Hot Weather Spinach
by Nora Graf

Tired of just growing spinach and then when it’s prime, it suddenly bolts because the hot weather decided to show up for just enough days to start the flowering process? Well, there are a couple of “faux” spinachs or spinach alternatives out there that will give you spinach-like leafy greens through the summer. These plants can be used in a similar manner as traditional spinach. Give one a try.

Malabar spinach—This vining plant has heart-shaped, crinkled leaves. There are two common varieties: one with a green stem, one with a red. The red-vined plant makes an attractive garden plant, along with being edible. Grow it on a trellis for the best results.

It is a native of tropical Asia and Africa. The leaves look like true spinach. Pick the leaves once they are three to four inches long. The taste and texture are slightly seaweedy, hence its other name, Land Kelp. The leaves also have a thickening effect when used in soups, something like okra.

New Zealand spinach—The succulent stems and leaves taste very like spinach. As its name indicates, it is from New Zealand (Tetragonia expansa or T. tetragonioides). It was first used by Europeans in about 1770. The plant is low and bushy, covering the ground with small, fleshy, triangular leaves. It has a mild flavor and can be used either fresh or cooked.

The seeds of this plant should be soaked for 24 hours before planting. Mulch heavily, as the plant likes moisture; give it deep, frequent watering. It will produce leaves until the first freeze kills the plant. In areas with light frosts or no deep freezes the plant will go dormant and
then come back in the spring. (Which means in our part of the country, mulching it well in the fall would probably protect it from all but our coldest weather.)

Aztec Red Spinach—The leaves of Aztec Red are red near the bottom of the plant with green leaves above. This plant (*Chenopodium berlanderi*) is actually a relative of true spinach. In Mexico, it’s known as hauzontli and is one of the world’s oldest vegetables, originally grown by the Aztecs between rows of corn. It grows tall, sometimes 8 to 12 feet but only about a foot across. A single plant can produce a pound of edible leaves. The more heat, the more leaves. When the temperatures cool the leaves turn bright red. This remains when the leaves are steamed.

Orach—sometimes called mountain spinach, this plant has both red and green varieties, (*Atriplex hortensis*). It is also a relative of true spinach. There are several red strains: *Rubra*, *Cupertorosea* and *Rosa*. The leaves can be used steamed or raw and the red remains on cooking. The plants will self-sow. This plant likes dry, saline and alkaline soil conditions.

Amaranth—another plant used by the Aztecs, but it is also found in Africa, Greece and the Caribbean. There are two types of amaranth—one grown for its seeds (it was an important grain in ancient Mexico) and another for its spinach-like leaves. There are several varieties available. The leaves have a slightly sweet flavor. A good variety to try is Meral. It is beautiful and has a walnut-like flavor. Harvest the leaves once they reach the size of a child’s hand. To keep the leaves coming, trim off the flower heads when they appear. The leaves should keep coming until the first frost.

These are plants that like warmer weather, so don’t get them started too early. They can be particular about soil temperature. The soil needs to be at least 60°F. Refer to the cultural information on the seed packet for the correct information on spacing and care—they are different than spinach.

All are good steamed and served with salt, pepper and a spot of butter. You can also use them in recipes calling for spinach although take into consideration there is a slight difference in taste and sometimes striking differences in color.

### Red Orach Frittata

6 servings

- 1 lb. baking potatoes (about 3 small)
- 4-5 cups coarsely chopped red orach
- 10 eggs
- 1/2 cup minced chives
- 1/4 cup minced dill
- 1 tsp. salt
- 1 tsp. pepper
- 1 Tbsp. butter

Peel the potatoes and cut into 1/2 inch cubes. Put in pan, cover with cold water and bring to a boil. Cook until tender. Drain and set aside.

Steam orach until just wilted, 2 to 3 minutes. Cook, then squeeze out as much water as possible with your hands. Set aside.

