

### **Is a sod lawn less work?**

Yes, a professional sod lawn needs no special care because it is a healthy mature lawn when installed, whereas a sprigged or seeded lawn requires years of nurturing to reach maturity. Sod is grown under expert supervision from either top quality seed blends or certified hybrid sprigs. After it's been installed, just water, mow and fertilize your sod lawn as needed and it will remain a healthy, green carpet of grass, requiring very little maintenance.

### **Where can I use sod?**

Sod can be installed practically anywhere, even where seeding is impossible or too costly. Sod is often used to stop soil erosion and water pollution on slopes where rain would wash away both seed and soil.

Sod is available in a variety of grass blends to suit various needs such as climate, amount of usage, sun and shade conditions.

### **Can sod withstand heavy usage?**

Certainly! Sod establishes itself quickly. In a couple of weeks, it's ready for full use. It creates the perfect surface for lawn games and family outdoor living. With today's various blends of hardy grasses, sod is chosen for parks, golf courses, athletic fields, as well as residential homes and business parks.

### **When can I install a sod lawn?**

Sod has revolutionized the lawn business! Now you can install a sod lawn anytime during the year, even on frozen ground, if sod is available; however, sodding during the heat of summer will require more water than during cooler periods. There is no need to wait for the "right" season to put in your lawn. Seeding or sprigging is best attempted in the Fall in most areas, with Spring being the second best time. Winter and Summer planting of seed or sprigs is strongly discouraged

### **Is sod a good investment?**

Yes -- it's the only way to go -- from bare soil to lush, green lawn in just hours. Yet, it's relatively inexpensive to use. In the few hours it takes to install your sod lawn, your property value increases significantly and even more in aesthetic value.

### **Is seeding cheaper than sodding?**

A big bag of grass seed will cost less than a pallet of sod, but that is like comparing the cost of raw wool to a fine sweater. Sod is a finished product that will provide nearly instant use, beauty and environmental benefits, whereas seed is an unknown that requires two or more years of on-going time, attention, water, fertilizer and pesticides to reach a maturity equal to sod on its first day.

### **How will sod affect our environment?**

With today's ecological concerns, many more people are considering sod for its environmental benefits.

Sod cools and cleans the atmosphere by reflecting the sun's heat and absorbing noises, carbon dioxide and other harmful pollutants. It releases valuable oxygen and moisture into the air we breath. As it grows, sod silently contributes to a healthier environment.

Sod lawns meet the needs of today's fast-paced, demanding lifestyle.

### **How is sod related to our lifestyle?**

Today we expect convenience, efficiency and quality in our products. Buildings are going up almost overnight and attractive landscaping is installed in hours. Why wait 1 or 2 years for a new lawn to struggle to maturity when you can have a beautiful sod lawn complimenting your buildings right now. That high quality sod lawn can be conveniently installed in hours, at a surprisingly low cost.

### **What can I do to maintain a beautiful lawn?**

Quality grass simply needs water, air, sunlight and nutrients. In most areas, grass needs approximately one-inch of water a week. Infrequent and deep watering encourages deep roots and a healthy lawn.

Mow frequently enough (with a sharp blade) so you never cut-off more than one-third of the grass blades in a single mowing. This will also allow you to leave the clippings on the lawn so they can naturally degrade and return nutrients to the lawn.

Prune trees so they allow as much light as possible onto the lawn.

Fertilize at least annually, or according to the specific needs of your lawn.

Aerate every other year to reduce compaction and increase the exchange of water and air at the root level.

### **How can I patch thin or dead areas?**

Sod can provide an instant patch by cutting out the old grass and trimming in a sod patch. It's easy, simple and immediate.

Seeding can be used when the area is small by raking out the old grass, loosening the soil and sprinkling seed. Keep the seed very moist with waterings two or three times a day until it matures.

## **Watering New Sod**

### **When...How...How Much**

Water is essential to all life...too little water and we die, too much and we drown. The same is true of the grass in our lawns. Water makes up 70% to 80% of the weight of our lawn grasses and the clippings alone are nearly 90% water. While most people are concerned about not watering their lawns enough, the fact is that more lawns are damaged or destroyed by over-watering.

Newly installed sod has very important watering needs. Proper watering immediately after installation will ensure the turf gets established, and it will also have an impact on how well the lawn continues to flourish for years to come.

#### **WHEN To Water New Sod**

Begin watering new sod within a half hour after it is laid on the soil. Apply at least 1 inch of water so that the soil beneath the turf is very wet. Ideally, the soil 3 to 4 inches below the surface should be moist.

**Watering Tip #1:** pull back a corner of the turf and push a screwdriver or other sharp tool into the soil. It should push in easily and have moisture along the first 3 or 4 inches, or you need to apply more water.

