Yard and Lawn Maintenance- The Basics

WATERING (for newly planted perennials, shrubs and trees ask for our article entitled "After Planting Care instructions")

In General

All plants require water to survive. This becomes even more critical during extended dry periods [defined as a period of 7 days or longer with no appreciable (0.33 to .5 inch of rainfall and rapid short lived thunderstorms do not count as the rain runs off too fast to be absorbed) rainfall. Such periods are the norm and are not uncommon in MD. This especially becomes an issue in the summer where high temperatures further desiccate plant materials. Hence, beginning with the day after we install your plants, plan on watering your new plants two or three times a week, with each watering separated by no more than 3 days during the months beginning in May through the end of September * during the first two years after installation. Watering new plants means leaving the sprinkler in one location long enough to thoroughly saturate the soil. For most sprinklers this means leaving it in place for a minimum of three (3) hours and often for as long as four (4) hours. Hand watering with a hose is impractical unless you have the patience of a Saint as it will be difficult for you to water one spot long enough to do any real good and watering it with too heavy a spray is similar to a thunder storm and is unlikely to do the plants much good. If we have planted any large trees (6 feet or taller) on your property one of the easiest way to water the tree is to purchase a 'Gator bag'. These are available at Lowe's and other hardware stores as well as on-line and are both easy to use and very effective. Remember we can't be responsible for plant loss due to neglect, abuse or accidents, and the lack of applying adequate water is considered neglect.

* Plants installed after October 15th are for the most part starting to go dormant. When we install your plants we give them a good soaking so you need only to supplement that watering if we go more than six days without a 1/4 or more inches of rainfall or if temperatures soar back in the upper 70's or more. As above, if using a sprinkler leave it in place for a mimimum of three hours. **HOWEVER**, keep in mind the warning at the end of this article about what to do if we have a dry Fall and early Winter.

Lawns (For information on newly seeded Lawns see the section below titled, "SPECIAL INSTRUCTIONS FOR NEWLY SEEDED LAWNS on page 6"

For established lawns a single moderate watering per week is all that should be necessary, unless this is in the hottest part of the year(June through September) when you should always use a 3 to 4 day schedule unless we have significant rains (1" or more) that week. Thunderstorm rainfalls don't really count as the rain comes down too fast to be absorbed. If there is a two to three hour period of moderate to gentle rain after the storm passes, however, that should provide sufficient watering for a couple days thereafter.

FERTILIZING

Fertilizing is the key for the success of any planting, whether it be trees, shrubs, perennials or grass plantings. We may recommend that after we install your plants that you apply fertilizer. My preferred

fertilizer for shrubs, trees, perennials and ornamental grasses is Miracle-gro (either in granular form to be mixed with water and sprayed or sprinkled on the foliage and ground surrounding your plantings or Miracle-Gro's per-packaged liquid formulation intended to be applied using Miracle-Gro's special hose end adapter; again on the foliage and the surrounding soil) which ,except for evergreen trees, should be applied beginning with the last weekend of March or the first weekend of April then every other weekend till mid July and stop. Evergreen trees can be fertilized till mid October. At a minimum you should apply fertilizers to your lawn and garden beds in the fall (IMPORTANT NOTE: Lawn grasses should <u>only</u> be fertilized in the Fall.) I recommend applying **two** applications of a granular fertilizer via a broadcast spreader. When using granular fertilizers the total fertilizer delivered in a year should be between 3.5 to 4.5 lbs of Nitrogen (the first number in the three number ratings you see on the bags of fertilizer) per thousand square feet. If a bag of granular fertilizer claims to be a 10-6-4 formulation it means that 10% of the contents is Nitrogen. Thus a 40 lb bag of that material contains 4 lbs of Nitrogen.

To get the square footage of your yard, take the measure of its boundaries, i.e. Its length vs its width and if its an odd shape you can take an average width and length (or use a reasonable fudge factor) to account for that. Keep in mind that this isn't rocket science and you need not be 100% on target. Once you obtain that square footage subtracting the square footage of your the house and paved surfaces to determine the approx. square footage of your lawn and garden bed. Divide that number by 1000 and multiple by 4 to determine how many pounds of nitrogen you'll need that year.

