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Texas A&M AgriLife Extension Orange County Agriculture Newsletter

July-August-September 2017

Upcoming Events

Meetings:

First Thursday's Apiary Committee at Extension Office-6pm

Second Thursday Master Gardener at Extension Office-6pm

Fourth Thursday Master Naturalist 6:00pm

Word from your Ag Agent

Howdy, Orange County! We have certainly had a great spring! Thank you to all of you that have come to all our programs this year, our attendance has doubled from last year! We certainly could not do what we do without you. In this issue I have address issues that we expect to affect us going into late summer and early fall, and issues we are facing now.

However, as bittersweet as it is this is my last newsletter as your Orange County Agriculture Agent, a honor I have had for the past two years. Thank you for being home, for welcoming me, for supporting what we do, and mostly for being so wonderful. I am not going far just up the road to a new adventure. It was with careful consideration I have decided to leave extension, and will truly miss my orange county family. So stop by for a good bye, but don't worry I be seeing you guys around I am sure! As always, my door is open, and I am only a phone call away. As far as my replacement, that will not be until September 1, when the state hiring freeze is lifted that the process will begin. I, along with volunteers and office staff, are working on the rest of this year's newsletters so you guys don't go without. Be just as good to the next agent, as you have me. Thank you Orange County it's been a blessing!

Feel free to "Share" this newsletter with friends, family, and colleagues. If you are not receiving this newsletter directly then call us and we will put you on the email list! You should receive this newsletter quarterly that will contain a few months' worth of useful information.

- Have a question? Need a Soil sample? Call for a site visit from your Ag Agent!
 - Need a plant, weed or bug identified? Email picture to Extension@co.orange.tx.us
- Want to be receive the Ag Natural Resources
 Newsletter? Contact us to be put on the email
 list for FREE!!!



Pond Management

Many ponds are being taken over by several aquatic weeds. However, the type of aquatic vegetation you may have, and your goals for your pond depend on what you would apply to control. Dragging ponds to rid it of the weeds may seem great at first, but many times you actually cause the weeds to multiply tenfold by doing so. Grass carp on some varieties can be effective in control of pond weed management. Most weed control in ponds can be more cost effective by spot treatment around docks, and swimming areas versus the entire pond. A Diquat plus Chelated Copper has been extremely effective in weed management of ponds. However, correctly identifying the aquatic vegetation you have and following the label is the first step in controlling pond weeds. Pond management just like pastures requires routine maintenance year round. Fall and winter time is ideal for lime, and spring and summer for fertilizer for your ponds. I have attached the annual calendar below:

EWF-003 Revised Way 2013



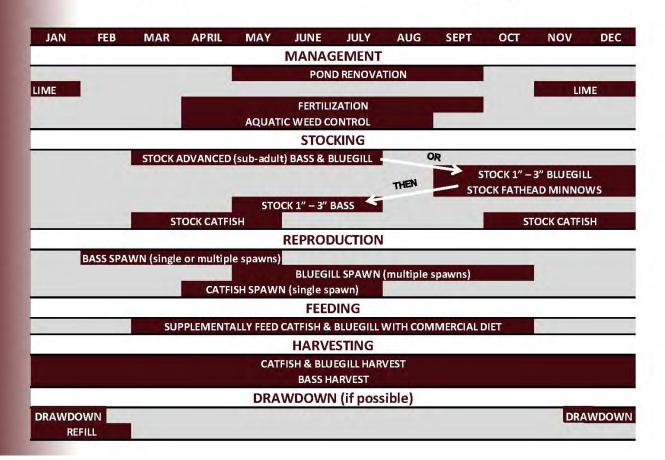
TEXAS FARM POND MANAGEMENT CALENDAR

Billy J. Higginbotham

Professor & Extension Wildlife & Fisheries

Specialist

Todd D. Sink
Assistant Professor & Extension Fisheries
Specialist



Fertilizing Fish Ponds

ANR 249. Revised 2008. Jesse A. Chappell. Extension Fisheries Specialist. Assistant Professor, Auburn University

Farmers know that proper fertilization can greatly increase crop yields. Similarly, pond fertilization can increase fish yields three to four times. Also fish will be in better condition, and the quality of catch by fishermen usually improves. Fertilizers used in ponds stimulate the growth of microscopic plants called algae or plankton. As primary elements of the food web, algae are eaten by microscopic animals called zooplankton and insects which serve as food for bream, which in turn are eaten by bass. Algae also make the water turn green, which helps to shade the pond bottom, preventing growth of troublesome rooted weeds and filamentous algae commonly called pond "moss or pond weeds."

Types and Grades of Fertilizer

There are many commonly used fertilizers produced for a variety of applications. Fertilizer manufacturers are required to list the grade on each fertilizer container by the percent of nitrogen (N), phosphorus (P) as phosphoric acid (P2O5) and potassium (K) as potassium monoxide (K2O). Therefore, a 20-20-5 grade fertilizer contains 20 percent nitrogen, 20 percent phosphorus as P2O5 and 5 percent potassium as K2O. "Complete" fertilizers contain N, P2O5, and K2O while "incomplete" fertilizers contain only one or two of these elements. Common incomplete fertilizer sources are normal superphosphate (0-20-0), triple superphosphate (0-46-0), diammonium phosphate (18-46-0) and liquid ammonium polyphosphate (10-34-0). Examples of common complete fertilizers are 13-13-13, 20-20-5, and 4-12-12.

Additions of phosphorus in ponds usually provide a much greater increase in fish production than from either nitrogen or potassium. However, nitrogen in combination with phosphorus is sometimes better than phosphorus added alone.

Liquid fertilizers are generally superior to the traditional granular form fertilizers in promoting rapid growth of plankton algae in farm ponds. This is because the nutrients are immediately in solution, making them more rapidly available to the algae. Also, smaller applications of liquid fertilizers (more as concentrates) can be used which may reduce the cost and labor of application but still improve the effectiveness of pond fertilization.

Common grades of liquid ammonium polyphosphate fertilizer are 10-34-0 and 11-37-0. Liquid ammonium orthophosphate, commonly sold as a 13-38-0 grade, can also be used. Nutrients are found in a ratio of about 1:3 in liquid fertilizers.

Any grade of liquid fertilizer can be used, as long as approximately 3 to 4 pounds of phosphorus as P2O5 are applied per application.

In recent years, fertilizer formulations which contain all three nutrients have become popular as a result of their effectiveness. In a dry, flour-like form, the 12-48-8 formulation produces excellent phytoplankton blooms which vigorously stimulate bream and bass growth.

Standard Fertilization Schedule

The following standard fertilization schedule can be used with any of the fertilizers and rates recommended in the fertilization table.

- Make the first application of fertilizer in late February or early March. (When water reaches 60 degrees) Follow with two additional applications at two-week intervals.
- 2. Make three more applications at three-week intervals.
- Continue applications at monthly intervals or whenever the water clears enough that a white disk attached to a yardstick is visible to a depth of 18 inches.
- 4. Stop applications by the last week in October.

