

NEWS & NOTES

*of the UCSC FARM
and GARDEN*



Issue 56 June 1992

Jeff Arnett, Beth Benjamin & Mary Offermann, Editors

MEDICINAL PLANTS

Sunday June 21, 1992, 12 noon - 2 pm
Louise Cain Gatehouse, UCSC Farm

Celebrate the summer solstice by broadening your knowledge of the plant world. There are friendly plants that we call weeds that are growing quietly around us, ready to help when we ask them nicely. Did you know about plantain for bee stings? Calendula for sunburn? Mullein for sore throats? Join us at the farm to learn about these and many more "weeds", medicinal herbs, and flowers.

ANNUAL MEETING OF THE FRIENDS OF THE UCSC FARM & GARDEN

Sunday July 26, 1992, 2:00 pm
Louise Cain Gatehouse, UCSC Farm

This is the weekend (July 24-26) of the Roots and Shoots Reunion and Anniversary Celebration. Ex-apprentices, staff, and old and new friends of the Farm, Garden, and the Agroecology Program will meet to trace the past, describe the present, and dream the future. We will hold our annual membership meeting right in the middle of it.

If you would like to join the Celebration for lunch and the annual meeting only, please RSVP to Megan Haney at 408-459-3729, and come to the Farm at about 12:30. If you register to attend the entire symposium for both or only one day, lunch will be included. Join us at 2:00 pm at the Gatehouse to meet and ratify the new Board Members and tend to the business of the day.

Please plan to attend the reunion and celebration. We want to honor and display all the ways in which Alan's garden has inspired the hundreds of people who worked with him there and in the many projects that arose from his teaching. The presentations and festivities will be most enjoyable. If you have not received a registration brochure in the mail by now, call Megan at 459-3729.

If you are interested in helping in any way, and we have many areas in which we need help, please contact Megan Haney at 459-3729 and she will direct you to the right committee. Can you offer a bed to a visitor from out of town? Would you like to help prepare the banquet? Have you been painting flowers on your visits to the Farm that you'd like to display at the art show? Do you have a business that could employ former apprentices that you could advertise at the Job Fair? Were you once an apprentice and are now selling garden-inspired products that you'd like to display at the marketplace? Let us know as soon as possible so we can include you in our plans!

Docent Led Tours of the Farm
Thursdays at Noon
Sundays at 2 PM
Children's tours Friday Mornings

Observer's Notes From The Spring Plant Sale

Several hundred avid plant aficionados denuded the herbs, perennials and shrubs offered at the latest incarnation of the sometimes annual plant sale. Inspired by the mindful ministrations of Megan Haney and the well-rooted guidance of Orin Martin and Mark Sammons, the base of the UCSC campus took on a decidedly green hue, as did the coffers of the Farm & Garden apprenticeship produce account. In fact, a fresh crop of apprentices blossomed in close proximity to the less essential greens on sale; these recently-transplanted students of many hues greeted the throngs of F & G followers as they descended on the assembled greenery with the beatific smiles of the converted. Humulus and hoe rakes to all! (Even as Megan, Orin, Mark, et al are recovering, rumors have been planted of a Summer plant sale for the fall garden. You read it here first).

Viva Vermicomposting!

