



Flylines

WINTER 2016

January 2016



BCFFF 2016 AGM RETURNS TO CORBETT LAKE APRIL 30

British Columbia Federation of Fly Fishers Annual General Meeting 2016

hosted by **Corbett Lake Lodge**

April 29-May 1 2016

Friday April 29; 7pm Reception: Meet and Greet

(\$10-15 payable upon arrival to Corbett Lake Lodge).

Saturday ,April 30 , Cost \$75.00 for meals* includes tax and gratuity

>Breakfast, lunch and a prime rib dinner (dinner only option \$50)

>Fishing: Included: ****Catch and Release ****

>Annual General Meeting 9 am

>Fly Tiers: TBA

>Dinner/Auction /Speaker 6:30 pm

Lodging is 50\$ + tax (approx. \$56 total) per person per night (2-7 per room/bungalow).

Let us know who you prefer to stay with.

If camping: Must be self-contained. \$20 per RV (max 2 people per RV) *Limited space available.

Boat rentals are included, although we encourage attendees to bring their own water craft, as there are only a limited amount of lodge boats available.

Guest speaker/Fishing analysis: **Phil Rowley**

FFF Casting Instructor: **Dennis Grant**

This event promises to be a fun opportunity for like-minded anglers looking to further the BCFFF goals of Quality Angling Opportunities and Conservation.

Contact pjrogers@shaw.ca or vipcare@hotmail.com to reserve your attendance. The lodge has limited space for 47 guests and is licensed for 60 in the restaurant (AGM dinner) so we encourage you to book early. Payment expected by Jan 15,,2016 .

Use the same contact info if you have a donation for the silent auction.

CONTACTS

Board of Directors

Rich Ronyecz	President
Myles Armstead	Vice-president
Phil Rogers	Vice president
Peter Caverhill	Secretary
Jim McEwan	Treasurer
Kyle Sawayama	Past president/website
Lloyd Erickson	Newsletter
Ken Burgess	Membership/Gilly Fund/ Insurance
Trevor Nowak	Director
Jesse Blake	Director/ website
Trysten Wilmot	Director
Don Grimway	Family Fishing Weekend
Art Lingren	BCFFF Historian

Affiliated Clubs

Cariboo Chilcotin Flyfishers
Comox Valley Fly Fishers
Cowichan Fly Fishers
Haig-Brown Fly Fishing Assn
Island Waters Fly Fishers
Kalamalka Fly Fishers
Kamloops Fly Fishers
Long Beach Flyfishers
Loons Flyfishing Club
Mid Island Castaways
Osprey Fly Fishers
Penticton Fly Fishers
Totem Fly Fishers
West Coast Fly Fishers

Mail: PO Box 41023
RPO Woodgrove
Nanaimo, BC V9T 6M7

Email: general@bcff.bc.ca

Newsletter editor email: acre5age@gmail.com

Website: bcff.bc.ca or [Facebook.com/BCFFF](https://www.facebook.com/BCFFF)

Membership: Open to all persons, and members of associated clubs. Direct memberships are \$20 payable to the Membership director.

INFO MEMBER CLUBS

COMOX VALLEY FLYFISHERS

By Norm Neiderer

This story starts last year.

Dean Patterson, the then Principal of Lake Trail School in Courtenay asked our Club if we would teach the kids fly tying and fly casting on Friday afternoons. We did it for nine weeks. There were eighteen kids but just a few were really interested. They attended because Friday afternoons were reserved for extra-curricular activities and the school thought that fly tying might be good for them. A week before the end of the sessions, Dean got transferred to Highland school in Comox as Principal. I suggested they start a fly fishing club there next year. He agreed, so we tossed ideas back and forth on how to do this and subsequently started in the Fall. Twenty-two kids signed up and at the last session thirteen showed up. We are hoping to have more kids in the New Year as the word gets around. We are finding that the kids have so many after school activities they find it hard to fit one more in. The kids we have so far are very keen which is very different from Lake Trail School. It makes it a pleasure to teach them. Eight members of our Club volunteered and so far we have had five sessions. We have now stopped for the Christmas break. We are concentrating on fly tying at the moment and will do casting in the New Year when the days get longer and the weather gets better. We will be using the new rods bought with the money from BCFFF. Thanks again BCFFF.