For Example: If your yard is 110 feet long and 60 feet wide the total square footage is 6600 Square Feet (SF). Let's say that your home is 25 feet wide by 40 feet long and your drive way is 12 feet wide and 25 feet long. You measure the length and width of your deck (12X18) and of the front walk (3X18). You obtain the following figures:

1000SF for the house 300 SF for the driveway 216 SF for the Deck and 51 SF (est) for the front walkway for a total of 1567 SF. You Subtract the 1567 from 6600 and you get 5033 and you can round that down to 5000 SF. Then you Divide 5000 by 1000 equaling 5 and the multiple 5 times 4 to determine that you need to annually apply the equivalent of approx. 20 lbs of Nitrogen onto your lawn and into your beds. A little higher or a little lower won't matter that much!

Before you go out and apply the fertilizer, however, you'll need to divide the number of pounds of nitrogen equivalent by 2 and that's the amount you deliver in each of the two applications.

Going back to the example above; you need 20 lbs of Nitrogen equivalent per year and you are purchasing a balanced fertilizer with the ratio given as 10-6-4. If each bag contains 10% Nitrogen by weight and if each bag weighs 40 Lbs you would be receiving 4 lbs of nitrogen per bag. To obtain the 20 Lbs of Nitrogen you need you'll need to purchase 5 bags of this 40 Lb 10-6-4 fertilizer. So each of the two times you fertilize you'll use 2 and one half 40 Lbs bags of this 10-6-4 fertilizer.

The first application should be made between September 15th and October 14th and the second application no sooner than 30 days later.

As the other two ingredients are catalysts they don't need to be replenished yearly. So in years 2 to 5 (in a five year cycle) I use UREA or 48-0-0; usually available at the Southern States Cooperative Store on Frederick Rd and St. Johns Lane in Ellicott City.

(NOTE: using the above example a 40 Lb bag of urea is almost 50% Nitrogen. So a 40 Lb bag of Urea contains almost 20

Lbs of fertilizer. For this yard you'd only have to buy one (Yes only One) bag of urea per year, applying half of it in the first application and the remainder in the second application 30 or more days later!!)

Only in year 6 (and years 11, 16, 21, etc..) do I use a balanced fertilizer such as a 10-6-4. Then in the spring I use a Crab Grass Preventer (see section on weeding below and note that it is hard to find without fertilizer but such single purpose products are often available at Meyer Seed Co in Baltimore and in local Hardware Stores (but not the big box stores such as Home Depot or Lowes.)

LIMING

It's probably a good idea to add lime to your lawn (but **never** to your garden beds unless told to do so by an expert) every three years if you already have what appears to be a healthy lawn. Apply it at the rate of 50 lbs per 1000 Square feet, using a drop, not a broadcast spreader or else you'll be bathed in Lime from head to toe. Wait at least 30 to 60 days after you've fertilized your yard before you apply Lime or else you can get a chemical reaction between the two and your Nitrogen will combine with the Lime to form Nitrous oxide a/k/a Laughing gas, but as your Nitrogen will go up into the air rather than into your lawn its not very funny! If you've made your second application of Fertilizer by October 20th, December 15th or later will be the perfect time to apply Lime.

If your lawn is yellow even after you fertilize and the grass is thin and not thick, it could be that you have a severe shortage of Lime and your pH is well below 5.8. In such a case add 100 lbs of Lime per 500 square feet of lawn and repeat this once every three months for a year to and year and a half (again avoiding applying within 30 to 60 days of your application of fertilizer.)

WEEDING

To minimize weeding you should apply a weed preventer in **early Spring**, and due to the lengthening of our warm to hot season, likely you will need to apply this item in early **July** as well.

Garden Beds

Though <u>weed preventers</u> do not control all weeds, they do prevent many. The most common weed preventer product available on the retail market is called *Preen*. Its not nearly as effective as the commercially available materials (which technically anyone could buy from sources such as Meyer Seed in Baltimore, John Deere in Elkridge or via on-line landscape material dealerships) but they are sold in "commercial-sized" units and are intended to do an acre or more. As such they cost \$100 or more (usually more) per unit. They also only have a life shelf of about a year or two and only if kept from extremes of cold/heat and humidity.

Another way to make it easier to control weeding is to use rock as mulch installed over landscape cloth. The cloth keeps the rock from migrating into the soil (by itself its a lousy weed preventer.) Although weeds will try to grow in the rocks they can't "anchor" themselves in as well as they can in mulch or soil. Hence, trying to grow in rock, they are easily yanked out of the ground with little effort or sprayed with a non-mammalian toxic product such as 30% Vinegar (see **Safe alternative weed killers** below.) Rock, as mulch, is between 4 to 5 times the cost of "professionally installed" wood mulches but after 4 to 5 years pays for itself and they will last for years (thousands maybe!) without needing replacement.