Recommended Fertilization Rates for Different Fertilizers Used in Fish Ponds

Fertilizer		4	Pounds of Fertilizer/
Туре	Grade		Acre/Application
Liquid	9-32-0 10-34-0 11-37-0 13-38-0	(either ammoni- ated polyphos- phate or ortho- phosphate)	10 (all grades)
Granular	20-20-5	(fish pond fertilizer)	40
	18-46-0	(diammonium phosphate)	18
	0-46-0 plus 34-0-0 12-48-8	(triple super- phosphate) (ammonium nitrate) Dry powder	18 plus 24 5

Because watershed fertility and pond uses vary, the standard fertilization schedule and recommended rates are not necessarily the most efficient for all ponds. The following considerations can help guide you to modify them to meet your needs.

Pond Use

Not all ponds have to be fertilized. Large unfertilized ponds which are fished by only a few people may produce excellent fishing. Heavily fished ponds, such as club ponds, should generally be fertilized. Sometimes less fertilizer is needed in ponds in watersheds where cattle are grazing, due to nutrients from droppings. Ponds which typically have strong flow-through after rain events or are a part of a stream where water retention time is low- that is the pond has a lot of flow-through- fertilization nor lime is not recommended.

Application Methods

Liquid fertilizers generally weigh about half again as much as water. Because they are heavier than water, they must be diluted with water or applied into turbulence so that they mix with the pond water and don't sink to the bottom.

One method of application of liquid fertilizer is to drip it slowly into the water from the bow of a boat driven by an outboard motor so that the wake of the boat and the action of the propeller will mix fertilizer into the water before it has a chance to sink. It can also be applied by pouring it directly into the turbulence caused by the outboard motor.

Another method of application is to pour the liquid fertilizer into a wash tub, plastic trash can or similar container placed in a boat. The liquid fertilizer is then diluted at 5:1 with pond water and is siphoned or drained over the transom.

Still another approach is to set up a vessel as described above at the pond's edge. Dilute the fertilizer by mixing more than 10 parts of water with it and slosh or splash the mixture onto the pond surface. A small pump can also be used to dilute the fertilizer with water and then pump the solution out onto the pond. This method is only appropriate for ponds smaller than 2 acres.

Liquid fertilizer can be applied full strength using a garden sprayer. Direct the spray onto the pond surface while walking around the pond. With some sprayers the fertilizer must be diluted with water so that it will pass through the small nozzle openings.

Especially in late spring and summer, liquid fertilizer may be used more efficiently and produce a more stable "bloom" if applied at half the recommended rate, but twice as often as the standard fertilization schedule calls for. For example, you can apply 5 pounds per acre at two-week intervals in summer, instead of 10 pounds at monthly intervals.

Granular forms of fertilizer should be kept from direct contact with the pond mud, because phosphorus in the fertilizer becomes trapped in the mud and unavailable to the algae. A fertilizer platform positioned one foot under water can be used to hold granular fertilizer off the bottom. Pour fertilizer or place open or slitted bags on the platform. The fertilizer will slowly dissolve and be distributed by water currents. A platform measuring 45 square feet is adequate for a 5- to 10-acre pond. Smaller platforms can be used in smaller ponds. More than one platform should be used in ponds larger than 15 acres.

Fertilizer granules can be broadcast in shallow water, but this method is not as good as the platform method. Never broadcast fertilizer granules in deep water.

Excess Water Flow

A large continuous flow of water through the emergency spillway or standpipe will flush fertilizer from the pond. If the volume of water flowing out of the pond during any month of spring or summer is more than the total pond volume, fertilization is usually ineffective. Some ponds have heavy outflow only during winter and early spring, and respond well to fertilizer during drier weather. Constructing diversion ditches, enlarging the pond and/or constructing another pond above the existing one are techniques which can help to reduce excessive water outflow and retain fertilizer and lime.

Muddy Water

When muddy water reduces visibility to less than 12 inches, algae respond poorly to fertilizer because the sunlight they need for growth is blocked. Therefore, fertilizing muddy ponds is usually ineffective. The following methods can be used to clear muddy water, but are only temporary until erosion of the watershed is stopped.

- 1. Apply barnyard manure at the rate of 1 ton per acre at 3-week intervals. Use extreme caution; however, as an oxygen depletion may result
- 2. Apply 75 pounds of cottonseed meal with 10 pounds of triple superphosphate per acre at 2- to 3-week intervals.
- 3. Apply Gypsum or alum as recommended by your county Extension agent.

Gypsum (pea-nut lime or calcium sulfate) can be highly effective as a tool to clear clay particles from ponds. Generally 250- 1000 pounds per acre give excellent results.

Pond Weeds

Do not fertilize weedy ponds--the fertilizer will only make the weeds grow faster. Weeds can be controlled by using chemicals designed for aquatic plant control. The grass carp (white Amur) are a highly effective aquatic weed management tool. However, fertilizing in early spring before weeds begin growing rapidly may put a stop to their growth. Ask your county Extension agent for publication ANR-48, "Chemical Weed Control in Lakes and Farm Ponds", for methods to control pond weeds. Another web resource for aquatic plant management is: http://aquaplant.tamu.edu/ or our extension site:

http://www.aces.edu/dept/fisheries/

Liming

Ponds with soft, acid water may not respond to fertilizer. If the water does not turn green from plankton bloom development after 6 to 8 weeks of fertilization, liming may be necessary. Agricultural limestone will increase water hardness and alkalinity and decrease acidity, thereby increasing the effectiveness of fertilizers. A pond soil sample is needed to determine the lime requirement. Ask your county Extension agent for publication ANR-232, "Liming Fish Ponds", for soil sampling instructions and liming information (http://www.aces.edu/pubs/docs/A/ANR-0232/).

Measuring Algae Density

Because all ponds are not equally productive or responsive to fertilization, intervals between fertilizer applications can best be determined by measuring plankton density. This method may be more economical than strictly following the fixed intervals of the standard fertilization schedule above.

Measure the algae density using a solid white disk or one painted with alternate black and white quadrants. The depth at which the disk disappears from view in the water gives an indication of plankton density. The more dense the plankton,

the shallower the disc will disappear. When the disc is visible at more than 18 inches, plankton density is too low and it is time to fertilize. Best plankton density measure is when the disc disappears between 8 and 16 inches. Do not fertilize when disc visibility is less than 12 inches. A visibility of less than 6 inches is a warning that an oxygen depletion may occur. Do not use the visibility method when the water becomes temporarily muddy.

Reminders

- 1. Do not practice haphazard fertilization. Fertilizing once or twice a year is worse than not fertilizing at all. It's like alternately feeding and starving the fish.
- Do not attempt to kill weeds by broadcasting fertilizer over them during the spring and summer. This can have the same effect as adding gasoline to a fire.
- 3. If plankton blooms do not develop and grow after fertilizing, check for:
 - Lime requirement
 - Excess water outflow
 - Weeds
 - Muddy water
- 4. Sometimes plankton blooms are difficult to initiate or reestablish even after potential problems have been eliminated. Temperature, clouds and possibly other weather-related factors may be the cause. Continue fertilizing every two weeks until the desired bloom develops.

Summertime pond management requires planning and caution

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OVERTON – Phone calls about out-of-control aquatic vegetation are a common midsummer occurrence, said Texas A&M AgriLife Extension Service wildlife and fisheries specialist Dr. Billy Higginbotham.

However, he said, pond owners should proceed with caution when treating aquatic weeds in ponds where fish are important resources.

Higginbotham said thinning or eradicating aquatic vegetation can improve the overall environment for the pond and increase the pond's utility for recreation, livestock watering and/or irrigation. However, in larger ponds managed for largemouth bass and appropriate forage species, some degree of aquatic vegetation coverage may provide beneficial habitat and harbor food items.