SAD NEWS: Ralph Shaw passed away January 7, 2016. He will be sorely missed by his many friends in BCFFF.



**Ralph Shaw with Rich Ronyecz at
BCFFF 2015 AGM at Comox Valley Fish and Game Clubhouse, April 23, 2015**

In Memoriam: Ralph Shaw (1926-2016)

By Brian Smith

When old friends pass, it's our image of them that remains on our mind and in our thoughts; photos not of their deaths, but of their living. My picture of Ralph is one of a man in his eighties going on sixty wearing a white Tilly hat and cargo vest; giving of his time, sitting at a table during a public outing or wildlife convention, tying Tom Thumbs, quietly offering them to wide-eyed, awe-struck youngsters who were intently watching the process. This was typical Ralph Shaw, a man who devoted much of his life to other people and to wildlife, especially to conservation organisations he believed in, such as the BC Wildlife Federation and the BC Federation of Fly Fishers.

I first met Ralph 40 years ago through my friend and pioneer still water fly-fishing legend Jack Shaw (1916-2000), who was no relation to Ralph, but a life-long comrade of Ralph's during his early fly-fishing days in Kamloops. While in Kamloops, Ralph was an educator, school principal and active conservationist and was instrumental in developing the McQueen Lake Environmental Centre, a setting where adults and especially school children could study the entomology and eco system of a still water habitat. For this legacy work, Ralph was appointed the *Order of Canada* in 1984.

Ralph & his wife Elaine later retired to Courtenay, where he began to write about hunting and fishing, contributing for many years as an outdoor columnist for the *Comox Valley Record*, also penning many articles for *Island Fisherman* and *Island Angler* magazines. He likewise contributed articles to *BC Outdoors*, *Outdoor Edge* and *Outdoor Canada* publications. While in Courtenay Ralph continued his conservation efforts, except on the saltwater fisheries front, and in 1990 was given the *BCWF Ted Barsby Conservationist of the Year* award and the *BCWF Presidents Award* recognising "outstanding volunteer achievement" for his work on saltwater fisheries. In 1992, Ralph was awarded the *Canada 125 Medal*, which commemorated the 125th anniversary of Canada, given "to Canadians who were deemed to have made a significant contribution to their fellow citizens, to their community, or to Canada."

On a personal note, Ralph was a member of the *Outdoor Writers of Canada*, and, knowing my keen interest in writing, through this channel introduced me to his friend and well-known author Bob Jones, past fishing editor of *BC Outdoors*. Bob took me under his wing, assisted me tremendously by editing my magazine submissions for several years, and then encouraged me to write a book on fly-fishing Central BC, which has since turned into two volumes. Unfortunately, Bob passed in 2008 before my first book was published in 2009, but this was an example of the essence of Ralph Shaw's character: always willing to help, encourage and contribute to others aspirations and well-being.

Perhaps the crowning glory of Ralph's fly-fishing life is highlighted when he teamed with Bob Jones and Larry Stefanyk to compile the fishing diaries of Jack Shaw, published in the 2008 hard cover book *The Pleasure of His Company*. In it, Ralph cited the words of Jack's summation

of a well spent fly-fishing life so beautifully: “All of this time, effort and expense just to create an assortment of fly patterns that will, when fished in the right manner and at the right time, catch fish, has often seemed to me a waste of time. But now, more than 40 years later, I have come to the conclusion that the pleasure has been in the journey, not in the arrival.”

To my friend Ralph, your journey has been memorable. As you and Jack now sit peacefully in your punts, side-by-side at anchor on a quiet Kamloops lake, casting your flies to the magnificent Kamloops trouts, we raise our glasses and salute you....cheers, my friends.