OF COURSE YOU CAN ALWAYS HIRE LABORERS TO MANUALLY PULL YOUR WEEDS OUT OF THE GROUND OR MULCH! We'd be more than happy to send out our crews to do this for you, for a fee of course!

Safe alternative weed killers:

Although safe is a relative term you can use substances which will kill your weeds and just about anything vegetative that its applied to (that may include your desirable plantings as well so be careful when applying them.) The substance I recommend is s mixture containing undiluted 20% or (preferably) 30% Vinegar. A good formulation would be 1 gallon of vinegar, 1 tablespoon liquid dish soap and 1 cup of salt (rock salt is preferred but if not available table salt will do.) Blend the mixture and pour it into a plastic spray bottle or a pump sprayer specifically labeled specifically for use with Vinegar, as Vinegar will destroy the seals of regular pump sprayers. You can apply it to any vegetative item that gets at least 3 to 4 hours of direct sunlight. That will top kill that vegetation. Although it may not totally kill the plants, repeated applications (2 or 3 over a few weeks) should just be enough to finally kill the weed for good. If you need to reapply vinegar to the weeds your additional solutions should not contain salt! Too much salt will poison the soil. Instead use a solution consisting of just the Vinegar and dish soap. NOTE: Vinegar sprayed onto vegetative materials is non-toxic to mammals, not harmful to the environment, and any odor dissipates within a few hours. Its available through Amazon and other websites and maybe, but don't count on it, hardware stores or over the web. There are also other "non-toxic" (again a relative term) herbicides available either at these stores or over the web. Read their labels carefully to make sure you understand how to properly apply them and what vegetative items they will kill.

<u>Lawns</u>

Again <u>lawn weed preventers (a/k/a Crab Grass Preventers)</u>, used primarily to control crab and goose grass, should be applied in the Spring around the end of March or early April and due to global warming we now have to re-apply this material in early July. These items are often sold in combination with fertilizer and/or Fertilizer with Weed Killer, but as Spring and Summer are the worst times to fertilize, only purchase single purpose products labeled for the prevention of crabgrass. NOTE: you will not find this product at the big box stores like Home Depot or Lowes. Only *real* hardware stores like Ace on Rt 40 in Ellicott City or Kendall Hardware on Rt 108 in Clarksville will have this single purpose (non-fertilizer/weed killer containing) products. Just follow the application recommendations on the bag.

In General

<u>Garden bed and lawn weed killers</u>, whether sold in liquid or granular formulation, are not particularly great for the environment and possibly toxic to mammalian life (and we humans are mammals!).

<u>Lawns</u> – Lawn Weed Killers should only be used in desperation, I.E. if your yard is more weed than grass. Also if applied don't be in a rush to re-seed afterward as their residual effect will kill new seedlings of grass plants. The best control for weeds is a healthy well fertilized lawn and setting the lawn mower's cutting deck to its highest settings. Weed seed need sunlight to germinate and it the grass is high and thick enough few such seeds can germinate. Applying weed killers in small spots to eliminate the worst patches would be a better environmentally friendly method vs wide-

spread application of these chemicals. Note: products containing Dicamba may injure the roots of trees and other ornamental plants nearby. Use only in area of large expanses of grass only or use products that do not contain Dicamba.

<u>Garden Beds</u> – What I said for lawns also applies to garden beds. Here most weed killers will harm a very broad spectrum of desired ornamentals as well as the weeds. Prevention is far more effective. If you must kill weeds here I recommend a solution of 30% Vinegar blended and used as described above. Again to be effective drench the weeds on a dry and sunny day. Plants soaked in the solution will die within a few days. DO NOT LET THIS SOLUTION CONTACT ANY FOLIAGE OF DESIRED PLANTS AS IT WILL DAMAGE THESE PLANTS. Also, note once again, that it make take several rounds to kill these weeds so that they don't re-sprout.

NOTE: *Round-up* (or any product containing the ingredient *glyphosate*) is a non-specific vegetation killer. It will kill (or at least make good effort to kill) any vegetative material it contacts. DO NOT USE IT AS A LAWN WEED KILLER as it will also kill the grass (unless that is your intention so you can re-seed the area four weeks later)!! It may also be responsible for causing certain cancers though its manufacturer, use to be Monsanto, now its Bayer, says otherwise.

Stilth Weed:

<u>What is it?</u> It's a bright green grass has silver hairs down the center of its short bamboo-like blade; grows up to 2 ft. tall. Has a weak and shallow root system. It is very Invasive and is appearing everywhere in MD! Although it is an annual killed off as a result of the first hard freeze in Fall or Winter, it is extremely invasive and crowds out desirable flora. Luckily its easily controlled (very shallow rooted and easy to pull) and it can be avoided altogether.