**Watering Tip #2:** make absolutely certain that water is getting to all areas of your new lawn, regardless of the type of sprinkling system you use. Corners and edges are easily missed by many sprinklers and are particularly vulnerable to drying out faster than the center portion of your lawn. Also, areas near buildings dry-out faster because of reflected heat and may require more water and top sides of hills shed water faster than flatter areas..

**Watering Tip #3:** runoff may occur on some soils and sloped areas before the soil is adequately moist. To conserve water and ensure adequate soak-in, turn off the water when runoff begins, wait 30-minutes to an hour and restart the watering on the same area, repeating this start and stop process, until proper soil moisture is achieved.

For the next two weeks keep the below-turf soil surface moist with daily (or more frequent) watering. Especially hot, dry or windy periods will necessitate increased watering amounts and frequency.

**Watering Tip #4:** as the turf starts to knit its new roots into the soil, it will be difficult, impossible and/or harmful to pull back a corner to check beneath the turf (Watering Tip #1), but you can still use a sharp tool to check moisture depth by pushing it through the turf and into the soil.

**Watering Tip #5:** water as early in the morning as possible to take advantage of the daily start of the grass's normal growing cycle, usually lower wind speeds and considerably less loss of water because of high temperature evaporation.

**Watering Tip #6:** if the temperature approaches 100 F, or high winds are constant for more than half of the day, reduce the temperature of the turf surface by lightly sprinkling (syringe) the area. This sprinkling does not replace the need for longer, deeper watering, which will become even more critical to continue during adverse weather conditions.

During the rest of the growing season most lawns will grow very well with a maximum total of one inch of water a week, coming either from rain or applied water. This amount of water, properly applied, is all that is required for the health of the grass, providing it is applied evenly and saturates the underlying soil to a depth of 4 to 6 inches.

**Watering Tip #7:** Infrequent and deep watering is preferred to frequent and shallow watering because the roots will only grow as deeply as its most frequently available water supply. Deeply rooted grass has a larger "soil-water bank" to draw moisture from and this will help the grass survive drought and hot weather that rapidly dries out the upper soil layer

## **HOW To Water New Sod**

Proper watering techniques are a critical aspect of lawn watering, equal in importance to the issues of when to water and how much to water. Here are several key factors to proper technique:

Avoid hand sprinkling because it cannot provide the necessary uniformity as most people do not have the patience, time or "eye" to adequately measure what is being applied across any larger areas of lawn. The only possible exception to this guideline would be the need to syringe the surface of the grass to cool it, or to provide additional water near buildings or other heat-reflecting surfaces.

Understand the advantages of different sprinkler designs, because each type has its advantages and disadvantages and its proper use will be determined by the type of sprinkler you select.

In-Ground Systems require professional design and installation and they require routine adjustments and regular maintenance to be most effective and efficient. The greatest mistake made with most in-ground systems is the "set it and forget it" philosophy that fails to account for the changing seasonal water requirements to maximize turf grown or even allowing the system to operate during or following a multi-inch rain storm. Another frequent problem is when heads get out of alignment and apply water to the sidewalk, street or house-siding, rather than to the lawn.

Hose-End Sprinklers range in complexity, cost and durability, but are highly portable and can provide uniform and consistent coverage, when properly placed on the yard and adequately maintained.

Sprinklers that do not throw the water high into the air are usually more efficient because prevailing winds are less disruptive of distribution patterns, the potential for evaporation loss is reduced and trees, shrubs and other plants do not block the pattern (or are very noticeable if they do).

Several times during the growing/watering season, routine maintenance to check for blocked outlets, leaking or missing gaskets, or mis-aligned sprinkler heads is important, regardless of the sprinkler design.

Select sprinklers and systems for uniformity of coverage across whatever area they are designed to water. Inexpensive hose-end sprinklers and in-ground irrigation systems can provide uniform coverage, but they can also be extremely variable and inconsistent in their coverage patterns.

Verify watering uniformity can be accomplished with a very simple and inexpensive method that uses only 4 to 6 flat-bottomed, straight-sided cans (tuna fish, cat food, etc.), a ruler and a watch.

Follow these steps:

**Step #1:** arrange the cans at random distances away from any sprinkler, but all within the area you assume is being covered;

**Step #2:** run the sprinkler for a specific amount of time, say a half-hour OR run the water until a specific amount of water is in at least one can, say a 1.5 cm (0.5 inches)

**Step #3:** measure the amount of water in each can, checking for uniformity. Some variation is expected, but a difference of 10-percent or more between any two cans must be addressed by replacing or adjusting the sprinkler or relocating the system.