Brian Smith

Prince George, BC

January 19, 2016



Can you
identify
this fish?

British Columbia's Classified Waters 25 Years Later by R S Hooton

A quarter century ought to be enough of a reference period on which to base a few observations on the original objectives of classified waters implementation (1990) and the evolutionary pathway that has resulted. Having been directly and intimately involved in the formulation of the regulations underlying the initiative, in the delivery and monitoring of it through its first decade and, more importantly, as a resident angler with long experience on most of the (Skeena) classified waters before and after their designation, I'll offer that I am well qualified to comment on the subject. I have less direct experience with the Dean, the mainland coast streams opposite northern Vancouver Island and, more recently, the Kootenay streams that were added to the classified lists but I have enough to know that the implementation processes and outcomes in all these other areas parallel those from the Skeena.

The driving forces for classified waters regulations originated with three of the province's blue ribbon steelhead streams, the Dean, the Bulkley and the mainstem Skeena around Terrace. On the Dean it was largely about the influx of non-resident, non-guided anglers (by legal definition that group is termed "aliens") who were seen as excessive competition with both guides and residents. Guides too were perceived as having too much of the pie. On the Bulkley, it was the rapid expansion of guiding through the mid-1980s that produced a groundswell of opposition from local resident anglers. The invasion and occupation of lower Skeena River bars by western Europeans was equally responsible for local unrest. Neither of the latter two could be treated in isolation of all the other neighbouring Skeena tributaries so most of them were also included in the initial classification thrust. When all was said and done the 1990 classified waters regulations limited the number of guides to those who already held licenses. Their level of guiding was also supposedly capped at the levels that existed over three years leading to the implementation of the new regulations. The southern mainland coast rivers that became classified at the time were more about climbing on the new band wagon than any situation comparable to either the Dean or the Skeena system. The Kootenay streams came much later as guiding for cutthroat and bull trout became lucrative and competition originating from outside British Columbia threatened the business interests of those involved.

It is important to remember that the underlying theme associated with the entire classified waters initiative was quality angling. The difficulty in delivering that is the ceaseless debate about what it means. A lower mainlander who has never fished beyond the Vedder River has no concept of what a Babine River angler expects. Those who have fished the province's best steelhead rivers since the 1960s and 70s rarely share the same perceptions as most contemporary anglers who weren't even born at the time. Small wonder the management authority has never been able to find an acceptable definition, much less sell a diverse angling public on how best to administer it. Great Britain, Norway, Iceland, the best rivers in eastern Canada, the Kola Peninsula, Kamchatka, etc. have sustainable quality fishing for a reason. They limit the number of people who partake at any point in time. Meanwhile, British Columbia has spent a king's ransom on multiple reviews of the classified waters system through the latter 1990s and in the first dozen years of the next century. The herding cats cliché is entirely applicable. The product of all that process was nothing more than the path of least resistance and a scenario that is far removed from anything resembling those initial objectives of quality angling and resident angler priority. I'll explain.

The two most important results of the 1990 regulations were the rapid escalation of the amount of guiding on the classified waters that were supposed to have been saved from that fate and the impact the restrictions on classified waters had on all the next best unclassified waters. The former was rooted in the indifference of the statutory authority of the day in the Skeena Region who chose not to require reasonable verification of the rod days guides claimed they had used. He contended the safety valve to re-adjust the rod day allocations after a two or three-year introductory period was the "use it or lose it" provision in the regulations. Supposedly, any excess rod days not utilized would revert to the crown, thus bringing the actual use into line with the legislated provisions.

