



Natural Currents

Homer Soil & Water Conservation District Newsletter ~ Fall 2018

Board of Supervisors

- Chris Rainwater, Chair
- Otto Kilcher, Vice Chair
- Genarita Grobarek, Treasurer
- Tim Alzheimer, Secretary
- Jim Engebretsen, our newest board member!



Our Mission:

To provide education and leadership in the conservation and sustainable use of soil and water-related resources through cooperative programs that protect, restore and improve our environment.

Our office contains a wealth of information for land owners and managers. Visit Us Anytime at 432 E. Pioneer Ave



Greetings From the District Manager:

By Kyra Wagner

It has been over 2 years now since I have taken on this role at Homer Soil and Water and I have learned a ton about our community, about issues and projects that often go softly unnoticed by most of us. We may get our fresh veggies at the Farmers Market, but have no idea what goes into the soil that grew them. We may grumble as we see invasive weeds march across the landscape, but have no idea what is happening to prevent their spread. We notice that our trails and our favorite fishing spots get muddy and messy, but have no idea what goes into fixing them.

This little office bustles with all kinds of projects that pull us in many directions with many different funding sources. And every bit of magic that comes out of this office is in thanks to the amazing staff that work here. Crowded into our new little office, we have plenty to keep us busy. In the following pages you will get introduced to our newest staff (Welcome Katherine and Kris!) as well as a bit about all of us and the projects we do here.

Twice a year we like to put out these newsletters so everyone can find out more about what is going on behind the scenes. Feel free to let us know what you think!

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Soil News from Brad

Concluding the Homer Soil Health Study

Homer Soil and Water Conservation District is nearing the completion of a three-year soil health study in cooperation with NRCS and four agricultural producers. Over the past few years study plots have been maintained in outdoor and high tunnel vegetable growing locations looking at the use of four NRCS practices; cover cropping, reduced tillage, nutrient management, and conservation crop rotation.

We expect these practices to have an impact on soil health in terms of its fertility, structure, and organic matter content. These parameters have been studied over the past three years by completing intensive soil sampling at each farm site.

Soil health data has been collected in the form of soil sampling processed by Brookside Labs in addition to measurements like bulk density, infiltration, aggregate stability, soil structure, cover crop biomass, and some vegetable production data. Differences are notable in soil testing data, but the data has not been statistically analyzed yet. These observations and data will be used to develop tools and help understand how cover cropping and reduced tillage impact soil health and plant productivity.

The other main objective of this study is to demonstrate to Southern Kenai Peninsula farmers the benefits and feasibility of using cover crops and reduced tillage to improve their soils. We have made tools available for our cooperators such as a flame weeder, broadfork or tiller that can be used to promote the use of reduced tillage and cover cropping. We have had multiple outreach events each year to share information on soil health, promote these NRCS practices, and demonstrate some of our tools. Finally, we plan to produce an informational pamphlet on soil health and some of the practices used in this study.

Each farm location has its own set of management decisions, production challenges, infrastructure, and climate resulting in a diverse set of study plots and data points. We are excited to have helped develop interest in both cover cropping and reduced tillage with participants involved and many others. We look forward to getting the data analyzed to see how the trails performed, and what kind of an impact these treatments have made on the soil health.



Crop rotation



Lori checks on her herbs

Wintertime Workshops

This winter Homer SWCD will be providing a variety of outreach events for community members. Workshops will be available for market farmers, gardeners, peony producers, and other community members. For gardeners we will have HT growers' meetings, soils discussions, and other workshops available. For market farmers and producers, the Alaska Farmers Market Association and Alaska Food Policy will be holding a conference in Homer March 8-10th, 2019. Additionally, the Annual Alaska Peony Conference will be held in Homer, AK on January 24-27th, 2019. Keep in touch with us as dates for these events and others are set. Please contact us with requests for farming and gardening topics you would like to see discussed in future workshops.



Chris Rainwater to be new president of the AACD

HSWCD is proud to announce that Homer's Board of Supervisors Chairman Chris Rainwater will be serving as President and Chairman of the Board for the Alaska Association of Conservation Districts. This is a two year term beginning in October 2018.