Because of potentially extensive coverage, there are dozens of native and invasive species of aquatic vegetation that cause ecological and economic impacts throughout Texas, he said. And positive identification is the key to successful control of aquatic vegetation.

Dr. Billy Higginbotham, Texas A&M AgriLife Extension Service wildlife and fisheries specialist, said pond owners

"I recommend people use the AgriLife Extension website http://aquaplant.tamu.edu for assistance in identification and control recommendations," Higginbotham said. "There is a wealth of information available to help guide landowners."



Dr. Billy Higginbotham, Texas A&M AgriLife Extension Service wildlife and fisheries specialist, said pond owners should be cautious during summer months when controlling or eradicating aquatic vegetation to avoid fish kills. (Texas A&M AgriLife Extension Service photo by Robert Burns)

The site assists with identification including descriptions and photos and also provides treatment advice, such as whether biologic controls are available and gives multiple herbicide options, their effectiveness and how to calculate the area and volume of ponds for applications.

Higginbotham said landowners should treat ponds in stages if maintaining fish populations is important. Treating an entire pond with herbicides during the hotter months can create an oxygen debt, due to decomposing vegetation, especially algae and other submerged vegetation, and cause fish losses.

"This is typically a summertime problem because water at higher temperatures holds less oxygen than would be possible at cooler temperatures," he said. "If treatment is necessary during the heat of the summer, break the pond up into sections and treat only 15-20 percent of the pond at a time with one week in between treatments."

Higginbotham said lower water levels typically found in late summer can also aid landowners who want to renovate their ponds. Reduced volume of water requires fewer treatment chemicals to remove the existing fish population, which might include undesirable species, in order to establish and support fish species that offer better angling opportunities.

"Landowners with unbalanced fish populations may also want to remove existing fish populations and start over, especially in smaller ponds less than one surface acre in size that lend themselves more for the management of single species that accept a pelleted ration, such as channel or blue catfish, hybrid stripers or hybrid sunfish," he said.

Removal of existing species not easily managed in these smaller ponds, or that will compete directly with the desired fish species or in some cases prey directly upon stocked fingerlings, can be accomplished using rotenone.

Rotenone is a restricted use pesticide, therefore pond owners need a Texas Department of Agriculture pesticide applicator license to purchase and use, or must hire a licensed applicator, Higginbotham said.

The liquid formulation of rotenone is easier to use, Higginbotham said, because it mixes easily with water and can be applied by pump or by mixing into the prop wash of a small outboard motor. Protective gear should be worn during the application process including eyewear, gloves and long sleeves to avoid skin contact with the pesticide.

Rotenone prevents the fish from taking oxygen from the water. Fish should begin surfacing within 30 minutes of the application, depending on species. The fish, however, cannot be consumed because the U.S. Environmental Protection Agency has not established residue levels for rotenone.

Landowners should wait at least two to three weeks to restock the pond after the rotenone application, he said. It is safe for livestock to consume water that has been treated with rotenone, except for swine.



Alabama Cooperative Extension

Pasture Management

There are several pyrethroid products available for control of fall armyworms and grasshoppers. These products are relatively low-cost and have few, if any, grazing or harvest restrictions. Some of the products to check out include <u>Mustang</u>, <u>Tombstone</u>, and <u>Lambda-Cy</u>.

For a link of pesticides labeled for pasture use click on the link: http://forages.tamu.edu/PDF/scs 2001 14.pdf



Kathleen Phillips

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Going Nuts Over Nutsedge

Nutsedge, often called nutgrass, is really not a true grass, but instead a member of the sedge family. Its proper name is nutsedge, or for you Latin lovers, Cyperus esculentus. It is closer 'kin to Papyrus (used to make the ancient writing paper of Egypt) or the ornamental Umbrella sedges, than to St. Augustine or bermudagrass. This African native plant has thrived and spread throughout the New World. Because of its ability to thrive and persist, most gardeners and farmers would agree that to know it is to hate it.

There is an edible form of C. esculentus known in various parts of the world as Chufa, Earth-Almond and Zulu-Nuts. Ancients Egyptians loved Chufas. In fact, archaeologists examining the opened tombs of Pharaohs have often found a small quantity of mummified Chufas in "easy reach" of the corpses! Now, I've heard of being buried with your family pet, but being buried with your "nutgrass" is taking things a bit too far!

I've grown Chufa Nuts in my garden and although they grow quite well, they aren't very impressive to the palate. They have a distinct almond flavor, but are very "woody" in texture. After awhile you give up chewing and remove a bit of sawdust from your mouth!

Our own beloved "nutsedge" has tubers that are smaller and scattered out further from the plant - a trait which improves its survivability (and weediness!).

New plants arise from underground tubers. The tuber's skin contains a chemical substance that inhibits sprouting. Soil moisture "washes" this inhibitor off the tuber allowing it to sprout. This is one reason why the plant thrives in a wet area of the lawn or garden and proliferates during wet spring seasons.

When a nutsedge shoot reaches the surface it forms a basal bulb, from which grow roots and thin, wiry underground stems with new tubers at their ends. In one year, the outward growth from one tuber has the potential to produce 1,900 new plants and 7,000 new tubers. Now you can see why it's so tough to control! If there is any good news it's that individual tubers do not last longer than 3 years (thanks a lot, right?).

The two primary types of nutsedge are described in the table below:

NUTSEDGE CHARACTERISTICS				
NUTSEDGE TYPE	Purple	Yellow		
LEAF COLOR	Dark Green	Pale Green		
LEAF TIP	Abruptly Tapers to Sharp Tip	Gradually Tapers to Sharp, Needle- Like Tip		
RHIZOMES	Wiry, Scaly	Weak, Thread- Like		
TUBERS	Oblong, Coarsely Hairy	Spherical, Smooth		
TUBER TASTE	Bitter	Sweet		
SEED HEAD COLOR	Reddish to Purplish-Brown	Yellow		

Each tuber has up to 7 viable buds and enough energy in reserve to sprout all of them. So, if an attempt at control, such as the ol' garden hoe, kills one shoot, the tuber merely sends up another. In order for control to be effective, mechanical control must outlast the tuber's ability to regenerate, or an herbicide product must translocate down and kill the tuber. In other words... "never let 'em up for a breath of air."

If you can get your first application on before late May you can control sprouted tubers before additional side tubers have had a chance to form. Once formed those tubers may lie dormant until the following spring. When they then emerge it appears the spraying or digging only made the infestation worse, when in fact

it was just too late to prevent the proliferation of more tubers.

Diligent efforts at frequent cultivation for a period of about 12 weeks can outlast a tuber's ability to regrow. Each time they re-sprout, they are rototilled and exposed to hot summer sun. Control is further complicated, however, by the fact that dormant tubers and seeds are usually around to join in the war.

Now that the beast sounds impossible to defeat, let me say that it is <u>not</u>. Difficult, yes—impossible, no.

TURF AREAS

There are two products available to aid in the war on nutsedge in turf areas. Image (active ingredient is imazaquin) and Manage are labeled for home and commercial turfgrass for use on St. Augustine, bermuda, centipede and zoysia. Neither product will wipe it out in one application. Repeat applications will be required for control, as there are always dormant tubers not affected by the treatment which can sprout later in the season.

