

Chichagof Conservation Council

Box 621 Tenakee Springs Alaska 99841 April 2017

What is the Chichagof Conservation Council?

The Chichagof Conservation Council (CCC) is a nonprofit network dedicated to providing information about conservation issues, especially those that affect Tenakee Inlet and Chichagof Island.

In this period of rapid political and climate change, we are keenly aware that maintaining the integrity of Tenakee Inlet's vibrant salmon streams is the greatest legacy we can offer future generations

Until passage of the Tongass Timber Reform Act in 1990, management of the Tongass National Forest was dictated by 50-year contracts that *guaranteed* profits to the two voracious pulp mills located in Sitka and Ketchikan. Persistent local voices called for permanent protection of Trap Bay, Kadashan, and the fish-rich watersheds of Upper Tenakee Inlet.

The House version of the Tongass Timber Reform Act included all of those areas, but the eventual compro-

mise legislation dropped Upper Tenakee Inlet. CCC's primary goal remains finishing the job and gaining permanent protected status for Seal Bay, Long Bay, Goose Flats, the head of Tenakee Inlet, and Saltery Bay.

The CCC network has resisted many threats to Tenakee Inlet, as well as sponsoring numerous positive projects ranging from replacing energy-hungry appliances to supplying poop-scoops for the Tenakee trail.

Many people share the dream of sustainable local food production. In Tenakee that dream is already a vigorous reality, and getting better all the time. Supporting local food production –both gardening and wild harvest— promotes conservation of resources at the most basic level.

CCC salutes the Tenakee community garden and Tenakee's commercial growers for providing local produce for residents and visitors.

Tenakee Community Garden Breaks New Ground

By Wendy Stern

The 2017 TKE Community Garden has begun! We have seeds. We have beautiful soil. We have gardeners. We have lots of sun and we even have a 42 year old rototiller, donated by the Carters, that works to beat the band. We are merrily throwing seed in the beds and a few folks have veggie starts going for later planting. Our very own Chichagof Conservation Council has generously donated a much needed garden cart that will save many a worker's back hauling kelp up from the beach. So it's looking good at the garden!

Come on out for a look and if you'd like to be a part of this year's garden team, talk to Pete Bogart or call Wendy Stern at 736-2442.



Pete Bogart, Ann Symons, Shelly Wilson and Roger Lewis prepare the Tenakee Community Garden for another season

Ten Years of Stream Temperature Data

The possible impacts of global climate change may include warming of freshwater streams that provide critical salmon spawning and rearing habitat. Spawning salmon require adequate levels of well oxygenated water in order to successfully reproduce. Catastrophic die–offs may occur when returning spawners are packed into streams that are too warm during periods of low flow Specific watersheds may have characteristics that offer resilience in periods of low precipitation and high temperatures.

In 2007 CCC started monitoring stream temperatures in local salmon streams to test our observation that Upper Tenakee Inlet streams benefit from much longer lasting snow pack than lower Inlet streams. We offered the data to University of Alaska researchers, and the first use of CCC data in a formal thesis will be published soon. University of Alaska (Fairbanks) researcher Michael Winfree examined stream data from 47 Southeast streams. Michael's analysis of "The influence of geomorphic and landscape characteristics on stream temperature and streamwater sensitivity to air temperature in the coastal temperate rainforest of southeast Alaska" confirms that upper Tenakee streams are indeed among the most resilient in the region, in that the stream water has relatively low sensitivity to changes in air temperature.

CCC suggests that Upper Tenakee watersheds may offer a stronghold for salmon species affected by climate change, and deserve the highest level of protection. While a few degrees seem insignificant at the low end of stream temperature rature range, as things heat up that buffer might make a huge difference. State water quality guidelines specify maximum water temperatures of 13 degrees C for spawning and egg incubation, 15C for migration and rearing, and 20C as the absolute upper limit.

CCC's long term commitment to this project requires ongoing volunteer contributions including labor, boats and fuel for transportation to remote streams.

CCC is also involved in developing a regional program of stream temperature monitoring by working with the Southeast Alaska Watershed Coalition.



Unspawned salmon die-off 8-16-2008 Mole River, Admiralty Island



Blooming flowers and bumbling bees in East Tenakee April 10, 2017



Four feet of snow at the head of Tenakee Inlet April 8, 2017

Don Young is still sponsoring irresponsible land bills

Alaska's sole representative Don Young may have been around DC almost as long as the Washington monument, but age hasn't stopped him from introducing more awful land legislation. He ushered in 2017 with two doozies:

HR 232 would take 2 million acres from National Forest lands in each and every state, and prioritize timber harvest on those lands, without the USFS management guidelines that currently protect salmon streams.

