Over 2500 adult Chinook returned to the Phillips River to spawn in 2014—exceeding 2013 as the biggest return in decades! This is the third consecutive year with over 2000 fish and continues the strong rebuilding trend seen in recent years. There are many hatchery programs in southern BC, large and small, working to restore Chinook, but in many cases the populations have continued to decline. For years, GPFA saw similarly disappointing results; however, in 2007 the Board made a bold decision to invest significant funds into rebuilding the hatchery and improving all facets of the operation in the belief that it would improve the performance of the enhancement program. GPFA also committed to having the information necessary to make informed decisions and implemented a rigorous monitoring program in 2009.

While it’s too early to declare the Phillips Chinook population rebuilt, recent results look extremely promising. We’ve also found that approximately 70% of Chinook returning last year originated from the GPFA hatchery program; this is possible thanks to the investment made in coded wire tagging (CWT) of all hatchery releases in recent years. Clearly the enhancement program has been successful in increasing escapement from the critically low levels observed in the past, but while GPFA is proud of this achievement, its ultimate goal is to see Phillips Chinook sustain themselves through natural spawning. The data shows that both hatchery and wild origin fish are increasing, which GPFA views as important progress towards its rebuilding goal.

Phillips hatchery and wild fish also contribute to fisheries, and based on what we know of harvest patterns, over a thousand Phillips Chinook would have been caught between Southeast Alaska and local waters last year—a significant benefit to these fisheries! (see inside for details on GPFA programs)
What we do—the GPFA Hatchery program.

Preparing the net...volunteer crews are essential for broodstock collection & egg take activities from August - October.

A large male Chinook being placed in a fish tube to keep it calm during transport. GPFA collects 70 to 80 fish for broodstock annually, additional fish are tagged as part of the Phillips Chinook Population Study.

Broodstock are held in pens and checked regularly for “ripeness” - fish mature at different times between the 3rd week of September and 2nd week of October.

Greg Barlow taking DNA and scale samples from spawned broodstock...this allows long-term monitoring of the age and genetic structure of the population.

Hatchery manager, Greg Barlow, deploys the broodstock net in the “seine pool”, just below the lake on the Phillips River. Over 100 Chinook were caught in a single set last year...a GPFA record!

Stalwart GPFA volunteer Hans Lammers putting a Chinook into the transport tank...fish are driven a short distance to holding pens in Phillips Lake.

Eggs are stripped from females and males are “milked” for their milt—“fecundity” of Phillips Chinook is around 6,000 eggs per female.

Ovarian fluid being sampled for fish health screening...GPFA periodically monitors broodstock and hatchery smolts to ensure the fish are disease-free before releasing them back into the wild.
GPFA collects between 160,000 and 170,000 eggs for its normal hatchery operations and transports them to its facility on Sonora Island. Fertilized eggs are kept in “Heath trays” until they hatch and develop into “swim-up” fry by late January, depending on water temperatures. By early February the fry are ready to be “ponded” into the hatchery’s circular rearing tanks. Approximately 30,000 fry are placed in each of the hatchery’s five Chinook tanks (the sixth is used for coho) and fed several times a day for about three months. Total survival in the hatchery, from egg until they’re released in May, is over 90%, while in nature it’s less than 10%.

Since 2011, GPFA has been marking over 90% of all Chinook released from its hatchery program—155,000 were tagged this April. A crew spends about a week at the GPFA hatchery inserting tiny coded wire tags (CWT) into the nose and carefully clipping the adipose fin to allow hatchery fish to be easily identified. The fry average 60mm and weigh 2grams at tagging. Tagged fry are returned to the rearing tanks for several more weeks of feeding, usually more than doubling their weight to 5grams by the time they’re released in mid-May. The final part of the hatchery process is to return the fish to the river so they can join their wild cousins and head out to sea. Volunteers help load the helicopter buckets for the short flight to pens in Phillips Lake where they’re held for several days to “imprint” on the chemical signature of the watershed. This is critical to ensure they can navigate back to the Phillips River after up to 5 years and thousands of kilometers at sea.

Thanks to CWT data, we know that Phillips Chinook are a far north migrating stock that swim into Alaskan waters. A significant number of them are caught in Alaskan and Northern BC fisheries.

