

News & Notes of the UCSC Farm & Garden

Issue 104, Winter 2005

UNEARTHING THE BEST SEED FOR ORGANIC GARDENS

– Deborah K. Rich

Finding seed that will behave in your garden takes a little digging, and you'll keep better company if you can resist the lure of a variety's description until you inquire about its upbringing. Plants perform best in environments similar to those they have been bred, tested and produced in; which means if you grow organically, you need to find a seed supplier who at least has an organic test-farm, if not an organic breeding and seed production program, located near your own patch of earth.

Whether a variety is an heirloom, a hybrid or is open-pollinated gives you little indication of how well it will perform. The term "heirloom" can mean anything the catalog wants it to. Heirloom might indicate that the variety has been handed down for several generations within a family and never before commercialized or is 100 years old whether previously commercialized or not, or is no longer sold by mainstream seed companies. Usually an heirloom is an open-pollinated variety rather than a hybrid variety, but even this differentiation doesn't hold across catalogs.

While hybrids and open-pollinated varieties do differ fundamentally from each other, when seeking top performance, be open to both if their backgrounds have adapted them to your environment.

Because the second (and likely the third, fourth and fifth) generation of open-pollinated seed reproduces "true," growers who have the time and the knowledge to save seed may prefer to do so, not only for financial and philosophical considerations but also to slowly pressure the genetics of the variety to adapt to the growers' particular microclimates.

Hybrid seed, on the other hand, segregates in the second generation, producing a mix of offspring, many that will differ significantly from one or both parents. However, both hybrids and open-pollinated varieties can give equal first-year performances in the environments they were bred for.

Rather than asking about a variety's classification, ask where it was bred and selected, by whom and on what type of ground.

Ideally, all varieties purchased will have undergone at least three years of selection in an organic nursery; however, formal selection programs to craft germplasm for organic growers are few and far between. If you don't have a seed supplier with a breeding program, at least weed out the companies who only give lip service to organic growers by asking about their test farm. Make sure they have one, and that the farm is on certified organic ground.

"Look to see if the company talks about their own trial work in their catalog and on their Web site. The ones who are really doing the work tend to talk a lot about it and like to tell that side of the story," says Tom Johns who, with his wife Julie, runs Territorial Seeds.

Try to purchase seed that has been produced organically for several generations. Regardless of whether the variety was originally developed in an organic nursery, producing the seed year in and year out on organic ground subjects the variety to the stresses of the organic growing environment and will help to shift its genetic makeup in favor of organic growing regimes.

"We use organic growers to produce our seed and all our varieties have been through several generations of growing on organic farms. The genetics of the varieties have changed just through natural selection and native intelligence; not sophisticated plant breeding, perhaps, but basic improvement and the weeding out of weak seedlings," says Steve Peters, Commercial Seed Manager for Seeds of Change, purveyors of organic seeds, seedlings and foods since 1989.

Double-check the location of the test farm, the closer to you the better, and if not in your neighborhood, then at least in the same region of the country, or in a region that is geographically and climatically similar to your own. Ask about the length of their growing season, their average daytime and nighttime temperatures, and the diseases they encounter, and know about your own conditions for comparison.

Finally, if your crop is your livelihood, don't hesitate to ask to speak to the company's seed production manager or breeder. Nobody will know the strengths and limitations of the company's varieties as well.

Sources for Seeds

The following seed suppliers test their varieties every year on certified organic test farms and offer organically produced seed for all or some of their varieties. In addition, several of the companies have their own plant selection and breeding programs.

Abundant Life Seeds

www.abundantlifeseeds.com, (541) 767-9606 (*Note:* Territorial Seeds recently purchased Abundant Life Seeds and is maintaining and expanding the Abundant Life collection of organically grown seed)

Cooks Garden Seeds

www.cooksgarden.com, (800) 457-9703

High Mowing Seeds www.highmowingseeds.com, (802) 888-1800

Johnny's Selected Seeds www.johnnyseeds.com, (800) 879-2258

NC+ Organics www.ncorganics.com, (800) 279-7999

Renee's Garden Seeds

www.reneesgarden.com, (831) 335-7228

Seeds of Change www.seedsofchange.com, (888) 762-7333

Territorial Seeds www.territorialseed.com, (541) 942-9547

Wild Garden Seed

www.wildgardenseed.com, (541) 929-4068

Deborah K. Rich is a Monterey writer and olive grower; she has kindly given permission to reprint this article, which originally appeared in the Home & Garden section of the San Francisco Chronicle.

