

# The Current



PO Box 1029 Haines, Alaska 99827

907-766-3542 [www.takshanuk.org](http://www.takshanuk.org)

## “The Science of Permaculture Gardening”



The Starvin' Marvin Garden in Summer

The Takshanuk Watershed Council, Haines School District, Seven Echoes Homestead, and Haines Community Education are teaming up to bring you another exciting season of Permaculture education classes. Melissa Aronson will be offering another “Introduction to Permaculture Gardening” class beginning at the end of March, and new this year, an “Advanced Permaculture” class in June will be implementing permaculture principals into the Starvin’ Marvin School Garden.

These classes are open to adult members of the community and also to High School Students. Students taking the class will have the option of receiving a semester science credit for their participation in both the introductory and advanced class.

The introductory class will focus on the principles of permaculture gardening including: making connections,

catching and storing energy and resources, making the least change for greatest effect, biological and renewable resources, and collectively learning from our mistakes. The main textbooks for this course will be *“Gaia’s Garden”* and the Haines Gardening Handbook. This course will begin March 30th and run roughly every-other Saturday through May.

The advanced permaculture class will begin in June and is designed for people who have taken an introductory permaculture class. This class will focus implementing permaculture principals to transform the Starvin’ Marvin garden into a Haines permaculture demonstration site.

If you are interested in getting more information or signing up for either course, please contact **Meredith** at 766-3542 or [meredith@takshanuk.org](mailto:meredith@takshanuk.org)

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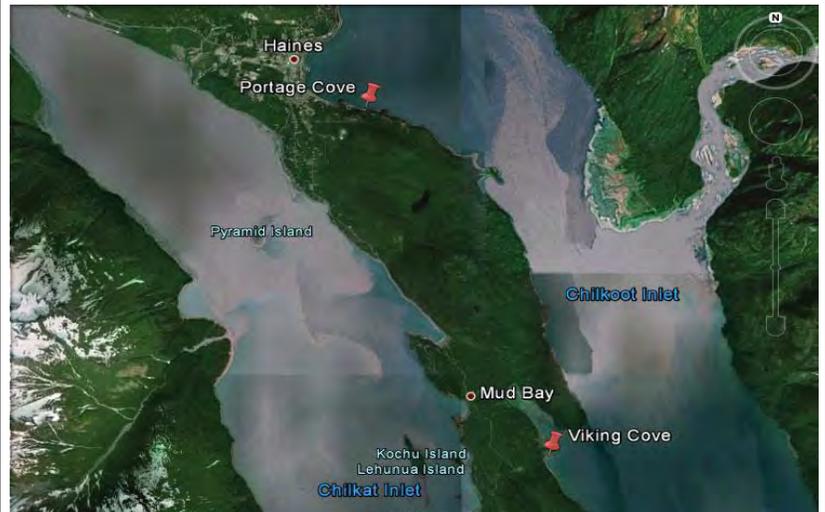
# PSP Monitoring Program with Chilkoot Indian Association

TWC has partnered with Chilkoot Indian Association to monitor Paralytic Shellfish Poisoning (PSP) in blue mussels through the Recreational Shellfish Beach Monitoring Pilot Program. As part of this program, once a month mussels are collected from Viking Cove and Portage Cove, shucked, and sent to the Environmental Health Lab in Anchorage for testing. The pilot program began in July of 2012 and will run for two years.

Paralytic Shellfish Poison is a naturally occurring toxin that originates from algae. It is a neurotoxin that disrupts transition of nerve impulses. The Alaska Department of Environmental Conservation has set an Action Level for PSP at 80ug/100g.

