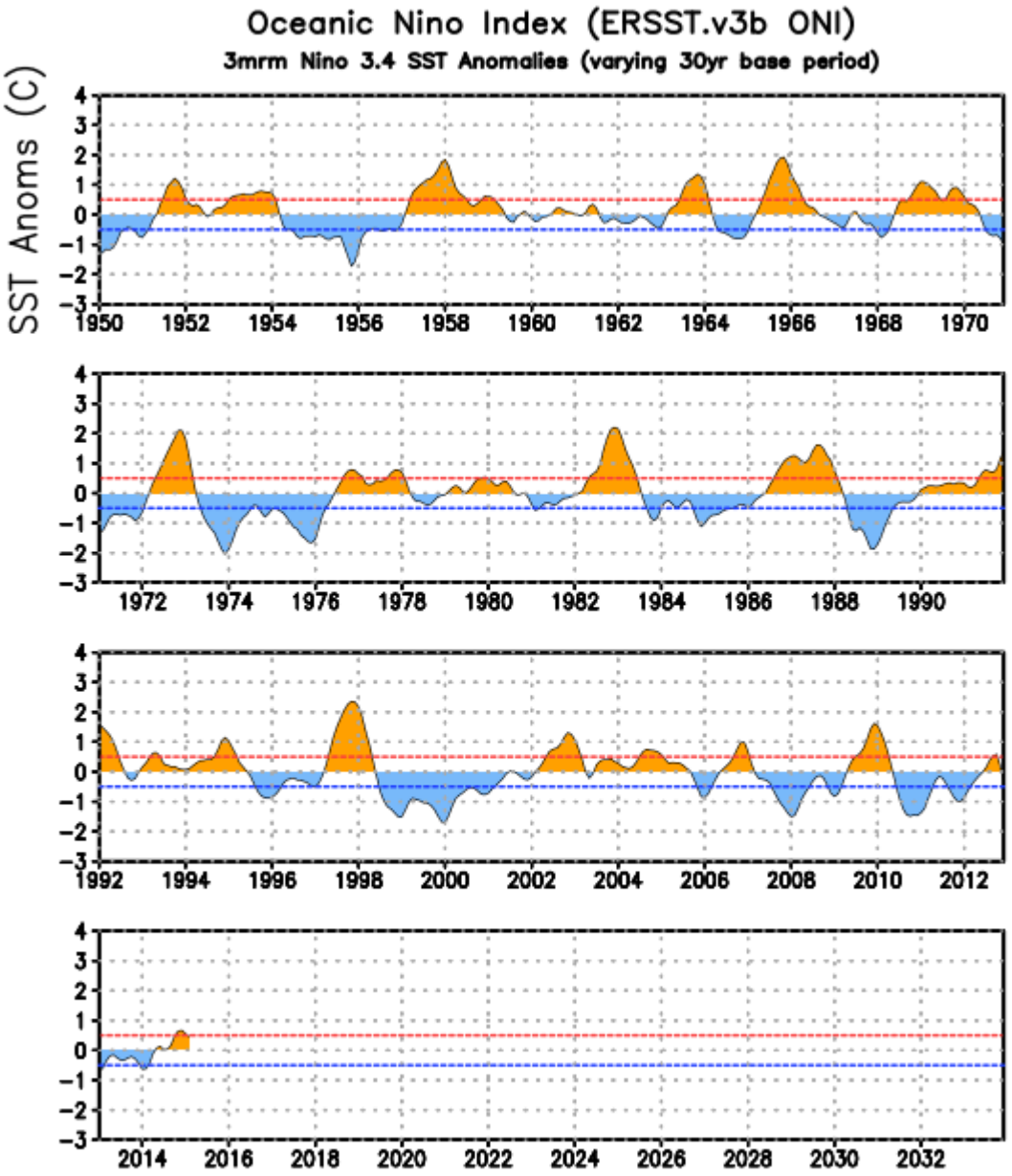


The monthly measurements for 2014 are plotted in the figure below. Notice that last spring the temperatures were warmer than normal and rising. In June, July and August the northwest winds (associated with clear sunny weather) caused upwelling of cold nutrient rich water from the depths and cooled the surface layer. Then from September through the end of the year the temperatures climbed again, due to the absence of upwelling and the presence of warm tropical water. The 2.51 degrees Celsius anomaly for December 2014 is exceptional and is higher than any monthly PDO temperature anomaly since 1997.



