

COOPERATIVE EXTENSION

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the Cochise County Master Gardener

NEWSLETTER

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JULY 1993

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BRAMBLES

Barbara Kishbaugh
Staff Writer

In some areas the brambles grow wild. As a child growing up in Idaho and Montana, I learned early to appreciate the sweet sharp taste of bramble fruits. Gathering a bucket or two for the making of jam or pies was required labor. Picking in the thickets resulted in numerous expected scratches from the thorns of these plants. Watching warily with one eye for bear who also enjoy the fruits added to the excitement of a day spent outside with your mother, brother and sisters, cousins, and aunts. Despite numerous warnings to the contrary, gorging oneself with the fruit was natural and upset tummies usually followed the outing.

An appreciation for these fresh fruits developed during these times, so planning a raspberry patch or blackberry bushes in my garden is a result of the fondness for these fruits. The delicate fruit of brambles can be enjoyed without paying the high prices asked at the supermarket, but in our area a little TLC is required to produce good berries.

Raspberries, Blackberries, Logenberries, and Boysenberries all belong to genus *Rubus*. These plants can be purchased as uprights or trailing types from catalog nurseries. Both bramble types require pruning once established to allow all available sunlight to as much surface as possible since more berries are produced with a better exposure.

Brambles can be thornless or not. The appearance of the berry plants are not inspiring when received from the supplier, but they grow very fast and plans should be made to keep new development in check since they will quickly grow out of control.

(Continued on next page)

Robert E. Call

Robert E. Call
Extension Agent,
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Prepare your berry bed carefully with a combination of native soil, sand, and compost—it will really pay off with the next harvest. Don't allow the beautiful new growth to influence your judgment when pruning. It needs to be cut back to develop the fruiting laterals.

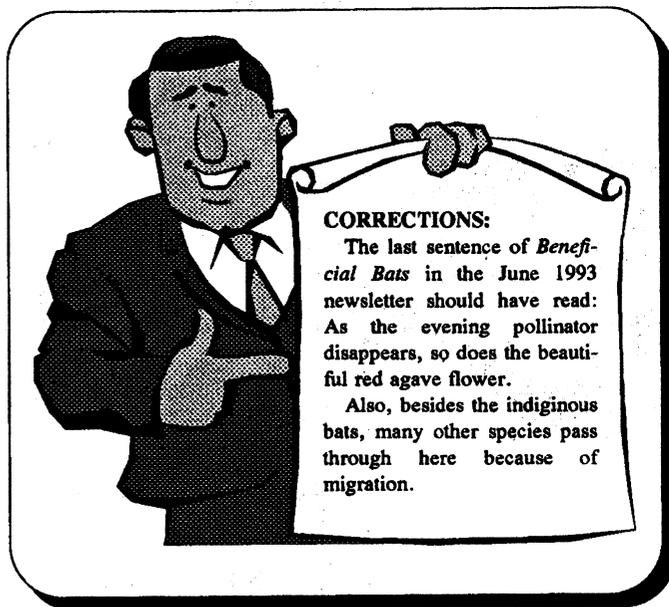
Each year new canes are developed from the basal root. This new growth should be lopped off. This will encourage the branching that will produce the multiple berries desired for the following year.

New plants can be started by tip layering or actually digging up new starts. Upon initial placement, berries seem more easily adapted if they feel they can lean against something for support.

The fruit of the raspberry pops off its receptacle quite easily when ripe. Blackberries turn a rich dark color to indicate ripeness. Birds will also notice when your fruit is ripe. A mockingbird and I are in competition to see who is the most greedy for our berries.



We planted Latham raspberry and have been disappointed with the yield which was small and sparse. In all fairness, the raspberry plot was not given as much care in preparation as the Boysenberry which is producing large and multiple fruits. Preparation of a quality bed results in a substantial harvest. I would recommend the Boysenberry since it seems to tolerate the heat more readily and has been a better producer. The fruit of this plant also freezes efficiently when spread on a cookie sheet in one layer and frozen. It can then be transferred into plastic bags. Your catalog should inform you as to the most dependable brambles for our area. There are a great many berries to choose from.



CORRECTIONS:

The last sentence of *Beneficial Bats* in the June 1993 newsletter should have read: As the evening pollinator disappears, so does the beautiful red agave flower.

Also, besides the indigenous bats, many other species pass through here because of migration.

JULY REMINDERS

- KEEP THE PESTS UNDER CONTROL
- KEEP WATERING
- YOU CAN PLANT SOMETHING YET!



Staff:

- Carolyn Gruenhagen
- Barbara Kishbaugh
- T.J. Martin
- Elizabeth Riordon
- Virginia Westphal

Articles to be published in next month's newsletter must be received at the Sierra Vista Cooperative Extension Office by July 28.

SOLAR GREENHOUSES—PART I

Emilie Vardaman

For people with a passion for gardening and fresh tomatoes with pesto, winters even in southern Arizona can seem long. Most of us read gardening magazines and seed catalogs, struggling to restrain our planting impulses through the cool months.