Not a single rod day that was allocated in 1990 has ever been retrieved. Instead, all those rod days that were never supportable were sold and resold to new operators who moved onto the scene and began to pyramid rod day quotas. Short years later all those fictitious days became real. One by one the small

operators were replaced, more often than not by non-Canadians more interested in locking up the best fishing opportunities available for their countrymen and corporate friends than quality fishing for British Columbians. That scenario varied between rivers but almost every classified river experienced the same outcome. Rod day quotas that cost their original owner nothing frequently became million dollar gifts from the residents of this province.

There is more. What began as a cottage industry comprised of small operators who seldom had any assistant guides and therefore spread their fishing effort relatively equally over the course of a season morphed into something that bore no resemblance to the 1990 benchmark. The new kids on the block brought a steadily increasing number of boats, ever larger and more powerful, and hired numerous assistant guides to help them sell their inflated rod day quotas. Their collective fishing effort was no longer spread uniformly over an extended season. Instead it became concentrated on all the best times and places. Rivers whose guides operated from lodges with a fixed client capacity per week escaped at least some of this concentration but the inflated rod day totals that were conferred at the outset certainly increased the overall effort on those rivers as well.

Whereas September and October were once the only months when guides operated on most of the high profile Skeena tributaries, the classified waters regulations changed that too. There are no rod day fees or classified waters licenses required other than for the fishing that occurs in those two months. Between the freebee afforded by adding additional guiding days outside those months and the trend toward milder late fall and winter temperatures, the incentive for guides to extend their seasons is obvious. The end game is that even the former August and November fishing once exempt from commercial exploitation has been compromised. The same can be said for the spring fishing on the lower Skeena and all the more prominent tributaries in the same area.

The second and more pervasive effect of the classified waters era was the fact that when opportunities to guide on the best rivers of the province are locked up by regulation, all the next best waters became the focus of anyone wanting to capitalize on a public resource. One by one unclassified waters were added to the list in the same gold rush pattern that precipitated the original classified waters initiative. The only difference is there are no restrictions on how many guides are licensed or how much activity they can exert on any unclassified water. Furthermore, other than the relatively miniscule cost of an angling guide license (less than the fee charged any client for a single day of fishing), there is no other direct return to the province for this unimpeded access to the fish that belong equally to all. This squeezing the bubble consequence was widely predicted in the early 1990s but not a single step has ever been taken to address it. Today we find ourselves in a situation where every river that has any perceived commercial potential is victimized. Anyone meeting basic residency and age criteria and exhibiting the most basic familiarity with the freshwater sportfishing regulations can be processed through a government website, specifically designed to accelerate licensing and permitting processes, and be issued an angling guide license in a matter of hours.

One might think there is some oversight or monitoring of all these circumstances. Wrong! The angling guide licensing and administration process is now so far removed from the people in regional offices of the Ministry of Forests, Lands and Natural Resource Operations who supposedly manage our fisheries there is no simple way of tracking what is occurring. For example, I have asked repeatedly for a list of the guides who are licensed to fish what is left of the marketable steelhead streams on Vancouver Island (e.g. the Cowichan and Stamp/Somass rivers). Web sites abound with video clips and advertisements by guides selling our fish and fishing but the Ministry can't even tell me who the licensees are and how many assistant guides they employ, much less how much pressure they are bringing to bear on public resources and opportunities.

Government spokespersons will counter they have all sorts of data emanating from river guardian initiatives undertaken on various classified waters over the years. I'll agree there are good data from the captive audience of anglers and guides on the Dean (as well as a long standing administrative system that limits non-guided, non-residents). Some of the data from the Kootenay streams may also be credible. Having no experience on the latter area in recent years I can't speak definitively to that.

However, I will state unequivocally if anyone tries to sell the notion there are good data from the Skeena country, they know not whereof they speak. I'll base that on the fact over the past three years I have spent many weeks camped on the Bulkley River, the most important wild steelhead fishery in this province, without ever encountering one of the guardians who gather all the information that finds its way to higher offices of the Ministry. How can the Bulkley fishery be monitored adequately when a large majority of both the effort and catch is boat facilitated but guardians are strictly shore based? How credible are the license data when the guardians have no authority to demand licenses? Why would anyone who perceived the information requested could be used to their detriment respond truthfully to a canned list of questions asked by neophyte guardians? As for the guide reports, I seriously question whether anyone at the field level in the Ministry even tries to extract them from their Victoria repository and examine what instruction might be there.