Look closely and you might notice that this Phillips Chinook is missing its adipose fin, identifying it as a hatchery fish. This is one of an estimated 1800 hatchery origin Chinook that returned to the Phillips in 2014, in addition, hundreds were caught in fisheries up and down the coast...this equates to over 20 adult Chinook produced for each individual taken as broodstock!

...please return heads from sport caught hatchery marked fish...this information is essential!
What we do—the S₁ Program.

The decline in Chinook since the early 1990s is generally thought to be the result of unfavourable ocean conditions, particularly the effect on survival of juvenile salmon during their first few months at sea. GPFA has taken the approach that while we can’t change these conditions, we can ensure the fish released from our hatchery efforts have the best possible chance to survive, and investments made to the hatchery facility have improved the fitness of our Chinook fry. GPFA has also been piloting an alternative approach to rearing hatchery Chinook, and over the last few years have worked with Omega Pacific hatchery on a program to rear the fish for an additional year; these yearling (“S₁”) smolts are more fully developed than the usual sub-yearling (“S₀”) smolts raised by most hatcheries in southern BC. The S₁s are thought to be better able to handle the many stressors encountered by juvenile salmon upon entering the ocean.

One of the likely causes of mortality upon ocean entry is disease; vibriosis, which occurs naturally and is prevalent in the nearshore environment, is considered likely to have a significant impact on young Chinook. GPFA is currently working with Omega Pacific, the Centre for Aquatic Health Sciences and the University of Waterloo on a project to test whether the S₁’s more developed immune system results in better survival than the S₀ hatchery smolts when both groups are exposed to the pathogen.

GPFA’s intensive monitoring and CWT programs are key to understanding the overall effectiveness of the S₁ program and its performance relative to regular hatchery production. Preliminary results suggest the S₁s are returning at about twice the rate of the other GPFA hatchery fish, but more years of data are needed before a rigorous analysis can be done. The importance of the S₁ trial goes beyond increasing returns to the Phillips River as this data will inform other hatcheries on the effectiveness of the approach for Chinook enhancement—Omega Pacific is participating in a similar trial on the Sarita River (West Coast of Vancouver Island) that has also shown promising early results. DFO is now recognizing the potential of this enhancement tool and working with Omega Pacific on additional trials; however, it must be noted that raising S₁s is significantly more expensive.

In April, the last group of 40,000 S₁ smolts were released back to the netpens in Phillips Lake where they began their journey as eggs 18 months earlier—the smolts are approximately 20 grams at release. They’re held in the pens for several days to imprint on the watershed. Although this program started in 2009, we are only beginning to see the adults return—early indications are that the S₁s are returning at twice the rate of Chinook raised at the GPFA hatchery.
What we do—Stock Assessment

As part of GPFA’s commitment to base decisions on sound information, the Phillips Chinook Population Study was initiated in 2009. This is an intensive “mark-recapture” program consisting of tagging Chinook as they enter the river and recovering spawned out carcasses through a “deadpitch” later in the season, the proportion of tagged fish recovered allows for high quality estimates of annual spawning escapement. The study also provides detailed information on hatchery returns and biological samples produce data on the age structure and other attributes of the population.

The 2014 population study was the busiest yet. Over 300 “spaghetti” tags were applied to adult Chinook between July and the third week of September. The “deadpitch” recovered 181 spawned Chinook carcasses from the third week of September through late October. Conditions were mostly favourable, although severe flood events in October significantly affected the ability to recover carcasses during the later part of the program. In addition, the program recovered 136 CWTs from hatchery origin Chinook. The estimated escapement was over 2500 Chinook with close to seventy percent originating from GPFA enhancement efforts—including the monster pictured above! A tremendous amount of other biological data was also collected for future analysis.

Chinook Radio Tagging Program

While it’s convenient to consider Phillips Chinook as a uniform population, in reality Chinook exhibit tremendous diversity and different components of the population may exhibit distinct run-timing. Last year GPFA undertook a radio tagging program to improve our understanding of this diversity by tracking Chinook that enter the river earlier in the summer and observing whether their migratory behavior differed from the main part of the run, which enters later in August. Chinook were captured as they entered the river and a small transmitter (top photo) was attached before releasing them to continue with their spawning migration. Receiving stations were set up at various locations throughout the watershed to track the fish, along with the use of a mobile unit (bottom photo). There was a steep learning curve required to implement this new program, but Pacificus Biological’s Kylie Anderson successfully radio-tagged and tracked the migration of 31 Chinook throughout the watershed. Extreme low water conditions in 2014 undoubtedly affected normal migration behavior and the results of the study, but some interesting observations still emerged: older fish appear more likely to migrate above Phillips Lake; fish migrating past the uppermost telemetry station (1km above the Clearwater confluence) were not only older, but also likely to exhibit a stream type, or S1 life history (spend at least one full year in freshwater). This is important information and will help inform future enhancement strategies.
Making Progress—the GPFA Hatchery Program