FLOWER BEDS AND VEGETABLE GARDENS

Nutsedge in flower beds, gardens and areas "to be gardens" can be controlled with a long drawn out ground war of hoes, hand pulling and summer cultivation. Remember, this weed is tough, but not invincible! If you are not diligent, however, it will be back with a vengeance! In other words, don't start something you're not willing to finish.

Perhaps a better control option, especially for larger areas and heavy infestations, is the use of a contact, translocated herbicide such as glyphosate (Roundup) or glufosinate (Finale). Our experience in the Extension test gardens has been that for nutsedge, glyphosate gives more effective long term control.

Remember these products kill desirable plants too, so for best results apply them at the full label rate with a wiper type applicator. This minimizes the potential for damage to the environment by targeting the

application to the weed itself and requires only a tiny fraction of the product used when a spray application is done. You can make a good temporary wiper applicator by attaching a folded rag or piece of sponge over the end of your pump-up garden sprayer nozzle with a rubber band or twisted wire. I have also used those "grabber" products sold in hardware stores for reaching up to get something off of a high shelf. Remove the suction cups and replace them with cut pieces of sponge. This allow you to carefully grab the weeds among desirable plants and wipe herbicide on the weeds only.

In order to achieve optimum results with glyphosate follow these guidelines:

- Apply only to <u>actively growing nutsedge</u>. Allow 3-5 leaves to emerge on new sprouts for best results.
 Mid spring to early summer and fall are best. Fall application should be made 4 or 5 weeks before the first frost to allow ample time for the product to be translocated down into the newly formed tubers.
- 2. Mix the product at the full label rate.
- 3. Add <u>surfactant</u> (commercial surfactant products are available or, in a pinch, you can use I teaspoon of liquid dish soap per gallon of spray mix) to help it "stick" to the slick leaves of the nutsedge plant.
- 4. Add 1/2 cup of <u>ammonium sulfate (21-0-0)</u> per gallon of spray. Although this may sound strange, it has been found to significantly increase the uptake and effectiveness of glyphosate on many weed species.

Nutsedge, although a tough, formidable foe, is not invincible. With diligent, determined effort and some help from the right herbicide products it can be controlled effectively in the home garden and landscape.

Special thanks to James McAfee, Extension Turfgrass Specialist – for reviewing this publication and offering valuable input.

Roses Need Summer Care

By Dan Gill

LSU AgCenter Horticulturist

Summer heat stresses many plants in our landscapes. Along with other plants, most roses are not especially happy during the extreme heat of mid- to late summer. (Come to think of it, neither are most gardeners.)

Proper care is important as roses enter this most stressful time of the year. Regular watering, mulching, dead-heading and insect, disease and weed control are the major issues we deal with.

Pruning

June is a good month to prune once-blooming roses. These roses, which bloom heavily in the spring and early summer and then not at all the rest of the year, will bloom next year on growth they make this summer. Prune appropriately now, if needed.

Repeat-flowering roses will continue to bloom through the summer. Cut the stem back to just above the first five-leaflet leaf when pruning off faded flowers (deadheading). Cuts may be made lower on the stem of more vigorous roses to control their size. The next major pruning of repeat-flowering roses will be in late August.



Watering

The intense heat this time of year can dry out beds surprisingly fast. Roses planted this year need a regular deep watering whenever we go five to seven days without a good rain. A "good" rain means receiving one-half to 1 inch of rain, not counting brief rain showers.

Established roses are remarkably drought-tolerant and generally do not require a great deal of supplemental irrigation. These roses may need to be watered every 10 to 14 days during long dry periods.

Avoid wetting the foliage, if possible, by using drip irrigation, soaker hoses or an irrigation system that sprays water below the foliage. If you must wet the foliage, irrigate during the morning or when the foliage will dry rapidly to reduce disease problems.



<u>Fertilizing</u>

Daytime highs in the mid-90s and nighttime lows in the mid- to upper 70s actually lower the vigor of roses. Despite your best efforts at proper care, you will notice that the flowers your rose bushes produce in mid- to late summer are often smaller with less vivid colors. And the flowers seem to fade almost as soon as they open.

Many gardeners interpret the lower vigor and poor quality flowers to mean that the roses need more fertilizer. Because heat is the issue, however, roses actually need less fertilizer in late June, July and early August. So be moderate in fertilization if you do any at all now.

Planting and transplanting

Mid- to late summer is absolutely the worst time to transplant roses. If you need to move a rose, wait at least until late November if you can.

Planting new roses during intense heat is also not a great idea, although container-grown roses can be planted this time of the year if needed.

Pest control

For roses highly susceptible to black spot, a weekly spray program is important through the summer months. Fungicides labeled to control black spot must be used regularly. This is not a disease you can spray for as needed. Use products labeled to control black spot on roses, carefully following the label recommendations.

Even with persistent efforts, black spot can show up when we get regular afternoon rainfall. Still, spraying will generally help. To avoid spraying, choose roses that are more tolerant of or resistant to black spot.

Various insects will chew on the foliage or even the flower petals on occasion, but damage is generally minor. For caterpillars, spray the bushes with Bt, spinosad, Sevin, cyfluthrin, bifenthrin or permethrin. The last four will also control beetles and a variety of other insects.

Leaf cutter bees chew round pieces about the size of a nickel or dime from the edges of leaves. Damage is generally not bad enough to warrant control. And these native bees are excellent pollinators.

Weeds

Keep beds well mulched to minimize weeds. A preemergence herbicide labeled for use around ornamentals, such as Preen or Amaze, can also help prevent weeds. For growing weeds, selectively spraying them with glyphosate (KillzAll, Eraser, Grass and Weed Killer, Roundup) will kill them. It is critical that none of the spray or drift contacts the foliage or green stems of the roses. Spray on a calm day, and, if necessary, place a barrier between a rose bush and what you are spraying.

As the outstanding spring and early summer bloom season draws to a close, don't despair. With good care through the summer, the fall rose-blooming season in October and November can be just as or even more spectacular for the everblooming roses.



David Austin Roses

Are Lichens Hurting My Plants?

No. That really is the correct answer. Frequently, they are blamed for a plant's problems when the true culprit isn't obvious. Root problems, compacted soil, water-logged soil, diseases, drought conditions may not be fully apparent for months or even years after the damage occurs and may be the real reason for a plant's illness or death.

Lichens will grow on anything that sits still long enough, including slow-growing plants, tree trunks, rocks, fence posts, fallen logs, animal bones, rusty metal, cloth, glass, tombstones, plastic and even the ground. Lichens are rarely found on



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fast growing trees and shrubs because these plants are always shedding bark, making it difficult for lichen to attach. They grow on healthy trees, as well as stressed or otherwise unhealthy ones. The bark of an older or stressed tree may become more brittle with more cracks and uneven surfaces permitting lichens to attach themselves more easily.

As bark ages, it changes in chemistry, texture, and ability to retain water, thereby influencing the type of lichen capable of living there

However, with at least 13,000 species of lichens living throughout the world, lichen species are so numerous and diverse that there are individual exceptions to most general statements about them. New research shows this primitive life form is the result of fungi and an algae living together. This symbiotic relationship benefits all three organisms.

A diseased or stressed tree can have both lichen and separate fungal organisms growing on the same dead branch or portion of the tree. The homeowner with lichens residing on their damaged or diseased tree branches should concentrate upon identifying the real sources for the tree distress. People considering lichens unsightly may use either copper sulfate or lime sulfur applications to eliminate them.