HR 229 would create 5 new Native corporations and transfer 115,000 acres of the Tongass to these private, for-profit corporations.

We need to regularly remind Representative Young and both of our Senators that opposition to these and other irresponsible land bills remains strong. **Call early, call often!** Contact information for the Alaska Congressional delegation is on the back page.

PRINCE OF WALES ISLAND AQUAPONICS GREENHOUSE TOUR by Kevin Allred

On April 13th, Carlene Allred and I traveled to Prince of Wales Island to join a large group touring three aquaponic greenhouses located in Coffman Cove, Thorne Bay, and Kasaan. The tour was hosted by REAP (Renewable Energy Alaska Project), and had participants mostly from Alaska, but also two folks from Canada. A staff person from Washington DC was also there. Our trip down was pretty routine except when we were surprised to witness our arriving Ketchikan Airport Ferry go out of control and smash into the landing dock, throwing a few people down and damaging the dock, and at least one vehicle. Since it was uncertain how badly the ferry was damaged, we were delayed in getting to the Prince of Wales Ferry, but still made it in good time.

We stayed in Klawock at a lodge and spent the next day touring the greenhouses from a couple large vans. Everyone was very impressed with the operations in these towns. The Schools are managing the greenhouses which are all run off Biomass cord wood or fake fire-

wood logs. Biomass is used because it is much cheaper to operate than heating oil. It also has the advantage of providing employment to students and local citizens in both procuring the 2' long split cord wood and managing the biomass boilers, which are quite large and each have 2500 gallons of water with temperatures up to 200 degrees F. Thorne Bay and Coffman Cove have dual boilers that heat the schools, teacher housing, greenhouses, and other buildings. Kasaan has only one boiler.



Inside the greenhouse at Coffman Cove. This lettuce is growing on floating pieces of foam. When sold, the roots remain with the plant and they can be kept for up to a month in a jar of water to keep fresh.



The Kasaan greenhouse. The fish tank is gray in the far corner. Fish waste provides nutrients for the plants.

The Coffman Cove operation generates about 50,000 dollars a year, and provides local employment, and great learning opportunities for the school children and youth. Some of the projects they are working on are yellow cedar starts for the Forest Service, mushroom farming, and hanging baskets for mothers day.

The school at Coffman Cove has a bee hive built into one of its classrooms. The bees enter and leave the hive from the outside through the lower hinge, and can be viewed through the glass.

The Thorne Bay folks have built a small restaurant in which they sell food containing their greenhouse-grown produce. We ate lunch at the restaurant..

The Kasaan operation was in a town about the same size as Tenakee Springs. I could envision folks here enjoying the benefits of harvesting year-round produce in a nice greenhouse next to a tank with visible large goldfish swimming around. According to my notes, their single wood fired boiler heats the school, teacher housing, community center, and greenhouse. They have plans to add the library soon.

We were inspired to try and promote a similar undertaking tailor-made for Tenakee Springs. There are at least half dozen different options for us, ranging from a couple potential geothermal sites, waste heat from the present light plant, or biomass somewhere in town to take advantage of heating other houses or buildings. Management of the greenhouse might either be through CCC or the newly fledged garden committee.

Octopus Among Us

By Sophie Strong

Octopus live under rocks in the sea. When the tide is low, and if you are lucky, you might find an octopus.

Octopus are one of the smartest animals on earth.

An Octopus mother will stay with her eggs, swishing water near them so they have enough oxygen. She also shoos away predators that would like to eat her eggs. An octopus mother does not eat during the time she spends near her eggs protecting them from harm. She usually dies protecting and caring for her eggs.

The first baby octopus I found squirted out orange ink.

Octopus do many amazing things living in the ocean. They are cephalopods from the phylum Mollusca and they are good mothers.



Sophie Strong with one of her cephalopod friends.

 ${\tt CCC}$ is a registered 501c-3 non profit organization, and all contributions are tax-deductible.

John Wisenbaugh (President)
Joan McBeen (VP)
Molly Kemp (Sec/treasurer/communications/stream temps)
Sam McBeen (Board)
Steve Lewis (Board)

CCC communications and alerts to members have made the inevitable transition to email, and this once-quarterly newsletter is now an unabashedly annual event.

Good News from Sitka

The Sitka Conservation Society (SCS) has included the fish-rich watersheds of Tenakee Inlet in its area of concern.

SCS is a vital, active organization that has become an integral part of the Sitka community, and has shown great leadership promoting local food production.

CCC looks forward to working with the Sitka Conservation Society toward our common goal of a sustainable, salmon-friendly future.

To ensure that democracy works, our representatives in government need to hear from us. Be sure to call our delegation often to let them know that we are watching what they are doing and that we demand that they take our concerns with them to Washington—not just the concerns of big corporations and their lobbyists.

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