<u>Control.</u> Yes its susceptible to weed killers including 30% Vinegar but you can also prevent its ability to germinate by the application of a pre-emergent, Prodiamine (Barricade) or other preemergents labeled for crabgrass control can be used, though Prodiamine is far more effective than crabgrass control products that contain other active ingredients than Prodiamine. Apply it in early spring (March) before it germinates. Early Spring should be interpreted as the last two weeks of MARCH! It germinates earlier than crabgrass so to prevent stiltweed the pre-emergent needs to be applied a couple of weeks earlier than for crabgrass prevention. Rainfall or irrigation is required to dissolve the herbicide which is then absorbed into the upper portion of the soil and forms a barrier which kills weed seedlings. (Actually it prevents the seedlings from creating a root and without a root it can not survive.)

Note: Pre-emergent grass herbicides have residual activity that lasts for several weeks after application. High temperatures and rainfall will decrease the length of time they remain at sufficient concentration to be effective. I recommend the re-application of this item be conducted no later than Mid-July as the prolonged hot summers we are experiencing may result in <u>both</u> Crabgrass and Japanese Stiltweed germinating in mid to late Summer.

<u>Pruning</u>

<u>For Existing plants</u> – Generally the best time to prune a plant is in the worst times for you to be outside; the hottest days of July or the coldest days in January or February. What's terrible for you is good for the plant. With that said you're probably going to prune when you want to or when you can hire someone else to do it! So my commentary here will be more of **when not to prune**.

- 1) Never prune a deciduous tree or shrub after mid to late August. You may encourage late growth that won't harden off in time for winter and you could get die-back that fills off both the new growth and some of the older growth. This could seriously disfigure the plant.
- 2) Evergreens and grasses are also actively growing into September and producing the sugar they need to survive so keep your hands off these babies too!! You could actually kill them altogether.
- 3) Try to prune at the juncture (crotch is the actual term used in the industry) of two branches just above the collar. The collar is a raised ridge of tissue that is seen just above where one branch erupts out of another (usually larger) branch. DO NOT SIMPLY TOP OFF A TREE – NO CREW CUTS! This can cause congested (many many stems) growth originating at these pruning sites and totally destroying the character and beauty of the plant. Many people disfigure their Crape Myrtles doing this, and the results are never pretty!
- 4) Don't put tree wound sealers or paper wraps over the cuts. They actually slow down the healing process. On Larger limbs (its probably better if you hire someone than risk injury to yourself, others or your property but if you insist) first make a 1/4 cut from the under side of the branch you intend to cut, staying outside of the collar area, then making your primary cut a 1/4 to 1/2" further up that limb through the top of the limb. This prevents the bark tearing away the outer bark from both the branch you are cutting and the bark below it on the other (main?) branch. If the limb is large enough you may want to take it down in sections, for wood can be heavy and can injure. Again you'd probably be better off hiring someone who has been trained how to safely take down these branches, and even they with all their expertise often incur injuries doing this work. Tree pruning workman compensation insurance rates are very high for a reason!!!
- 5) Consult a book on pruning, especially one that give advice on the pruning of specific types of trees and shrubs. You can even call me for advice.
- 6) If you seem to be pruning a plant again again and again every growing season for its covering up your windows or attacking you when you try to get to your front door, it may be time for that plants' lifespan to end!! I can help you come up with alternative plants where you won't need that machete to find your front door.

As far as pruning maintenance on the plants I have recommended and have had installed for you, I try try to avoid using plants that will out-grow the site I put them into. I do this so any pruning should be minimal, if at all, needed. Occasionally a plant will do something out of the ordinary and grow too vigorously, but generally that is rare, so when it does happen remedial pruning may be necessary. Most perennials do need to but cut back after their foliage has died down in the fall. This can be done is late fall/early winter or, as I usually do, in late winter/early spring.

IN ANY EVENT if a plant's growth habit offends thee cut it off!! ? Well at least the part that you don't like.

Lawn Mowing Heights

To minimize the growth of noxious weeds in your lawn, you need to deny the seeds of weeds what they need most; sunshine! The easiest way to accomplish this is to let your grass grow tall enough to shade (block-out from the sun) the weed seeds lying under the grass. Without strong sunlight most weed seeds can't germinate or survive long enough to produce roots. So set your mower at its <u>highest</u> setting. If you are concerned about winter mold you can start to lower the mowing height in late October lowering it for each subsequent mowing through to the last mowing which in our area usually takes place in late November or early December. In Spring, with your first mowing, re-set your Mower to its highest setting. **Never** scalp the lawn nor wait so long that you are cutting off

more than 25% of the total height of the grass each time you mow.

