

ALASKA MASTER GARDENERS ASSOCIATION NEWSLETTER

June 2003

From the President by Mary Shier



Don't you just love this time of year? Walking about the yard checking to see what survived the winter and will be enhancing the gardens once again? Those monstrous weeds are also making their appearance about now. I don't know why they are so eager to make their presence known - they are nobody's favorite plants.

I was able to take advantage of soft soil and easy pulling a few weeks ago and got rid of a batch of young dandelions. Today though, I noticed larger dandelion plants that had escaped my scrutiny and had developed flower buds. I'm sure they now have a tap root which will resist being pulled all together, leaving a tad to put forth another plant later in the season.

Gardening, as wonderful as it is, also entails keeping up with and ahead of the weedy plants. Get your knee pads out and keep them handy. You'll need them throughout the season. As much as we are on our knees, we need to offer them a bit of protection and not be hesitant to drop down on the spur of the moment to tackle one of the pesky weeds we see.

Wouldn't it be great to have a useful need for some of those plants? Let's see.... dandelions can be used to make wine. I know - my mom used to make some from time to time. Our pantry had a delightful aroma at certain times of the year. Unfortunately it was before the age of indulging for me. Now that I'm well past that age limit I suppose I should give it a try, considering the number of dandelions growing on my property. I also know chickweed can be used as a salad green. I have to admit I really would have a hard time harvesting it for that purpose though. It's so noxious that I can't bring myself to put it into a salad. It does extremely well as a ground cover, but I know of no one who touts having it as such, at least for very long.

There must be a reason Nature gives us all these plants. We have to decide which will be the ones we want and which ones we don't. It's the plants we don't want that we have to discover a use for. Maybe if we find a good use for them they wouldn't be so abundant and they wouldn't be considered such a nuisance. It would certainly save our knees, hands and backs from excessive wear and tear during the summer.

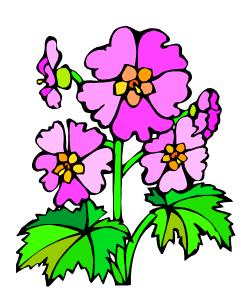
Hummmmm, putting weeds to work for us? Now that's a gardening concept to consider.

"In the garden more grows than the gardener sows."

Correas



Alaskan Primrose Primer



Review by Julie Riley

Alaskan flower gardeners have few books written specifically for them. This is no longer true for the genus *Primula*. Plantswomen Sally Arrant has recently written and published a marvelous reference titled *Alaska Primrose Primer*. The 40-page book contains 38 color photographs of primroses growing in Alaskan gardens. It discusses native species, *Primula* currently being grown in Southcentral Alaska, companion plants for *Primula*, different propagation techniques and winter protection.

The many species of primrose are arranged into sections which groups together plants sharing similar physical characteristics. For each section Sally gives species descriptions and then includes paragraphs on distribution, habitat and cultivation in the garden. According to Sally there are 426 different species of *Primula* and this of course doesn't include its many hybrids.

The Alaska Primrose Primer helps make sense of this complex genus. The book includes list of organizations, primrose seed and plant sources in Alaska and the rest of the USA. The cover is beautifully illustrated by Master Gardener Katy Gilmore. Copies of the Alaskan Primrose Primer are available at select greenhouses and nurseries for about \$20.

June AMGA Tour Schedule

June 16, 7 p.m.

Sally Karbelnikoff's Garden:

Bog garden, many perennials, large and small pool areas, orchid greenhouse. 7435 Old Harbor Avenue Take Muldoon Road, turn west on Old Harbor.

Verna Pratt's Garden:

Only 2 patches of lawn left! Some of our gardens have gravel walkways around them. They are dry, easy to view plants from and give our dog more room to roam (He will NOT go into the gardens!)

Small vegetable garden, raspberries, roses, tall perennials, a greenhouse, lots of container gardens and lots of rock gardens. The Rock Gardens contain native Alaska plants and many unusual species obtained from specialty nurseries, seed exchanges, and North American Rock Garden Society meetings.

Address: 7446 East 20th Avenue, Anchorage, AK 99504.

From Anchorage, take Northern Lights east to Patterson. Left on Patterson which makes a couple of bends and becomes Chandalar. Our home is on the corner of 20th and Chandalar (light blue house on southwest corner).