What About El Nino?

The warm sea surface temperatures we experienced in 2014 were not caused by an El Nino. However a mild El Nino did begin in December 2014, which today is pushing more warm tropical water to our coast. It is expected to be short lived with a 50% probability of lasting through the summer.



Oceanic Nino Index April 2015

Source: NOAA Climate Prediction Center NCEP

Arrival of Cold Water Copepod Community

An important measure of ocean conditions off the coast of Oregon and Washington is the arrival of the cold water copepod community http://www.nwfsc.noaa.gov/research/divisions/fe/estuarine/oeip/ec-biological-spring-trans.cfm. (I wish Canada had an organization like NWFSC looking at the ocean conditions off the BC coast).

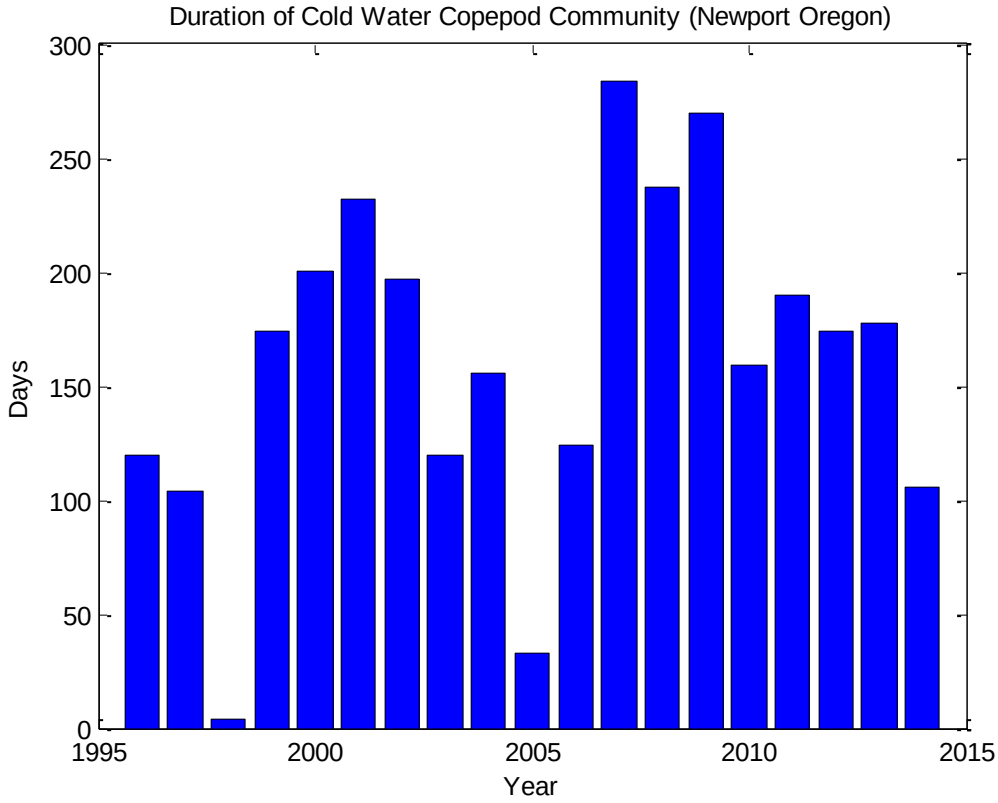
The juvenile coho and chinook salmon migrate to the ocean in late spring, and during their first summer in the ocean feed primarily on copepods and euphausiids. Their highest ocean mortality is during the following winter, and survival is particularly dependent upon how well they feed during that first summer in the ocean.