Unlike plants, lichens do not have leaves, stems, or roots, or a waxy outer cuticle to control body water content. Lichens continue to grow during periods when dew, mist, and rain water are present, but a summer dry period can cause them to become dormant until the next rainfall. Miniscule mineral particles that are carried by the wind during wet conditions are dissolved and absorbed by the lichen. Lichens also produce their own food using sunlight energy and do not feed on the tree bark. The lichen bodies are attached to the outer tree bark and remain on the surface. Their rhizomes typi-

cally do not penetrate deep enough into the inner bark and cause no harm to the trees they inhabit. While they grow very slowly (one to a few mm per year), over time they tend to grow together and cover large sections of the bark.

Lichens provide many benefits both in nature and in human culture. They are eaten by many animals, such as deer, mountain goats and caribou, and even humans. Of the thousands of different lichens, only two are not edible. The two toxic ones are the bright yellow Wolf Moss Lichen (*Letharia vupina*) and bright green *Letharia columbiana*. Many species of bird, for example, hummingbirds, use lichen materials in constructing their nests. They come in many bright colors which make them a popular source of traditional dyes. Certain lichens are used in producing antibiotics, while others provide the miniature plant landscape for model railroad tracks.

Lichens are numerous and important organisms in the natural environment that are generally beneficial in nature. They convert rocks into soil, litmus paper is treated with a lichen dye which reacts with the acid or base, lichens are used in the perfume industry, as thickenings for puddings and to stiffen fabrics and papers. The presence of lichens on healthy trees should be welcomed as likely positive indicators of lower levels of air pollution and a reasonably good quality of atmospheric conditions in the neighborhood.





Lichen.com

Www.opalexplorenature.org



Trinitynewsdaily.com

Courtesy of Birds & Blooms Magazine http://birdsandblooms.com/birding/birding-basics/

5 Ways to Create a Bird-Safe Backyard

Keep your feathered friends healthy with clean feeders, fresh birdseed and a natural yard. By Kenn and Kimberly Kaufman

A lot of planning, time and money go into attracting and feeding your backyard birds. But making your space appealing to them with food and plants they love is only one part of the equation. You also need to ensure that birds stay safe while in your yard. With these tips, you are on your way to a bustling backyard full of feathered guests. Creating and maintaining a bird-safe yard requires a bit more work and dedication beyond simply putting up a feeder. But the peace of mind that comes with doing your part to keep birds safe is extremely rewarding.

Clean Feeders Regularly

Cleaning bird feeders is certainly not the most glamorous part of attracting birds, but it's necessary to keep them healthy and avoid spreading diseases. Moldy seeds and accumulated bird droppings create a very unhealthy environment. It's best to clean your feeders once a month using a stiff brush and hot, soapy water. Consider cleaning them more often during times of peak feeding activity, such as the migration season. Allow each feeder to dry completely before filling and putting it back up.

When you're ready to choose and buy a new feeder, it's important to consider how easy it will be for you to take apart and clean. Because many birds feed on the ground, remember to keep the area under the feeders clean as well.

Say No to Pesticides

Birding and gardening go hand-in-hand, and understanding how birds, bugs and plants benefit one another greatly enhances the rewards. As an active gardener, you probably have found bugs eating your plants and felt the urge to take action. But it's important to know that most pesticides are nondiscriminate killers that don't just eliminate specific bugs. Pesticides kill important pollinators, like honeybees and butterflies, as well as helpful insects like lady beetles.

Although many kinds of lawn fertilizers with weed killers are harmful to wildlife, you still should consider organic fertilizers. Building your soil with a strong combination of compost and organic fertilizers is critical. If you forgo all fertilizers, you can end up with poor plant growth, fewer bugs for birds to eat, and soil erosion as plants decline.

And reducing the overall use of harsh pesticides in yards is healthier for humans, too. A pesticide-free yard is the safest option for your favorite birds, other wildlife guests, pets and even you, too!

Prevent Painful Windowstrikes

Thud! When you hear a bird crash into a window, a feeling of dread comes over you. Stand out in your backyard and look at the windows of your house from a bird's perspective, and it's easy to see why strikes are a major issue. Windows reflect the sky and fool birds into thinking they can fly right through.

Special tape, decals shaped like hawks, and many other products designed to reduce window strikes can be effective and worth trying. If you're experiencing bird strikes at windows near your feeders and decals aren't doing the trick, move the feeders to within 2 or 3 feet of the window. In such a short distance, birds can't build up any speed between the feeder and the window. Birds may still bump into the window occasionally, but they're far less likely to be injured.

Keep Cats Happy Indoors

Cats are lovely and make wonderful companions. But if you love birds and feeding them, it's best to keep your cats indoors. Studies prove the devastating impact that roaming house cats and feral cats have on birds and small mammals.

House cats are not native and also are not part of the natural ecosystem. Many people believe that a well-fed kitty wouldn't have any reason to hunt birds, but even cared-for cats have the instinct to go after birds. Feeders and roaming cats are a lethal combination. If you have an outdoor cat, or if many strays visit your yard, it may be best if you refrain from feeding the birds, for the birds' own safety. Or, you can create an outdoor enclosure or cat patio for your feline friend. They allow your kitty to be outdoors without being a threat to birds. Remember that, according to veterinarians, indoor cats live longer, healthier lives. So keeping them inside not only protects the birds, it's also better for the cats.

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Avoid Red Dye

Beware: Some retailers offer hummingbird food colored with red dye. Most leading experts agree that the dye can be harmful to birds, and at the very least it's unnecessary. The top recommendation for hummingbird food is to make it at home. Mix one part granulated white sugar to four parts water. Any other kind of sweetener besides white granulated table sugar may be unsafe.

Is a Good Snake a Dead Snake????

Absolutely NOT!!!!

Snakes do not deserve the reputation they have gained over the years. People have come to fear snakes based on myths and untruths they have heard over the years. I hope to give you some information on snakes and why we need snakes around. I used to be deadly afraid of snakes. Until I started volunteering at the local botanical gardens, I thought all snakes were bad. I knew there were poisonous and non-poisonous snakes but not until then did I learn the big difference that I point out below. Now I tolerate snakes, I look to see what it is before I take any kind of action. Majority of the time, it is a harmless snake and I leave it alone.

Just like the birds, armadillos, opossums, raccoons, rabbits, snakes come on your property not to hurt you or your family. They are there looking for food, places to hide, to build a nest or a mate. They are a part of nature just like the other animals.

If you see a snake, leave it alone. It is more afraid of you than you of it, in most cases. If you leave the snake alone, it will slither off. Most people are attached or bitten when the snake is provoked trying to get a better look or kill it. If you continue seeing snakes on your property here are some things you can do:

Remove weeds, excess vegetation, piles of debris and any other areas where snakes can hide

Mow your lawn regularly

Keep firewood piles & lumber elevated from the ground 1-2 feet

Keep birdseed from falling to the ground. This will attract rodents to eat the seed that drop to the ground

Seal any cracks and crevices around your foundation to keep snakes out

Install screens over vents and seal openings around plumbing entering home

Keep compost piles in closed containers to keep rodents & snakes away.

There are snake repellents on the market, which are suppose to affect the olfactory senses in snakes but they do not always work on all snakes. People say mothballs, this is a myth so **do not** waste your money for snakes, rats, mice, bats, armadillos, raccoons, and opossums.