To read more of Deborah's writing on heirloom seeds and organic growers, see her article at www.organicconsumers. org/organic/heirloom090204.cfm

Dibs & Dibbles

Harvest: A Year in the Life of an Organic Farm Nicola Smith, with photos by Geoff Hansen Lyons Press, 2004

If you'd like to get an unromantic, unvarnished glimpse into the intimate, day-to-day operation of one small, organic farm in Vermont, this is the book for you. Lavishly illustrated, *Harvest* brings both the pain and pleasure of living off the land to life in this account of a year at 20-acre Fat Rooster Farm and the couple who are trying to make a go of it while raising their young son.

Second Nature Michael Pollan Grove Press, 2003

This inexpensive paperback reissue of the 1991 classic is well worth adding to your gardening bookshelf. A collection of wry and entertaining essays that unearths some truths to puzzle over about nature vs. horticulture, they were inspired by the author's struggles to establish a "natural" garden amidst weeds and woodchucks.

Also check out *The Botany of Desire: A Plant's-Eye View of the World,* Pollan's 2001 book, that explores how the relationships between humans and domesticated plants—specifically, the apple, the tulip, the potato, and marijuana—have evolved.

Start tomato seeds this month for planting outdoors in March and April. While you're at it, try sowing mâche seeds in containers or directly into the ground now. A cool-season annual (*Valerianella locusta*), it takes up to 60 days to mature into a sweet, nutty tasting rosette of juicy leaves that makes a great salad. French farmers began cultivating it in the 17th century from the weedy plants that grew up among cereal grains like corn, wheat, or rye. It's also known as corn salad or lamb's lettuce. Dress simply with a little vinegar, olive oil, salt and pepper, and a few cherry tomatoes with chopped green onion or shallot and hard-boiled egg.

Want to know more about what all those labels on your food, household, and body care products mean? Consumers Union has developed a web site that describes and "fact checks" various eco-labels and general claims, such as organic, natural, free range, non-toxic, or cruelty free. The site currently describes over 130 labels and claims, and provides a "report card" for each that gives you a sense of how meaningful the label is. You can search the site by label, product (food, household cleaners, personal hygiene, wood/paper), or certifier. To learn more, see www.eco-labels.org.

late Winter/early Spring Calendar

CSA Tour, Dinner, & Movie at the Farm

Wednesday, March 9th, UCSC Farm

Come learn about the UCSC Farm and our Community Supported Agriculture (CSA) program, share a potluck dinner, and check out a great movie about one farmer's CSA success story. See schedule and details on next page.

Seed Starting and Spring Garden Preparation

Saturday, March 26, 10 am - 1 pm Louise Cain Gatehous, UCSC Farm

Garden manager Christof Bernau will share ideas on getting your spring and summer garden off to a good start. Tips on starting seeds, transplanting seedlings, selecting varieties, preparing garden beds, and much more at this lecture/demonstration workshop. Dress to be outside; heavy rain cancels. \$10 for Friends' members; \$15 for non-members, payable the day of the workshop.

Apprentice Reception

Friday, April 22, 5 pm - 7 pm UCSC Farm

Join us in welcoming the class of 2005 apprentices to the UCSC Farm & Garden as they begin their six-month training course. Light refreshments will be served. Please RSVP to 459-3240, jonitann@ucsc.edu.

Introduction to Bee Keeping

Saturday, April 23, 10 am - 1 pm Louise Cain Gatehouse, UCSC Farm

Join beekeeper Albie Miles to learn about honey bee natural history and bee keeping. This is a great introductory workshop for those thinking about getting into bee keeping, or for those who want to know more about these fascinating creatures. It's also an opportunity to brush up on your bee keeping skills. \$5–\$10 for Friends' members (sliding scale); \$15 for non-members, payable at the workshop. Dress for the outdoors. Heavy rain cancels.

Growing and Using Medicinal Herbs from the Garden

Saturday, April 23, 10 am - 1 pm Louise Cain Gatehouse, UCSC Farm

Learn about the abundance of herbs growing in local gardens. Darren Huckle, a Western/Chinese herbalist and licensed acupuncturist, will teach you about sources of medicinal plants, how to use garden herbs for health and wellness, and how to prepare planting beds and harvest herbs. \$15 for Friends' members; \$20 for non-members, payable the day of the workshop.