A lifelong Alaskan and cattle rancher, Chris has been a cooperator in the Homer District for many years and has served on the Board of Supervisors since 1983. This will be Chris' third term as AACD president. He is looking forward to taking a leadership role and promoting the mission of conservation districts at the state and national level.

West Homer Elementary's Potato Festival



For several years West Homer Elementary has hosted The Potato Fest, an exciting event where the whole school comes together to talk about their experimental potato beds and the role each grade level plays in the project. The potato beds are treated with different fertilizers like worm compost or fish meal, and also different potato varieties. Third through sixth grade are in charge of different aspects of the potato beds. Some classes harvest and record weights and number of potatoes, others fertilize and take soil tests. The activity is a great way to get kids outside and excited about growing food, science, math, and many other topics that can be incorporated.

This year Brad Casar assisted the fifth grade classes to take soil samples and make recommendations for next year's potato crop. Several days were spent with the students having soils discussions, getting out in the garden beds tak-

Annual Invasives Species Workshop:

Learn About Invasive Species In Your Community

Join us at the 2018 Annual Invasive Species Workshop "Surf and turf: Invasive species above and below the tideline" November 13-15, in the City of Homer at Land's End Resort. Hosted by the Alaska Committee for Noxious and Invasive Past Management (CNIPM), the workshop is a forum for discussing invasive species management activities within the state, offers expert presentations about emerging invasive species science and management issues, and training for new and experienced invasive species managers alike. For more information and to register, visit: <https://www.uaf.edu/ces/invasives/conference/> Cost is \$180 for all 3 days (includes lunch). Student Scholarships are available. The draft agenda is [available online here](#). **The following public events will be offered free of charge**, hosted by Homer Soil and Water Conservation District (HSWCD), Kachemak Bay National Estuarine Research Reserve (KBNERR), and UAF Cooperative Extension Service in partnership with CNIPM:

Monday, November 12th, 2018

Invasive Species Current Issues & Identification Lab 5:00-6:30pm, followed by *Public Lecture 6:30-7:30pm*

Location: Islands and Ocean Visitor Center, Homer
Invasive species, including terrestrial, aquatic, and marine plants and animals, cost the United States billions of dollars each year in damage to habitat quality, water supply infrastructure, fisheries, and other sectors. Addressing such a critical problem requires clear, accurate information and communication to members of the public as stakeholders. During this public identification lab, professionals will share expertise on species of concern, and participants will interact with scientists making valuable connections for identifying invasive species and being a part of prevention and response strategies. *Public Lecture* will follow at 6:30pm in the Islands and Ocean Visitor Center Lecture Hall, hosted by CNIPM.

Thursday, November 15th, 3:30-5:00pm

Public Event: Invasive Species Current Issues & Identification Training

Location: Lands End Resort, Homer

Online pre-registration required: <https://goo.gl/forms/FhFLMK8q2gRntBA72>

Invasive species cost the United States billions of dollars each year in damage to habitat quality, water supply infrastructure, fisheries, and other sectors. Addressing such a critical problem requires clear, accurate information and communication among scientists, policymakers, resource managers, and other stakeholders. During this 1.5 hour workshop, professionals will share expertise on invasive species of concern, including terrestrial, aquatic, and marine plants and animals. Participants will interact with scientists

ing samples, and coming together to watch the student presentations at Potato Fest. Shelly Worsfold has been leading the organization of the event for many years now (bravo!), and with her departure at the end of the school year, West Homer Elementary is looking for new teachers to take the lead.

What's up with the Anchor River?