Along with doing the items above, you can build a snake proof fence. It is made of any material that is not easily moved or that contains large openings. Wire mesh is often a popular choice, though some people have installed solid, wooden fences instead. Snakes do not need much room to fit under or thru to get on the other side, so it is best to bury the bottom a few inches into the ground. Some snakes are fantastic climbers such as the rat snake. So, when building the fence, slope the fence outward and do not use wire based fencing material since the snake can easily climb this. Also this would help keep other animals out.

Snakes are beneficial as they eat rodents (mice, rats, etc.) and insects which can carry harmful diseases that can cause illness, or, in some cases cause death. Some snakes even eat other snake. I will go into that next.

There are two types of snakes – Venomous (Poisonous) and Non-Venomous (Non-Poisonous). All snakes will bite. Just because it is a Non-Venomous does not mean it will not bite. If provoked it will bite as stated above.

The famed King Snake is so named, as it is the KING of snakes in most every region they live in. That means they EAT other snakes and other things we find undesirable. On the top of the list of the King Some of their favorite foods are rats and mice but their top choice is eating other snakes – venomous snakes (poisonous snakes). If that does not make you LOVE the all mighty King Snake, then eating rats and mice should.



The Speckled King Snake is the most common King Snake in our area of Orange County and South East Texas. It is a pretty snake with the yellow speckles on the dark green back and yellow belly. King Snakes have been kept as pets due to their ease of care. If you decide to keep one as a pet, always provide a pre-killed rodent. A live rodent can deliver a powerful bite, which could injury the snake. King Snakes are generally docile, curious and gentle. But, you should let the King Snake stay in the wild to take care of what nature has intended for it to do – eat rodents and venomous snakes.

Other Non-Venomous Snakes found in South East Texas and Orange County:





Eastern Hognose Eastern Hognose (These snakes have been seen in different colorings) Average size 25 – 36 inches, eats toads



Texas Brown Snake Average size 8 – 14 inches Eats slugs, snails & earthworms



Rough Earth Snake Average size 9 – 14 inches Eats earthworms, ant larvae



Texas Rat Snake Average Size 42 – 72 inches Eats rodents, birds, frogs, eggs, fledgling birds



Diamond-Backed Water Snake Average Size 3 – 5 ½ ft Eats fish, amphibians, crayfish

Note: All snakes can swim and most of them do quite well, but some do better than others. The Cottonmouth or Water Moccasin, a close relative of the Copperhead, is very buoyant and floats while holding their head high out of the water. Water snakes typically swim at or under the surface of the water, with their heads level with their bodies. Sometimes Water snakes may float/swim at the surface while Cottonmouths go under water to catch fish. Copperheads often do the same.



Broad Banded Water Snake Average size 25 – 25 inches Eats frogs



Yellow-Bellied Racer Average Size 30 – 50 inches Eats eggs, small birds & eggs



Yellow Bellied Water Snake Average Size 30 – 42 inches Eats frogs, tadpoles



Gulf Coast Ribbon Snake Average Size 8 – 34 inches Eats worms, slugs, insects



Buttermilk Racer Average size 28 - 58 inches Eats rodents, lizards & frogs



Blotched Water Snake Average Size 30 – 48 in. Eats small rodents



Eastern Coachwhip Average Size Eats lizards, SNAKES, small mammels



Western Coachwhip Average Size 4 – 6 ft.



Rough Green Snake Average Size 20 – 30 in.



Bull Snake Average Size 4 – 7 ft. Eats small rodents



Mud Snake Average Size 36 – 48 in. Eats amphibians



Graham's Crayfish Snake Average Size 18 – 32 in. Eats crayfish



Louisiana Milk Snake Average 16 – 22 in. Eats lizards, snakes & small mice



Texas Night Snake Average Size 10 – 14 in. Eats small lizards



Common Kingsnake Avg. size 18 – 36 in. Eats snakes, lizards, rodents

Two good websites to identify snakes are http://www.texassnakes.net/index.htm and http://www.texassnakes.net

Turn your backyard into an oasis

With warmer weather upon us, it's time to move your gatherings outside. Gilmour has three easy ways to transform your outdoor space into both an oasis for relaxation and a place to entertain.

Ideas for transforming your backyard include:

Customize your walkway: First impressions are always important. Make your lawn stand out with a welcoming walkway lined with ornamental grasses and traditional bedding plants, such as hostas, hydrangeas and ferns.



Add potted plants: Add a splash of color to your backyard with a fun, brightly colored potted plant. These plants allow you the freedom to rearrange your backyard and patio on a whim. Potted succulents are low-maintenance, and herbs like basil, lavender and peppermint are perfect mosquito repellants.

Plant Natural Hedges: Are your neighbors too close for comfort? For privacy, grow towering plants, shrubs and trees to help obscure the view and serve as privacy screens, windbreaks and sound barriers.



Courtesy of Gilmour garden hoses, http://gilmour.com/

Too few chilling hours could affect Texas fruit crop

By Adam Russell Texas A&M AgriLife Extension Service

Warm winter weather could mean too few chill hours for much of the state's fruit production areas, said Texas A&M AgriLife Extension Service experts.

Fruit trees, such as peaches and apples, depend on cool weather in the winter to promote proper physiological growth in the spring, said Dr. Larry Stein, AgriLife Extension horticulturist, Uvalde. If plants don't receive the required number of chill hours, the plants are slow to leaf out and this typically leads to poorly developed fruit or no fruit at all. Multiple seasons of inadequate chill hours can kill plants.

Damp, cloudy conditions and temperatures between 32-45 degrees are ideal for accruing chill hours, Stein said.

Chill hours begin to add up after the first freeze each fall, he said. Trees go dormant for the winter, but chill hours promote hormones that dilute growth inhibitors throughout the winter and prepare the plant to break dormancy and promote growth, bloom and set fruit.

But this winter has been one of the warmest on record and has experts and producers concerned the lack of chill hours could impact the state's fruit crops, especially peaches.

"Fruit trees need sufficient chill hours," he said. "The lack of chill hours is a big deal."

The lack of chill hours around the state has confused plants, Stein said, because growth inhibitors remain and are holding the trees back physiologically.

"Hormones in the buds are telling trees to remain dormant because the inhibitors are still there," he said.
"Bloom has been delayed. Fruit set is erratic at best. Some fruit sets look like they may abort."

Jim Kamas, AgriLife Extension horticulturist in Fredericksburg, said it was the warmest winter in Central Texas he can remember in 22 growing seasons. And local news reports noted this winter was the warmest in Central Texas since 1906.

Most peach trees in the Fredericksburg area need 800-850 chilling hours to break dormancy and set fruit properly, Kamas said. The area received 525 chill hours this year.

"The trees look like it's still winter," he said. "Leaves are still slow to emerge."

Some producers applied BudPro, a growth regulator that replaces winter chill and induces uniform bud break, to help fruit trees along.

"It helps speed up the termination of dormancy as if flower buds were exposed to chilling and fully differentiated," Kamas said. "But it's still stressful on plants and we're waiting to see how they perform. Insufficient chilling can detract from the size and shape of the fruit."

Kamas said fruit with low chill-hour requirements, including some peach varieties, could perform well, though he said bloom and ripening times will be out of normal sequence.

Peach producers should know the extent of the damage within the next few weeks Kamas said. They will be cutting open fruit to see if viable seeds have formed.