OR From DeBarr Road, turn right on Patterson, left on 20th, go about 2-1/2 blocks. Our house is on the right and is opposite I sland Drive.





Soil Health by TAMI SCHLIES

Our guest speaker at the Alaska Pioneer Fruit Grower's Association in January, Mr. John Evans of Palmer, got me thinking about soil. He created Alaska Bounty, a "soil stimulant system" that replaces natural bacteria and fungi lost in chemical fertilizing, harvesting, and even tilling the soil. His unique system breeds microorganisms by aerating a special compost tea, versus the organisms found in such things as "soil soup" or even regular compost tea, and he claims this is better for the soil. And better soil means better plants.

Now, first of all, what do these microorganisms do exactly for us gardeners? Well, first of all, they break down the insoluble nutrients in the soil, as well as in the organic fertilizers we might use. In this process, they release the nutrients into the soil in soluble form for our plants to use. And their little bodies hold on to a continuous supply, like a slow release fertilizer, as long as we keep them – ie. our soil – healthy.

You cannot use too much according to John, because it is not a fertilizer and will not burn plants. Used along with organic fertilizers, it will reduce fertilizer use by up to 70% because the organisms utilize the nutrients and improve the overall soil structure.

According to John, this allows the plants to grow not only larger, as his many giant vegetables attest to, but also sweeter. He regularly uses a refractometer to measure the sugar levels in his produce as well as the produce in the grocery stores for comparison. And the plants are better able to shrug off diseases and pests, and even neglect or drought.

Mycorrhizae

After John's visit, I decided to do a little bit of research on mycorrhizae in particular. Remember, fungi do not create food on their own, like plants do. Mycorrhizae is a type of symbiotic fungus that interacts with plant roots, exchanging absorbed mineral nutrient ions for the sugars the plant produces.

Mycorrhizae also increases a plant's effective root system by up to 700% by breaking down and absorbing nutrients farther away - up to 30 feet away. Mycorrhizae not only distribute nutrients, but also depress many root diseases caused by pathogenic fungi and nematodes. When you disturb natural soils, by digging or rototilling, you break up mycorrhizal systems and force them to start over, interrupting the absorptive area they share with the native plants. More than 99% of the earth's plants utilize this fungus to their benefit. There are six types of mycorrhizae, but only two are more considered major types, so that is what I will cover here: ectomycorrhizae and endomycorrhizae.

Ectomycorrhizae

Ecto is the suffix for outside, so ectomycorrhizae tend to grow on the outside of the root tips. They penetrate the spaces between to cells of the root's outer layer, covering the root like a glove, and then fungal hyphae (hair-like filaments) grow outward from the roots into the surrounding soil. These gather water and nutrients and share them with the plant. They have been shown to be particularly good at absorbing phosphate, potassium, and alkaloid metals.

Ectomycorrhizae also seem to be able to protect a plant from soil born diseases and pathogens. They do this by producing a sort of antibiotic that keeps bad bacteria at bay, rather like penicillin. The "glove" they form around the roots may also act as a physical barrier against invasion.



"Soil Health" CONTINUED FROM PAGE 3

Ectomycorrhizae also produce growth hormones and regulators which can alter the metabolism and growth of the roots themselves, encouraging healthy growth. This type of fungus tends to colonize coniferous trees and hardwoods.

Endomycorrhizae

As you may guess, endo is the suffix for inside, therefore endomycorrhizae grow mainly *inside* the cells of the plant root's outer surface, rather than between the cells. These do not form the glove around the plant root like the ectomycorrhizae, and therefore are impossible to see without a microscope. But they do send out a net of hyphae to gather water and nutrients.

John talked about using "BioVAM" in his compost aeration mixture, and now I know what VAM stands for. It is short for vesicular-arbuscular mycorrhizae – two structures formed by endomycorrhizae within the cells of the root. 90% of the world's higher plant types have a relationship with this kind of mycorrhizae. Arbuscules are bodies made up of hyphae that take carbohydrates from the cells and increase until they fill the cell completely, then they break down and release their stored nutrients to the host plant. The mycorrhizae then moves on to another plant cell. Little is known about vesicles, but scientists suspect that they play a role in propagation.

VAM in particular are good at absorbing phosphorus, copper, iron, zinc and calcium, plus some potassium, though this is highly affected by the balance of calcium, nitrogen, and potassium levels in the soil. This type of fungus tends to favor turf grasses, ornamentals, hardwoods, and fruit and nut trees.

