COOPERATIVE EXTENSION

University of Arizona and U.S. Department of Agriculture cooperating.

UNIVERSITY OF ARIZONA

the Cochise County Master Gardener

NEWSLETTER

VOL. 4. NO. 12 DECEMBER 1993

TUMBLEWEED (Russian Thistle)

Barbara Kishbaugh
Staff Writer

Several years ago when we first acquired acreage in Cochise County, our niece warned us that conditions are created which are ideal for tumbleweed growth when soil is disturbed for development. Once native plants are uprooted, the most obnoxious of weeds will soon follow.

Tumbleweed seeds wash in during summer rains and are also transplanted on clothing or in animal droppings. Any barrier that catches the seed — another plant, a bunch of grass, a rock — encourages a hold. combined with a little sand and moisture, the plants soon become established. The small plants are soft and fern-like in appearance and explode with growth after rain showers. The seeds sprout in groups, under the shelter of a "host" plant, and are difficult to see. Sometimes they are not noticeable until they are already grown and going to seed.

Tumbleweeds become very brittle and the stalks and limbs turn a reddish hue when they produce their seeds and die. Once they are large enough to roll down an old dusty western street, the slightest gust of wind will distribute the seed. The plants blow up against fences creating real fire hazards. This is when they release thousands of tiny seeds which will lie in wait for conditions perfect to produce hundreds of new plants. Rolling the stickery sharp scratchy weeds into a pile is possible but determining what to do with them after they are corralled becomes your next problem.

(Continued on next page)

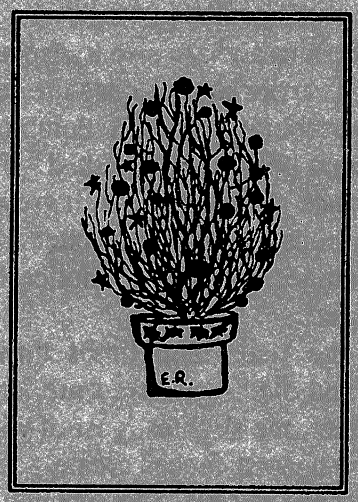
Robert E. Call

Robert E. Call
Extension Agent,
Horticulture

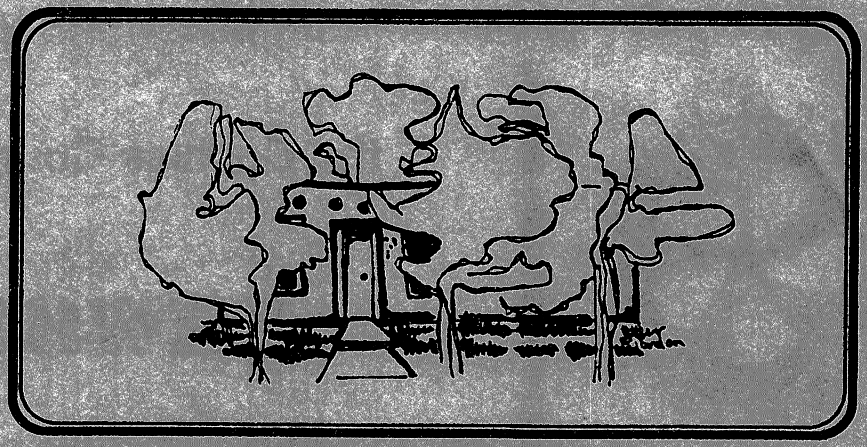
450 Haskell • Willcox, AZ • 384-3594
1140 N. Colombo • Sierra Vista, AZ • 458-1104

Pre-emergent weed killers can be applied in the spring in hopes of killing seeds before they germinate. After it is grown, the tumbleweed can be mowed, but it will still produce seed on the lateral new growth. Physically pulling this plant up by its roots is the most effective way of removing it. Persistence is the key to any method employed.

One Christmas a friend built a snowman using three graduated sizes of dried tumbleweed for the body and head. It was sprayed white to look cutely southwestern and placed in his front yard for the season. When spring arrived, he realized the folly of his snowman — his lawn was now full of tumbleweed seedlings.



The best approach when developing a yard or garden area is to disturb the native growth as little as possible. Initial planning and consideration are necessary or absolute diligence will be required once these Russian thistles invade your territory.



LIVING IN A GROVE OF TREES

Carole Cox

Think about how much cooler it looks (or feels) when driving down a tree-lined street or walking through a forest. an oasis in a desert is certainly appealing. It is possible to live in a grove of trees, even here in southern Arizona, whether you have only a small lot or a larger acreage. Trees provide such a great service to our environment that some consideration should be given to their use, not only by individuals, but also by businesses and government entities.

Trees filter the air and put oxygen back into our atmosphere. They can provide screening from neighbor's properties, help to deaden any unwelcome noises, offer cooling shade in summer yet allow warming sun in winter, furnish fruit or nuts, prove a wildlife habitat, and children will welcome a few trees to climb.