Between 1984 and 2006 two million juvenile salmon were released by GPFA, but the dedicated who started this enhancement program had no way to assess whether their efforts were contributing to rebuilding Phillips Chinook. The limited information available at the time indicated that, despite the hatchery program, returns to the Phillips continued to be seriously depressed. GPFA was restructured in 2006 and reviewed all aspects of the program. A priority was to establish a clear goal for the enhancement program, which was defined as: *“Rebuild the Phillips River Chinook Population to a healthy, self-sustaining level.”* In order to achieve this goal, GPFA identified a number of areas that needed to be improved (see table below):

<table>
<thead>
<tr>
<th>Objective</th>
<th>Actions</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve consistency in achieving egg targets.</td>
<td>Provide additional resources and capacity for broodstock activities.</td>
<td>Egg target has been achieved in all years except 2011 when floods hampered efforts and only 90,000 eggs were collected.</td>
</tr>
<tr>
<td>Ensure the hatchery facility and practices are designed to produce the fittest smolts possible in order to improve their likelihood of surviving after release.</td>
<td>Complete rebuild of hatchery facility in 2007 and development of procedures in-line with best practices.</td>
<td>Survival from egg stage to fry release consistently greater than 90%; fish growth and condition factor in-line with expectations. Achieving optimal size and time of release. Data suggests GPFA survival is above average for southern BC hatchery Chinook programs.</td>
</tr>
<tr>
<td>Explore innovative ways to improve the marine survival of hatchery Chinook.</td>
<td>Worked with Omega Pacific hatchery and DFO to implement an S(^1) hatchery program.</td>
<td>Successfully raised and released 4 cohorts of 40,000+ S(^1) smolts. Initial returns suggest S(^1)s surviving at least twice the rate of regular hatchery fish.</td>
</tr>
</tbody>
</table>
| Ensure sufficient information to support sound decisions on enhancement programs and assess progress towards rebuilding Phillips Chinook. | • Worked with Pacificus Biological and DFO to implement the Phillips Chinook Population Study  
• Committed to CWT application for all hatchery releases.  
• Conducted radio-tagging program in 2014.  
• Dialogue with DFO on role of Phillips data in fisheries management. | Annual estimates of known quality for the following:  
• Chinook spawning escapement  
• Overall hatchery contribution  
• Age structure of population  
• Relative performance of different enhancement strategies  
Also, improved information on harvest patterns of Phillips Chinook based on cwt recoveries in fisheries. |

GPFA is proud of the progress on these objectives which have contributed to significant headway on the rebuilding goal for Phillips Chinook:

- There has been a sustained increase in Chinook returns to the Phillips and hatchery fish are contributing significantly to this rebuilding.
- The data suggests that Chinook originating from spawning in the wild is also increasing, which supports GPFA’s interest in the population becoming self-sustaining.
- It’s difficult to define a specific level of escapement that defines the population as “rebuilt”, but at current escapement levels spawner abundance is unlikely to be a critical factor limiting rebuilding.

Why a hatchery program?

In nature, even with ideal habitat, only a very small proportion (less than 10%) of the eggs laid in the gravel survive to begin their ocean migration. In the Phillips, which was impacted by historic logging activity, freshwater survival may be even lower; fortunately, improvements in logging practices and protection of important riparian habitat within the Phillips Estuary Conservancy are helping the watershed to recover. These habitat issues, combined with generally poor ocean conditions over the last 20 years, have made it difficult for naturally spawning populations to even maintain themselves, let alone recover on their own. Considering these challenges, and chronically low Chinook returns to the Phillips River, the only effective way to restore the population was through a hatchery program. The GPFA hatchery strives to rebuild the number of spawners by improving on the egg to fry survival observed in nature—this appears to be working as each Chinook removed for broodstock results in twenty returning to the Phillips to spawn in the next generation, compared to just over one returning for each fish spawning in the wild.

