



Photo of Least Sandpiper courtesy of Father Charles Brandt

[www.tsolumriver.org](http://www.tsolumriver.org)



A NEW  
YEAR

EXPECTING A HUGE PINK SPAWNING RETURN FOR FALL 2017

FEBRUARY 2017 NEWSLETTER

## Planning for 2017 by Angela Spooner and Caroline Heim

The Tsolum River Recovery Plan detailed a list of priority projects for the Society to focus on in the next five years kicking off an exciting new stage in the Tsolum's restoration.

Our upcoming projects include: **1. Lower Tsolum Gravel Bar (T1) Reduction**- The project will deal with the excessive bedload that has deposited to form a large gravel bar near the upper limit of the tidal influence. The bar has filled in most of the old channel and is re-directing flow towards the left bank, and increasing the backwater effect of the tidal influence during peak flows resulting in periodic flooding across fields, through riparian areas and over the K'ómoks First Nation's (KFN) campground on Condensory Road. The TRRS is supporting this project's scoping and design and the KFN will lead the project once finalized. The T1 gravel bar has been surveyed in order to calculate the volume of gravel to be removed, and to finalize an engineered design including an option of using the material as a protective berm upstream where the river flows across fields at peak flow. **2. Dove Creek Gravel Trap** Recent slope failures upstream of the Duncan Bay Main have led to excessive bedload input in Dove Creek. Removing some of this bedload is critical to the ongoing recovery of the lower reaches of Dove Creek where much of the higher quality habitat is found. A main channel gravel trap will be designed and excavated (D5, below the Duncan Bay Mainstem). After removal of up to 1,500 cubic meters of material, the trap edge and outflow will be bio-engineered to enhance rearing habitat using blast rock, boulders and large woody debris. The TRRS, in partnership with the KFN and with support from TimberWest, has applied for 2017 funding from the Habitat Conservation Trust Fund and Pacific Salmon Foundation. **3. Tsolum River Gravel Bar Stabilization at Channel Reaches T9-T10: Live-Stake Bio-engineering**

The TRRS, with the KFN, has applied for a 2 year DFO RecFish grant. This project is also supported by TimberWest, Gooding Hydrology, Fanny Bay SES, JR Edgett Ltd. and Project Watershed. This project will take place between the Murex confluence and the Inland Highway. TimberWest LiDAR data will be used to produce maps of the project area to serve as locator maps and base maps for working on the river. Field assessment and project planning will occur in 2017 and the first phase live stake planting is planned for 2018.



*New Watershed model presentations in 2017*

### 2017 Annual General Meeting

We would like to invite all members, future members and interested public to our 2017 AGM. We are pleased to welcome Dave Polster, bio-engineering expert who will be speaking on using natural processes and live staking to restore gravel bars. Refreshments will be served. **1 - 3 pm Saturday, February 18, 2017. Dove Creek Hall, 3400 Burns Road, Courtenay, BC**

## 2016: a Year in Review

By Laura Ann O'Brien and Caroline Heim

In January we hosted our AGM and Project Coordinator Angela Spooner presented the Recovery Plan for the Tsolum River. The plan was also presented to the Tsolum River Partnership and to the community at large throughout 2016.

The Recovery Plan identified many issues which were shortlisted to 10 priority projects. The focus in 2017 will be to increase efforts to stabilize gravel bars in the upper Tsolum and in upper Dove Creek. Project planning and funding applications have been submitted for projects for 2017/18 (see article on page 1).

In July some of our directors travelled to Port Renfrew to learn about large scale gravel bar live staking which is the planting of flood resistant poplar and willows on a large scale using machinery as a means to stabilize elevated gravel bars.

Other regular activities in 2016 included monitoring of fry outmigration with the Rotary Screw Trap. Numbers counted in the trap are extrapolated to estimate total fry outmigration. Numbers for salmonids caught in the RST for 2016 were 155 Coho fry and smolts, 63,136 Pink, 487 Chum, 17 Rainbow, and 1 Cutthroat. Since it is estimated that the RST captures 1.5% of total outmigrating fish, Pink fry estimates for 2016 were 4,200,000. Fry salvaging was not required due to favourable summer weather in 2016. However some stranded fry/smolt were observed after the first fall rains when river flows increased and then dropped rapidly after a rain event. A reminder that stranded fry are not just a summer occurrence and that eyes on the river are needed at all times of the

year to keep track of stranded fry due to fluctuating water levels.