HSWCD Collaborates With Other Agencies to Address Streambank Erosion

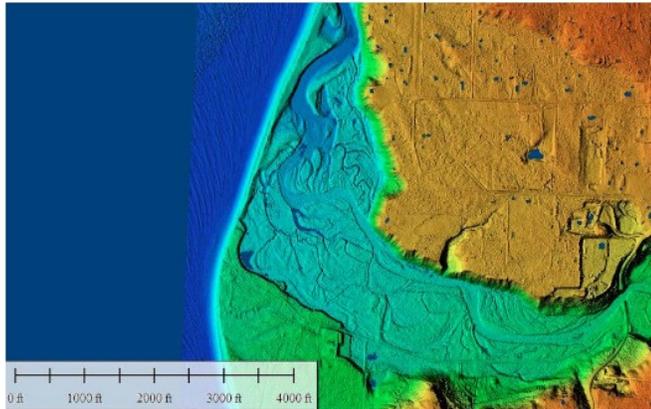
By Devony Lehner

Since April of this year, Homer Soil and Water has been collecting, compiling, and organizing information about the Anchor River below the Old Sterling Highway bridge. For example, we've met with the Anchor Point community and collected a ridiculous number of photos along the river. Why? Well, this stretch of river is within the Anchor River State Recreation Area (SRA), so it gets lots of attention from visitors and locals, sometimes, in fact, too much. The result is that some stretches of streambank that should look like the photo at right instead look like the photo below. This creates problems for juvenile salmon that use the area.



Eroding streambank

As a result, Homer Soil and Water has been working in partnership with local community members and resource managers—like the Alaska Division of Parks and Outdoor Recreation (which manages the SRA), the Kachemak Bay National Estuarine Research Reserve and the Alaska Department of Fish and Game (which look at ways to protect and improve local salmon habitats)—to identify appropriate ways to help restore damaged streambanks. Funding for Homer Soil and



Recent Lidar image of the river

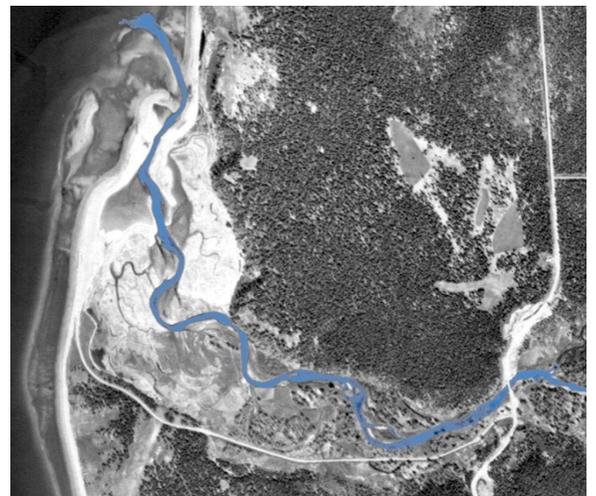
Water's participation in these efforts has come from the Alaska Department of Environmental Conservation, Division of Water's Alaska Clean Water Actions Program.



Healthy streambank

The result so far has been to compile information in the SRA that helps us understand the conditions of Anchor River streambanks and the processes affecting them—from ice dams to high and low stream flows to campsites on the water's edge. Most recently, Homer Soil and Water has identified dozens of actions—big and small—that could be taken to start helping damaged streambanks revegetate, become more stable and resistant to the dynamic processes occurring along the Anchor River. Importantly, these measures can help provide better places for juvenile salmon to find food, hide from predators, rest out of the river's currents, find backwaters in which to overwinter, and all in all, be able to find what they need to get ready for their epic journey out to sea and then back to spawn.

For more information, check the "[Anchor River Updates](#)" Facebook page where various steps along this process are shared with anyone who's interested. And just because it's fascinating to take a look back into the past as we work towards preparing for the future, here's an image of what the lower Anchor River looked like in 1951 (NRCS photograph) and a dramatic view of the contours of the floodplain that the lower Anchor River creates.



1951 image from HSWCD's archive

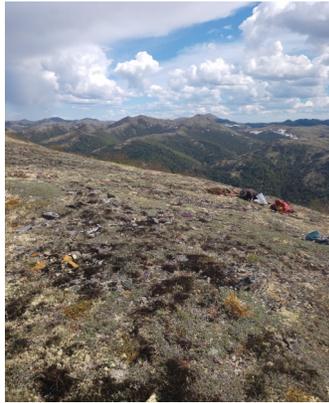
From the Field

by Charlotte Crowder

Homer Soil and Water has been partnering with NRCS and the Alaska Bureau of Land Management to survey the soils in the Nulatto Hills and Seward Peninsula. This summer HSWCD's Charlotte and Brad made two trips to western Alaska for the project's fourth season.

