

## Watering your lawn

### How do you know how much to water?

Set a tuna or cat food cans at different areas of the lawn to measure the amount of water your sprinkler will apply in 15 minutes. If you have a gear driven rotor type heads your water will need to run at least 3 times as long to get the same amount of water on the lawn as a pop up type head. The advantage of this slow rate of water application is the reduction in water runoff. Lawn rain gauges can be purchased at local nurseries if you cannot find a can or cup to catch water. On an average, your lawn and landscape will require 1.5 inches per week during the summer. More water will be required during extremely hot dry periods during June thru August. The opposite is true from November thru February. The Fescue lawns that are the slowest to green up are usually homeowners that do not water at all during the winter or water too much and leach out all of the fertilizer we have applied. Now that spring is here moisture demand will increase and you may need to address poor sprinkler systems and/or dry areas caused by trees roots. Trees that are surrounded by streets, concrete, and houses will become dependent on small areas of the lawn for survival and dramatically increase the water demand in that area of the lawn. **Small areas of the lawn can easily need 3 inches per week to keep up with the tree water demand.**

### Average weekly water demand throughout the year

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
.25	.50	1.0	1.0	1.5	2.0	2.0	1.5	1.25	1.0	.5	.25

Highlighted months are very important months to save water.

Go to our links page to receive current weekly water demand for common area grasses.

**Watering** - Most lawns will require 1.5 inches per week when we are not receiving natural rainfall. When it gets super hot (98 degrees and up) I have found that applying .5 to .75 inches late in the day then restarting your sprinkler again 3-4 hours later or the next morning, allows the water to be pushed deeper into the soil before the sun and wind steal your water. By watering with "repeating cycles" you should be able to water only **once or twice per week** instead of daily watering that greatly increase water evaporation. The objective is to water deep and less frequent to encourage deep root growth. You may need to water more frequently if your home is built on shallow soil (soil with white soil and rocks showing). These type soils do not hold water very well. The lack of moisture around trees also kills out all lawn grasses. **The leaves on your trees can often have more surface area than your entire lawn.** This is why water use will increase dramatically next to trees. **Think about having your entire lawn up in the air where the grass leaves are exposed to more wind and sun. \*\* 12 to 15 inches next to sprinkler heads can be the hardest areas to get wet.**

**MP Rotator** – These type nozzles are being mentioned to give you an option to increase your lawns watering efficiency. They can only improve coverage, wind loss, and runoff, you still must water if you want a lawn. These are gear type sprinklers that will require 3 times the amount of time to put out the same water as pop up sprinkler. Go to our links page to and click on [www.mprotator.com](http://www.mprotator.com) to actually see these nozzles operate. These are designed to replace your old fan tip. Your main pop head, which is in the ground, is not replaced. Only the very tip is replaced. It will cost around \$8-10 per head to update your system. **Your**

**current sprinkler company can help you replace your current nozzles with MP rotators.** These are very new but they are available in Lubbock at Ewing Irrigation Supply Company. We do not work on sprinkler systems and would rather not recommend a specific company.

### **Reasons to consider changing to MP Rotator**

- 1) Your **lawn has dry spots** that the current sprinkler does not cover well. This poor coverage generally causes homeowners to over water 90% of the lawn to wet the dry 10%.
- 2) You run water into the street very easily. MP Rotators apply water much slower so the water has time to absorb into the ground before it runs off into the street. **MPs will need to run 45 minutes to put out the same amount of water as 15 minutes of a regular fan tip nozzle.**
- 3) If wind creates a mist with your current water spray this will increase evaporation. It requires very high wind speeds to disrupt MP nozzles, so less water is lost to evaporation.

**Xeriscape** - I have discovered that like most other issues the answers are not black and white. One of the main problems with total xeriscape is **weed management** that will need to occur in West Texas. Because we are an agricultural area we will continue to have dirt storms that will in 3-5 years fill in rocks that have been used instead of lawns. This is where the problem begins - in lawns we can use herbicides to help on weed management, but it is much more difficult to safely apply herbicides in a rock system with beautiful xeriscape plants which help shade ground and compete with weeds. When weeds do occur hand weeding will be necessary to safely remove weeds without harming desirable xeriscape plants.