Our 2016 summer student, Rhia Ironside worked with us from late June through to November. We hired Caroline Heim as our Administration and Outreach Coordinator in June. Rhia and Caroline helped out at outreach events, organized files and membership systems, updated our website, built a new watershed model, helped with a landowner contact database and maps for future riparian planting priorities, and offered field trips to school children.

Our first raffle draw was a success, earning \$3,200 which will go towards outreach and education activities. Vancouver Island businesses donated all the prizes, including Jamie's Rainforest Inn (Tofino), VI Musicfest, Destiny River Adventures (Campbell River), Kristi Walker Spa, Butcher's Block, Portuguese Joe's Fish Market and local pilot David Radford. We appreciate their support!

In the fall several attempts were made to schedule Pink spawner surveys. Weather was not in our favour with early heavy rains hampering visibility. Anecdotal numbers collected by members were very low, and in the end, an official count was not made. DNA sampling was scheduled to be part of the fall population assessment but due to low numbers of fish this data collection is postponed to the spring fry outmigration or to the fall of 2017.

Chum returns were through the roof, and accounts of fish in places they haven't been seen in years were circulating throughout the Valley. The delicious aroma of fall was in the air attracting an abundance of wildlife to the rivers and estuary.

Caroline and Laura led field trips to over 100 elementary school students at Huband Park and Queneesh Schools. The students learned about salmon life cycles and the importance of

ephemeral streams such as Towhee Creek, which are often overlooked as ditches. Future partnerships with Vanier School students will be forged to continue the restoration partnerships fostered by Jack Minard.

Director and arborist Stewart McIntosh spearheaded a project with the local Scouts group to build deer browsing guards to protect planted trees. The kids took part in assembling 20 guards and will help with tree planting in 2017.

*Gathering flow data*



*School Field Trips in Oct/Nov 2016*



*Partnership field trip in the fall to discuss restoration priorities*





## Honouring Stewart Duncan

By Laura Ann O'Brien

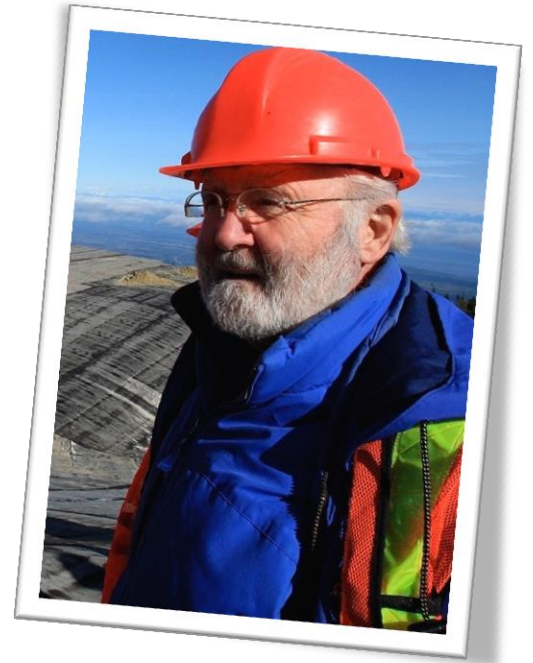
Stewart Duncan is a long-time volunteer director of the Tsolum River Restoration Society, in fact, one of the first. Stewart and our current President, Wayne White, are two of the founding members of the Society. He also served as President for a number of years. Stewart has donated his time, money, art and Scottish will to the Tsolum and the Society for over 20 years.

Stewart is like most of us that have been drawn to participate in the Society's work – people who either moved to the area or were brought up here and fell in love with the humble beauty of the Tsolum River. The River quietly winds its long, clear way through our mountains, forests, farms and neighbourhoods, and if you live near it, into your heart.

Stewart, his partner, Anne Louise Davies and their children landed on Railway Avenue in Merville for a while. Stewart embraced and embodied the Tsolum spirit. He drank the water, walked on the banks, explored the forests, photographed the natural beauty, learned more about the lack of fish, hosted an experimental Coho project on their land, attended innumerable meetings and field trips of all kinds with government and industry partners, demanded action, guided the Society as president, built bridges – both literally and figuratively - with partners and the community, removed fish barriers, donated artwork and equipment, is a regular financial donor and, most importantly, contributes time which is the most valuable donation. Plenty of blood, sweat and tears were shed along

with a little frustration and a whole lot of jubilation!

Stewart drives around the watershed in his leisure time checking on the functionality of past projects or the feasibility of new projects, observing weather, flood and drought conditions, always on the lookout for any fish or trouble. He makes every effort to attend meetings and report his stewardship observations to the rest of the Board. He was the first one to sign up for mine site tours and was keen to observe the remediation up close. His opinions, advice and contributions to discussions and the management of the Society have always been honest, clear and appreciated.