If your lot is small, consider planting dwarf or semi-dwarf fruit trees for more variety, or strategically place two or three larger fruit or shade trees around your house to save on your cooling/heating bills. If you have a larger acreage, the state makes a variety of trees and large shrubs available each spring at a low cost. They include trees with a low water requirement that will thrive in this area. (NOTE: See related article elsewhere in this newsletter.) The variety and use of trees is only limited by the imagination.

It is essential to decide what use you want to make of your property and then draw up a plan for the inclusion of trees into your landscaping. Many good books describing trees and plants for desert areas, as well as their care requirements, are available at local bookstores. Be certain that you will be able to provide for their continued maintenance BEFORE you plant them, as an unkempt "jungle" is not appealing, and a dying forest is disgraceful!

THE AGENT'S CORNER

Robert E. Call
Horticulture Agent

QUESTION: Now that winter is approaching how often should I water my roses, shrubs and trees?

ANSWER: Normally winter rain and snow are sufficient for plants in Cochise County. We can divide plants into two categories: deciduous, meaning those plants who lose their leaves and evergreens. When a plant loses its leaves there is little if any transpiration occurring. Photosynthesis has ceased in deciduous plants and water is required to make carbohydrates and oxygen. Winter rain and snow normally provide adequate moisture. Evergreens, on the other hand, have need of some water because their leaves will still do some photosynthesis if temperatures are not too cold. The general rule of thumb for watering evergreens in the winter is one third the summertime amount. This includes winter rain and snow which normally are adequate.

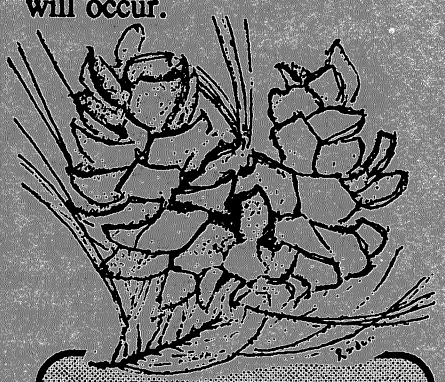
QUESTION: Should I prune shade trees and evergreen shrubs during the winter months?

ANSWER: Wait until February or later. Pruning is a stressful event for plants. Pruning is generally an invigorating process which not only causes buds to grow but also helps define a plant's shape and general health. Most deciduous perennial plants like trees and shrubs go through a process called winter rest. After losing their leaves in the fall they are incapable of growth, even under ideal conditions, until the rest period is completed. This occurs sometime in mid winter to early spring depending on the plant species and climate. Rest is a biological strategy to ensure successful survival through the harshness of winter. With rest completed, plants can begin to develop which will lead to bud break, flower, leaf, and shoot growth. If you have ever wondered why crab apples or flowering plums do not bloom when shoots are cut and brought indoors, the reason is rest has not been completed.

Pruning of living plant tissue should only be started when rest is completed. That means mid winter into spring. I have seen trees and shrubs pruned in December die because rest was not completed and the stress was too great. Pruning is invigorating and can cause bud growth in early winter which will die and deplete the plant of needed energy reserves to survive. Evergreens are normally pruned in the spring or summer. Dead branches and suckers can be pruned anytime. If there are further questions about pruning of specific plants contact the Cooperative Extension offices in Willcox or Sierra Vista.

QUESTION: Is it too late to plant bulbs for spring flowers?

ANSWER: No it is not too late. Spring flowering bulbs like daffodils, hyacinths, crocus, and tulips can be planted until you cannot work the soil. However, these bulbs must have six to eight weeks of cold temperatures (35 to 40°F) to overcome winter rest. This process can be sped up by placing the bulbs in the refrigerator so that the cold requirement needed to complete rest will occur.



COOPERATIVE EXTENSION ADVISORY BOARD

The Cochise County Extension Advisory Board met recently in Tombstone to formulate goals of the Extension for the coming year.

They are interested in your ideas on how to educate and involve children in the importance of agricultural production. Please write down any ideas you may wish to share and mail to:

P.O. Box 1417
Sierra Vista, AZ 85636

Your input is very important for the continued success of the cooperative programs, some of which you use, such as the Master Gardener program.

CONSERVATION TREE SEEDLINGS FOR SALE

Arizona landowners have the opportunity to purchase tree and shrub seedlings for spring 1994 planting.

The Tree Seedling Distribution Program is sponsored by the Arizona State Land Department, Forestry Division, in cooperation with the U.S.D.A. Forest Service. This program provides low-cost seedlings and technical assistance to rural landowners in order to promote windbreak establishment, reforestation, erosion control, wildlife habitat, and Christmas tree plantations. Forty species of barefoot and potted tree seedlings are available with selections suitable for planting in all regions of Arizona. Private landowners that own one or more acres of land can participate in the program if they agree to plant the seedlings for the previously mentioned conservation purposes.

The success of this program is demonstrated by the nearly 2.5 million seedlings which have been sold throughout Arizona since 1971.

Applications to purchase tree seedlings are available at local offices of the State Land Department, U.S. Forest Service, U.S.D.A. Soil Conservation Service, the Cooperative Extension Service, State Parks, or the Arizona Game and Fish Department. Applications may also be obtained by writing to:

Arizona State Land Department
Cochise, Graham, Greenlee, Pima, Pinal or Santa Cruz Counties (specify)
233 North Main Avenue
Tucson, AZ 85701
Tel: (602) 628-6016

Sierra Vista and Willcox pick-up days for the plants have been in March.