Other fruits like grapes and blackberries, depending on the variety, were not affected by the warmer conditions, Kamas said. Strawberries were being harvested and appeared to be fine. However, he said it could be a tough year for apple orchards because the fruit trees are more susceptible to lack of chilling than peaches.

"Usually low chill hour varieties are hit or miss because they bud so early and typically face a freeze," Kamas said. "But this looks like it could be their year."

For the Tea Drinker - 10 Ways to Recycle your Tea Bags!

Cooling off with a tall glass of iced tea here in Orange County is a great way to relax after spending a hot morning or evening working in your garden. When most



people brew their tea, they toss the used teabags into the trash with little thought. After all, what could you possibly do with a used teabag?

It turns out; there are actually quite a few things you can do with used tea bags, especially in the garden. Keep reading to learn why you might want to bury those teabags instead of tossing them in the trash:

- 1. The bags decompose: Did you know that most British tea bags are made from a relative of the banana? Manila hemp is made from the fiber of abaca leaf stalks. The bag itself will break down and the very little plastic they use to seal the tea bags virtually disappears within 6 months, according to the UK Tea & Infusions Association. American tea bags are made of blend of wood and vegetable fibers with the vegetable fiber being the same as the British tea bags from the abaca hemp tree.
- 2. Tea adds nutrients to the soil: Tealeaves contain tannic acid and nutrients that are natural fertilizers for a garden. As the tealeaves decompose, they release nutrients into the soil, creating a healthier growing environment, according to The Gardening Cook.
- 3. Reduce garbage: Burying your teabags in the garden or tossing them in your compost pile helps eliminate excess waste.
- 4. Tea bags keep pests at bay: Used tea bags (and coffee grounds) will help keep bugs away from your plants. The odor deters the pests from chewing on your flowers and veggies.



- 5. The smell of tea works on cats too: Sprinkle coffee grounds or used tea grounds around your garden to keep fluffy from urinating on your favorite plants too. (You can do use this with indoor plants as well), Earth911 recommends.
- 6. Your teabags can grow a garden: Believe it or not, you can grow your own gar-

den with used teabags, seeds, a plastic tray, water and a paper towel. You'll germinate your seeds with the tea bags and then plant them in the garden, according to the Kiwi Conservation Club.

- 7. Tea increases the decomposition of other items: If you are using teabags in your soil or compost pile, the acid in the tea can speed up the decomposition process of other items in the compost bin, which means you can use the compost faster.
- 8. Worms eat the tealeaves: Worms can safely consume tealeaves. Once they digest the leaves they produce a more "nutrient-rich output," making your soil healthier for growing plants, according to Veggie Gardener.
- 9. Teabags help with water retention: Bury your tea bags near the root of your plants, flowers, and veggies to help the plants retain more water and stay healthier.
- 10. Teabags help keep weeds at bay: When you bury your teabags in the garden, they can help impeded the growth of weeds (which means less work for you!).

Adapted by Sheri Bethard, Master Gardener from http://gardeningtips.diyeverywhere.com



Health Tips Portal



How Do I Control This Weed?

WEED OF THE MONTH (July 2010)

BY RICK KRENZ, MG INTERN '06

Photos by GCMGA

Common Name: Virginia Buttonweed Scientific Name: Diodia virginiana

A friend asked for assistance in identifying a weed in their St. Augustine lawn. Of course he was also interested in options for getting rid of (or at least controlling) this weed.

His troublesome weed is commonly known as Virginia buttonweed (*Diodia virginiana*). Virginia buttonweed is a vigorous, low growing and vining plant that produces small white flowers at its leaf axils.

We talked about how it is found in the southeastern United States and is troublesome in golf courses and other turf grass areas. This spreading perennial weed has opposite leaves. Virginia buttonweed proliferates through extensive underground rhizomes and is particularly troublesome in wet or moist areas.

How do you control this weed? I have seen two control measures for St. Augustine grass. One is by diligently pulling them from the ground by hand. You must pull roots and all since plants will readily reproduce from stem and root fragments in addition to seeds. If you see Virginia buttonweed starting to bloom, do not wait—pull the plants up before they go to seed! This method has proven to be best for both environmental and final results. However, this approach is effective and practical only for limited or small size infestations and when plants are diligently pulled on a frequent basis over a 4-6 week period. The areas must be regularly inspected over the remainder of the growing season to remove any newly emerged plants. This must be repeated again next summer for complete eradication.

The second option is by application of post emergence broad leaf herbicides. Tests have shown herbicides containing dicamba (such as Image) may help. Repeated applications will be necessary for complete control. Be sure to read and follow all label directions provided by manufacturer. No pre-emergent herbicides have shown to kill or control Virginia buttonweed.

To help prevent Virginia buttonweed from getting in your St. Augustine grass, we have learned a thick and healthy lawn that is properly mowed and fertilized will greatly decrease the possibility of Virginia buttonweed getting a foothold. Since the Virginia buttonweed plant prefers moist wet conditions, excessive irrigation should be avoided.

	THE BASICS	
Туре	Broadleaf (Dicot)	
Description	Spreading warm-season perennial	
Leaves	Opposite	
Flowers	Between the leaf and the stem (leaf axils). Individual flowers star-shaped with four white petals	
Stems	Usually trail along the ground but sometimes are ascending. Stems can root at the nodes and occasionally hairy.	
Fruit	Small, hairy capsule (1/4 inch) that contains 2 seeds	



Virginia Buttonweed Readily Adapts to Mowing



Virginia Buttonweed as a Spreading Perennial



The Flower of Virginia Buttonweed

References to trade names are made with the understanding that no discrimination is intended and no endorsement is implied by Texas AgriLife Extension Service.

11 Ways to Kill Garden Weeds

Keep unwanted weeds from infiltrating your garden with these simple remedies.

BY TRISH BARBER FROM THE BOOK EXTRAORDINARY USES FOR ORDINARY THINGS



Baking Soda

Looking for a safe way to keep weeds and grasses from growing in the cracks of your paved patios, driveways, and walkways? Sprinkle handfuls of baking soda onto the concrete and simply sweep it into the cracks. The added sodium will make it much less hospitable to dandelions and their friends

Bleach

Do weeds seem to thrive in the cracks and crevices of your walkways? Try pouring a bit of undiluted bleach over them. After a day or two, you can simply pull them

out, and the bleach will keep them from coming back. Just be careful not to get bleach on the grass or plantings bordering the walkway.

Borax

Get the jump on those weeds that grow in the cracks of the concrete outside your house by sprinkling borax into all the crevices where you've seen weeds grow in the past. It will kill them off before they have a chance to take root. When applied around the foundation of your home, it will also keep ants and other six-legged intruders from entering your house. But be very careful when applying borax — it is toxic to plants.

Bottles

When using herbicides to kill weeds in your garden, you have to be careful not to also spray and kill surrounding plants. To isolate the weed you want to kill, cut a 2-liter soda bottle in half and place the top half over the weed you want to spray. Then direct your pump's spraying wand through the regular opening in the top of the bottle and blast away. After the spray settles down, pick up the bottle and move on to your next target. Always wear goggles and gloves when spraying chemicals in the garden.

Carpet Scraps

Place a series of carpet scraps upside down and cover them with bark mulch or straw for a weed-free garden path. Use smaller scraps as mulch around your vegetable garden.