The coastal water of British Columbia, Washington and Oregon contains more than a dozen species of copepods which are normally present but in varying abundances, depending upon ocean conditions. Some are adapted to warm tropical water and others to colder northern waters. Two of the cold water species, *pseudocalanus mimus* and *calanus marshallae* have particularly high lipid levels, and during PDO cool phases when these varieties are very abundant the juvenile coho and ocean-type chinook salmon experience rapid growth and lower than normal winter mortality. These copepods are important sources of Omega-3 fatty acids.

The Davidson current which flows north along the California coast during the winter months delivers warm tropical water to Oregon and Washington. The clear sunny weather and northwest winds which begin approximately in May reverse the direction of this current (which is then called the California current and flows south) and causes upwelling, bringing cold nutrient rich water to the surface. It is counter intuitive, but the water off the coast of California and southern Oregon is warm during the winter and colder during the summer. This offshore body of cold water in the summer causes ocean fog (which we also see on the BC coast in July and August) and stimulates the summer community of cold water copepods. It is also why California surfers often wear wet suits during the summer months.

In 2014 this summer upwelling and colder water off Oregon began on June 11, several months later than normal, and ended September 25, about a month earlier than normal. The length of the season is a good indicator of the survival of juvenile salmon in that area. The season was shorter than average but not exceptionally short, as shown in the figure on the next page.

Along the BC coast the summer upwelling season is much shorter than off Oregon. I believe that one of the consequences of the warm water and short local upwelling seasons in summer 2013 and 2014 was that our juvenile salmon fed more heavily on euphausiids than cold water copepods. I noticed that the red flasher worked well through both of those summers, and both chinook and coho had a preference for red hooks.



Summary: What to expect in 2015? That's the million dollar question. This warm water is going to hang around for a while, and may not clear until July (or later) when the northwest winds start the upwelling again and bring cold water to the surface.

Last summer the salmon seemed to be either bypassing the warm water close to shore, or holding their noses and passing through very quickly without feeding. So let's cross our fingers and hope for cooler ocean conditions during the summer, which means normal migration patterns and the salmon passing closer to the lodges where they are accessible. I'll be watching for good kelp growth and the presence of adult herring in the inshore waters.

We've had two summers (2013 and 2014) of poor ocean conditions for the juvenile coho and chinook salmon. The juvenile coho that went to sea last summer will be returning to spawn in 2015, and I expect there will be fewer coho than normal and they will be small in size.

The summers of 2011 and 2012 had good ocean conditions with low juvenile salmon mortality in the following winters. The ocean-type chinook salmon that went to sea in 2011 will be returning to spawn this fall as five year old fish and it should be a good run of tyee class salmon. Similarly the ocean-type chinook salmon which went to sea in 2012 should be very plentiful as four year old fish, probably in the twenty pound range.

And the halibut fishing seems to be getting better every year and I wouldn't expect that to change.

DFO and the 2013 State of the Ocean Report

The Fisheries and Oceans Canada 2013 State of the Ocean Report is now available at: http://www.dfo-mpo.gc.ca/Library/353469.pdf. The 2014 report should be available later this year.

How to Gaff a Big Halibut

The quick answer is don't, but I guess it happens to every guide eventually. I've heard many stories of guides or guests gaffing big halibut, which then whip their heads from side to side and toss the fisherman around like a terrier with a rag doll. The story normally ends with the halibut swimming away with the handle of the gaff sticking out of the water.

Last summer I was fishing near the Estevan group of islands in Caamano Sound, and one of my guests hooked (on a salmon rod) a halibut in the sixty to seventy pound range. The new regulations are a serious pain because it is necessary for the guide to lean over the side of the boat and determine if the halibut is shorter than 133 cm. The broom handle that I was using was straight and the halibut was curved and not cooperating, but eventually I decided that although it was close it was probably legal.

When I stood up to look for the harpoon my guest (a really keen young lady) put the gaff in my hand and smiled brightly (and she was very pretty), so without much thought I went for it. What a disaster! In one smooth motion I gaffed the halibut and dragged it halfway over the rail, at which point it was balancing half in and half out of the boat and I couldn't back up any further because I was stuck against the center console. Then the stunned halibut came to its senses and went absolutely nuts. Within seconds it was off the gaff and back in the water, and went on a sizzling run in the general direction of Japan. The other guest (her brother) was holding the salmon rod which was bent double with the reel melting down, and was spooled within seconds.