Preheat the broiler. Whisk eggs in a bowl with chives, dill, salt and pepper. In a large ovenproof skillet, melt the butter over medium heat. Add the potatoes and orach; stir briefly. Add the whisked eggs and stir again to distribute ingredients evenly. Cook over medium heat until the bottom of the frittata is set and brown and eggs start to solidify at the top, about 5 minutes. Carefully slide or invert the frittata on a large plate. Cut into wedges and serve.
Meet a Master Gardener

by Pam Bowman

Moving to a rural area of Camp Verde with her husband, Larry, in the last days of 2001, Jeannette Teets knew she needed to learn more about gardening in a climate that burned plants in the summer and froze them in the winter. So she promptly signed up for the Master Watershed Steward classes, to be followed by the 2003 Master Gardener classes. Since graduation, Jeannette has been an active volunteer in the MG Association. She has co-chaired the volunteer projects and public relations committee, coordinated the landscaping of the Verde Valley Medical Center, worked on a xeriscape plant list and currently serves as the Association’s Vice President. Although her primary interests change regularly, gardening and volunteering are always an important part of Jeannette’s active life.

Born in Greeley, Colorado, Jeannette always wanted to get out of the small town situated in the flats of the state and known for its feed lots, slaughter house and famous teachers’ college. However, she does attribute her love of gardening to her grandmother and mother. Her mother nurtured a huge cutting garden from which she supplied all the flowers for her church. Jeannette admits she did not work in the garden, but she did love the beautiful flowers and tasty fruits her mother grew. Following her first year at the University of Colorado, she moved to Orange County in Southern California.

Jeannette and her first husband bought houses, fixed them up (inside and out) and sold them. At the same time, she finished college at Cal State Fullerton with a Bachelor of Fine Arts and a minor in religious studies and worked as an insurance agent. Following many moves within Orange County, Jeannette moved to Phoenix where she worked in her brother’s chiropractic office and worked on a degree in computer technology. Finally able to put her education and love of design to work, she was hired as the art and design manager for a golf-related company. She even has patents on her designs for different parts of golf clubs, i.e. head, shaft, etc.

With her 25th home which is located in Camp Verde, Jeannette is now able to pursue all her interests. She enjoys designing and landscaping the house and 1-acre garden. Starting from scratch—the previous owners left willow sticks (now trees), pecan trees and lots of wheat, Bermuda grass and weeds—Jeannette has attached a drip system to the Verde ditch system, which often entails flushing out crawfish. She is replacing the Bermuda grass and wheat with decomposed granite and lots of perennials, 60 roses and a xeriscape experimental garden. Jeannette believes we need to implement more xeriscape landscapes because water is such an important resource.

When not working in her garden, designing landscapes for her neighbors or preparing for team teaching on Xeriscape plants at the Sedona Campus of Yavapai College, Jeannette can frequently be found in her art studio, where she might be working on an oil painting or her new passion—an art quilt. Her quilts are “paintings in fabric” and have won many awards. Jeannette is also a voracious reader and belongs to a book group that leads her to books she might not normally read. She has also been on the Camp Verde Library Advisory Committee and the Library Endowment Board and currently volunteers at the library. And she finds time to exercise regularly and vigorously and enjoy her two dogs and two cats. She and Larry also have a RV in which they visit many areas of Arizona and Utah.

Happily, Jeannette has brought her artistic talents and giving nature to the Master Gardener Association. I, for one, am grateful that gardening and volunteering are important to our current Vice President.
Is it just me or are the roses especially grand this year? Both at work and at home the plants seem to be covered with blooms. You might want to bring some of that beauty indoors with you. There are a variety of strategies that will improve the life of the flower. Thanks to the “Yavapai Rose Rambler,” from the Yavapai Rose Society for the following information:

Cut your roses in the morning before it gets hot or late afternoon, when the sugar has left the canes and is in the flower. Immediately submerge the stem and leaves up to the bloom in warm water (100 degrees). Leave flowers in this water until your vases are ready. Re-cut the stems under water just before placing the rose in its arrangement or vase. If the flower has sugar and a biocide in the vase, it will last longer. Sugar is food and a biocide keeps the bacteria level low. Bacteria plug up the tubes in the stem, starving the rose. Water that is more acid moves more easily up the stem so that is added, too. Some concoctions you can make from ingredients found in most homes already have sugar and a biocide. Some even have an acidifier.

* one part lemon-lime soda (not diet) to 3 parts of water; to each quart add 1/4 teaspoon of bleach.

* two tablespoons sugar, 1/2 teaspoon bleach in each quart of water.

* two ounces of Listerine mouth wash (regular flavor) in each gallon of water; Listerine has sucrose, a food, a bactericide and it is acid.

* a teaspoon of sugar and a couple of drops of bleach per vase

* one cube of sugar per pint of water and put a copper penny into the vase.