This year's field trips to Unalakleet with the NRCS Soil Survey team were better than we could have hoped for. The team, procuring full-profile soil taxonomy and soil properties alongside vegetative inventories, forestry data, and ecological descriptions, went out for twelve days at the end of May and again at mid June for two spectacularly rain-light trips. Finding the right weather window allowed us to have more helicopter-flyable days, more hours in the field, and allowed us to capture the data we were there to get. Since rain and fog have cut down on data collection for this project in the past, we plan to capitalize on this window for helicopter work next year too.

Another bonus of starting our work at the tip-top of the season was catching the flowering phase of plant species that



Scenes of the Nulatto Hills and Seward Peninsula from Charlotte and Brad's NRCS soil surveys



are more cryptic by the time summer comes around (i.e. those dang willows!) which made our survey somewhat easier to complete and more exact, even while some leaves were just budding and snow patches lingered.

Since the survey's partner, the BLM, is interested in the resources available for caribou and reindeer forage, we collected wet lichen weights and samples from many of our lichen-tundra sites this year, and plan to weigh dry samples to determine which kind of sites have the most resources and how much of the landscape can support foraging. We'll continue this study next year as well and incorporate it into our final report.

Next year will most likely be the last year to do field work for this phase of the Nulatto Hills survey, so we are tentatively planning to fit about four trips in to complete the areas we have yet to visit and round out the whole area. One or two are likely going to be boat-supported trips in order to survey the less helicopter-accessible fully-forested mountains and valleys. Check back in next year for the next (final?) chapter!



Unalakleet Village off Norton Sound



Conservation Districts work as a grassroots form of local governance authorized under state law. They create bridges between individual cooperators (landowners committed to sustainable use of the natural resources they manage) and other partners, including non-governmental organizations and all levels of government. The aim is to combine and coordinate resources to achieve shared conservation goals. The District model was established in the 1930s by Congress as a way to promote coordinated conservation approaches to healing soils during the “Dust Bowl” of the 1930s.

Join as a cooperator! It is similar to membership in your favorite group. Being a cooperator says that you use good practices on your land (like the ones demonstrated in the Soil Health Study) but it also gets you the benefits of a voice at the District level through your vote or your presence on our board.



Food Systems Survey Update:

HSWCD’s Food Systems Study is trucking along at a steady pace. Nicole has been busy meeting up with and interviewing people from both sides of Homer’s local food economy – our food producers and major farm product buyers. She has interviewed over 30 local producers and 25 restaurants thus far.

The producers survey has taken her far and wide visiting farmers and cottage foods entrepreneurs in the Homer, Anchor Point and Nikolaevsk areas. Interviewing these amazing people on their own turf has been eye opening and has provided a valuable sense of production at the ground level. She has met with food crafters from a variety of operations, including fruit and vegetable farms and livestock ranches, a mushroom cultivator, aquaponic growers, honeybee keepers and a birch syrup boiling facility.

Once the producer interviews are complete she will pick

Sign up for the monthly (at most)
AG UPDATES E-NEWSLETTER
Just email Kyra@HomerSWCD.org and she will get you on the list for news on all local ag events.

back up with the buyers survey, speaking with restaurants, grocery stores, the Homer Senior Center and South Peninsula Hospital, among others. We aim to achieve around 80-90 interviews in all to gain a snapshot of local food’s strengths and challenges in Homer.

We are very thankful for the great interest in this project and for the all time and thoughtful insights interviewees have shared with HSWCD and the community at large. We are all in this together. Nicole looks forward to hopping into her trusty Subaru and heading out to the next conversation about local food.

Coming to Homer March 2019!

The Alaska Food Festival & Conference

The Alaska Food Policy Council and the Alaska Farmers Market Association are partnering for the 4th semi-annual Alaska Food Festival & Conference.

March 8-9 2019 at Land’s End Resort



Nature Trail Boardwalk in Demonstration Forest Gets Facelift thanks to Dave Brann

Super volunteer Dave Brann has once again stepped up to the plate for trail lovers, this time fixing sections of the Nature Trail Boardwalk in the Homer Demonstration Forest .

Dave is a local land owner, long time volunteer and trails aficionado, helping to maintain trails on Baycrest Hill, Ohlson Mountain, Rogers Loop and others. He also helped spearhead the Kachemak Bay Water Trail.