Spring Plant Sale

Saturday, April 30 and Sunday, May 1, 10 am - 2 pm Barn Theatre Parking Lot, UC Santa Cruz (corner of Bay & High Streets, Santa Cruz)

Friends of the Farm & Garden members will have pre-entry priority from 9 am – 10 am on Saturday

The biggest and best collection of organically grown flower, herb and vegetable starts, perennials, grasses, and other landscape plants available in the region. Proceeds support the Farm & Garden Apprenticeship training program. Friends' members receive a 10% discount on purchases. Memberships and renewals are available the morning of the sale, beginning at 8:30 am.

Also coming up ...

The San Francisco Flower & Garden Show

March 16–20 Cow Palace, South San Francisco

This year's garden show theme is "Where Gardens Meet Art." See six acres of demonstration gardens and attend a variety of gardening workshops and seminars. Purchase tickets at www.gardenshow.com or 800.569-2832, or from Far West Nurseries or The Garden Company in Santa Cruz.

If you'd like more information about these events, need directions, or have questions about access, please call 831.459-3240 or see our web site, www.ucsc.edu/casfs. Please note that we cannot accept credit card payments for classes (cash or check only).

Co-sponsored by the Center for Agroecology & Sustainable Food Systems at UC Santa Cruz, and the Friends of the UCSC Farm & Garden.

ANNUAL MEETING REPORT

Members of the Friends of the UCSC Farm & Garden gathered to enjoy dinner and an oceanside sunset at the La Feliz Room of Long Marine Lab's Seymour Center. The evening included a review of the past year's Friends' activities, a look ahead to what's coming up this year, goals for the Board of Directors, and approval of the new slate of officers. Jeffrey Caspary will serve as Friends' president for 2004–2005. He replaces Laura Ridenour, who will remain a Board member. Many thanks to Laura for all her hard work this year, and for taking the lead on Board development issues.

Other officers for the 2004–2005 term are Trish Hildinger (vice president), Susan Ford (treasurer), and Fran Grayson (secretary).

The evening also included stories by Friends' Board member Kurt Christiansen, who shared tales from his days as an apprentice in the early 1980s. Apprenticeship coordinator Diane Nichols spoke about the status of the apprenticeship program and highlights from the past year's training. Thanks to Peggy and Phil Crews, owners of Pelican Ranch Winery, and to Kelly's Bakery for their donations; and to the Seymour Center for the use of the La Feliz Room.

New Publications Available

This winter the Center for Agroecology and Sustainable Food Systems published a new training manual, *Teaching Direct Marketing and Small Farm Viability: Resources for Instructors.* It focuses on teaching the skills involved in making a small- to medium-scale farm or market garden economically successful, with chapters on Community Supported Agriculture and other direct marketing options, as well as information on small farm business planning, land tenure options, and small farm viability.

Our first training manual, *Teaching Organic Farming and Gardening: Resources for Instructors* continues to receive widespread interest and praise. Both publications can be downloaded for free from the Center's web site (www.ucsc.edu/casfs). They can also be ordered from the Center; contact jonitann@ucsc.edu, or 831.459-3240 for ordering information.

Also available from the Center is the Friends of the Farm & Garden's newest cookbook, *Fresh from the Farm & Garden – Seasonal Recipes for Busy Cooks.* Spearheaded by Friends' Board member Sue Tarjan, this new cookbook brings together recipes that will help you make the most of fresh, seasonal produce. Order your copy for \$20 by sending a check made payable to UC Regents to: Friends of the Farm & Garden, 1156 High St., Santa Cruz, CA 95064, or call 831.459-3240 for more information.

Sign Up Now for the 2005 Community Supported Agriculture Season!

Sign up now to guarantee your CSA share

By becoming a shareholder in the Farm & Garden CSA you'll receive a box of fresh-picked, organically grown produce each week while supporting the Apprenticeship training program.

Shares cost \$600 for a full share (feeds 4 people) or \$380 for a half-share (feeds 2–3 people). Payment can be in full or divided into two or four installments. There are also shares available for low-income households at half the cost of a regular share. Members pick up their share boxes weekly (either Tuesday or Friday) at the CSA Barn located next to the shareholders' pick-yourown herb and flower garden.