*The end result is many more fish back to the river, and as habitat improves these fish will have a better chance to successfully spawn and produce the next generation of Phillips Chinook.*
Future direction

The GPFA hatchery program has been effective at increasing escapement of Phillips Chinook, but long term success of the rebuilding effort depends on whether the population can sustain a healthy abundance through natural production. One of the key considerations for a hatchery rebuilding program is the relative contribution to escapement of hatchery vs wild origin fish (see figures below); it’s important to maintain the proper balance over time in order to minimize the potential negative effects of hatchery propagation on the reproductive fitness of the population.

In addition to maintaining a balance between hatchery and wild origin fish, a successful conservation based hatchery program must also maintain diversity, which is key to the resilience and long term viability of Chinook populations. The 2014 radio-tagging program data hints at some of this diversity in Phillips Chinook, showing that older fish with a stream type life history are more likely to use the upper part of the watershed. GPFA believes that it’s time to put more emphasis on maintaining and restoring diversity, and have been consulting with experts in the field of conservation hatchery programs to develop an appropriate strategy.

GPFA plans to continue working towards its goal of rebuilding Phillips Chinook to a healthy, self-sustaining level through the following strategies:

- Maintain hatchery production at 150,000 sub-yearling smolts as insurance against catastrophic events and to ensure a healthy spawning abundance while freshwater habitat continues to recover its productive capacity.
- Investigate enhancement strategies that maintain/restore diversity e.g. broodstock collection and spawning protocols, out-planting eyed eggs to suitable habitats for natural incubation, etc.
- Continue adult escapement assessment and CWT programs in order to monitor trends in abundance; understand contributions of different hatchery strategies; and provide information to DFO on harvest rates and marine survival of Phillips and associated Southern Mainland Fjord Chinook stocks.
- Undertake studies to improve knowledge of freshwater productivity, including how many juveniles are being produced and from what parts of the watershed. This information is fundamental to informing GPFA’s future rebuilding efforts.

In summary, there has been considerable progress on recovering Phillips Chinook to the point where spawning abundance is no longer the major threat to the population; however, there is still work to do before the population can be considered rebuilt.

Southern BC Chinook—Phillips Chinook returns in context

While recent returns to the Phillips are encouraging the same cannot be said for many Chinook populations in southern BC. Major investigations by DFO and the Pacific Salmon Foundation are underway to try and explain and hopefully mitigate these declines. The contrasting results observed in the Phillips have attracted the attention of DFO and the Pacific Salmon Commission’s Chinook Technical Committee; their scientists are keen to use the extensive data collected by GPFA to get a better understanding of the population dynamics of Phillips Chinook. Hopefully this will provide some insights into why these fish seem to be surviving at a higher rate than other nearby Chinook populations, including DFO’s major hatchery facility in Campbell River.
GPFA as an organization

GPFA is a not for profit registered charity governed by a volunteer Board of Directors. Support for Gillard Pass continues to be extraordinary and has allowed GPFA to become one of the more successful salmon enhancement groups on the coast. The following is a brief description of the GPFA’s financial activities in 2014; public financial reporting will take place at the AGM on June 21, 2015, to be held at the Stuart Island Community Association property.

GPFA Revenues

The annual Stuart Island Salmon Enhancement BBQ & Auction continues to be the major source of funds for GPFA and the 2014 event was another success. Total dinner and auction proceeds, excluding major cash donations, were over $125,000...the live auction alone raised close to $90,000! Major cash donations totaled over $30,000. An additional source of revenues is direct program funding from DFO and other sources such as the Campbell River Salmon Foundation—these funds amounted to over $10,000 for 2014. Total financial revenue for 2014 was $203,000.

In-kind Donations

In-kind donations are not accounted for in the financial statements, but amount to tens of thousands of dollars. This support includes:
- Marine Transportation—barge services.
- Technical fisheries support
- Coded wire tags
- Fuel and supplies
- Accounting and Administrative support
- Construction materials
- Road maintenance
- Vehicle and equipment maintenance

The tiny coded wire tags used to identify hatchery fish cost about $.08 each, which doesn’t sound bad until you consider that GPFA tagged almost 200,000 fish last year—that’s $16,000 just for the pieces of wire! Fortunately, DFO recognizes the value of the work GPFA is doing and has provided the coded wire tags as an in-kind donation in recent years.