If the government of British Columbia can ever be pressured to stand by its commitment toward quality fishing and resident angler priority here is a shopping list of items that singly or in combination could be applied. Some are already on the shelf, others would need to be developed. None are unreasonable or unrealistic if we are serious.

1. A moratorium on the issuance of any new angling guide or assistant angling guide licenses.
2. A major upgrade in the data recording and retrieval system for all angling guiding activity.
3. A permit system for all classified waters anglers, guided or non-guided, resident or non-resident. Presently there are insufficient data on which to base judgements on which class of licensee contributes to alleged crowding on classified waters. Permits would not be restricted in number unless and until it is proven there are too many applicants to meet some pre-determined "quality fishing" level. Guides would receive the number of permits they qualify for as per their rod day quotas. Permits would be considerably more enforceable than anything that exists today provided that sufficient line agency enforcement personnel are part of the equation.
4. Amendment of the existing regulations re conditions on angling guide licenses such that unclassified waters are also subject to restrictions that might be appropriate (e.g. guide free times and/or zones, number of clients, days of the week, etc.)
5. Amendment of existing regulations to facilitate no guiding on any river, not just those that are classified.
6. Application of boating restrictions such as no fishing from a boat and no power boats where and/or when deemed appropriate.

R.S. Hooton

2015-10-24

Evolution in Fly Fishing for Pink Salmon by Lloyd Erickson

I was introduced to fishing for pink salmon on the Eve River sometime in the late 1970's, sometimes referred to as "the good old days". We dedicated a few days around the full moon in August for our fishing trip because of a predictable daytime low tide. We particularly enjoyed fishing in the river and fished downriver on the falling tide, then back as the tide returned. On the low slack tide we would get maybe an hour's fishing at the river mouth or along the beach. Of course pink salmon were considered "commercial species" and we could not fish for nor keep them upstream of the tidal boundary signs.

Fiberglass rods were still in vogue in those days. My go-to rod was nine feet, throwing an 8-weight line. I used a floating line with a fairly long leader, but also used a couple of slow sinking lines with maybe a 7 foot leader. I used about 4 or 5 patterns of flies back then, what a change from now! Some of the other fishermen used 7 weight or even 6-weight rods/lines. The fly of first and last resort was simply a hot pink (cerise) fly with a slim steelhead wool body and wing, usually a size 4, but maybe smaller. We had caught pink salmon while trolling in the saltchuck, but usually always incidentally to other salmon species we were targeting. Of course, the commercial fishermen used pink hootchies when trolling for pinks. So we didn't get much guidance from other fishing experiences as to what patterns of fly we might use. We only "knew" that pinks fed mainly on krill and other "pink feed".



Fishing pressure on the Eve River was a tad less in those days; we might meet a half dozen or so other fishermen. Pink salmon weren't as "worthy" as other salmon. They were smaller, they had pale flesh, and since most were caught using heavy trolling gear, weren't considered strong fighters. Popular outdoor magazines such as *Western Fish and Game* and *the Environment* didn't enlighten us on patterns to use. Articles about beach fishing were usually about cutthroat trout or coho salmon. The handful or so fishermen who had discovered this Shangri La of fishing in a river or on the beach at the nicest time of year kept it secret and

enjoyed very little competition.!

However, the fun of beach fishing did start to gain in popularity as fishermen discovered other river mouths where pink salmon congregated. Rivers such as the Keogh, Cluxewe, Oyster, and Nile Creek became known. Stores catering to sportsfishermen started to carry specialized gear. New materials allowed development of rods and lines that could cast farther. Perhaps one of the biggest changes has been in the flies that we use.