Members can also look forward to weekly newsletters with recipes, farm updates, and events; complimentary membership to the *Friends of the Farm & Garden* for one year; a 10% discount on plants and merchandise at our bi-annual plant sales; and quarterly issues of the *News & Notes*.

To learn more about the Farm's CSA program, join us on Wednesday, March 9 at the UCSC Farm.

4:00 Farm Tour, meet at the Farm Center

5:30 Potluck dinner

7:00 Film: "The Real Dirt on Farmer John"

Come visit the farm fields where your produce is grown, meet CSA members, enjoy a walk around the farm, a meal in the Farm Center, and a film on farming and CSA (see below). Please bring your friends, favorite dish, dessert, or beverage and join in the fun. Call 459-4661 for directions and/or more info, or to RSVP.

The film, "The Real Dirt on Farmer John" is an epic tale of a maverick Midwestern farmer, John Peterson. Castigated as a pariah in his community, Farmer John bravely transforms his farm amidst a failing economy, vicious rumors, and arson. He succeeds in creating a bastion of free expression and a revolutionary form of agriculture in rural America. Angelic Organics is now one of the largest Community Supported Agriculture farms in the country, growing organic produce for over 1200 households. This film is guaranteed to make you laugh and cry.

If you would like to receive our CSA Brochure and Pledge Form or have any questions

regarding the CSA program, please contact Nancy Vail at 831.459-4661 or email navail@ucsc.edu.



Peaches and Nectarines – Growing Tips and Varietal Descriptions

Peaches (*Prunus persica*) and nectarines (*P. persica* var. *nectarina*) hail from northwestern China (Xian—also home to the exquisite garlic variety of the same name). The specific name *persica* is a misnomer, probably attributed to its spread via trade caravans from China into Iraq and Iran and eventually to Europe. The fruit came to the Americas (Mexico and Florida) with the Spanish explorers in the 16th century on their conquering expeditions. It was then spread across the U.S. by Native Americans.

Peaches are the shortest-lived of all deciduous fruit trees, with an average life expectancy of only 20–40 years (apples and pears live > 80–100 years). Because the genetics of the peach are much less variable than any other fruit, the trees of almost every seedling bear edible fruit. There are also more cultivars (varieties) of peaches than any other fruit owing to the ease of obtaining quality seedlings from peach crosses.

Peaches and nectarines can be grouped into two basic flesh types — clingstone and freestone. Clingstones exhibit a firm-textured flesh that cannot be pulled off the stone (pit) and must be cut away with a knife. Because they hold their shape when cut or sliced, they are the logical candidates for canning, drying, or being used fresh, halved or sliced. Freestones are softer- fleshed varieties with higher juice content, and separate easily from the pit. They lend themselves to fresh eating.

Additionally, peach tastes can be linked to flesh color and "old school" vs. "new school" varieties. Old school varieties don't color evenly or have as bright a sheen to their skin. They have a more balanced sugar/acid ratio contributing to a fuller old-timey peach flavor. They have a very limited shelf life, must be tree ripened to have full flavor, and bruise easily, giving rise to that old farmers' market adage, "Real peaches don't stack."

Cultivation and Growing Tips

The peach is a vigorous (5–8 feet of extension growth) upright grower in the early years after planting. As it matures the tree's habit morphs to a more naturally spreading form with moderate to weak vigor. Peach leaves cast dense shade, so it is important to train trees to allow sunlight to penetrate into the center of the tree. Remember, sunlight translates to color and emphatically to high sugar content.

The largest, best quality peaches are produced on lateral one-year-old branches that hang on young, actively growing main scaffold branches (3–5 years old). With peaches, what you grew last year is what you're eating this year. That is to say that a lateral branch will grow one year and simultaneously produce and express fruit buds. In year two these branches bear fruit. They should be shortened to 12–18 inches long and fruit should be thinned to 6–8 inches apart. Because peach fruit buds contain only a solitary flower, they set a single fruit and unlike apples don't need cluster thinning. Proper thinning equals proper size and is especially critical on small-fruited varieties like Saturn types, Baby Crawford, and all nectarines (which tend to be smaller than peaches). In the third year, the lateral shoot will die out (or start to) and not bear any fruit. Or it will grow new wood that bears the following year that is too far away from the main branch for either good mechanical support or continued flow of nutrients for size and taste.