Salt

Those weeds that pop up in the cracks of your walkways can be tough to eradicate. But salt can do the job. Bring a solution of about 1 cup salt in 2 cups water to a boil. Pour directly on the weeds to kill them. Another equally effective method is to spread salt directly onto the weeds or unwanted grass that come up between patio bricks or blocks. Sprinkle with water or just wait until rain does the job for you.

Shower Curtains

Those old shower curtains will also come in handy next time you do any landscaping with gravel or bark chips. Just place the shower curtain under the mulching material to prevent annoying weeds from poking through.

Spray Bottles

Fill one with undiluted white vinegar to get rid of the weeds and grass poking out of the cracks in your concrete, as well as ants and other insects — but be careful not to spray it on your plants; the high acidity could kill them.

Vinegar

Are dandelions sprouting up in the cracks of your driveway or along the fringes of your patio? Make them disappear for good by spraying them with full-strength white or apple cider vinegar. Early in the season, give each plant a single spritz of vinegar in its midsection, or in the middle of the flower before the plants go to seed. Aim another shot near the stem at ground level so the vinegar can soak down to the roots. Keep an eye on the weather, though; if it rains the next day, you'll need to give the weeds another spraying.

Vodka

For a quick and easy weed killer, mix 1 ounce (30 milliliters) vodka, a few drops liquid dish soap, and 2 cups water in a spray bottle. Spray it on the weed leaves until the mixture runs off. Apply it at midday on a sunny day to weeds growing in direct sunlight, because the alcohol breaks down the waxy cuticle covering on leaves, leaving them susceptible to dehydration in sunlight. It won't work in shade.

WD-40

Don't let pesky prickly weeds like bull and Russian thistle ruin your yard or garden. Just spray some WD-40 on them and they'll wither and die.

Tips for Aphid Control

Aphids: Common problem we will see in our area!



Apply 2.5 Table spoons of Dawn Dish soap per 1 gallon of water spray every other day for 1 month to plants or trees, as well as the ground beneath, reapply if rain occurs, then twice a week for a month, then once a week. This should break the life cycle, and help prevent recurring infestations.

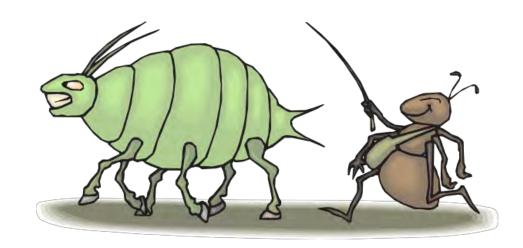
Yellow plastic cups, turned upside down and stuck onto 16 inch

tall, broomstick-sized sticks, using a thumbtack. The sticks are pushed into the ground about a foot from the tomato plant. I coat the yellow plastic cup on the outside, with Tree Tanglefoot, a very sticky substance that doesn't wash off. The aphids are attracted to the color yellow, they fly onto the cups and the Tanglefoot catches them. (Don't substitute something else, Tree Tanglefoot is the on-



Jimlongscolumns.blogspot.com

ly thing that doesn't wash off and keeps catching plants.



Wildlife & Hunting

Wildlife Food Plots

Forage legumes are widely used as components of mixtures planted as supplemental browse for white-tailed deer. Warm-season forage legumes, such as Rio Verde lablab and Iron and Clay cowpea, are usually planted in late spring or early summer to provide a high protein source for deer in mid to late summer. These same summer legumes can be fall-planted in mixtures with clovers and small grains to provide supplemental forage from October through May. Cooperative research was conducted by Texas A&M AgriLife Research and Texas A&M AgriLife Extension Service at Overton, TX to determine optimum seeding rates of these forages. The image above shows a mixture of 40 lbs cowpea, 10 lbs oats, and 40 lbs arrowleaf clover. It shows the mixture at 30 days post-planting.



Photo credit: John Stehn - USFWS



Walter Reeves

Wildlife & Hunting

Combination Food Plots Can Attract Deer Year-round

- Writer: Adam Russell, 903-834-6191, adam.russell@ag.tamu.edu
- Contact: Dr. Billy Higginbotham, 903-834-6191, billy.higginbotham@ag.tamu.edu

OVERTON – It's time to plant food plots for white-tailed deer as hunting season approaches, said a Texas A&M AgriLife Extension Service expert.

Dr. Billy Higginbotham, AgriLife Extension wildlife specialist, Overton, has a food plot combination proven to attract whitetails and keep them hooked through the hunting season and beyond.

The combination of winterhardy oats, iron and clay cowpeas and arrowleaf clover works well in any area that receives 35 inches or more of rainfall each year, specifically in East Texas, Higginbotham said. Cowpeas grow quickly when planted in September when moisture is available. Sprouts are an immediate attractor for deer.

Higginbotham's strategy is to establish numerous small plots edged by cover so deer will use them during legal hunting hours.



A plot of cowpeas is a good attractor for white-tailed deer. Combination fall plantings of cowpeas, oats and arrowleaf clover provide forage for deer through winter, spring and into summer. (Texas A&M AgriLife Extension Service photo by Adam Russell)

A great way to enhance plots is to provide a transition zone between the edge of the woods and the open food plots so deer feel comfortable moving through screening cover from the woods to the feeding area, Higginbotham said. Allow one or two disc-widths of native vegetation to grow between the food plot and the hard cover to provide secondary cover.

Also consider setting aside at least 1 acre for every 100 acres of habitat in cool season food plots as "sanctuary plots" that are never hunted, Higginbotham said.

"It's good to rotate food plots each hunting season but I also recommend having a few food plots where deer can feed and are never pressured," he said.

Wildlife & Hunting

The cowpeas will be grazed out and/or die back at the first frost, but by then the oats will be established.

"Of all the small grains, deer prefer oats when given a choice," Higginbotham said. "Be sure to select winter hardy oat varieties to plant because they will provide the bulk of the forage available from first frost until spring green-up."

The arrowleaf clover will emerge in the spring and last until early June, he said. By then, spring-planted warm-season food plots should be established and able to carry deer through the summer.

To establish plots, shred and disk the area to be planted, Higginbotham said. Consider applying glyophosate to kill vegetation a few weeks before plot preparation if there is heavy vegetation on the site.

The plot should be in a natural opening that will provide enough sunlight for the forages but small enough to provide deer the security of nearby cover, Higginbotham said.

In a clean disked seedbed, broadcast the oats and peas at a seeding rate of 40 pounds per acre each and cover to a depth of 1 inch, he said.

"It is very difficult to disk lightly enough without burying these seeds too deep—a cardinal sin," he said. "Consider devising a drag out of cattle panels or old tires so the seed can be covered to the correct depth."

Cowpeas should be inoculated prior to planting. Be sure to purchase the appropriate inoculant when buying seed. Inoculation results in nitrogen fixation by the plants and boosts production.

Arrowleaf clover seed would then be broadcast at 10 pounds per acre and lightly dragged in, Higginbotham said. Like the cowpeas, clover should be inoculated prior to broadcasting. There are pre-inoculated varieties of arrowleaf clover available.

Inoculants minimize nitrogen fertilizer needs at planting and again in late deer season. However, if the oat component of the combination shows signs of "yellowing" during late December or early January, top dress the plots with additional applications of nitrogen at 200 pounds per acre.

"The cowpea-oat-arrowleaf clover-combination has proved to provide early deer hunting opportunities for youth-only and archery seasons when established in early September," Higginbotham said. "The combination then provides a constant supply of forage for deer into early summer."