Other Facts

Another interesting theory about mycorrhizae is that it allows plants to communicate with each other. There are cases where a plant is stripped clean of foliage by insects faster than it can regrow the leaves. As soon as one plant becomes infected, the other plants in the area change chemistry and begin to secrete toxins to keep the insects from preying on them. Scientists believe mycorrhizae may play a role in this communication.

Though most mycorrhizae are invisible to the naked eye, there are a few that produce fruiting bodies. Small fungi that appear near birch, hornbeam, larch, and spruce may be a type of ectomycorrhizal fungi. Believe it or not, truffles are also a type of ectomycorrhizal fungus.

Ectomycorrhizal trees

Arborvitae Aspen Basswood Beech Chestnut Birch

Cottonwood

Fir

Hemlock Hickory

Larch

Oak Spruce Willow

Endomycorrhizal trees

Ash Buckeye Crabapple Dogwood Ginko

Huckleberry Hawthorn Holly

Horsechestnut

Locust

London Planetree

Magnolia Maple Redbud Sycamore Walnut Yew



Dahlias

By Michele Hébert

Mid-April is too late to plant dahlia seeds and still have flowers this season, but

dahlia tubers can be planted now. If you are fortunate enough to have a friend that grows this plant, they probably have many tubers to share. If not, there are many choices available at local nurseries and garden centers. Planting tubers is the easy part. Deciding which color and what form you want the plant to take can be challenging.

More than 4,000 varieties are available from which to choose. Dahlias can be grown to produce one large, dinnerplate size bloom or as a bush with many small flowers. The flowers come in an endless array of shapes and colors. By the end of summer, I am always amazed at the large swollen roots that have been produced in such a short growing season. Last fall I tucked my dahlia roots in a box filled with vermiculite and put them in the root cellar. Now that April is here, it's time for me to get them planted.

Getting started

Dahlias will produce a clump of three to seven tuberous roots that can be over wintered in a cool, dark place. In the spring, cut to a quarter inch any sprouts that have developed in storage. Cut the clumps into sections, each with part of the old stem and an eye or bud. All of the eyes are in the crown at the base of the stem above the tubers. Sometimes there are more tubers than eyes, and sometimes more eyes than tubers. Usually it is easy to find the eyes at the top of the tuberous root where it attaches to the stem. If not, place the root mass in warm, moist conditions to help the eyes develop. Let the cut pieces dry and heal overnight to prevent rot.

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Central Peninsula MG News by Rosemary Kimball

Things are heating up!! May is a frantic month for birds, bees and gardeners! I do the daily walkabout in the green house exhorting the plants to grow faster or to slow down, depending on where they and the weather are in their lives. The Christmas wreath is dropping its needles on the deck so the season really is here. The moose protection has been removed from the trees at Pioneer Park and they really have nice shapes since they haven't been moose-munched. The woman working there has it all cleaned up and looking nice.

The robins were 10 days earlier then usual. The green sheen on the birch came 2-1/2 weeks earlier. Unfortunately the bora (a cold, dry, violent wind that comes zooping down from the north or northeast into I taly and on to the Adriatic Sea) damage is revealing itself. Around our yard it has shown up as leaf damage on the lingonberries in unprotected locations. The berginia at PP looked like it had been scorched with a flame thrower. The jury is still out on my Polestar rose and codonopsis.

A sure sign of the season is that my husband is buying trees to set out in our expanded, fenced garden. He even bought two varieties of crabapples, the first time we've had trees with edibles on board! And he was Johnny-on-the-spot when the 4-H/Global Releaf sale started in Soldotna. With the rabbit population down in our area it is a good time to start more larch on their way up.

Lastly, a product report: AIH has the 1.5 liter pump hand sprayers for 1/2 the price of garden shops. If you don't have one of those, you're missing a treat. They also have cement mixers that are gorgeous...light sand-colored drum with a turquoise pipe frame. This is the first time I ve looked at my ratty orange one and wished I had another! And, since we have a friend who has someone in the

neighborhood letting his rabbits run loose to dine on the neighboring foliage, we've had several rabbits come into our life. The ratchet clippers available in gardening sections are wonderful to use as a butchering tool.