There are several reasons for the veritable *explosion* in the number and variety of fly patterns being tied and purchased for pursuing pink salmon. One reason is the relatively large numbers of new fishermen becoming involved in this fishery. This has created a lot of demand for new flies from suppliers. It has spawned a gush of new fly fishing articles in local magazines such as *Island Fisherman* with authors sharing their new patterns. Another reason is a flytying desk full of new materials. These include a litany of material derived from mylars, plastics, tubing, artificial hair, chenille substitutes and sheet materials. Beads are a category of fly making material that has a huge variety of its own, including various metal beads and plastic beads, with many new colours and finishes. For any one pattern you can tie it with no bead, a shiny plastic bead or a heavy metal bead. You can further customize this pattern by choosing different sizes of beads, and different sizes of hooks. Finally, there are a large number of styles of flies that work. You might call them *families* of flies. Some examples are Clousers, California Buggers, streamers and krill imitations. The pretty obvious result is that my collection of pink salmon flies can no longer be carried in just a couple of fly boxes!



The irony is that pink salmon will bite on almost any of these new patterns; they are not very fussy. So you don't really need a vest full of fly boxes. You need only **one fly**, best in a variety of sizes !



Jerry Wintle--Legendary British Columbia Steelhead Fly Fisherman Died January 22, 2016

I just learned that Jerry Wintle has just passed on to the other side of the river to join other BC fly fishing pioneers and characters (especially steelhead). Jerry, and his wife Jean (who survives him) for decades were to be found on BC's important steelhead waters. Jerry was one of the early BC'ites who realized that to get into BC's prime steelhead waters one needed an advantage- ie an airplane. Jerry acquired a plane with STOL capability (short take off and landing) and he and Jean were away to the steelhead races. One of their flight plan target areas was the Dean River where they would pucker up and land on the river, set up camp, and chase Dean steelhead.

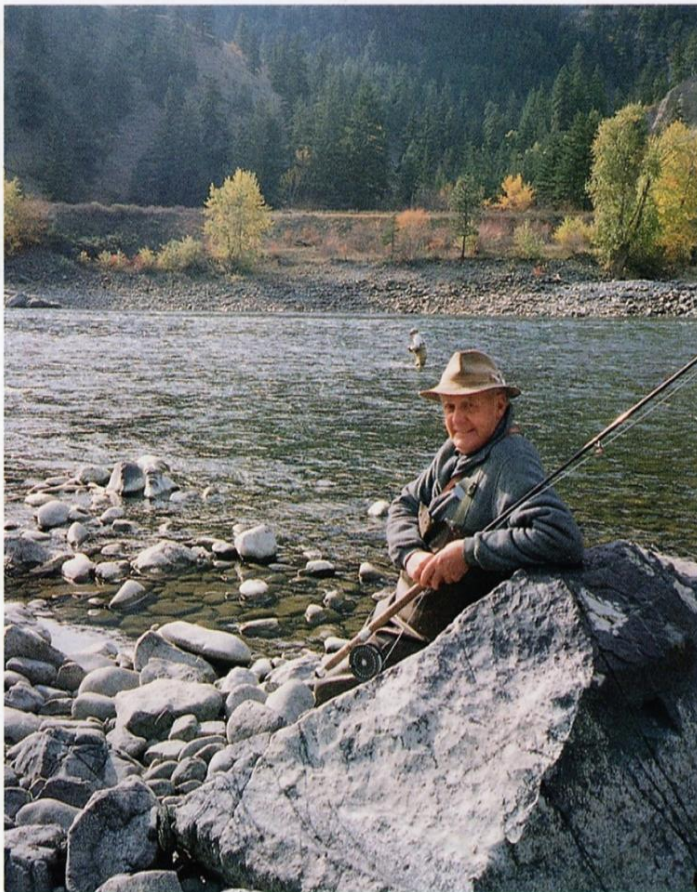
Jerry was always low key in his search for steelhead. He didn't need long casts (this was single hand fly rod times) or fancy flies and he was amazingly adept at finding the fish. One of his favourite flies, named "Wintle's Western Wizard", over the years, has accounted for many steelhead hookups!

