

The Water Ship News

A Volunteer Service of the Goldstream Volunteer Salmonid Enhancement Association

March 2019

Editor – Kate MacDonald

GVSEA publishes the Water Ship News on a monthly basis for educators, secondary students, agencies and community organizations. The 'News informs participants in Fisheries and Oceans Canada's Stream to Sea Program in the Capital Regional District. The 'News also notifies students and educators of training and volunteer opportunities concerning species enhancement and habitat restoration. In turn, community organizations find the support they require to fulfill their objectives.

Back issues of The Water Ship News can be viewed at www.salmoninschools.ca

CLASSROOM INCUBATION

EGG HATCH

- Chum eggs have an ATU value of around 540 today, so have likely hatched!
- Coho eggs are around 440 right now, so have probably begun hatching or will in the next few days.
- The foam on the surface of the water and the rotten egg smell you may notice are the enzyme produced by the alevin to weaken the eggs so they can hatch. It will subside once all of the eggs have hatched.

DAILY MONITORING

1. Dead eggs/alevin

- Each day, check for dead eggs or alevin and carefully remove any (a turkey baster works well). Dead alevin don't move and will lose their colour.

2. ATUs/temperature

- Record the tank temperature daily and maintain your ATU chart. Please remember that ATUs will vary between all projects – there is no "right" or "wrong" value.

3. Record Keeping

- You are required to keep a record of how many eggs/alevin/fry die throughout the project. Again, there is no "right" or "wrong" answer. You'll report these numbers after fry release.

4. Styrofoam Jacket/Viewing

- At **alevin stage**, only remove the front and/or top of the Styrofoam jacket for **15 minutes a day** while you are monitoring your brood and updating your records.
- Once the alevin have "buttoned-up" (absorbed their yolk sacs) and **become fry**, remove the front of the jacket each morning and **keep it off all day**, but cover the tank back up fully at the end of the day.

WHAT'S NEXT?

- **Target Temperature:** keep target temperature set to **5°C** with a range of 2°C.
- **Spring Break:** fry will not be ready for feeding until after spring break. Over the break, you may choose to check on your fry, but it's not necessary. After the break, update your ATU chart by estimating the temperature on the days you were away.
- **Feeding:** it's not feeding time yet. You'll know it's time to feed your fry when at least 75% of them are completely buttoned up (no yolk sac left) and swimming around the tank.
- **Fry Release:** fry must be released no more than 10 days after they've begun feeding on the fish food – usually late April/early May.

Questions, concerns or issues with your incubator? Salt Spring Island projects, please contact Drew Bodaly. Everyone else, please contact me (Kate), directly.

COMMUNITY ACTIVITIES & RESOURCES



Peninsula Streams Society brings Environmental Education into the classroom. Our aim is to have educational programs that Connect children with their local environment at the elementary and middle school levels. We offer our programs to classes and groups in Greater Victoria. In April and May, we visit Gr. 3 classes to deliver a one hour interactive presentation, composed of two parts: Watershed Education and the Salmon

Lifecycle. **This program is a perfect lead-up to the salmon fry releases** for schools that participate in the salmon classroom incubator program. Our Gr. 3 program is now delivered to schools in the SD 63 (Saanich) and SD 61 (Greater Victoria) regions, to almost 500 students annually. [Click for more info](#)



Become a CRD Watershed Warden – Capital Regional District Kids can earn a free CRD Watershed Warden badge by learning about and taking care of their local watersheds. Badges may be earned by participating in any local programming or stewardship activities whether with your class, family or club.

Rainwater and Watersheds – A learning resources for elementary educators in the Capital Region, is an online document (pdf) which provides place-based lesson plans which can be easily adapted to various grade levels and can help you earn a badge!

More online resources including short videos, watershed maps, printable activities and graphics are available to enhance this place-based learning opportunity. Learn more at: www.crd.bc.ca/watersheds.

Editor's Note - The Water Ship News is an e-newsletter for CRD participants in the Classroom Incubation Program. Your email address is not contained in the header. To remove yourself from this mailing list, send an email from your address to katemacdonaldjulicher@gmail.com