ARIZONA NATIVE PLANT SOCIETY

The next meeting will be held December 15 at 6:30 pm at the Sierra Vista campus of Cochise College, Building P4. John Murray of the Fort Huachuca Environmental Office will speak on *Ethnobotany in the Huachuca Mountains*. The post archeologist will discuss plants used by the early inhabitants of the San Pedro Valley.

ROOMS NEEDED

Do you have a spare room you might offer to a speaker for the *High on the Desert* conference scheduled for February 17 and 18? If so, please call the Cooperative Extension office at (602) 458-1104, Ext. 141.

Also, Master Gardeners, room moderators are needed for the conference. If you have not yet fulfilled your volunteer hours, here is a great way! Call the above number if you are interested.

Staff:

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

SOLAR GREENHOUSES — PART VI

Emilie Vardaman

In last month's solar greenhouse article, I wrote about the need to store the sun's heat gathered during the day. Building materials such as brick, stone and adobe store heat well and should be used in the floor or can be used in the walls if the walls are then insulated on the outside.

Why insulate on the outside? We know to insulate in the wall, in a regular stud wall, and many have probably added some insulation underneath drywall on the inside of cement block or stabilized adobe walls. However, insulation blocks the transfer of heat (and cool) between the wall and air. If insulation is on the inside of a wall, heat or cool stored in the wall is blocked from moving into the house. It makes more sense to put insulation on the outside of the wall, keeping outside temperature extremes from affecting the wall and helping to stabilize interior temperature.

In a solar greenhouse, the sun will enter the south windows on a winter day warming the floor and walls. The absorbed heat will be released into the greenhouse at night. However, the walls and floor won't have enough mass to store all of the available daytime heat, unless of course you have walls about three feet thick. So where to store the heat? In water!

Water stores more than twice the amount of heat or cool as rock, masonry, or adobe. This means it will stabilize the greenhouse temperature more effectively in both in winter and summer.

How does one use water and where in the world do you put it? Water can be contained in a variety of ways from gallon jugs to ponds. Enclosing water in jugs or 55 gallon drums keeps the water contained. Ponds or large water storage tanks can contain large amounts of water and add humidity to the greenhouse.

Fifty-five gallon drums make wonderful storage containers, however know your drum! Don't use drums that have been used to ship hazardous or flammable materials! Around here it is fairly easy to find pvc drums that once held iodine.

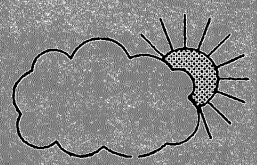
Metal drums should be rustproofed on the inside and then filled. The outside, if painted a dark color and placed in direct winter sunlight, will be more effective heat gatherers than drums made of pvc.

Drums can be laced against the north wall of the greenhouse, under a table or rack that holds growing beds. Seedlings raised here will never get cold toes!

Full gallon jugs, the water dyed a dark color to better absorb the heat, can be stacked on shelves against the north wall under planting beds. Gallon jugs, even if not in direct sunlight, can be placed under work tables or against the walls.

Or, you might think about adding an in-ground pond for semi-tropical fish. An above-ground water storage tank might not be as aesthetically pleasing, but would also store lots of heat. Maybe you'd rather go all out and put your hot tub in the greenhouse!

However you do it, plan to put some water storage in your greenhouse in addition to using lots of mass in the walls and floors. And, be sure to call me to personally inspect and try out your hot tub, should you choose that route!



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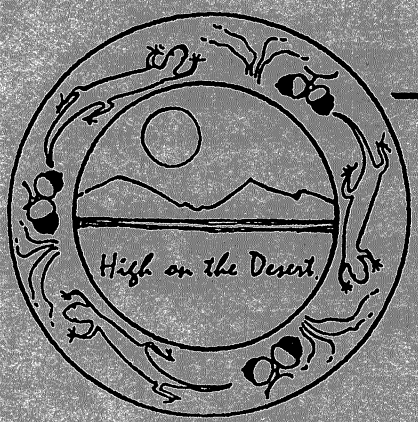
U. S. DEPARTMENT OF AGRICULTURE
THE UNIVERSITY OF ARIZONA
TUCSON, ARIZONA 85721

Address correction requested



High Desert Gardening & Landscaping Conference
February 17 & 18, 1994

The first annual High Desert Gardening and Landscaping Conference will feature Judith Phillips, author of *Southwestern Landscaping With Native Plants* as the keynote speaker. The two day conference has more than two dozen other speakers scheduled covering "everything you want to know and more" about high desert gardening. Topics include: native grasses, fruit trees, selecting the right tree, plant diseases, drip irrigation, medicinal plants, pruning, cactus and succulents, grafting, and many more! Plan now to attend. For more information call the University of Arizona Cooperative Extension office, (602) 458-1104, Ext. 141 or write ATTN: Rob Call, 1140 N. Colombo, Sierra Vista, AZ 85635.

Merry Christmas and Happy New Year!