In any given winter pruning session, approximately one-half the laterals should be stubbed to 1-3 buds or 1–3 inches to renew growth and bear the following year. Similarly, after laterals have fruited they should be stubbed back to renew the cycle. Since new growth is prioritized on peaches and nectarines, primary branches are pruned hard annually in the winter to encourage good extension growth and the induction of laterals. As a result, it is not unusual to prune 40–60% of the previous year's total growth off a peach or nectarine (in contrast, pome fruits are pruned by 20–25% annually). Additionally the primary scaffold branches on an (open center) peach are completely renewed by stubbing them to their base every 5–7 years. This re-scaffolding is best achieved incrementally over a 3–5 year period. More markedly than with pome fruits, peaches slow down and lose vegetative vigor with age.

Almost all peach/nectarine varieties are self fruitful, that is they accept pollen from their own flowers and do not need pollen from another variety to set fruit. Notable exceptions are Elberta types and Hale cultivars.

Peach leaf curl (*Taphrina deformans*) is a leaf fungus that afflicts almost all peach and nectarine varieties in almost all growing regions. It is especially devastating in cool, coastal climates where trees can be completely defoliated in June during a bad year. Peach leaf curl infects the leaves and young shoots. It causes distorted, reddened, puckererd foliage and when severe can radically reduce annual production and deinvigorate the tree over the long term.

As with most pest and disease populations, the aim in controlling peach leaf curl is to aggressively prevent high spore pressure. It is difficult to work backward from high pressure to good control organically. The prescription for peach leaf curl is three annual sprays with copper or sulphur products. An easy-to-remember schedule aligns with three big American holidays, Thanksgiving (leaf drop), Christmas (full dormancy) and of course the Super Bowl (Feb. 1 — bud swell). Resistant peach varieties (and they are effectively resistant) include: Frost, Avalon Pride, Mary Jane and Q1-8. Extremely susceptible but great tasting ("aye, there's the rub") varieties include Babcock, Elberta, and the Saturn types.

Rootstocks

Compared to pome fruits, rootstock options are more limited with stone fruits. There are no truly dwarf (size controlling) stocks—the only choices are full-size and semi*continued on next page* dwarf. The principle attributes imparted to fruit trees via rootstocks are size control, disease/pest resistance, and fruiting efficiency (see chart, below).

Size Control — Full-size or standard stocks produce vigorous vegetative growth (especially in the early years). Trees on these stocks will top out at 20–30 feet tall. Semi-dwarfing stocks reduce tree size (15–20 feet).

Pest, Disease Resistance — The main issue with stone fruits is root susceptibility to nematodes (*Pratylenchus* spp.), which are multicellular, microscopic non-segmented roundworms. Nematodes sap tree roots of nutrients, reduce vigor, and lower fruit productivity. The rootstocks Nemaguard and Nemared impart resistance.

Fruiting Efficiency — Although not as dramatic as with pome fruits (apples and pears), stone fruit dwarfing root-stocks promote greater fruit production per area of tree canopy. The mechanisms for this are not fully understood, but the result is demonstrable.

Peach Varieties

Older ("old school") peach varieties need to be carried to full maturation on the tree. They are ripe when the background color has no tinge of green and is expressing full yellow or white coloring. The foreground color of red and/or golden yellow may be more a function of varietal characteristics than ripeness. Tree-ripe peaches that have achieved full sweetness should be extremely, sublimely aromatic and yield slightly to the touch.

Varieties of note (in order of ripening) –

- Babcock and Giant Babcock—Medium and large fruit, skin mostly red. White flesh, sweet, juicy. Consistently heavy yields.
- Avalon Pride—Found seedling in Washington State. High flavor, yellow flesh, semi-freestone. Extremely resistant to peach-leaf curl.
- Red Haven and Early Red Haven—The standard for assessing all early season varieties. Firm yellow flesh, pleasing smooth texture, red/golden skin. Good fresh eating and canning.
- Saturn and Sweet Bagel—Shaped like a doughnut, melting sugary flesh, small fruit. Not particularly resistant to plain leaf curl. Sweet Bagel fruit is bigger and yellow fleshed.
- Loring—Large yellow fruit with a striking red blush. High flavor, good eating quality, also for canning.
- Suncrest—The classic California peach as lauded in the book *Epitaph for a Peach*, by David Masumoto. Large, round fruit, highly aromatic, flavorful balance between acid and sugar — "old timey" flavor. Skin is 2/3 red, 1/3 yellow, colors unevenly, bruises easily.
- Elberta, Fay Elberta, Late Elberta—Firm yellow fruit with golden hue and red blush. For over 80 years a standard bearer. Sweet and holds reasonably well off the tree.
- Rio Oso Gem—Heavy bearer of large, firm freestone fruit. Red skin, great taste, late maturation. Small tree. One of the best-tasting varieties ever.