A couple of weeks later I was in Milbanke Sound and it was round two, although almost certainly with a different halibut. This one was a similar size on a halibut rod, and again I went through the exercise of measuring the uncooperative halibut against the broom handle. And this time I picked up the harpoon, the head of which was tied to a small buoy, and I lined up on a spot between the eyes and a couple of inches towards the tail. When I drove in the harpoon the halibut went limp, I had got it in the brain and the rest was easy.

Summary: Use the harpoon and aim for the brain. Or if there are no alternatives, use the back of the gaff to whack the halibut hard between the eyes to stun it for a couple of seconds, then gaff it in the normal manner and hold on tight. But realistically, use the harpoon and not the gaff. Halibut to about forty pounds usually fit in the net.

Red Flashers

For the past two summers the red flasher (chrome with a red plastic border around the outside) was the flasher of choice throughout the season. In early June I watched Gordon Klughart (Corn Liquor) land a 40 lb salmon, the last and largest of four tyee he guided that afternoon during heavy rain at the Waterfall in Whale Channel. In addition to the general overcast conditions and low visibility the water was stained brown with tannin from the creek runoff, and the red flasher and army truck hootchie were devastating in those conditions.

Throughout the summer the red flasher worked well, right down to the last trip of the season. In low light conditions we used it with the army truck hootchie and on bright sunny days with Silver Horde or Max Flash mylar flies. The normal green flasher also worked well for me during the algae bloom but the purple haze flasher (normally the flasher of choice in late July and early August) was pretty much a dud. In general red was best and in retrospect I think it was related to the warm water conditions, and perhaps the salmon as juveniles had been feeding heavily on euphausiids (which have a red spot and are often called “red feed”) rather than copepods. For the second year I used red trailing hooks on my teaser head and Pro-Troll leaders and found they worked very well.

Max Flash Green Alien Flies

A couple of years ago Wayne Boles (Brandy) introduced me to the Max Flash Green Alien hootchie (http://bugeyefly.com/bugeye-fly/max-flash/maxflash-greenalien.html), which is dynamite on clear sunny days when the water is tinted green. Last summer my guest Joe Hippler picked up a 36 lb spring on a green flasher with Green Alien fly one afternoon in early August at the Stable, in Milbanke Sound. Throughout the summer this fly was my “go to” hootchie on clear sunny days and it did very well.

Wayne started the summer with two Max Flash Cop Car hootchies (http://bugeyefly.com/bugeye-fly/mirage/mirage-copcar.html) and his guests broke off both early in June on solid salmon (and he uses 50 lb leader). This fly provides good contrast in low light conditions and in overcast weather, and also glows in the dark.

One caution: the Max Flash Bug Eye flies come already tied on leaders intended for fresh water, and the hooks quickly rust back to stubs. I discard the factory leaders and tie my own with tandem 4/0 Mustad stainless steel or Gamakatsu single hooks.

Summary: I’ve already got a bunch of Green Alien flies in my kit but I’ve ordered more and have also ordered some Cop Car flies.

Flasher and Anchovy

I rarely fish flasher and anchovy, simply because most lodges on the central and north coast don't stock anchovies. However last summer there were a few boxes of anchovies in the lodge bait freezer and I also found two boxes of seven inch (green package) herring. The rest of the frozen herring was huge, generally purple and black packages (8 to 10 inches long) and much larger than the bait in the local area.

The seven inch herring were perfect with the Pro-Troll and I occasionally gave that a try (and guided a guest to a 30 lb salmon with it), but I had my best success with the anchovy which worked very well for coho and mid size chinook that were feeding actively. Then in early August my guest Stephen Ellis picked up a 40 lb spring in the Lounge (just north of Cheney Point) at Milbanke Sound on a green flasher with green/glow anchovy teaser head.

Summary: I'm now very comfortable with flasher and anchovy, and last summer I found the green/glow anchovy teaser head to be very effective. I wire rig it with 18 gauge stainless steel "locking" wire. The lodges often don't carry small bait, and next summer I will also bring some green/glow teaser heads for herring strip (which can be cut from the big herring) as a backup when imitating smaller baitfish.

