

Homer Garden Club



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The February meeting will be held February 24, 2:00 pm, at the Bidarka Inn, downstairs.

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February 24th Meeting to Feature Teena Garay on Woody Plants and Companion Perennials for the Landscape

Teena Garay has been gardening, consulting and lecturing in Alaska for the past 23 years on perennials, shrubs and trees. She will present a Power Point on woody plants, perennials and vines that are completely hardy for the Homer area and ideal for the home landscape. Her garden was on the garden tour last summer and her prior Homer garden was featured in *Sunset and Horticulture* magazine. In 2000, she travelled to southwest China with eight other members of the Alaska Rock Garden Society,



in search of seed of plants hardy to Alaska. All pictures are of her gardens here in Homer. There will be some seed available after the lecture.

WHAT'S GROWING

Even though a mantle of snow covers the land, an ember of hope grows in the gardener's heart.

Seed catalogs have been arriving with a promise of next season's harvest. At the Homer Garden Club, committees are being formed to implement the upcoming events. Your participation is invited.

The Refreshment Committee, chaired by Julie Parizek (226-3276) organizes tasty snacks and beverages for our monthly meetings and coordinates the Annual Harvest Dinner.

Our largest event, Gardeners' Weekend is co-chaired by Roni Overway (226-3404) and Brenda Adams (235-3763). This committee contains several sub-committees and has multiple talented participants. This year's

guest speaker will be Rick Darke, author of "The American Woodland Garden"

Cathy Ulmer (235-8934) continues to chair the Nominating Committee to recruit new board members if needed. Call her if you would like to work with her or if you have a suggestion for a board position.

Program Chair Neil Wagner (235-6953) has done a splendid job finding speakers for our monthly meetings. Also the club has developed a network of connections with other garden clubs and occasionally extra programs are developed, such as the Fruit Growers Seminar with Dr. Bob Boors last September. This June another extra event will feature British Gardener, Chris Caldwell, with a presentation on rock gardens. Neil would be

happy to hear your suggestions about other possible speakers.

Newsletter Editor Paula Riley (435-3983) publishes our fine quality newsletter monthly. She is always interested in articles submitted by our members.

The Spring Plant Sale is always a fun way to start the growing season. We are looking forward to selling plants contributed by members; food and music will add to the festivities on the grounds of the Homer Visitors' Center. Karen Howorth (235-5253) will chair this committee. Member sign up has been strong for this event.

Baycrest Garden Committee has many members signed up, but is still in need of a chair. Please consider if you would like to assume a leadership role in this committee.

Announcements

Seed Exchange—Bring your extra vegetable, flower and herb seeds, along with small envelopes, to the **February** Garden Club meeting. You can then pick & try new varieties. All seeds are welcome!

Plant Sale—The annual plant sale is scheduled for June 1 at the Chamber of Commerce lawn. There will be an exchange of planting containers at the scheduled meetings prior to the sale. Be sure to make your plans to bring lots of donations from your gardens to sell at this annual fundraiser.

Fishbone Meal Fertilizer—Michael and Peggy Craig will once again be making a trip up to Palmer to pick up fishbone meal fertilizer from Sea-Ag. If you are interested in ordering, please sign up on the list that will be going around at the February meeting, or contact Peggy at 235-0631. We will be limited to 2 tons (80 sacks of 50 pounds each). First come, first serve so sign up early.

Class by Brenda Adams—National award-winning garden designer, Brenda Adams, will teach a two-day, in-depth, how-to workshop. Gain the confidence that your gardening goals can be achieved and a sense of direction on how to do it. To be held April 6 and 13, 10:00 am to 5:00 pm at Kachemak Bay Campus-Kenai Peninsula college. The fee is \$85. To register, go to the KBC campus on Pioneer Ave. or online at uaonline.alaska.edu, 235-7743. Deadline to register is March 29th.

Arugula. It's the only garden seed we don't have enough of for this season. How did I forget? It's so easy to save as some goes to seed every fall. This spring we have the collected seeds from a variety of tomatoes, peas, beans, kale, spinach, poppies, parsnip and even a hybrid Lenox cabbage. –It will be interesting to see how the x-hybrid plants vary and grow this year. We'll keep the best plant to replant and get seeds from again the following year. In theory we could select a better local version that would be adapted to our long days of sunlight and other local nuances. We're using Kyra's high tunnel as an isolated lab of sorts to grow seed crops. That way we can prevent cross pollination.



some new ones. It was a good time for friends to exchange information on their best plant varieties.

I always try to remember my spring planting mantra. "It's better to err in planting your starts too late than too early." Our transplants usually have plenty of time to mature in our climate. After our dark snowy winters, when we get several warm days of golden sunshine in February, it's natural to think spring is here. Look at your calendar, not your window, and stay on schedule. Winter will return and you'll be juggling around the too leggy or root bound plants if you don't wait. At that point there isn't much you can do to help them. You'll get bigger and better yields if you start with a bit smaller plants than root bound or leggy plants.