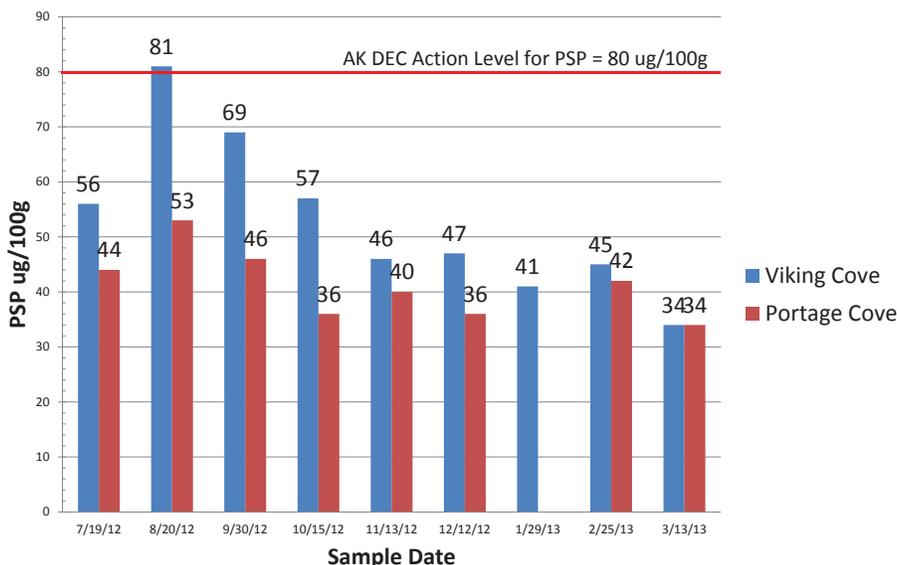
It is important to acknowledge that this testing is NOT to label a beach as "safe" for harvest. This is only a means to gather data on the PSP trends and test the method for determining PSP levels.

## Sampling Location



## PSP Sampling Results for the Haines Area

Sampling by Chilkoot Indian Association & Takshanuk Watershed Council



For more information on PSP please contact your local AK DEC office



Luke Williams (Chilkoot Indian Association) and Meredith Pochardt harvesting mussels at Portage Cove

# Garden Gate to School Plate



The Watershed Council is launching an exciting program to encourage local gardeners to dedicate a space in their garden to supply the school with locally grown produce -- we're calling it "Garden Gate to School Plate".

**Why do this?** Locally grown produce has many advantages over produce that is grown in the lower 48 and shipped to Haines – mainly the quality, freshness and the reduced or eliminated transportation cost. And if that's not enough, you can get paid for your produce!

**What the school can buy from you?** Unprocessed foods; Fruits and veggies in their natural state with minimal processing such as rinsing, trimming, or separating greens from roots. Preferably grown without pesticides.

**What the school can NOT buy from you?** Processed fruits and veggies; anything that has been cooked, baked, frozen or packaged.

**When will this begin?** Once school has started in August (date TBD) and will continue until harvests are complete. You can drop off your produce at the Starvin' Marvin greenhouse Mondays from 4-6pm and Tuesday from 9am to noon. For those gardeners outside of town, we encourage you to carpool your veggies to the greenhouse.

## What are the school produce needs?

- Weekly
  - Green Leaf/ Romaine Lettuce: 12#/week
  - Broccoli: 27#/week
  - Carrots: 25#/week
  - Celery: 30#/week
  - Cucumbers: 20 ea./week (6-8" used for estimation)
  - Cauliflower: 4#/week
  - Tomatoes: 30 ea./week
  - Onions: 3#/week
  - Berries: up to 30#/week
- Monthly
  - Potato, Russet: 60#/month (8 oz./potato used for estimation)
  - Cabbage: 10#/month



Questions/Comments or to sign up, please contact Meredith at 766-3542 or [meredith@takshanuk.org](mailto:meredith@takshanuk.org)

# Education Program Update

**GLOBE:** The Global Learning and Observation to Benefit the Environment (GLOBE) program is a worldwide hands-on, primary and secondary school-based science and education program that TWC has been implementing in the Haines School for several years. As part of this program fourth and fifth graders take daily atmosphere measurements on precipitation and temperature. Fifth graders also track annual ground freezing. For more information on the GLOBE program check out [GLOBE.gov](http://GLOBE.gov).



**CFI:** Students in the Chilkat Forest Investigators after school program recently made a video to present to the Bald Eagle Preserve Advisory Council and the State Department of Transportation addressing a planned highway construction project and its potential impact on the local eagle population. They also created several public service announcements for statewide television broadcast. To view these and other videos CFI students have made check out the Takshanuk website: [www.takshanuk.org](http://www.takshanuk.org)

**Starvin' Marvin:** Starvin' Marvin is a project in collaboration with Haines School to compost school lunch scraps, shredded office paper and sawdust from the school shop. The compost is then used to grow food in Marvin's Garden for the school cafeteria. In addition, the project is working with the community to increase the amount of healthy local and traditional foods in school lunches. High School students participating in the Science of Gardening Class and community members in the Advanced Permaculture class this spring and summer will be enhancing Marvin by integrating permaculture techniques into the garden. Come stop by to check it out!