Cut Plug Herring (Coho Roll)

I try to be observant and over the years have learned quite a bit from my guests. One trip last summer I instructor guided a guest who was a dyed-in-the-wool "coho roll" (45 degree cut) cut plug fisherman. The lodge motor had a very fast idle and the result was a frenetically spinning semi-chopper action which to me looked absolutely awful, but I was polite and held my comments. Later I was thankful for my discretion because he landed two tyee during a slow period when there were few big salmon in the area. I've learned over the years not to argue with the salmon, and sometimes the big springs like a fast rolling bait.

A few days later I was able to do personal fishing in the afternoon after changeover. When I fish by myself the purpose is to relax rather than work, so I only fish one rod and usually release the salmon. I also like to fish quiet spots rather than elbow to elbow in a popular place, so I generally try to avoid the guest boats. And I like to experiment.

The fact that my guest had done so well with the coho roll intrigued me, and I wondered if a Pro-Troll (which also spins very quickly) would work. I put on a green Pro-Troll with a big herring and the tail pinned up in the "butt plug" style. There was a very strong wind which limited where I could fish, so I made a slow troll right down the middle of Louisa Cove. On a windy day Louisa Cove becomes a zoo, but in this case the other boats were fishing the structure along the edges of the cove and the middle was clear. The day before on the depth sounder I had seen salmon arches between 80 and 100 feet so I set my line at 77 ft.

Shortly after setting up I hooked a very solid salmon that I lost without getting a look at him, then I released two teenager springs. Near Reginald Island I released two more springs, the larger approximately 20 lbs. I also watched on the depth sounder as a big fish (thick bright red trace) swam from 20 ft down to 77 ft to look at my herring, then continued deeper until I lost the trace. All this in a couple of hours during the afternoon when the fishing is usually slow, and was very slow for the other boats around me.

I was using my personal Islander reel which was spooled with a 50 meter section of Spectra line on top of the normal 30 lb monofilament. I really like the Spectra line. In wind and wave conditions with nylon monofilament subtle hits are often lost in the wave action. The Spectra has practically no stretch and I can see the hits clearly. This is especially important when the salmon are cautious and just mouthing the bait, and especially when fishing deep. It was great fun on an otherwise slow afternoon, and especially considering I was only fishing one rod.

I've been told by other guides and I've also read that the big chinook like a very slow roll, one revolution per second or slower, while the smaller salmon like a fast roll. I suspect that while the slow roll paradigm might be true for big chinook near their natal river, earlier in the migration they may accept a faster action. A big benefit of the faster roll is that it has a strong acoustic signature and attracts the salmon from a greater distance.

Summary: The Spectra line was excellent for fishing deep. And the Pro-Troll with its fast spinning action worked really well. I think that when the salmon are spread out the spinning action of the Pro-Troll generates an acoustic wave that attracts the salmon from a distance. The faster the spin the stronger the acoustic wave.

Fishing Deep (and Deeper and Deeper Again)

I like to target the mature migrating chinook, and they often run shallow. They also often hang out in kelp, and for those reasons I usually fish shallow (17 feet to perhaps 57 feet). Last summer I fished my standard depths but found as the summer progressed that I was having better success fishing deeper. Gradually over time I worked my way down to the 80 to 120 ft range, then during the last trip of the summer my guest Roy VanBeest introduced me to fishing really deep.

In early June I found most fish markers (on the depth sounder) were at 60 feet with some as deep as 100 ft. Most of the time I fished 57 ft to 77 ft.

June 28 we were fishing Duckers for halibut, and my guest caught a 15 lb spring right on the bottom in 240 ft of water (on halibut gear, and in hindsight this was a fascinating hint that I ignored).

Owen Matthews likes to fish deep. On July 3 he did well at 87 ft in the Slop Bucket, just off bottom. The next day we did well at Eclipse at 87 ft in 120 to 140 feet of water (no structure nearby, we were well away from land fishing a kelp line where two currents met).