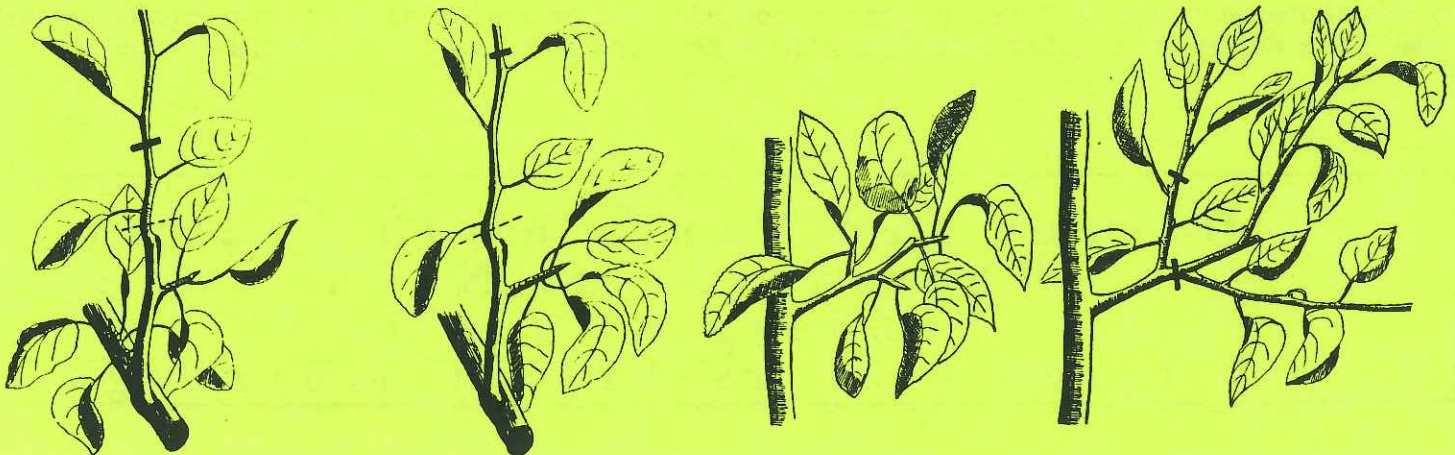
Ann Lindsey, vivacious and vermily grounded, regaled a cadre of two dozen committed composters with nitrogenous yet carboniferous tales of the wormy wonders awaiting them. With the April showers veiling the Louise Cain Gatehouse (reminding us inside of May bowers), Ann charted us through the charms of the well-composed compost pile, moving deftly into the deeper mysteries of the vermi-and-squirmi-compost orchestrations. The secret appears to turn around the right worms. Ann possesses some of the right stuff, as it were, and may be contacted for insider trading, vermily, vermily. You had to be there.

SUMMER PRUNING

For many gardeners, pruning deciduous fruits like apples and pears is thought of as an operation strictly limited to the winter months when the trees are in dormancy. Pruning during the growing season has an important advantage over winter pruning, since in dormancy one can only guess how a particular bud will grow and in the summer the developing shoot is right there. Although dormant season pruning is still important in developing a fruit tree's basic shape, adopting a program of summer pruning allows the gardener greater control over the fruiting wood and indeed is essential for any one wishing to use intensive training systems such as cordons and espaliers.

Summer pruning practices got their start in the extensive gardens of the European continent, where limitations on available land for the production of crops gave impetus to the development of techniques for maximizing production in a small area, a situation analogous to that of the modern home gardener. Trees were placed against walls and along fences and the task of keeping them within these narrow bounds necessitated pruning while the trees were growing. It didn't take long for gardeners to notice that in certain cases where shoots were shortened to a few leaves; instead of producing another shoot, a swollen bud formed which gave rise to a flower cluster the following year. The advantages associated with this were immediately evident: more fruit! and a consequent reduction in unwanted leafy growth making it easier to keep the trees in bounds.

Decades of observation and experimentation were brought to their culmination early in this century with the work of Louis Lorette, professor at the Practical School of Agriculture at Wagnonville, who articulated numerous systems of training for apples and pears, and also helped to train the young Alan Chadwick. Lorette's lifetime spent studying and manipulating the growth of trees allowed him a precise control over all aspects of tree growth from the placement of scaffold branches to the number and position of fruit buds. Such control entailed equally precise manipulations. At its most extreme, even individual leaves were pruned to induce a particular response. Most of us lack the time (and inclination!) for such an operation, and fortunately for most practical purposes, we can make use of a few simple aspects of Lorette's work to optimize the growth and productivity of our fruit trees.



Lorette's system of summer pruning in its strictest form did away with dormant pruning completely; instead the growth of the trees is directed by pinching back shoots early in the growing season. Subsequent multiple prunings during the summer are used to enhance the development of fruit buds on short laterals along the main stems. In this way an astonishing number of flowers is produced, turning the entire structural framework of the tree into bearing wood. There is an added advantage in that most of the fruit is grown close to a large diameter branch ensuring a good supply of water and nutrients, thus not only are a super abundant number of fruits produced but in general their size and overall quality is superior to less intensively produced fruit.

There are some drawbacks to the Lorette system that have led to its modification for commercial orchards. A large amount of skilled labor is needed to carry out the pruning operations at a time when there is usually much else to do, and more importantly from a horticultural standpoint, in climates less temperate than north western France where Lorette worked, the late flush of growth that is sometimes induced by summer pruning often failed to withstand the first hard frosts of autumn.