"New school" peach varieties all equal or surpass the superlatives good, better, best. These varieties break all (almost all) the rules—they ripen before background color comes up, can be picked firm and will have high sugar content, and can be refrigerated and shipped long distances. They are more about sugar than traditional peach flavor — good though.

Varieties of note –

Arctic Supreme—White flesh, low fuzz, light sweet flavor even when firm. Red over creamy white skin, freestone.

Starfire Freestone—Staggered ripening over 2–3 weeks. Rich flavor, yellow flesh. Good in cool summer areas.

White Lady—Low acid, high sugar, melting flesh (white). Medium to large red-skinned fruit, firm flesh, freestone.

> – Orin Martin Manager, Alan Chadwick Garden

Rootstock Type	Tree Height	Characteristics/ Features/Species
Nemaguard	15–25 feet	Best on well-drained and sandy soils. Imparts effective resistance to nematodes for peaches, nectarines, apricots, plums, and almonds.
Lovell	15–25 feet	Somewhat susceptible to nematodes, especially on sandy soils. Cold tolerant, toler- ant of poorly drained soils. Usually propagate from seeds of old canning variety Lovell. For peaches, nectarines, apri- cots, plums, and almonds.
Citation	12–18 feet	Induces early fruiting. For peaches, nectarines, plums.
PumiSelect	10–12 feet	Produces somewhat vegeta- tively weak 10–12 foot tree. Trees are precocious but often lose vegetative vigor at bear- ing maturity, leading to reduc- tion in fruit size and quality. Good for backyard situations. For peaches, nectarines, and plums.
St. Julien A	10–15 feet	Good in cold weather areas with inconsistent spring weather. For all stone fruits.
Pixie	10–15 feet	Similar to St. Julien A. For all stone fruits.
Marianna 2624	15–20 feet	Resistant to nematodes and oak-root fungus. Good for plums, apricots, and most almonds. Incompatible with peaches.
Myrobalan	20–30 feet	Produces vigorous trees!



Apprentice News from Eco-Farm Conference

This January many former apprentices came to the Ecological Farming Conference in Pacific Grove, California, and at least eighteen of them were conference presenters or moderators, including Degge Hays, Stephen Decater, Brian McElroy, Guillermo Vasquez, David Beller, Jasmine Roohani, Kirsten Roehler, Laura Ridenour, Joe Shirmer, Damian Parr, Laura Tourte, Ken Dickerson, Laura Smith, Kate Stafford, Ken Foster, Tom Broz, Nancy Vail, and Albie Miles.

Below are some updates on Apprenticeship alumni who attended the conference or information we gleaned from others at the conference, featuring new jobs or work that is new-to-us (some of the alumni above and others at the conference have been featured in past *News & Notes*).

. **Celia Barss (**2002) is co-manager for Woodland Gardens in Athens, Georgia, a five-acre mixed vegetable operation with year-round growing under hoophouses and year-round marketing to restaurants and farmers markets.

. **Mallory Jenkins** (2002) is the farm manager for the Virgin Island Sustainable Farm Institute, a 140-acre training center located near Fredrickstad in the U.S. Virgin Islands.

. **Steve Schuerell** (1993) has accepted a faculty position teaching ecological agriculture at Evergreen State University in Olympia, Washington.

. John Iott (1998–1999) is the farm manager at the Center for Land Based Learning in Winters, California, which operates the FARMS Leadership Program for high school students statewide.

. Guillermo Vasquez (1999) is the director of Indigenous Permaculture, a San Francisco-based organization of Meso-American and South American Indian people offering traditional indigenous methods of land stewardship to encourage community food security and ecosystem rejuvenation.

. Erika Kempter (1997) has an organic landscaping business and teaches a 10-week organic gardening course at Washtenay Community College in Ann Arbor, Michigan.

. **Colby Eiermann** (1999) is the garden manager at the five-acre organic demonstration garden for Copia

Center for Wine, Food, and the Arts located in Napa, California.