On July 7 between Eclipse and Alexander I noticed a large fish arch at 90 ft swimming parallel to our direction of travel. At Eclipse Point I saw a group of fish arches at 90 to 100 ft. We dropped one line and caught a halibut, and didn't think any more of it (in hindsight another hint that I ignored).

August 12 fishing Louisa Cove I noticed a fish arch at 100 ft. Then the following day we fished Louisa Cove again at 100 ft in the center of the cove (no structure, the water was about 180 ft deep) and had great fishing for teenager springs.

August 21 as mentioned earlier I watched on the depth sounder as a big fish (thick bright red trace) swam down from 20 ft to 77 ft to look at my herring, then continued deeper until I lost the trace. Personal fishing, great afternoon with springs to 20 lbs at 77 ft. It seemed like the trophy salmon were shallow and the smaller springs were deeper.

August 22 I was fishing with Marika, Elyssia and Chelsea (serving staff taking a few hours off in the early afternoon) and ran cut plug at 37 ft and Pro-Troll herring at 77 ft. Hooked and lost a solid salmon on both. Later fishing Louisa Cove I caught a 20 lb salmon at 77 ft on Pro-Troll.

August 23 I was fishing 77 ft and doing well. Other guides were hitting fish shallow, at 25 ft to 37 ft.

August 24 I was doing well at 77 ft. Not many springs were caught this day, but I did well.

August 27 I made a trip to McInnes Island and it took me several hours to find the springs. They were sitting at 100 to 125 ft, near bottom, and were taking big herring very tentatively. We changed to flasher and hootchie and immediately got into three springs in the teens and many coho, releasing most. I suspect that the salmon were coming up from much deeper, attracted by the flashers, and were feeding on immature herring or sand lance. I also saw a very thick and bright arch on the depth sounder at 37 ft near the kelp (perhaps another trophy salmon running shallow).

August 28 Roy VanBeest caught a 28 lb spring at 157 ft.

August 29 We found the best fishing at 90 to 110 ft.

August 30 was my last day on the water. In the morning I fished with Kevin and Greg, keen cut plug fishermen, so we ran cut plugs at 47/57 at Cape Mark and picked up 21 lb and 15 lb springs. Big waves and building wind, crazy conditions to run cut plug but it worked. After lunch I went out with Kyle and Roy, who likes to fish deep, and fished the Notch with Pro-Troll and flasher/hootchie at 110/177. We caught two teenager springs and many coho, and had several solid fish break off. This during a period when few guides were catching any springs at all. Later in the afternoon one of the other guides asked me what my secret was. I had to admit there was no secret – there were a few springs in the area but they were very difficult to find. That seemed to sum up the entire season.

Summary: Have confidence in your fishing methods, be observant and watch the depth sounder closely. If you suspect that the salmon are running deeper drop one line. Don't worry about fishing structure when running deep (stay away from bottom and watch the cannon balls!).

Full Moon

Greg (the West Coast mechanic who also happens to be a marine biologist) told me that in Uculet the morning fishing goes dead during periods of full moon. He believes that during the full moon the salmon feed during the night and sleep/digest during the morning. Other guides have noted that the greatest tidal swings and strongest currents occur during the full moon, and this also affects the fishing.

During August at Milbanke Sound the full moon was August 11 and we had excellent morning fishing in the days leading up to and past the full moon, however we also had heavy fog during the night. Then on August 13 the fog cleared and the morning fishing was slow, with much improved fishing in the afternoon.

I think Greg is right, with the caveat that the salmon only feed at night during clear weather.

Summary: When you get up before dawn and see the full moon shining brightly, expect that the fishing may be slow in the morning but also may be very good in the afternoon and evening.

Sand Lance in the Morning

During the summer it occurred to me that sand lance burrow in the sand overnight (actually I knew that already but I hadn't worked out the consequences). At dawn they leave the sand, form schools and make their way to the feeding station. This takes a couple of hours and the salmon have figured it out and for the most part sleep in. I can't count the number of times I've fished an excellent sand lance location at the crack of dawn (Borrowman Bay and Kettle Inlet are examples) and wondered why the fishing was dead, while later in the morning and during the afternoon and evenings they were excellent spots. Duh.