The Homer Seedy Saturday Seed Swap had around 75 people attending last month. Foundroot owner



Leah Wagner organized the event and gave a short talk on the basics of seed saving and vermaculture. We dropped off our extra seeds and picked up

Upcoming Garden Club presentations:

March 24 - Brian Olson from Kenai will be presenting his research on the rock star Haskap berries that do so well here. – You can replace your blueberry plants with a similar plant that will actually give you something to harvest!

April 28—Meet Lydia Clayton, our new extension person from Kenai. She will be presenting on building soil and the microbial food web. –Fertile productive soil is the basis for great gardens!

Treasurer's Reports

by Peggy Craig

January 2013

Income		Expenses	
Membership	125.00	Meeting	115.00
Total Income	\$125.00	Venue	100.00
		Program	15.00
		Total Expenses	\$115.00
Beginning balance 1/1/13	\$12,501.02		
Income	125.00		
Expenses	-115.00		
Ending balance 1/31/13	<u>\$12,511.02</u>		

The power is out and it's snowing in dense wet flakes that pile up behind me even as I dig my way up the walk one heavy scoop at a time. The road is impassable and I'll spend the day stoking the fire, clearing off the high tunnel lest it collapse, and listening for the sound of the snowplow.

Inside for a bit to warm up by the fire in my favorite overstuffed chair, I wonder about such weather. We went from bare ground on December 23rd to three feet of snow on Christmas Eve, and then so much rain the week after that the snow was reduced to a few inches of crust with ice coating the roads and walkways. And now more snow. There's nothing moderate or predictable about this weather, and while I have only lived in Homer for four winters, I suspect this is unusual - a portend of climate change perhaps?

Concurrent with our brutish winter and last summer's cool wet weather, farmers from Northern Texas to North Dakota are still coping with severe drought conditions.¹ According to a recent USDA report, corn, soy and wheat yields will fall below consumer need for a second year in a row unless this region of the country receives substantially higher than average rainfall to refill lakes and saturate parched soils. Couple this with news that the US food reserves are already historically low because we've grown less

than we've consumed in recent years. To top it off, the UN is predicting a worldwide food crisis for 2013.²

So what can I, as a gardener, do about these dire climate-driven predictions? I can do what gardeners always do - I can plant more seeds.

While I'm not likely to successfully grow the grains I need to sustain my bread baking habit, I can grow most of the vegetables and many of the berries I eat in a year. And by canning, drying, freezing, and storing food in my crawl space (in lieu of a root cellar) I am successfully able to keep myself in locally grown foods year round. My grocery bill is testament to the success of my small garden's yield (500 square feet of raised beds).

Producing my own food accomplishes two things. It allows me the security of knowing that I'll have food on the table even if there are shortages and cost hikes. And it means that much of the food I eat traveled only the 30 feet from my garden to my table, rather than the 2,500 miles or more it would travel if shipped from outside of Alaska. This greatly reduces the carbon footprint of my diet. Consider how much CO₂ is released to bring me asparagus in January that was grown in Mexico, or a can of pineapple grown in the Philippines. This winter I reach for jars of Walter and Judith's apples cut into chunks

and canned with a bit of cinnamon and farmer's market honey, or a scoop of Mossy's raspberries fresh frozen and ready for a smoothie.

Think of it as a remake of the World War II Victory Garden first planted by Eleanor Roosevelt on the Whitehouse Lawn and emulated by millions of Americans in a time of need. You may have heard that Michelle Obama has brought gardening back to the Whitehouse, tilling under an area about one acre in size and sowing it in vegetables with the help of local school children. Her aim is to teach better nutrition, but she's helped start a new backyard gardening revolution in this country.

And so, as I'm shoveling the snow away from the sides of my high tunnel, and watching the big flakes slowly drift over my garden beds, I'm planning next year's garden. I'm thinking a new, bigger bed for potatoes, and a second for carrots. And because the moose don't seem to bother these crops I can till up a section of lawn outside of the fenced garden. Complying with the adage to "grow food, not grass", I'll be weeding rather than mowing this spot next summer, and enjoying the rewards of my efforts at this time next year.

¹ <http://droughtmonitor.unl.edu>

² <http://www.guardian.co.uk/global-development/2012/oct/14/un-global-food-crisis-warning>

Thanks Bronwynn, VISTA Volunteer

by Kyra Wagner

Bronwynn Kelly worked with the Homer Farmers Market and Sustainable Homer for a year as a VISTA volunteer promoting local food and analyzing the local food system. When you start looking at all her accomplishments during her time here it is surprising that she got so much done in this short time.

Thanks to Bronwynn's organization, two elementary schools received grants to improve their gardens and greenhouse.

She also helped to create garden programs with People's Garden recipients.

She helped promote the Farmers Market events and managed grants that paid for Market programs like their food stamp benefits program.

She organized various meetings with high tunnel owners to share experiences and know-how regarding every subject from seed varieties to structures

that can hold heavy snowloads. She put together a Local Food Manual for general information on the area's local food resources for everyone to use.