However, for those fortunate enough to have a solar greenhouse attached to their homes, fresh tomatoes become a year-round delight. They sow flower and vegetable seeds in fall, and gardening becomes a twelve month activity.

This new series will introduce you to many facets of greenhouse gardening, from design considerations and construction tips, to the management and use of a solar greenhouse.

For many, the cost of a greenhouse may be a primary concern. Don't let money stop you! I once designed a \$500/five-year greenhouse plan for a woman on limited income. For about \$100 a year over a five year period she constructed her solar room addition. Admittedly, this was a number of years ago, but even today a small usable greenhouse can be built at a fairly low cost, then improved and modified yearly until it becomes a comfortable, productive room.

The first question to ask yourself is: Do I *really* want a greenhouse? Your initial response will probably be a loud "Yes!", but take some time to reflect on your lifestyle, your energy, and other commitments. Do you travel in winter? Do you enjoy or maybe even need a few months off each winter to relax, work on other projects or pursue other interests? Are you willing to commit time and energy each week to keep your greenhouse clean and bug free?

If you're not sure you're really ready to do this, don't! A solar greenhouse isn't for everyone. I've seen more than one that's

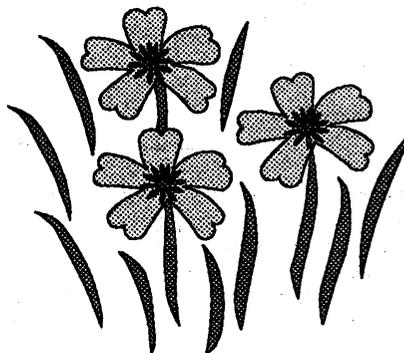
been turned into a storage room or ignored and left to deteriorate.

The second question is: Do you have adequate space to attach a greenhouse to your home in an area that receives more than six hours of sun on winter days? A solar greenhouse will not perform well if it's shaded by nearby buildings, fences or tall pines (or *will* be, when those pines grow up!).

The best site for an attached greenhouse is the south side of your home, although the east or west side could also be used. The south side of a greenhouse needs full winter sun. Trees and houses cast long winter shadows, shadows at least twice the height of the object creating the shadow. So when you check a potential site remember that a 20 foot tree south of your envisioned greenhouse will create a 40 foot winter shadow. Trees and houses to the southeast or southwest of your future greenhouse cast shadows even longer.

Next month I'll give you detailed information on how to evaluate your site. If you can't wait that long, go to the library and check out either *The Solar Greenhouse Book* edited by James C. McCullagh or *The Passive Solar Energy Book* by Edward Mazria.

Master Gardener Cathé Fish and I both worked for some time with the Arizona Solar Action Team conducting solar greenhouse design, use and construction workshops around the state. With a little prodding, who knows? Maybe there's a greenhouse workshop in the future!

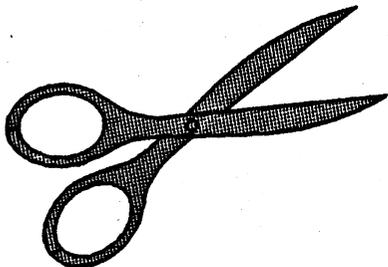


TO INSURE CONTINUED BLOOM

Carole Cox

For continued bloom the importance of picking or cutting off old flowers from perennials and annuals cannot be overemphasized. A part of the natural plant cycle for most plants is making seeds for the continuation of the species. When the flowers have bloomed, the plant's main duty becomes the development of seeds from all flowers that have been pollinated. Its energies are geared in that direction, and it will often quit making new buds for future flower production so it can use its energy to develop the seeds. In annual plants, the job has been completed with the seed production, and the plant will often die; perennials won't die but will often not produce further flowers that season unless heroic measures are taken to revitalize the plant.

So, as soon as the blooms begin to fade and go to seed, cut them from the plant, resulting in the plant's energies being directed to developing more flower buds (with its eventual aim the development of seeds). One note of caution: although some rose books suggest cutting off spent flowers, it is less likely to spread diseases such as mosaic virus if the flower heads are snapped off with the fingers instead of cutting them with shears.



THE AGENT'S CORNER

Robert E. Call
Horticulture Agent

QUESTION: When should I plant native warm season grasses and how should I prepare the soil?

ANSWER: Warm season native grasses include but are not limited to the bluestems, buffalos, grammas, Indian rices, lovegrasses, sideoats and wheatgrasses. Planting of most of these grasses should occur just before the monsoon rainy season begins in July. Seeding rates vary between different grass species. For example Buffalo grass is seeded at 3 to 4 pounds and blue grama grass is seeded at 1 to 2 pounds per 1,000 square feet. In most situations it is advisable to mix 2 or more compatible species together and sow them so there is more diversity in the planting.

For best germination and stand till the soil 4 to 6 inches deep, (this is very necessary on new construction sites because of compacted soil), rake smooth, spread seed, and top dress with compost or composed manure. The dark compost will warm the soil and hold moisture which aids in germination.