Budget 2015/16

For planning purposes GPFA’s budget follows the hatchery brood year. Operating expenses for the year beginning August 1, 2015, are anticipated to be approximately $150,000 generally assigned to the categories shown in the figure below.

Notes on expenses:

Payroll

GPFA has one full time employee responsible for hatchery operations and broodstock collection, in addition, temporary employees are hired at critical times during the year. Other functions such as program management, fundraising, administration and accounting are carried out either by the volunteer board of directors, or provided as in-kind donations by GPFA supporters.

Contractors and Professional Services

In some cases specific expertise is required on a contract basis, including:
- Commercial diving services
- Coded wire tag application
- Biological support and reporting for the Chinook Population Study
- Fish health services

Maintenance of equipment and infrastructure

Operating programs in a remote watershed such as the Phillips requires a significant inventory of equipment and infrastructure, all of which must be maintained and kept current. In addition to the hatchery facility on Sonora Island there is a field cabin and broodstock holding facility at Phillips Lake. Other equipment and infrastructure includes: trucks, boats, generators, pumps, nets etc.

Transportation

This includes helicopter time to move fish from the GPFA hatchery back to Phillips River for release. The other main transportation expense is water taxis to move broodstock and stock assessment crews back and forth to the Phillips.
Many hands...
Volunteers play a key role in everything from broodstock collection, to egg-takes, to tagging and even “deadpitching”...it sounds horrible, but walking the river looking for spawned out Chinook is actually fascinating. Volunteers also make our annual Stuart Island Salmon Enhancement BBQ & Auction possible. All told, GPFA receives hundreds of days in volunteer time, and while it doesn’t show up on the balance sheet, this support is one of our greatest assets!

Thank you to our 2014 volunteers
Anita Brassard, Jackie Adamthwaite, Hans Lammers, Peter Hollenbeck, Don Boyle, Sam Anderson, Ken & Tara Kristian, Cathy Pearson, Lark Buchanan, Trevor Nowak, Wally Nowak, Joe Sweeney, Brenda McCorquodale, Sara Askwith, Richard Buchanan, Barry Ross, Gerry Mitchell, Peter Geneau, Kylie Anderson, Shannon Anderson, Scott Cooley, Dave Ewart, Diane Bouchard, Capt. Paul Johns, Derek Gale, Cathy Gale, Dan Lewis, Samuel Gale, Celeste Gale, Eiko Jones, Barry Willis, Bob Main, Rose Stephenson, Viktor Davare, Richard Buchanan, Phil Griffiths, Ross Griffiths, Doug Rippingale, Sean Barfoot, Stacey Larsen, Jim Cloves, Karen Wade, James Kay, John Todd, Gerry Hornby, Bob Tonkin, Gary McLean, Liz McLean, Corey & Laura Magowan, Terry Magowan, Rich Walt Stenback, Barry Peters, Gabe Raven, Karen Wade, Jerry Fletcher, Kaitlin Ross, Gerry Mandin, Sharon Little, Peggy Pallan, Bert Jophnson, Tom Kirkby, Fred Taptuna, Darvin Rollison, Michael Swanston, Dale Hassets, Dennis Landreville, Bart Fletcher, Dave Ritchie, Doug Round, Tanya Phillips, Dave White, Bill Dubois, Sam Keef...Apologies to all the folks who donated their time, but didn’t get mentioned—we appreciate all of you!

Auction Support
The success of the Stuart Island Salmon Enhancement BBQ & Auction depends on the incredible support of the whole community, but special mention goes to the following: Lindsay McNab and the Warm Springs staff, Harley Hagedorn & Arran Pt. crew, Big Bay Landing, Stuart Island Community Association, Dent Island, Sonora Resort, Paccar, Goose Landing, Nanook Lodge, Pacificus Biological, and of course Rose Stephenson – all of you did a fabulous job in helping to make the 2014 event a huge success!

GPFA would also like to thank the Mallman family for providing the fantastic live music!
Thank you to our 2014 corporate supporters!
“Creative” ways to support salmon...