I have a few customers that have xeriscaped portions of their lawn with a lot of success. Today they look good but it was not cheap, usually \$10,000 to \$30,000 depending on what is done, with a lot of hand weeding. You may want to first try to xeriscape areas where the Bermuda has died from the lack of sunlight. This is because without sunlight Bermuda and many other weeds will not be such a powerful weed problem. Multiple "Roundup treatments" will only hurt Bermuda- it normally will come back in areas that have water and full sunlight within 3-24 months.

**To sum up the water problem** - lawns, which include fescue in shade areas, are the cheapest and easiest method of weed control. **Also Fescue is very weed competitive which allows us to dramatically reduce herbicide use.** I believe that if you will learn to manage your water instead of setting your sprinkler and forgetting it, you will be able to have a beautiful lawn that is water efficient. I want to encourage you to switch to xeriscaping whenever possible. But be sure you understand all of the benefits and pit falls, with weeds and hand weeding being the number one issue.



## **What to do in low light areas of the lawns that Bermuda will not grow.**

### **Fescue Seeding**

**Sunlight is the most critical part of producing a beautiful lawn.** As trees grow they dramatically reduce available sunlight to your lawn. If your lawn was originally Bermuda it probably looked great for the first 10-15 years then weeds started appearing and you noticed dirt starting to show. It is time to think about a change. We are able to change your present lawn to Fescue **without digging up the lawn** or creating a dirty mess. We use a special method of planting the seed in the upper 1/8 inch of the soil or existing turf. Do not worry about the old Bermuda it is actually helpful in germinating our seed. **Over seeding is also how we maintain an existing Fescue lawn.** If you are interested in having a fescue lawn contact us thru our web site contact button.

### **Shadowturf**

This is a new turf grass that you may have seen advertised in the newspaper. It can be purchased at Holland Garden, Ivey Gardens and Frontier Hybrids in Abernathy. Frontier suggested going to their web site for more information ([www.turffalo.com](http://www.turffalo.com)). After talking to Frontier Hybrids I believe this grass may have potential in moderate shade (30-70%). They are claiming it is more shade tolerant than fescue; this is yet to be seen. Solid squares of Shadowturf sod are not available yet because it is too new. You should not expect full coverage for 2.5 years in the shade even if you plant sprigs at 6 inch spacing. If it was planted in full sun it might cover in one growing season.

The claim of fewer weeds may be true in full sun but doubtful in shade where the turf will not be as thick. Turffalo, Zoysia, St. Augustine have not lived up to the claims in the shade, but maybe the Shadowturf will be different. Keep in mind this grass maybe like Zoysia and St. Augustine that do not go dormant enough to tolerate Roundup to kill winter grasses which result in more weeds than you expected. I tried Shadowturf at my home in 2006 in a shady Fescue area that my dogs were beating down. The dogs won and I am going to put flat river rock in that particular area.

### **Trees, Flowerbeds and Shrubs**

Most of your trees, flowers and shrubs are native to areas that have high rainfall (which is the area from Dallas to the East Coast) where the soil is more acidic. **To help your plants survive in the Lubbock area where our soils are alkaline, I suggest using products such as Iron-X, Ironate, Ironite or Ironite - plus which includes a 12-10-10 fertilizer and is ideal for most shrubs and flowers.** These products are found in most nurseries; **these products will stain concrete.** They can be scattered on the soil surface with a small hand held spreader. To prevent possible stains on concrete, I suggest making small trenches approximately 6 inches away from shrubs and plants with a hoe, about 3-4 inches deep, then pour in about 1 inch of product and cover the trench with dirt to keep the iron from dissolving and floating across concrete areas. **In the same trench apply normal fertilizer such as 16-8-8 or a fertilizer that is specific for your particular plants-the Ironite-plus already has this type fertilizer.** If your lawn is Fescue we cannot use high fertility rates without damaging the lawn. Consequently tree and shrub fertility in Fescue lawns is extremely important.

**Mowing Height** -Mowing too low is very stressful for the lawn unless it is Bermuda grass with 10-12 hours of full sunlight. If there is **any shade** the lawn should be mowed higher so the leaf blades will be able to intercept more sunlight. Sunlight is critical for the production of plant food for the lawn. This is one of the major reasons why Bermuda will thin out when it is forced to grow in the shade. Fescue should be mowed 2.5-3.5 inches depending on sunlight level. Fescue will also thin out if it does not have at least 4 hours of direct sunlight. During the summer mow Fescue higher; this will help your lawn to tolerate the heat and allow more sunlight interception.