Many of these warm season grasses make attractive landscape areas but are not suited to heavy traffic and play. However, breeding programs are currently developing turf type lawn grasses from native warm season grass species that will withstand traffic. Also, many of these grasses are more drought tolerant than the more traditional turf grass and require less water than bermuda grass.

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THE FALSE CHINCH BUG

T.J. Martin
Staff Writer

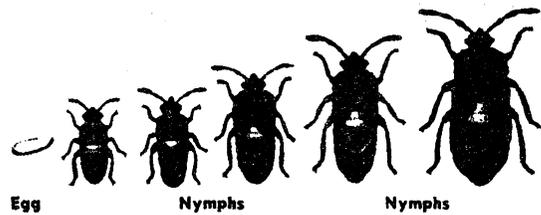
While talking on the phone one day, my friend and local Ag. agent, Rob Call, mentioned that some local folks were having trouble with a little creature called the "False Chinch Bug" and asked me if I would do an article on it. Of course I naively said, "Sure!" and headed off to do my normal amount of research and to whip out my usual 2-3 pages of well-documented facts and bug control advice.

WRONG! I have determined that one of the main reasons this critter is such a problem is that practically no one knows anything about it! Instead of multiple scholarly papers, encyclopedia descriptions, and pages of recommendations from consumer-oriented publications, I came up with a big fat ZERO on information, and Rob was only able to find two short paragraphs in a book published in the early 1990's.

So this month's column is going to be based on "by guess and by golly", and if anyone of our faithful readers can provide further information on this bug I will be glad to pass it on as a follow-up. In the meantime I can show you what it almost looks like (the true Chinch Bug) and let you know what I would do if this thing took up residence in my own home garden.

True to its' namesake, the False Chinch Bug closely resembles the true Chinch Bug which is a member of the Hemiptera and sports the tell-tale inverted triangle on its back behind the head (see picture). While the real Chinch Bug is black with brown markings and silvery "hair", the False Chinch Bug is red-brown as a nymph (young, wingless immature) and grayish-brown as a mature insect. It will grow up to about 3 cm long and thus is a bit shorter than the true Chinch Bug. The False Chinch Bug is also more slender in appearance.

Chinch Bug



It is a pest of potatoes, cabbage and other cruciferous crops and is sometimes found on grape, corn, and sorghum. It seems to be a particularly bad problem for sugar beet growers. The adults and nymphs alike feed by piercing plants with sharp mouthparts and sucking out the juices. Young plants may die outright and older ones may simply not have enough energy left to produce a crop. The physical injury left by the pest may then become an opening for opportunistic diseases or fungi to move in.

Adults and nymphs overwinter in plant litter and become active in the spring and worse as the weather gets warmer. The crescent-shaped eggs are pink in color and are laid in the soil or on the flowers or foliage of low-growing plants. There are supposedly 4-5 generations per year in the northern United States so I would guess that they could be a problem here in southern Arizona almost year around.

In trying to get rid of this pest, I would treat it like most any other smallish, rather soft-bodied garden insect. Crop rotation should prevent population buildup and inter-planting different kinds of crops in one area rather than "mono-cultures" could keep them from getting ALL of a certain crop even if they find some of it. Since they hide and overwinter in debris, garden clean-up is of utmost importance. Cart away all of last year's mess and cultivate the soil to expose any pests or their eggs. Encourage your neighbors to clean up also if their area might be a breeding place for pests that will migrate to your garden for supper.

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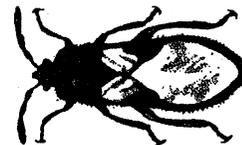
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If you are using a hay mulch, it may pay to change this and put out fresh and hopefully uninfested material. If this is too much, consider raking away the hay and spreading it out in the sun for a few days to entice the pests to leave. At the same time, cultivate the soil around your plants to expose any eggs and inspect the foliage and flowers. Needless to say, water your plants more frequently while the mulch is off to replace the extra water that will be lost.

Maintain proper water and nutrient levels to keep the plants as healthy as possible. An agricultural fleece may be appropriate as a barrier for at least part of the season for some crops. Encourage Lacewings, Praying Mantids, and other insect-eating helpers from Nature's own stock. A forceful spray of water from the garden hose will wash away many of the pests and splashing with a soap and water mixture or one of the new fatty acid soap insecticides should do a number on the rest of them.



Adult

If none of the above works for you (or you just have too big of an area to cover) you might want to try one of the less toxic insecticides that are currently available such as Pyrethrin, Rotenone, or Sabadilla. A fine spray or dust would probably work the best on these small pests. Don't forget to do the undersides of the foliage! There are also a number of commercial insecticides available. Look for products targeted at such similar insects as Leafhoppers, Stinkbugs, or Plantbugs, or call the Cooperative Extension office for the latest recommendations. In all cases, please protect yourself, non-target creatures, and the environment no matter what you decide to use.