Stewart and Anne have moved around the Tsolum watershed and around the Valley always settling near water whether it be the Tsolum, the ocean or our unique estuary. Water and compassion flow in Stewart's veins. It's all connected. We're all connected.

The capping of the mine, subsequent water quality improvements, a return of pink salmon in 2015 that was of historical proportions and a huge chum salmon return in 2016 are all the culmination of Stewart's and other members of the community's dedication to improving their local environment. Let's go with the flow and grow with the River, helping maintain the simple natural beauty of one crucial artery in the web of life. Thank you Stewart.

**“The River quietly winds its long, clear way through our mountains, forests, farms and neighbourhoods, and if you live near it, into your heart.”** *Laura Ann O'Brien*

## New "Friends of Ruth Masters" bursary at NIC

By Laura Ann O'Brien

A "Hero Spoon Award" bursary is being established at North Island College by the Friends of Ruth Masters to honour the work Ruth has done throughout her life for the protection of the environment. The bursary will be awarded annually, and in perpetuity, to a School District 71 student entering NI College in a program of environmental studies. Applicants must demonstrate that they have participated actively in the conservation of wildlife and natural habitats on Vancouver Island. The annual bursary of \$500 requires an endowment fund of \$12,000.

NIC is currently accepting donations to be added to the fund, and all donations will receive a tax receipt. If you wish to contribute please contact Erin Petersen at NIC Foundation by email: [erin.petersen@nic.bc.ca](mailto:erin.petersen@nic.bc.ca) or call [250 334-5085](tel:2503345085).



Challenge yourself and your friends to contribute 150 hours of volunteer time in 2017 in this Canada-Wide challenge. Register to join the [Volunteer Challenge](https://volunteer150for150.ca/) now at <https://volunteer150for150.ca/> and then contact us or Volunteer Comox Valley to get to work!

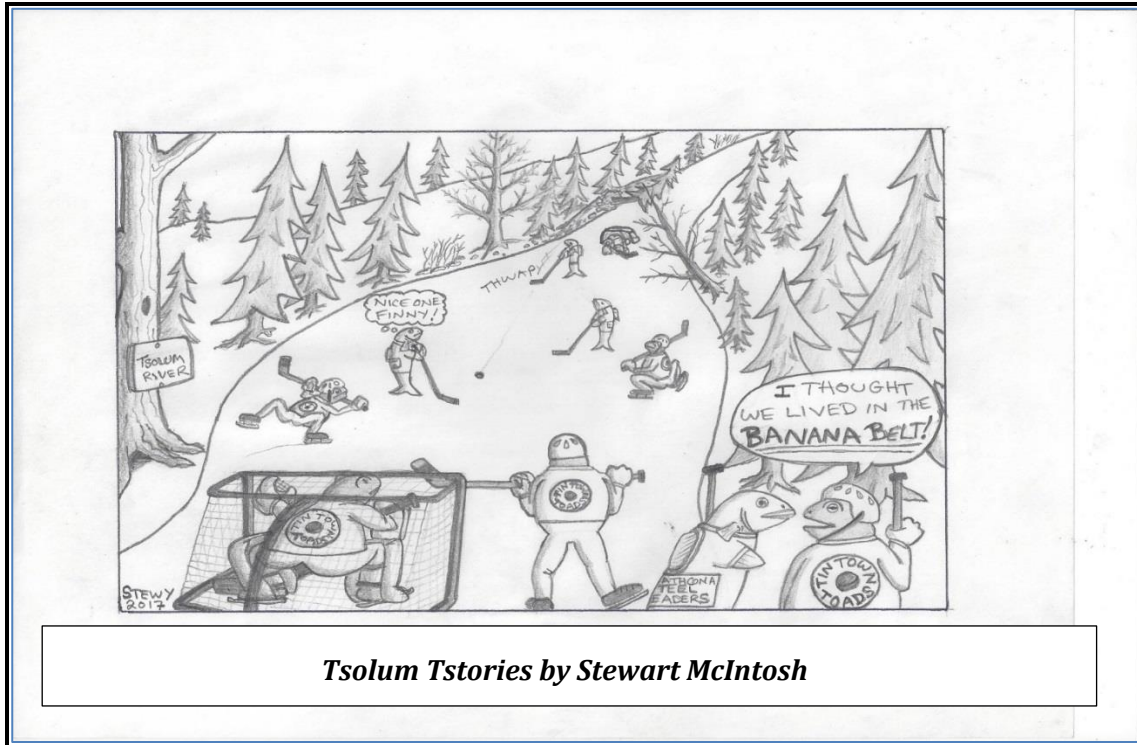
## NEW TSOLUM PARK

Some Railway Avenue area landowners donated 6 acres on the Tsolum in Merville to the CVRD Land Trust as a safe haven for fish and wild life. The land will be leased to the CVRD for use as a local community park. \$3000 needs to be raised to pay for ongoing monitoring. Please come to the **Merville Hall on Saturday March 11, 2017** to celebrate this new park, donate to its upkeep and dance to our beloved neighbourhood band **Flying Debris!** Donations to the Land Trust are tax deductible.