. **Amanda Rieux** (1998) is starting a school garden project in Hawaii called Ambrosia, the Edible Gardens of Waimae Middle School.

. **Jasmine Roohani** (2002–2003) and **Kirsten Roehler** (2002) run Everett and Daughter's Farm in Soquel, California.

. **Kat Goodwin** (2002) is the greenhouse and garden manager for McEvoy Ranch, an organic olive orchard, farm, and garden in Marin County, California.

. Laura Smith (2003) works for Elkhorn Slough Nursery and for the Wild Farm Alliance in Watsonville, California.

The 2004 Apprenticeship Graduates at Work

The 2004 class of apprentices graduated on October 15th. Here are some examples of how they are already putting their training to work.

. **Aaron Blythe** is a field manager at Harmony Valley Farm in Viroqua, Wisconsin, a very successful 75-acre organic mixed crop operation focusing on direct marketing through CSA, farmers' markets, and restaurant sales.

. **Shayna Bailey** is the CSA Manager for a nonprofit 100-member CSA farm run in conjunction with the University of Georgia's Center for Restorative Ecology in Athens, GA (see next page).

. **Emelia Addi** has returned to her farm in Ghana where she plans to strengthen the farm training program she started for single mothers and other farmers.

. **Ratoya Pilgrim** is gardening on two 3.5 acre plots in St. Lucia, where she reports an unusual amount of rain in what is supposted to be the dry season.

. **Thomas Lee** has been offered a job with the Food Project, an urban youth job training program based at a farm and two garden sites in Boston.

. **Joy Msomi** has returned to her farm in South Africa with plans to do training and food projects with different communities in the KZN province.

. **Allegra Foley** is starting a CSA farm with her father on family land in Maryland.

. **Erin Justus** is working with Ella Bella Farm in Corralitos, California, organizing farmers' markets and doing greenhouse management.

. **Teresa Kurtak** works for the Ecological Farming Association in Watsonville, California.

. Darryl Wong, Adam Wilson, Laura Williams, Doron Comerchero, Nathan Frigard, Jennifer James, Chris Siegriest, and Kate Posey are second-year apprentices receiving advanced training and work experience at the CASFS Farm & Gardeb, preparing to be assistant instructors for the 2005 Apprenticeship Program.

2004 Apprentice Heads South to Run CSA

Shayna Bailey has returned to the Southeast as CSA Manager of Full Moon Cooperative in Athens, Georgia. Full Moon Cooperative is a non-profit CSA with 100 members from Athens and Atlanta, and offers standard organic produce shares, egg shares from the farm's chickens, and coffee shares from an Ecuadorian cooperative.

Currently, the CSA has 3+ acres in mixed vegetable and flower production, with plans to expand to 10 acres in the future. The farm is protected by a conservation use easement, restricting the use of the land to agriculture and forestry.

The farm operates in collaboration with the University of Georgia's renowned Institute of Ecology to combine pioneering research, educational programs, and local public outreach. Full Moon Cooperative and the University's Agroecology Laboratory work together to create a highly integrated, multidisciplinary and adaptive model for ecosystem management of an organic farm. The partnership is dedicated to researching and promoting ecologically sound and socially responsible agriculture by bringing together the fruits of university research and the commercial accountability of community supported farming. The farm has served as one of the field sites for the Center for Sub-Tropical Agroforestry to examine the feasibility of alleycropping and no-till planting in organic systems.

Yummy Winter Salad

1/4 cup pecan, halves

1/4 cup maple syrup

1 cup raw beet, peeled, coarsely grated

1 cup Fuji apple (or any other hard apple), peeled, cored, grated

1 cup fennel bulb, trimmed, grated

1/2 cup fresh mint, stem removed, chopped

1/4 teaspoon salt

1/4 teaspoon freshly ground black pepper

2 to 3 tablespoons olive oil

1 tablespoon balsamic or apple cider vinegar

4 ounces blue cheese, crumbled (optional)

Preheat oven to 350 degrees. Pour maple syrup into a small bowl. Toss nuts in syrup and remove with a slotted spoon. Bake on aluminum foil or a cookie sheet for approximately 10 minutes or until nuts are roasted and syrup hardens.

In a large bowl, combine beet, apple, fennel, mint, salt, and pepper. Toss. Add oil and vinegar, cheese, and nuts. Toss again and serve immediately.

Serves four.

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