Carmel Tysver will be in Sterling on Saturday June 7 from 10AM to 1 PM for her annual Hypertufa trough class to be held at Mark White's house. You will need to bring something that can be used as a mold– dishpan, box, flower pot, large pan, or whatever your imagination thinks of. You will also need a pair of sturdy gloves. The hypertufa materials will be provided and the cost will be \$20. There will be coffee for the cold. RSVP by Wednesday June 4 to Rosemary Kimball 262-6187 or at this e-dress or Mark White 260-1609.

The annual perennial plant sale of Rosemary Kimball and Mark White (and anyone else we can get) will be held June 20-21, Friday and Saturday, from 6-10PM at Mark's house in Sterling. Stop in if you are down here...there will be coffee and maybe cookies. Among things Mark is featuring are Longiflora lilies which have done well, and also other lilies. He is planning on the Maclea microcarpa, a showy 6-foot cousin of the poppy. Call or e-mail Rosemary at 262-6187 for information. The sale will be signed on the highway at 5:45PM.









- McDonalds is running a radio ad that mentions tatsoi and arugula! Amazing to see the corporation has entered the world of vegetable gardeners.
- Here's a new gardening product you don't want to miss—ButterflyPee, pure urine from the wild. Supposedly it helps attract butterflies to your garden. The company can be found at www.predatorpee.com if you're interested :-).
- Plants from Allen Deitz's old Anchorage garden will be available at Annie Nevaldine's Plant Sale on June13-14. New owner Martha Ferris is dividing perennials that Allen originally planted. Sale times: Friday 6-10 p.m. and Saturday 12-5 p.m.
- Master Gardeners Blythe Campbell, Nicklette LaFleur, Mary Beth Whitehurst, and William Pride will soon be Community Tree Stewards. The 25 hour course is sponsored by the Division of Forestry's Community Forestry Program.
- Watch for 'Hercules' dill at the Alaska Botanical Garden herb garden this summer. Its a giant!

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Denali Institute Field Seminars

High Country Wildflowers June 20-22

Fee: \$140

Early summer brings an incredible variety of blooming wildflowers to Denali¹s tundra and taiga forests. In this field seminar you¹ll move from boreal forests to tundra to alpine meadows, learning about our local flora's unique adaptations to both high latitude and high altitude. You'll spend time learning to identify wildflowers using a hand lens, a dichotomous key, and field guides. Joan Foote, retired U.S. Forest Service Botanist, will be our guide. The seminar is designed for all levels of plant enthusiasts.

Participants must be in good physical condition and able to hike 1-2 miles with significant elevation gain, over uneven terrain including tundra and river bars.

Limited to 12 participants, ensuring a quality experience for all. They fill up fast, so sign up early to secure your place. For further information, call 907-868-8639 or toll free 866-688-1269.

PERENNIAL PLANT SALE

Friday, June 13, 6 to 10 pm Saturday, June 14, 12 noon to 5 pm 4960 East Fifth Avenue (between Pine St. and Boniface)

Contact: Annie Nevaldine, 333-2100

Several prominent perennial gardeners combine forces and flowers and fun to feature fruit and ornamental trees, shrubs, orchids, bog and water condition plants, dahlias, roses, lilies, divisions from Allen Deitz's garden, other perennials, and perhaps even a few annuals. Also for sale will be garden art and supplies for the gardener. Vendors include Bud Dubay, Martha Farris, Mark Gordon, Sally Karabelnikoff, Sally Koppenberg, Susan Miller, Annie Nevaldine, and Linda Teninty.

DAHLIAS for Sale

Connie Sanders, Anchorage master gardener has over 150 dahlias started and has them for sale at \$7.50 or 3 for \$20. Contact Connie Sanders @ 522-6800. E-mail address is: botanical4@aol.com



Dahlias CONT FROM PAGE 5

For added protection, shake the roots in a bag containing a fungicide powder that is labeled for dusting bulbs or tubers. Lay the roots horizontally on 2 inches of soil in the bottom of a pot at least 6 inches tall. Cover initially with 2 inches of soil and add more as the plant grows. Let only one or two shoots develop.

Plant the bulbs in a rich potting soil that contains compost and a slow-release fertilizer. I like to use organic fertilizer that contains bonemeal and greensand. You can make your own soil by mixing one part garden loam, one part compost or peat moss, and one part horticulture or mortar sand.