The passion and generosity of people show in support of salmon enhancement continues to amaze. Over the years a number of our supporters have poured their talents, and long hours, into creating unique and fabulous items to donate to the GPFA fundraising auction. Last year’s auction had a number of creative donations, including:

- A beautiful hand carved paddle by up and coming Campbell River carver Will Henderson.
- An amazing credenza custom made for the auction by Viktor and Ursula Davare of Woodform Interiors.
- A “live edge” vertical wine rack by Kyle Dempsey.
- An annual favourite! Handmade quilt by Tara Kristian.
- A handmade banquet table by Herb Bresch.
- A folk art “trout stream” motif coffee table by Mike Manson.
- Other creative pieces were donated by Deb Martin, Melissa March, Eiko Jones, Martin Buchanan, Robert & Margaret Cheshire, Shannon Henley, Scott Smith, Cathy Pearson, Shoal Bay Yacht Club, and others.

Kwiakah First Nation

The Phillips River is in the core territory of the Kwiakah First Nation and they co-manage the Phillips Estuary Conservancy along with BC Parks. GPFA operates in the Phillips under a partnership agreement with the First Nation, which ensures activities are consistent with the management direction for the Conservancy and Kwiakah values. This support for GPFA activities is essential to working in the watershed. Salmon are centrally important to both GPFA and the Kwiakah First Nation.

Support takes many forms...

The success of GPFA is a clear indication of how much the individuals and businesses in the Stuart Island area care about salmon recovery. Support for GPFA comes from everywhere in the community and it’s inspiring to see how willing everyone is to help out in any way they can, whether it’s writing a cheque, donating goods or services, or volunteering their time.

Thank you to our many 2104 supporters

Gold Supporters ($5,000 or more):
GPFA received major cash donations in the amount of $10,000 each from Bruce Burrows/Little Dent Island; from PAC-CAR/Eagle Creek Lodge; and from Mark Peterson—thank you! Our other Gold Supporters whose major contributions include funding, auction items, and in-kind support often amounting to tens of thousands of dollars: Seaspan Marine Corp., Dave Ritchie, Dent Island Lodge, Sonora Resort, London Enterprises, Fisheries and Oceans Canada, Marine Link, Pacificus Biological Services, Campbell River Salmon Foundation, the Mailman Family, Daedalus/Boeing.

Silver Supporters ($1,000 to $5,000): John and Pat Wane (Goose Landing), Inlet Navigation, Warm Springs Resort, Kenmore Air, Fawn Bluff, Discovery Launch, Stuart Island Community Assn., West Coast Helicopters, Jamie Nordstrom/Seattle Foundation, Pacific Western Brewing, Greg Ward, Browns Bay Resort, Viktor Davare, Will Henderson, Herb Bresch, Rick Hanson, Barry Willis.


Pacific Western Brewing’s owner Kazuko Komatsu presents a cheque for $2000 to GPFA president Rupert Gale at the 2014 Stuart Island Salmon Enhancement BBQ & Auction.
The Gillard Pass Fisheries Association has been operating for over 30 years. The mission of the GPFA is to recover salmon stocks in the Stuart Island Area with the current goal to rebuild the Phillips River Chinook population to a healthy self-sustaining level. Current activities include Chinook and Coho enhancement, stock assessment, and habitat stewardship. The program operates with one full-time staff and a host of volunteers.

**Board of Directors:** Rupert Gale (president), Sean Ross (treasurer), Tammy Ritchie (vice president), Rich Chapple, Martin Buchanan, Doug McCorquodale, Henry Spit.

**Program Manager:** Greg Barlow.

**Mailing Address:**
Gillard Pass Fisheries Association
12831 Horseshoe Pl.
Richmond, BC V7A 4X5

We can’t do it without your support.
Be part of restoring local salmon runs. GPFA is a registered charity that can issue charitable tax receipts. Our Canadian charitable registration number is 89127 1843 RR0001. Of course we love cash, but other ways to support local salmon recovery include:
- Donate an item to the fundraising auction...artwork, trips, services, etc.
- In-kind donations such as transportation, equipment, supplies, technical expertise.
- Volunteer!

To donate, please send a cheque to Gillard Pass Fisheries Association at the address noted above, or contact Rupert Gale for other ways to support GPFA.

GPFA sincerely thanks Rick Pearson who served 8 years on the GPFA Board and contributed countless volunteer hours.

---

A note on photo credits: This newsletter draws on photos from a number of people including: Eiko Jones, James Kay, Dan Lewis, Peter Hollenbeck, Hans Lammers and others.

Stuart Island Salmon Enhancement BBQ & Auction
Save the Date!
August 1, 2015