Summary: If the primary baitfish in an area are sand lance don't expect the fishing to be red hot at the crack of dawn. The salmon already know that the sand lance get a slow start -- for the first hour or two it is better to run cut plug or teaser head herring rather than flasher and anchovy.

Line Creep

Line creep is when the reel allows a little bit of line to pull out occasionally, usually due to wave action. Over time the belly in the line between the rod tip and the release clip gets larger and larger, with quite a bit of slack when a fish strikes. This is a particular problem when running hardware (which requires a faster trolling speed than bait) and especially when fishing deep.

Line creep is a big problem with the Islander reels. The Islander reels are excellent with a silky smooth drag. However a drag setting which prevents "line creep" while trolling might be too tight when a salmon is heading off on his first run. I don't like to lose salmon, so I set the drag as light as possible and while trolling fast the line often creeps out.

A simple solution is to take a spare downrigger release clip and attach it to the line between the reel and the first rod guide, tying the other end of the release clip to the rail on the boat. The release clip takes the strain and the reel can be set with lighter drag, suitable for playing a fish. When the angler picks up the rod or a salmon pulls hard on the line, the release clip at the reel pops free. I did this quite a bit and it does stop the line creep, but several times my guests got tangled up in the release clip while trying to strike a salmon.

I believe the best solution is to use a reel where the drag is not quite as smooth. This winter I bought a Daiwa M-One UTD fishing reel and spooled it with 100 yards of 30 lb Dacron backing and 250 yards of 30 lb Maxima Ultra Green, followed with 100 yards of 50 lb braided Spectra and 10 yards of 40 lb Maxima Ultra Green. I'll mount this reel on a lodge rod for my "third rod" next summer, to be used while fishing deep with hardware. The Daiwa M-One UTD has a seven disk drag system which is almost as smooth as an Islander on a dry day and is far superior in the rain, but still has some difference between static and dynamic drag. I'm hoping that it will be the solution to the line creep problem.

Summary: I know from past experience that the Daiwa M-One UTD is an excellent reel. I've also learned that Spectra line works really well when fishing deep. I'll report back on whether this combination solves the line creep problem.

Orcas

I was fishing Eclipse last summer when a group of orcas came through and scattered the salmon. The other boats left the area, but I tend to be a contrarian so I stuck around. I also saw Gordon Klughart (Corn Liquor) move in close to the kelp and continue fishing. Gord is a very experienced guide and knows what he is doing, so I guessed that some of the springs might have found refuge in the kelp and Gord was targeting them. Correct on both counts – both boats did very well for the next hour or so, until the salmon moved back out into deeper water.

Later in the summer I was fishing Milbanke Sound and Roy VanBeest, one of my guests, mentioned that when orcas pass through an area the best strategy is to fish deep. The orcas have to breath so prefer to

hunt shallow, and to find refuge the springs scatter deep and hug the bottom. I haven't tested this but it rings true.

Summary: When orcas pass through an area most of the lodge boats usually leave, thinking the whales have chased the salmon away. Actually most of the salmon will still be there, just not in the normal spots – try fishing tight in to the kelp or in deeper water.

Chartreuse Dye

Brian Babcock is an excellent fisherman and guide, and several years ago I learned from him that when the water is clear (the waves blue in colour) it can be useful to add half a teaspoon of Mrs Stewart's bluing (available at some supermarkets in the laundry supplies section) to the bait bucket, to dye the herring blue. I often do this in late July or early August when the algae blooms are over and the water clears in Milbanke Sound (about the same time that I would use the blue teaser heads and Pro-Trolls, and the purple haze flashers). I've caught a couple of tyee with the blue dye and am confident that it doesn't hurt, and I believe it might help.

More recently I've noticed that the Pro-Cure Bad Azz product line of powdered bait dyes includes a chartreuse lime fluorescent colour. I've often thought of trying this during the early part of the season when the water is green in colour. Last summer Rennie had guests who had brought some and he used it on his bait. The result was a 33 lb salmon during a period when very few tyee were in the area. I wouldn't claim that the chartreuse dye made the difference (Rennie is an outstanding fisherman and would probably have caught the big salmon anyway) but I don't think it hurt.