## Gravel Bar Live Staking by Caroline Heim

Live staking on gravel bars is a technique used to mimic the natural successional process of nature. Certain tree species such as willow, cottonwood, aspen and alder are known to colonize rapidly into impacted or disturbed areas. The Tsolum River has an abundance of large elevated gravel bars that are unstable and become mobile during high flows. By planting willow/poplar stakes on a large scale on gravel bars, the natural process of re-vegetation is accelerated, leading to a more stable bar. Even during higher flows, vegetated gravel bars reduce the scouring effect of high water. We are pleased to welcome Dave Polster, a renowned plant ecologist who has over 30 years of experience in re-vegetating unstable riparian and steep slope areas using boil-engineering techniques, to our **2017 AGM on February 18, from 1-3pm**.





### Volunteering Opportunities - Consider joining

- our Board of Directors to help guide the stewardship of the Tsolum River and Watershed
- a crew of dedicated volunteers gathering spring outmigration data with the rotary screw trap
- volunteers on our annual summer habitat restoration project or a hands-on, instream salmon counting crew
- monitoring crews for water quality, flows and other provincial parameters
- our outreach or watershed committees to assist with planning and action
- education and field trips with school students

### Please support our fundraising efforts by:

- Renewing/purchasing an annual membership, becoming a monthly donor or considering a lump sum donation
- Donating your bottle return money to Account #252 at the Courtenay Return-It Center - \$80 raised in 2016!
- Purchasing beautiful art cards and art prints by Father Charles Brandt and Anne Louise Davies

**A HUGE THANK YOU  
to all our Donors  
and Volunteers.  
We appreciate  
your support!**







## MEMBERSHIP FORM

Membership for 1 year: Family: \$15 Individual: \$10

Please complete form and either:

- mail form and cheque to: PO Box 488, Merville, B.C.V0R 2M0
- email form to: [tsolumriver@shaw.ca](mailto:tsolumriver@shaw.ca) - then please mail cheque to address above
- go to [www.canadahelps.ca](http://www.canadahelps.ca), search Tsolum River to pay by credit card for membership, lump sum or monthly online donations. For monthly donations another option is to use this form and a VOID cheque.
- drop off form and cheque to 2356 Rosewall Crescent, Courtenay, BC (call 250 897-4670 first)

Name(s): \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Email Address: \_\_\_\_\_ Phone: \_\_\_\_\_

Do you live in the Tsolum River watershed? If yes, which tributary? \_\_\_\_\_

Volunteer interests:

- Outmigration – rotary screw trap – March to June
- In-migration – salmon counting – Sep to Oct
- Monitoring – water quality, flow, temperature, turbidity
- Assessments – habitat, riparian, steelhead, etc.
- Tree Planting
- Projects – mainstem and tributaries
- Projects – your neighbourhood
- Events – Earth Day, VI Musicfest, CVEX, Rivers Day, etc.
- Education – watershed, primary schools, field trips, bullfrog
- Committees – outreach or watershed protection
- Social media – website, Facebook, etc.
- Fundraising – government, corporate and individual

### Monthly Pre-Authorized Donation Payments Using VOID cheque

I want to become a monthly donor of the Tsolum River Restoration Society ("TRRS"), PO Box 488, Merville, BC V0R 2M0 – Canada Revenue Agency Charitable Tax No. 89402 6921 BC0001

I wish to gift \$ \_\_\_\_\_ per month (includes membership)

I, the undersigned, hereby authorize my banking institution to charge my account on the 15<sup>th</sup> day of each month and pay the TRRS the sum noted above. This authorization shall be the same as if I personally signed a cheque to the TRRS. I may terminate my participation in this program at any time upon written or email notification to the TRRS. Signed: \_\_\_\_\_

Print Name: \_\_\_\_\_ Date: \_\_\_\_\_

Please sign, print your name and return this form with a VOID cheque by mail or in person. For further information please call 250 897-4670. An annual tax receipt will be issued and mailed to you.