In the gardens of the Agroecology program we have adopted a modified version of the Lorette system in training our intensively produced apples and pears. We still practice dormant pruning to manage the overall structure of the trees, and during the summer months any lateral branches which are not needed as extension growth are cut back to induce fruit bud development. Which laterals are cut and which are left to grow is dependent on the training system: in the case of oblique cordons only a single bud, the topmost, is allowed to extend the growth of the tree, any branches arising from lateral buds are subjected to summer pruning; for bush or open center trees, generally the outermost two shoots on each main branch are allowed to develop until the tree has filled the space allotted to it, all other laterals can be summer pruned.

The precise details on the pruning of laterals are as follows. When growth begins in the spring each bud giving rise to a shoot first produces a small cluster of leaves ranging from three to five in number. These leaves can be seen as a whorl ringing the base of the shoot in the summer; additional leaves are put out along the stem as it grows. When a shoot is half-ripe, that is, starting to become woody, (which generally happens near the middle of July in Santa Cruz but can vary from year to year), and about the diameter of a pencil, it is cut back to two to three leaves above the basal whorl. Under ideal conditions the buds in the axils of the remaining leaves will develop into fruit buds, thus each lateral shoot bud can be made to produce two to three fruits the following and subsequent years. What about less than ideal conditions? Should the lateral shoot be smaller in diameter than pencil thickness at the time of pruning it is necessary to prune it harder, leaving only one or two leaves above the basal whorl, otherwise there will be insufficient nutrient supply to induce the desired fruit bud protection. Frequently, especially with irrigated fruit trees, the long summers of Santa Cruz cause the buds which remain after pruning to burst and produce new shoots, instead of remaining dormant until the following season. In this case it is necessary to repeat the summer pruning operation when these new laterals ripen, usually in early September.



Provided that your trees on dwarfing rootstocks are kept in good vigor with adequate supplies of water and nutrients, this simple operation will greatly enhance the quality and quantity of the fruit they produce. Since fruit wood is developed earlier in the life of the tree, its energies are sooner given over to fruiting, leading to a reduction in the rate of vegetative growth which reduces the ultimate size of the trees and thus allows for closed spacing between trees (as little as 2 feet apart for oblique cordons). The removal of lateral branches during the growing season increases the amount of light and air within the tree which helps to reduce disease problems and keeps fruit wood which might otherwise be shaded healthy and vigorous. Light reaching developing fruit makes for good full color and high sugar content, but can be a problem in very hot areas with very exposed fruits. In cool summer areas like Santa Cruz, and especially our coastal locations, sunscald is rarely a problem.

As can be seen, summer pruning has a number of important advantages for the home gardener. Although a tree in full leaf can seem complicated and prove daunting at first, the simplicity of the technique makes summer pruning easy. The gardener has a opportunity to develop new familiarity with his trees and reap great rewards for a little effort.

by Mark Sammons

*Special Summer Pruning Workshop at the Farm
Sunday, July 12, 12:30 - 2:00 pm*

APPRENTICE ASSISTANCE OFFERED

Some of our new apprentices are looking for work to do in their spare time. As they are students far from home, with limits on their available hours, they are trying to find jobs in Santa Cruz without much of a network to start from. Please see if there is any help you are looking for that these folks can provide. As a Friend you can help them earn the extra money they need as they create the Farm and Garden for your visiting pleasure. Here is a list of peoples' names and job skill:

Adrian Benvenuto - landscaping - no lawn - pruning
Elizabeth Donahue - Housecleaning - childcare - window washing - general yard care
Terry Allan - Gardening - yard care - house sitting - party assistance - bartending
Amy Schwendimann - childcare - help with children's parties - house sitting - yard care
Melissa Wheelock - childcare - help with children's parties - house sitting - yard care
Gatua Wambugwa - landscaping - gardening
Beth Gibans - landscaping - gardening- house sitting - word processing (IBM)
Clifton Dodge - landscaping - rockwork - wait tables - etcetera
Krishna Shresthra - gardening
Shyam Khadka - gardening
Joy Taylor - gardening - landscaping - child or elderly care - word processing - data entry - (MAC or IBM)
party catering - house painting outdoor, indoor - willing to barter
Tina Kolpakowski - tutor math, science, computer - cater - child care
Samantha Patterson - weeding - gardening - dog walking - person walking

Contact the Farm center at 459-4140 to get a message to any of these people. They'll probably need to call you back, since they mostly are outside during the day. ☛

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C/O Agroecology Program
UCSC Farm
Santa Cruz, CA 95064

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