Summary: I'm going to try some of the Pro-Cure Bad Azz chartreuse powdered dye next summer. I think it makes the bait more visible during periods when there is a lot of algae in the water.

Wire Rigged Teaser Head

One of my favourite fishing methods is wire rigged teaser head with whole herring. In the past I've used 16 gauge galvanized steel wire from Home Depot but over time it rusts. This fall I found that Malin Company in the United States manufactures 16 gauge (0.051 inch diameter) stainless steel lockwire, and it is available from Grainger Industrial Supply – a much better solution.

Also last summer I exchanged emails with Marcos Lopez on how best to deal with the trailing hook. I had been letting it dangle, while Marcos had been embedding the hook like a cut plug. During the summer I tried it both ways and decided that with big herring I missed fewer strikes when embedding the hook, both for teaser head and Pro-Troll.

Summary: Stainless steel lockwire is much nicer than the Home Depot galvanized wire but is difficult to find in Canada. And bury the trailing hook same as for cutplug.

Large Chinook

I usually catch a few tyee (springs 30 lbs and larger) each season. Not a lot, but it is a way to judge how well the season went. It is also interesting to see what they were caught on. The table below lists my large chinook for 2014:

Date	Weight	Guest	Lure	Location
June 24	29 lbs	Peter	Clear Pro-troll with 7 inch herring	Waterfall
July 4	28 lbs	Sean	Red flasher with army truck hootchie	Waterfall
July 23	40 lbs	Ted	Green/glow wire rigged teaser head, big herring	Cheney Point
Aug 8	28 lbs	Bob	Bloody nose anchovy teaser head, UV purple haze flasher	Cape Mark
Aug 9	40 lbs	Stephen	Green/glow anchovy teaser head, green flasher	Lounge
Aug 11	47 lbs	Tim	Green/glow wire rigged teaser head, big herring	Notch
Aug 11	36 lbs	Joe	Green flasher and green alien bug eye fly	Stable
Aug 11	30 lbs	Greg	Pro-Troll herring	Cheney Point
Aug 25	28 lbs		Cut plug	Cape Mark
Aug 25	30 lbs	Jim	Chartreuse Pro-Troll with big herring	Cape Mark

Also on the afternoon of August 25 my guest Jim hooked a big salmon at Cape Mark. We fought it for more than ten minutes – sizzling runs, very fast, then it sounded. As Jim worked it back towards the surface the hooks pulled out. Big disappointment, based on the fight I thought it was in the order of 40 lbs. This was also on chartreuse Pro-Troll with big herring, the tail pinned up “butt plug” style.

I now realize that the majority of the salmon last summer were feeding on sand lance and immature herring, and there were very few mature herring in the areas I fished. That is why flasher and hootchie, and flasher and anchovy consistently fished well for the coho and smaller chinook, the salmon that were actively feeding. However the big bait still worked very well for large chinook, likely because they were migrating through the area quickly and were opportunistic feeders.

My two largest chinook (47 lbs and 40 lbs) were on green/glow teaser head with big herring, wire rigged and with the tail bent up “butt plug” style. The other 40 lb chinook is the largest I’ve caught on flasher and anchovy (the anchovy was wire rigged as well).

Last summer I used just about everything in my kit and caught good salmon on most of it. Sometimes I chose specific gear because it matched the local feed or because I thought there might be big salmon in the area. Other times I just felt like running cut plug or Pro-Troll. Most of the gear caught fish. My conclusion from this is that finding the salmon and getting the gear in front of them is much more important than the details of what you are using.

It is also very important to be on the water when the salmon are passing through. If I hadn’t fished on August 11 my tally for the summer would have been three tyee instead of six. August 25 was another day when a group of big salmon swam past.

Summary: Use big bait for big chinook, but for consistent fishing match the bait in the area. Getting the bait in front of the salmon is much more important than the details of what you are using. And when the big salmon are in, fish every daylight minute available.

Have a great summer and I hope to see you on the water.

Bill Haymond