Funding for trail maintenance has been slim in recent years. Seeing lumber on sale at Spenard Builders Supply, Dave figured it'd take about \$250 to give some very much needed TLC to the Demonstration Forest trail. He brought his proposal to HSWCD, and with this seed money in hand he bought discount lumber and did some magic. Trail users were thrilled. Appreciating the work Dave was doing and how much more could be done with a little more lumber, trail user Stephanie Silanoff personally donated \$200 to the cause. So, Dave headed back to SBS, got more wood and did more magic.

The Demonstration Forest is one of HSWCD's many projects. It is managed through an Interagency Land Management Authority with the Forest Service. Many different user groups enjoy this public trail (also locally known as the Homestead Trail) as a wild zone right in Homer. The boardwalk winds through forests and wetlands and connects to ski and snowshoe trails during the winter. The forest also features a fenced-in arboretum. Dave is an active member of the Homer Demonstration Forest Steering Committee.

He writes, "The trail was put in approximately 15 years ago, mostly with donated or cheap lumber and volunteer labor. A few band aids were applied over the years but by 2018 it was a matter of do something or close the trail."

Dave shared his progress with HSWCD in June. Looking back on his work he writes, "Talked to a young mother today that walks this trail, her favorite, loves it, about four times a week with her daughter on her backpack, two dogs, sometimes a husband for company. Made me smile."



District Manager Kyra Wagner Presents at Rotary Club

On September 13th district manager Kyra Wagner gave a presentation about our local food system at the Homer Rotary Club's monthly meeting.

Attendees learned about local farm production and acreage used for farming, food security, the superior quality and nutrition of Alaska Grown, challenges facing local farmers (including supply and demand challenges), Food Hub and Farmers Market sales statistics, processing facilities available locally, and the many ways people can buy local food.

Her presentation was recorded by local public radio KBBI AM 890 and was featured on their new locally produced science show *Kachemak Science* on September 22nd.

Before



Time to do something



Some finesse needed here



Ouch for runners and walkers



An unfinished section of boardwalk for approximately 15 years

Photos courtesy of Dave Brann

After



A few pieces at a time



Brand spankin' new, yippee!



New planks



Painted planks are recycled, repurposed from Ben Walters Park

Meet The Staff



Kyra Wagner, District Manager

Kyra has moved from years of experience as a general community volunteer extraordinaire to the lead juggling acrobat in the office. In charge of accounting, grant writing and other general management, she loves seeing who the next person will be who walks through the door and what the latest issue may be.

Devony Lehner, Natural Resources Specialist

Devony is the queen of Web Soil Survey, NRCS programs, and all the resources needed to make wise decisions on your land. With nothing more than the purest intent to inform each and every landowner on the Peninsula of these resources, Devony is OUR greatest resource and institutional memory bank.



Brad Casar, Natural Resources Technician

Brad is our soils guy. If you have questions about soils he's the man to talk to. He holds a B.S. in international soil and crop sciences and international development, and is active in doing outreach to our community of growers and land managers on the southern Kenai Peninsula.



Charlotte Crowder, Biological Technician

Charlotte works with the NRCS Soil Survey team on their mapping projects. As a botanist, she gets friendly with flowers, puzzles with lesser grasses, measures tree girths and rings, and works on making an estimation of their coverage at each site. And she really likes a nice afternoon tea.



Nicole Arevalo, Food Systems Analyst

Nicole was hired this spring to conduct a Food Systems Study for the Homer and Anchor Pont areas. A local foods buff, she holds a B.S. in anthropology from UAA and brings 18 years work experience in the food service industry ...and a little bit of time helping pick weeds and harvest vegetables at local farms.



Kris Nichols, Natural Resources Technician

Homer Soil & Water welcomes Kris as the newest member of the team. Kris will be helping us with nutrient management recommendations for land owners. He has a Master's degree in soil science and recently moved to Homer with his wife and 15 month old son Nolan.



Katherine Schake, Natural Resources Specialist



Growing up in Minnesota, Katherine was always drawn to the sphagnum and the black spruce. In 2005 Katherine arrived in Denali National Park for a summer job, and has been exploring Alaska ever since. She spent 8 years working in Denali: guiding day hikes, driving buses, and educating visitors on the botany, wildlife and geology of the subarctic ecosystem. When she's not hiking the backcountry of Alaska, Katherine has worked as an aerial surveyor and project manager of remote-sensing mapping projects, coordinated a statewide salmon data synthesis, and coordinated the Mat-Su Salmon Science and Conservation Symposium.