\*\*\*\***The most powerful weed control mechanism is mowing a lawn at the proper height.** This is much better than our best herbicide. We see Spurge (Milkweed) dramatically increase when the lawn is mowed too short.

**Fire Ants update** - The wet fall and winter may increase this "moisture loving" pest this spring. The imported fire ant (IFA) slowed its population explosion due to the extremely dry conditions in 2006. If we have a dramatic increase in rainfall do not be surprised to see the ants also increase. The IFA actually has been in Lubbock for 15 years. Our drought prior to 2004 has slowed their establishment. Very likely they came on firewood or tree root balls from central Texas. You will see the characteristic larger than normal dirt mounds usually next to sidewalks. **Our native ants enter and exit from one hole at the center of the mound whereas IFA enter and leave the main underground colony from several tunnels that are several feet away from the dirt mound you see.** On warm days if the dirt mounds are disturbed you will see white ant larvae, which are the "baby ants". IFA will move their entire brood of larvae during the course of the day from underground to the top of the dirt mound to control the temperature of larvae. Be careful with these ants they will attack in large numbers and sting with a very toxic poison. If you or your pets are stung seek medical help. These ants also love to infest anything that has electricity such as in -ground lights, sprinkler valves, and electrical junction boxes. The dirt nests are usually found next to concrete sidewalks or rocks. These ants are much more aggressive than our native red fire ant that is much larger and consistently red instead of reddish brown. The imported fire ant came from South America and was introduced into the United States at Mobile Alabama in 1929. It has infested most southern states including Texas. It is a bigger problem here than in South America because it does not have the natural enemies and diseases that control it in its' native environment. Fire Ant insecticides with the **active ingredient Fipronil** is currently sold under the name **Over 'N' Out** will be the best for control. The insecticide must be applied over every square inch of the lawn and beds for it to be effective. These products are now available in some local garden centers.

**Humic acid and Coron slow release fertilizer** - Is now part of our fertility program. These products when used with our **foliar iron and other micronutrients** will help achieve an excellent color with a moderate growth rate. We will be explaining more about these products in detail at the time of treatment. We began using Humic acid and Coron July of 2005 with excellent results.

**Spring Dead Spot -The fungus group is called ETRIF or (ectotrophic root infecting fungi).** This is a disease of Bermuda that results in circular patches of bleached, dead grass that appears in April and May as the dormant Bermuda lawn resumes growth. The 4-24 inch spots will appear in the same spot year after year. Re-growth of grass into the patches is generally slow. The fungus releases a toxin that slows growth and will stunt runners as the Bermuda tries to fill in the dead area. This is a cool season fungus that attacks the lawn in September-October. As the temperature increases in May and June the fungus will generally go dormant. We have tried numerous fungicides that **claim** to stop the disease; so far we have not seen any control.

**Solutions that we know work to control Spring Dead Spot.**

- 1) Dig out the spot and replace with disease free soil.** Be sure to dig down 8 inches, and remove at least 4 inches of unaffected grass surrounding the spot to remove all of the fungus.
- 2) Allow us to overseed your Bermuda lawn in October with Fescue** which is unaffected by the disease. I would suggest this solution for several reasons: a) Spots will go away. b) Over seeded turf will allow lawn to be more aggressive and uniform, therefore better able to tolerate sun and shade.
- 3) The best solution is to spread ground peat moss (which is acidic pH of 4),** approximately 1.5 inches deep in the affected area. This is found in nearly all nurseries and discount stores in large compacted square bundles. As you water, the peat will begin to decay and help kill the fungus throughout the year. You will begin to see

Bermuda runners spread more rapidly across the infected area. We first heard of this treatment at TX A&M - Dallas turf research station. We treated several lawns in 2004 and 2005 with moderate success.

**4) Our Coron and Humic acid fertility system is the best long-term prevention program.** It reduces disease due to the 70% slow release nature of the products allow for a more controlled and healthier growth rate. The slower growth rate keeps leaf cell wall stronger and less venerable to disease infection. Quick release fertilizers cause such rapid growth that the lawn become susceptible to disease. This excessive growth response is similar to steroids used to build strength and muscles in humans and the negative effects in the human cells.