SPECIAL INSTRUCTIONS FOR NEWLY SEEDED AND SODDED LAWNS

NEWLY SEEDED - Over or under-watering a newly seeded area will dramatically affect the rate (success) of seed germination. Ideally the newly seeded lawn should be misted lightly three times a day until germination takes place (which takes place in 7 to 10 days when the maximum daily air temperatures are 75 or warmer, 10 to 14 days when that temperature ranges between 65 and 75, and as long as three to four week when that temperature ranges from 50 to 65. Of course three times a day (which translates to mid morning, around noon and mid afternoon) is often impractical, so at least try to make sure you mist the lawn at least once if not more a day. Note heavy watering may actually wash seed away. Three to five days after you note that germination has started you may change that misting to a light watering every other day for at least two weeks. Then a gentle but somewhat heavier watering every three to four days for the next two weeks. Note if it rains more than a 1/4" of an inch you may skip that day in your calculation as to when to water next. I.E. If you are on a 3 to 4 day schedule that would change to a 4 to 5 day period in between YOUR watering the seed. After that period a single moderate watering per week is all that should be necessary, unless this is in the hottest part of summer (July through August) when you should always use a 3 to 4 day schedule unless we have significant rains (1" or more) that week.

Now for the most important instruction – **DO NOT MOW THE NEWLY SEEDED AREA UNTIL THE GRASS IS 3 to 4 INCHES TALL!!!!!** (In the case of *Fall planted lawns that may mean not mowing this area until the following Spring!*) Most people use a rotary mower which relies on the creation of a vacuum to get the grass to stand up and be cut. That vacuum is strong enough to lift the seed off the ground (thus interrupting the germination process) or if seeds have sprouted, actually yanking the new grass right out of the ground killing it altogether! Unless you have a reel (not a real) mower do not attempt to mow the newly seeded area until the grass is 3 to 4 inches tall. That may mean waiting as long as 8 weeks or more! I know you're disappointed over not being able to conduct your most favorite household chore, mowing, but what can I tell you. More newly seed lawns have been destroyed by mowing it too early than any other single cause except for drought.

NEWLY SODDED - Newly sodded areas/lawn should be watered every other day for 30 to 45 days but unlike newly seeded lawns watering means leaving the sprinkler in one location long enough to thoroughly saturate the soil. For most sprinklers this means leaving it in place for a minimum of three (3) hours and often for as long as four (4) hours. Hand watering with a hose unless the sodded patches are very small (less than 100 SF) is probably going to be impractical.

Again I recommend that you do not mow the newly sodded area(s) for at least 30 to 45 days, as the both the vacuum created by today's mowers and the very physical action of pushing a mower over the sod can cause it to move before its roots have a chance to anchor the sod to your pre-existing soil.

How to Fix Burnt Grass & Dog Urine Spots

Summer is a beautiful sunny time of year to sit out and relax in your yard. But the suns rays can do some major damage to your lawn. And what about those furry friends? Experts say, certain PH levels found in dog pee can leave unsightly brown spots that stick out like a sore thumb! Follow the steps

below to easily solve both of these problems.

Remedy for Brown, burnt grass

Lightly sprinkle **Epsom salt** all over the burnt grass area. Rake the salt lightly into the grass so it contact the soil itself. Then water lightly and regularly until the grass greens up again.

Remedy for Dog Urine Spots

Mix 2 tbsps of **Baking Soda** into a gallon of water. Water your lawn as necessary (once or twice a week depending on how hot and dry the weather is.) The grass should green up in about one to two weeks.

THE MOST IMPORTANT PIECE OF ADVICE TO REMEMBER IS:

Should we have a dry October and November, water the yard and beds DEEPLY AND THOROUGHLY in early December before the ground freezes. Dry soils do not retain heat. Moist soils do. If the soil in the winter is dry the soil temperature can drop to 28 degrees F, or Lower. At 27 degrees F roots of plants begin to die!!! Even when air temperatures hover around 0 degrees F or even dip below 0, the ground, if moist, will rarely drop below 28 degrees F; often staying at 30 degrees F or higher! MAKE SURE YOUR LAWN AND BEDS GO INTO WINTER WITH MOIST (NOT FLOODED) SOILS. This applies to all plantings lawn grass included!

If you have any questions feel free to call me at 443 812 2760

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