**Ts'ats'ee Bird Observatory:** The bird observatory was formed recently to address research questions and to enhance public participation and appreciation of bird watching. Research is focused on changes in bird species diversity with climate change, and local migratory flyway mapping. For more information on the Bird Observatory please contact Pam Randles at [pam.randles@takshanuk.org](mailto:pam.randles@takshanuk.org)

**Community Invasives Management Association:** Haines has the third largest number of invasive plant species in Alaska. Every year more invasive species are found in Alaska. TWC is working with the Southeast Soil and Water Conservation District and the Haines Borough to form a Community Invasives Management Association (CIMA). The goal of the CIMA is to survey and map invasive species, establish priorities and take action to control access, mitigate damage or eradicate invasive species.



# Restoration, Research & Monitoring Update

## Upper Habitat Assessment

In 2009-2010 TWC partnered with USFWS to implement an assessment of 37 stream crossings within the Haines Borough for fish passage. Of the 37 crossings inventoried, 21 were coded 'red' (insufficient for fish passage), seven were 'gray' (marginal or indeterminate for fish passage without further analysis), and nine were 'green' (sufficient for fish passage). Then in 2012, with support from the USFWS, TWC conducted upstream habitat assessments of 14 of the 28 'red/gray' culverts to produce a prioritized list of restoration opportunities based on the quantity, type and quality of habitat that would become available to migrating fish if passage conditions were improved. The upstream habitat of the last 14 culverts will be conducted in 2013. This



analysis has already been used to determine that the 'red' culvert in the road to the cannery in Letnikof Cove was the leading candidate on the preliminary list. Its replacement would open up 1.3 miles of stream and 10 acres of wetland for high quality spawning and rearing habitat. This culvert is scheduled to be replaced in 2013.



Cannery Road Culvert

## Mosquito Lake Monitoring

In 2012 the Alaska Department of Environmental Conservation (DEC) contacted the Takshanuk Watershed council to conduct weekly water quality and invasive aquatic species surveys of Mosquito Lake. There was concern from the DEC that septic systems around the lake were failing and causing excessive aquatic growth in the lake and that invasive Eurasian watermilfoil (*Myriophyllum spicatum*) and/or Common waterweed (*Elodea Canadensis*) were present in the lake. The fecal coliform results were all below Alaska's standard of 100 fecal coliforms per 100ml. The nitrate/nitrite levels were also negligible. Only native aquatic plants were identified including native whorled watermilfoil (*Myriophyllum verticillatum*) that may have been the plant of concern. Sampling will continue in summer 2013.



Dan testing turbidity

## Upcoming Events:

### April

**6: Haines Health Fair.** From 8-12 at the school.

**7: Stormin' Norman's Annual Aloha Birthday Party.** Come to the Fireweed to celebrate and support TWC from 5-10pm

### May

**4: Annual Chilkat River Clean-up!** Meet at TWC parking lot at 9am

**11: Haines Earth Day and First Farmers Market.** From 10-12 at the school.

**26: Waffle Feed.** The day after brewfest come soak up the alcohol with all you can eat waffles and coffee for \$10 at the Senior Center.

*Stay tuned for seafood sales at the Farmers Markets this summer!*

### TWC Wish List:

- Garden pots for starting plants and selling at Farmers Market
- Garden tools for use during the Advanced Permaculture Class in June

*Please email Meredith@takshanuk.org or call 766-3542 to make a donation*

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PO Box 1029 Haines, AK 99827  
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*Show your support, become a member of the Friends of the Watershed*

I wish to become a 2013 member of the Friends of TWC in the amount of...

\$20 Pink Salmon (T-Shirt)

\$100 Sockeye Salmon (Float Trip)

\$50 Chum Salmon (Hoody)

\$250 King Salmon (TWC Project Tour)

\$75 Coho Salmon (T-Shirt & Hoody)

Other \_\_\_\_\_

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