Jerry should not be forgotten. All, who do not recognize the name, should be made aware that he was one of BC's steelhead fly fishing pioneers. I hope that others who knew Jerry will provide more information on him for the historical record.

Peter Caverhill

Art Lingren Facebook Post January 23, 2016

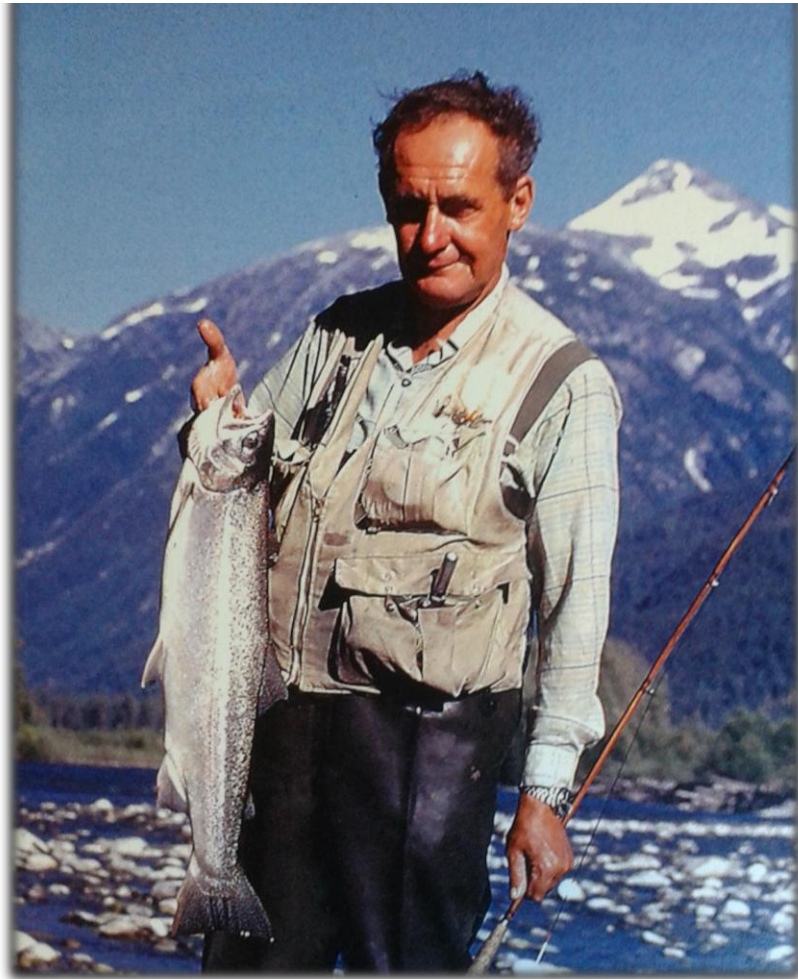
Jerry Wintle waits his turn while partner, Dave Winters, fishes the Big Horn Pool. These two ardent fishers popularized the floating-line technique on the Thompson in the early 1970s.



I met Jerry Wintle and his wife Gene on the Dean River in 1983. I was a little shy about meeting a BC steelhead legend. This was my first trip to the Dean and I was up fishing the Fir Pool in the early part of the trip and I hooked a steelhead. But before I left I was adjusting backing and a new DT fly line on my Hardy St. John. I must have got distracted and as this first Dean steelhead took out line I soon found out that I had forget to knot the backing to fly line and I was dismayed as my brand new fly line slithered through the rod guides and into the river. I had another spool with sink tip line so I switched over to that and carried on fishing. In the meantime an hour or so later, Jerry was sitting in his camp about ½ mile downstream watching the river flow by and saw a floating fly line and managed to wade out

grab it and to his surprise there was a steelhead on the end of the line which he landed and released. He gave me my line back but insisted on keeping the Green-butt Black fly that I had hooked the fish on. He paid me a real compliment when he said that the sparsely dressed green-butt Black was ideal for floating line fishing.