Dahlias like sun, so grow them under light or in a bright window. Keep the temperature below 70 degrees Fahrenheit by using fans or opening the window. Two weeks before the plants are to be transplanted outdoors, begin the hardening process. Start by taking the plants outdoors in the elements for one hour the first day. I ncrease by an hour each day. After the last killing frost, which is generally June 1, the dahlias can be planted outdoors.

Spread 1 to 3 inches of compost, peat moss or well rotten manure and work into a depth of 6 inches. Mix a high phosphorous fertilizer into the soil before planting. Apply 3 lbs. 8-32-16 per 100 square feet. Another alternative is to add 10 lbs. wood ash or 1 lb. muriate of potash and 5 lbs. bonemeal or 2 lbs. super phosphate.

Prune the terminal bud if you want a bush plant with numerous small blooms. Remove lateral buds if you want large blooms. Stake plants as they grow very tall by the end of summer. Of course, the short bushy or miniature plants will not need to be supported. Make sure the stake does not damage the roots. A midseason application of fertilizer helps the plant produce healthy flowers and roots. Water with a soluble or sprinkle one tablespoon of granular fertilizer around the base of each plant. Stop fertilizing in mid- August.

After the first killing frost, cut the tops off and carefully remove the mass of roots with a fork. Brush off the dirt and let the clump dry on newspaper for several days. Put the clump of roots in a box of vermiculite, perlite or dry peat moss and cover to keep the tubers from drying out. Store below 45 F for best success.

A good place to look for dahlia information is the American Dahlia Society at http://www.dahlia.org/. They publish a bulletin available for members. The Web site has notes on new varieties and offers practical information on care. This year I am going to look for Cornel, which produces dark red, pompom shaped flower. This plant was released in 1994 and has been an award winner.

Gardening Calendar

June 3,5,10,12

Watershed Stewardship - 6-9 p.m.; Contact CES to register, 786-6300.

June 5

Anchorage Garden Club: "Primulas" presented by Sally Arant; Pioneer Schoolhouse, lower level; located at 3rd and Eagle Streets; 7:30pm Programs are free and open to everyone.

June 7

Anchorage Garden Club: Annual Plant Sale held at 3734 W 35th Ave.; 9am to 5pm

June 10

Alaska Rose Society meeting, "Summer Preparation of Centennial Rose Garden", 7 p.m., hands-on project at Centennial Rose Garden, Delaney Park Strip. Contact Lonnie Chace, 345-5725

June 11 - Aug. 27 (Wednesdays)

Story Time in the Garden, for children ages 3-5 with parent/caregiver, 6:30 p.m.- meets in the lower perennials garden at the ABG. Canceled when it rains. ABG - Contact 770-3692

June 13 - 14

PERENNI AL PLANT SALE - (see attached article)

June 16

AMGA June Summer Tour: (see attached article) Sally K's garden, Verna Pratt's garden. 7 p.m.

June 28-29

Alaska Botanical Garden: 6th Annual Garden Fair; 10AM-6PM Saturday and 10AM-4PM Sunday

July 17 - 23

Alaska Rock Garden Society: NARGS Exploration: Plant Exploration in Northeastern Oregon; contact Tom Clark at 253 Batchelor St., Granby, MA 01033.

July 18

AMGA July garden tour: Linda Klinkhart's garden, Dana Klinkhart's garden. 7 p.m.

June 21

Choosing Organic Fertilizers - 2-3:30 p.m., Alaska Mill & Feed. Register @ 276-6016

July 27

Anchorage Garden Club: Annual City Garden Tour - Tour 6-8 gardens around Anchorage, Free - Gardens will be listed in the Anchorage Daily News Friday July 25 and the Free Press

July 28 - 29

Alaska Rock Garden Society: Flower Show and Plant Sale at Alaska Botanical Garden "Garden Faire"

[On the Internet: www.corecom.net/~gardener click on "Calendar" for more events]

The Anchorage Chapter of the Alaska Master Gardeners Association welcomes letters, opinions, articles, ideas and inquiries. Contact the editor, Gina Docherty, at:

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Phone: 345-4099

Email: gardener@corecom.net

AMGA Web Site: www.corecom.net/~gardener (The Newsletter will be on-line in living color!)

For information about membership or upcoming programs, contact:

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