You can purchase packaged preservatives on-line or from a local florist. There is a difference between a preservative solution and a conditioning solution. A conditioning solution maximizes the water uptake of the cut flower and is used by exhibitors and florists to make the bloom more turgid (stiff) and substantial. It is usually used with refrigeration.

Chrysal Pro 1 (RVB) is used with Chrysal Clear Sachets. The Pro (RVB) is a hydrating solution. It makes the flower take in the maximum amount of water, keeping stems and petals turgid or stiff. This promotes “holding” and prevents “bent neck syndrome.” The Chrysal Clear product is a food for the flower in the vase, as stated on the label. Floralife has a product, Floralife Quick Dip, which hydrates the flower, preventing bent neck, plugged stems and wilting.

Spruce up a Trellis
from Garden Gate Magazine, April 2005

These days you can go into a place like Home Depot or Lowes or any hardware store and found ready-made lattice. It’s great for trellises but it’s a bit plain. To spruce it up and add your own touch to it is easy. Pick up a roll of copper tubing and create a work of art, not just a trellis.

The materials list is for the design in the picture. Feel free to make your own design.

Materials

1- 50 ft roll of 3/8 in outside diameter, bendable copper tubing cut into 8 lengths—(L to R in picture) 54 in., 83 in., 90 in., 89 in., 80 in., 71 in., 52 in., 34 in.

16 ft #14 copper wire for tendrils

1 6 ft by 3 ft wooden trellis
1 box of 1-in. #17 stainless steel nails
1/2 in diameter dowel
Weatherproof glue
Paint, primer, patina finish (optional)

Tools
paintbrush
tube cutter or hacksaw
scratch awl
wire cutter
hammer

Paint the trellis if you want. Natural is ok, too.

Forming the stems: Gently bend tubing into large curving stems with your hands. Take your time and gradually work them around into a curve. If you rush it, the pipe will kink and not bend. Filling the tube first with sand will help prevent kinking. If you use sand, just seal each end with tape. Bend all 8 pieces into the desired shapes.

If you want to patina the pipe, now is the time to do it. Metal patinas can be found at paint and some craft stores. Follow the directions on the bottle.

Attach the stems by laying the trellis on a firm surface. Lay out the stems first, settling on where you want each piece. Once you have the design in place, start with the tallest stem and punch a small hole in the place where the pipe crosses the wood lattice. Nail the pipe in place. Repeat until all the pipe is nailed down.

Tendrils can be added for a fun touch. Take a 2 foot piece of the copper wire and wind it snugly around the 1/2 inch dowel. Leave a tail at the end about 3 inches long. This is used to attach the tendril to the copper pipe. Slip the wire off the dowel and unwind one end so it flares open a bit. Stretch it out to make it looser and more natural looking. Position the tendrils near the tops of the stems where they will show best and simply twist them on. A drop or two of weatherproof glue will keep them in place.
For the second year Master Gardeners (MG), under the adept and inspiring leadership of Lynn Hazlewood, participated in set-up and selling activities for the Highlands Center for Natural History's Grow Native! Plant Sale and Educational Festival. With training early in April and 3 days of preparation the week of the sale, everything went smoothly on Saturday April 28. At the Highlands Center’s Lynx Creek site more than 3,000 plants were sold and the amphitheater was filled to standing-room-only when workshops were underway. Now the volunteers have to dig holes for all the natives they purchased (sometimes going back 3 times to purchase still more).

On April 5, Highlands Center (HC) Executive Director Nicole Trushell and HC Outreach Coordinator Cindy Scott addressed the what, where, when, who and how of the upcoming sale to about 20 MG and HC volunteers. They provided handouts that described how plants would be handled and how sales would be made. They finished the session with an informative and interesting slide show depicting and describing some of the plants available for the sale.

On April 24, a number of MG volunteers package wildflower seed. Finishing this task with great speed, these same volunteers grabbed rakes and prepared the plant display area for the upcoming delivery. Two days before the sale (April 26), MG and HC volunteers unloaded 3,600 plants from two large delivery trucks. Four hours later the perennials, grasses, succulents, shrubs and trees had been distributed in an orderly fashion around the sale site and identifying signs had been strategically placed. The day before the sale, volunteers made final preparations for the sale. Signs were hung, the amphitheater was cleaned, tables and chairs were placed at the entrance to and exit from the sale and other tasks were completed.