I have included words about Jerry in my Thompson River Journal (1994), Fly Patterns of British Columbia (1996), Dean River Journal (2000) and Famous British Columbia Fly-Fishing Waters (2002). In the latter book I summarized Jerry's steelheading in The Capilano River chapter. Jerry, an east end Vancouver lad, was born in December 1930. He started to fish for steelhead in the Capilano in 1942, using a greenheart rod from his grandfather.. Wintle started flyfishing in the early 1950's, and caught his first fly caught steelhead in Campbell River's Line Fence Pool in front of Roderick Haig-Brown's home. Jerry and Gene were fixtures at Barrett Station on the Bulkley in September. He had just turned 86 in December of 2015.



A younger Jerry on the Squamish River. Charlie Brumwell likes to tell me the story of Jerry catching Squamish winter runs in the spots where gear fishermen stood after they waded downstream



Jerry and I enjoying a glass of wine at Barrett Station on the Bulkley. I usually tried to stop by and visit the gang here on my way home from my Skeena trip. Jerry and Gene were welcoming hosts.

If you ask Jerry for the secret to his success, he gives a modest, casual answer *"All you need do is chuck the fly out, bring it around properly and you will catch fish!"*

I want to thank some of the other guys for the pictures of Jerry.

Notes from Peter Caverhill January 24, 2016

I attended the Steelhead Society BC Annual meeting in Langley this am. There was a presentation at SSBC by Dave Harper (BCIT – Rivers Institute) on upcoming proposed work on the Upper Squamish River (determine protection for Shovelnose Creek which produces about 80% of the steelhead in the Squamish watershed). I asked Dave if he would do a very short overview on this for Fly Lines. They will be approaching potential funders of which BCFFF will be one (possible Osprey/Totem submission).

Shovelnose Creek Off-Channel Groundwater Complex Berm Repair Dave Harper

In the fall of 2015, an extremely high stream flow event in the upper Squamish River resulted in the breach of a protective berm and significant damage to the Shovelnose Creek groundwater channels. The magnitude of this event was the highest recorded discharge on the Elaho River water survey gauge dating back 34 years. The Squamish FSR also washed out in a number of locations with particular damage occurring south (downstream) of the Shovelnose Creek tributary to the mainstem.

On October 22, 2015, the site was inspected by Al Jonsson and Dave Nanson (DFO), Kenji Miyazaki (MFLNRO), Pat Slaney (biologist who led habitat restoration at Shovelnose in the 90s), Ralf Kroning and Dave Harper (SSBC Directors), and Randall Lewis (Squamish Nation). Based on observations it was determined that a significant portion of the Squamish mainstem flow had breached the dyke and began running down through the upstream-most groundwater channel and down the mainstem of the restored reach of Shovelnose Creek. It is apparent that the river will routinely breach the dyke in each subsequent high flow event. Over time, what is left of the protective berm and the adjacent bank will continue to unravel, and without corrective action, there is a high likelihood that the entire Squamish River mainstem could be forced through this location. This would be disastrous for the downstream complex; many of you are intimately familiar with the power of the Squamish River.

To this day the highest mean juvenile steelhead densities in the upper Squamish River are found in this artificially-constructed off-channel groundwater complex. The complex accounts for more than 4,000 linear meters of groundwater channels. Corrective action involves constructing a rock-gravel plug in the groundwater channel a few hundred meters downstream from the breach location. The budget for this stop-gap solution is \$15,500 (\$20,000 with contingency). The SSBC is seeking partnership funding to conduct this work prior to the 2016 freshet. Long-term plans involve surveys and channels assessments to determine options, feasibility and costs of permanent repairs.