I'm only brushing the surface of the work Bronwynn did for our community while she was here, but I just want everyone to know how lucky we are. She will be returning to her home in Michigan, but she has left our town a better place.

For most people low levels of Arsenic are part of their daily lives. Its natural occurrence in rocks and soil, water, air, plants and animal, as well as the many anthropogenic influences, make it readily available. Alaskans may be even more familiar, due to our proximity to natural activities such as volcanic action, erosion of rocks, and forest fires, which can further increase arsenic levels.

It's important to note that arsenic can exist as a number of compounds and that not all are created equal. In nature, pure arsenic is rare. *Organic arsenic* compounds contain arsenic in combination with carbon. Arsenic in compounds that do not contain carbon, but contain other elements, is called *inorganic arsenic*. Arsenic from plants and animals is usually *organic*, while most arsenic in soil, rock, and groundwater is *inorganic arsenic*.

For most people, food and water are the primary sources of exposure to arsenic. Small amounts of arsenic naturally occur in some foods we eat, including fish and shellfish, rice, and cereal products. Fish and shellfish contain mostly *organic arsenic*, which is the less harmful form. Rice, rice milk, and brown seaweed contain small amounts of *inorganic arsenic*, the more harmful form. It is estimated that of the 50 micrograms of arsenic people consume per day on average, in food and water, most of it is in the *organic* form.

Arsenic is found in all water sources, however higher levels of arsenic tend to be found in ground water sources than in surface water sources (i.e., lakes and rivers) of drinking water. Additionally, the demand on ground water from mu-

nicipal systems and private drinking water wells can cause water levels to drop and release arsenic from rock formations surrounding those wells.

Arsenic in the soil, whether naturally occurring or from irrigation, can be toxic to plants and toxicity symptoms include stunted and blackened roots, stunted plant growth, blackened leaf margins, and lower yields. Green beans are particularly sensitive and they serve as a good indicator crop for toxic levels of arsenic. Root crops accumulate the highest arsenic levels while fruiting crops store very little arsenic. Arsenic-containing groundwater may also be taken up by vegetables if contaminated water is used for irrigation. Enrichment of arsenic in soil from irrigation with groundwater or river water depends on the concentration of arsenic in the water and the climate. Fortunately for gardeners here in Alaska, accumulation of arsenic in soil is highest for dry climates that need frequent irrigation, have little dilution from rainfall, and experience high evaporation of moisture from soil which leaves the substances in the water behind (Yet another reason to be thankful for all the wonderful rain we received last 'summer'!). If your soil or water is contaminated with heavy metals, do not consume plants showing toxic symptoms.

Three main strategies help minimize exposure to heavy metals and safely grow vegetables irrigated with arsenic-containing water or in arsenic-containing soils: 1) adding soil amendments; 2) removing and replacing soil; and 3) phytoremediation.

Increasing soil pH with the addition

of lime, ash, or compost each year is the most effective and widely used remedial technique to ameliorate contaminated soils. Heavy metals become more readily available to plants in acidic soils than neutral soils, with arsenic being less readily taken up by plants grown in a soil pH of 6.5 or above. Many Alaskan soils naturally tend towards an acidic pH of 5.2 – 5.5 or lower. Therefore, it is very important to maintain a soil pH of 6.5 – 7.0 to minimize arsenic mobility in soil and decrease plant uptake. Organic matter is another soil amendment shown to be effective in improving contaminated soil. Organic matter additives increase the surface area to which heavy metals can bind. Once bound, heavy metals become unavailable for uptake by plants.

From the literature reviewed, overwhelmingly the greatest risk in growing vegetables in soil contaminated with heavy metals lies in ingesting the soil directly. Growing vegetables in raised beds filled with uncontaminated soils is the most effective way to avoid contamination of vegetables and contact with contaminated soils when gardening.

Research suggests contaminated soil and water poses more danger through direct inhalation and ingestion than through consumption of vegetables grown in the contaminated soil. Amending the soil with organic matter combined with good pH management (pH 6.5 – 7.0) can result in soil heavy metal levels well below the acceptable limits for safe vegetable production.

Effective phytoremediation, the majority of which has been focused on

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Arsenic and our Gardens

(Continued from page 5)

the arsenic hyper-accumulation of Chinese brake fern (*Pteris vittata*), can take decades and is therefore impractical for home gardeners.

Despite its reputation as a poison, arsenic is like any toxic substance; its effects depend on how much and how long people are exposed to it. To minimize exposure from gardens, monitor well water contamination levels through regular testing, manage soil pH so that it is in the range of 6.5 – 7.0, and add organic matter regularly. Only water when necessary with contaminated groundwater sources and use rainwater to dilute arsenic accumulation in soil. Wash soil off

vegetables outdoors, thoroughly wash hands and exposed skin after gardening, leave garden shoes outdoors, and change gardening clothes, to reduce the risk of creating household dust with the contaminated soil.

References

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Exponent. (July 2010). Arsenic Factsheet. <http://www.tva.com/kingston/exponent/Arsenic%20fact%20sheet.pdf>

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