About 6:30 a.m. volunteers arrived to prepare for the expected crowds and they were not disappointed. MG volunteers helped at the entrance by explaining how customers could select, tag and transport plants to the exit. Volunteers were present to help with each stage of the sale and to provide information about specific plants. When checking out, customers met more MG volunteers who worked as cashiers or plant loaders. Master Gardeners also staffed a table in the James Learning Center from 7:30 a.m. to 2 p.m. In addition to all these activities, one MG volunteer held a workshop in the amphitheater—Bill Cart described how to prepare soil and plant natives and answered questions from an appreciative audience.

Thanks to excellent planning by the HC staff and the hard work of all the volunteers the second Grow Native! Plant Sale and Educational Festival was a success. Thanks to Lynn Hazelwood and MG volunteers, all Yavapai Master Gardeners can be proud of our participation in this important community event. The following MG’s frequently volunteered for more than one activity: John Hassell, Jinny Shugars, Jackie Rizzo, Wendy Spring, Rose Williams, Richard Wise, Anita Fleming, Lesley Alward, Pam Bowman, Diane Nault, Lois Slabe, Missy Sandeen, Angie Mazella, Cathy Michener, Bev Turnbull, Rebecca Banks, Marijke Schupack, Tana Bourdage Allman, Bobby Gooslin, Debbie Allen, Jay Fleishman, Herdis MacLellan, Sherry Howard, Kathy Grant, Eunice Rickleffs and Bill Cart.
From the Editor: Please send or email articles and announcements to the address below. All articles must be in my hands by the 10th of the month. Short announcements (no more than 2 or 3 lines) will be accepted until the 25th.

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Yavapai County Master Gardeners are responsible for the goodie bags at the October Highlands Garden Conference. Collecting the items needs to begin soon. Two to three MGs are needed. If you can help, please contact Beverly Emerson, bjemerson11@juno.com, 646-0379.

Hours Reminder
The fiscal year ends June 30th, so please submit your volunteer and continuing education hours. Any hours received after July 4th will not be counted when the recognition hours are calculated. Also, only those with “active” status as of June 30th can vote in the next MGA election. After you are certified (50 Vol hours) you need 25 Vol hours and 6 CE hours per fiscal year to maintain an “active” status.

Gourd Class: I am planning a gourd crafting class for MG sometime in July. It will be on a Sunday or Monday. Please let me know if you are interested and for which day. Call me at 928-567-6703 or email me at mesquite2@hotmail.com for your preference and further information.
Nora Graf

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**2007 Calendar of Events for Master Gardeners**

**June 16, Annual Arboretum Field Trip, Sign up by contacting Patti Conrad (in the evening) at 778-4810**

June 20, 6:30 (Cottonwood) MGA meeting, Cacti and Other Succulents for the Arizona Central Highlands—Gene Twaronite, Defensible Space Education Specialist for the Cooperative Extension

Don’t forget!

**July 28, MGA Field Trip, Sculpture Garden at Yavapai College plus a Master Gardener Garden Tour (for information email Missy Sandeen at rmsandeem@bullerinetworks.com)**

August 15, 6:30 (Cottonwood) MGA meeting, Horticultural Techniques for Plants in Higher Elevations -- Steve Yoder, Executive Director, The Arboretum at Flagstaff

August 25, V Bar V Ranch Field Day, Call Cottonwood office for more information

September 15, (Prescott) Recognition Awards & Picnic

September 20-23, Yavapai County Fair

October 11/12, Highland Garden Conference, Apache Gold Casino, San Carlos

October 17, 6:30 (Prescott) MGA meeting, Insect Identification--William Currie, Entomologist from Ash Fork

November 14, 6:30 (Cottonwood) MGA meeting, Elections, Flora and Fauna in the Verde Valley--Janie Agyagos, District Wildlife Biologist, Red Rock Ranger District, Sedona and Master Gardener

**Highlands Garden Conference**

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For Rose enthusiasts: the Yavapai Rose Society will have a table at the Yavapai College Sculpture Garden, Prescott, event June 9. The YRS will accept rose entries from the public from 10:00 AM to 2:00 PM to compete for prizes for two of the best rose entries. The public will be the Judges. Call 771-9300 for information.

MG Association Meeting
June 20, 6:30 Cottonwood
Cacti and Other Succulents for the Arizona Central Highlands,
Gene Twaronite, Defensible Space Education Specialist for the Cooperative Extension