Katherine's holds a B.S. in Environmental Science and Soils from the University of Minnesota. This led her to Kenya for 4 months where she worked with East African Wildlife Societies to support alternative livelihoods for farming communities. In her spare time, Katherine guides for Natural Habitat Adventures in Iceland, maintaining a passion for botany and birding in the Northern hemisphere.

Katherine is excited to join the HSWCD team as the Invasive Plant Coordinator, and looks forward to sharing her enthusiasm for native plants and diverse, intact ecosystems with the local community.

Welcome to
Katherine,
our new
invasive
plant
coordinator!

You are Invited to Attend our Board of Supervisors Meetings- Come See What's happening in the District

The HSWCD Board of Supervisors meets on the second Wednesday of the month at 5:00 pm. Meetings are held in the NRCS conference room next door to our office at 432 E. Pioneer Ave. in downtown Homer, AK. If you need an accommodation to participate in this meeting, please contact Kyra at 299-4920 or by email at Kyra@homerswcd.org, preferably a day or two before the meeting. In partnership with NRCS, the HSWCD is an Equal Opportunity Provider and Employer.

Upcoming Events

November 5-7: Sustainable Agriculture Conference, BP Energy Center in Anchorage.
www.uaf.edu/ces/agriculture/sare/conference/.

November 12th: Creating Custom Fertilizer Mixes for your Garden at Kachemak Bay Campus with Casey Matney, Cooperative Extension Agent, from 6:00 p.m. – 8:30 p.m. Cost: \$25.00. Registration Deadline: November 8th. Register online at www.kbcnoncredit.asapconnected.com

November 13-15th: Alaska Invasive Plants Conference, Land's End, Homer. Includes activities open to the public on Monday at Islands and Ocean, a Identification and Prevention Training at Lands End on the 15th, or you can sign up for the whole conference
www.uaf.edu/ces/invasives/conference/

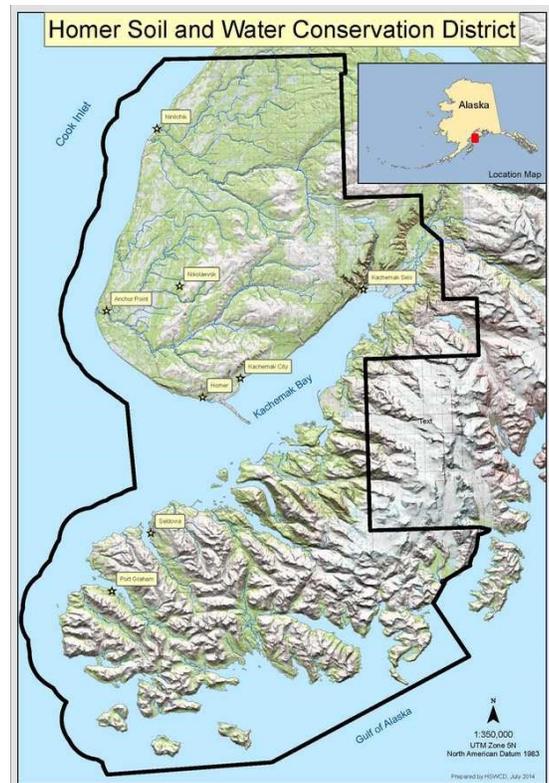
November 18th: Homer Garden Club program, 2pm at the Bidarka Inn, Homer

November 16-17: Alaska Farm Bureau Annual Meeting, Crown Plaza, Anchorage.

January 24-27: Alaska Peony Growers Association Winter Conference Land's End Resort, Homer
www.alaskapeonies.org/about-apga/winter-conference/

January 26: Homer Farmers Market Annual Meeting 12-pm at the Kachemak Center , Homer. APPLICATIONS DUE.

March 8-9: The Alaska Food Festival & Conference Land's End Resort. The Alaska Food Policy Council and the Alaska Farmers Market Association are partnering for the 4th semi-annual Alaska Food Festival & Conference.



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