This measuring method should be used across an entire lawn that has an in-ground irrigation system to assure maximum coverage and uniformity.

Watering difficult areas such as slopes and under trees requires some special attention to achieve maximum benefit and a beautiful lawn.

For Slopes, see Watering Tip #3

For Areas Under and Near Trees you need to know the water requirements for the specific trees, as well as for the grass. Despite having deep "anchor" roots, trees take up moisture and nutrients from the top six inches of soil...the same area as the grass. Trees and turf will compete for water. Watering sufficiently for the grass may over-water some

varieties of trees and under-water others. A common solution is to not plant grass under the drip-line of trees, but rather use that area for perennial ground-covers, flower beds or mulch beds.

### **HOW MUCH Water Is Applied & Needed**

The amount of water your lawn requires and receives will determine its overall health, beauty and ability to withstand use and drought. Keep in mind that too much water can ruin a lawn just as fast as too little.

One inch a week is the standard water requirement established for most lawns; however, this will vary between different turf species and even among cultivars within a specie. There will also be varying water requirements for seasonal changes and still more differences brought about because of different soil types.

Look at your lawn to determine its water needs. Grass in need of water will have a grey-blue cast to it, rather than a blue-green or green color. Also, foot prints will still appear after a half-hour or more on a lawn in need of water, while on a well watered lawn foot-prints will completely disappear within minutes.

Use a soil probe, such as a screwdriver or large spike to determine how dry your lawn is. If the probe can be pushed into the soil easily, it's probably still moist, but if it takes a lot of pressure to push in, it's time to water.

Verify watering quantities with the same measuring can method described above, except you will want to note the time it takes for the cans to collect a specific amount of water. For example, if 0.25-inches collects in 30 minutes, you can easily calculate that it will take one hour to apply 0.5-inches of water or two hours to apply 1-inch.

Water timers can help provide consistency and even be programmed or set to turn-off when no one is awake or at home. Some timers measure just the amount of time water is flowing through the devise and you have to know or calculate how long to set the timer for (see item above). Other units measure the number of gallons of water flowing through it. Knowing that 600 gallons per 1,000 square feet equals one-inch of water will help you calculate the timer settings your lawn will require.

### **Things not to forget.....**

Sod edges, top of hills, next to buildings dries out faster than the middle of the lawn does, this means these areas need special attention to keep them from drying out and turning brown. If certain areas do turn brown just water those areas more, even if you use the hose directly, soak the areas well. Newly installed sod can shrink if not watered enough at first, causing gaps between the pieces to develop. Sod will move from foot traffic, especially on hillsides, avoid walking on your new lawn as much as possible, this includes pets.

Mow your new lawn about 2 weeks after it was installed, if it is long enough and if it is stuck down to the ground firmly enough to avoid damage. Mowing height recommended is 2-1/2 - 3-1/2 inches, shorter cutting will make your lawn look yellowish. If the sod is real long the first mowing either bag the clipping, rake the clippings or cut the sod twice, half the length each time, clumps of clippings will smother the sod and can kill those areas. Your new lawn is 99% weed free, no weeds are impossible, but if improper care of watering, fertilizing or mowing ,your new lawn can become a weed field with in a short period of time,

it's nice now so keep it that way. A weed and feed hose end sprayer works great, or you can hire a professional lawn care company, the new sod is fertilized and shouldn't need any additional treatment for 3-4 months after installation, if this time frame falls into winter just wait until spring.

## **KENTUCKY BLUEGRASS TURF SPECIFICATIONS**

### **CHARACTERISTICS:**

Cool-season grass - dark green color and dense, beautiful appearance, medium leaf texture with excellent leaf uniformity. Forms a strong sod via rhizomes.

### **RECOMMENDED USAGE:**

Widely adapted basic lawn grass of the cool, humid, semi-arid and temperate regions - recommended for residential and commercial lawns. Also, widely used on sports fields and play areas, parks, cemeteries, commercial lawns and roadsides.

### **TEMPERATURE TOLERANCE:**

Thrives in cool weather and will tolerate very cold winters - undergoes stress during extremely hot weather, but will maintain good color and appearance if properly watered and cared for.

### **DROUGHT RESISTANCE:**

Medium - can go into summer dormancy when irrigation is withheld; upon return of moisture supply, will green up again. Some varieties have better tolerance to heat and drought.

### **SHADE ADAPTATION:**

Fair to poor - thrives in sunny areas - a few varieties are moderately adapted to partial shade.

### **WEAR RESISTANCE:**

Medium - recovers quickly from occasional abuse - will withstand moderate foot traffic usage - rhizomes enhance quick recovery, especially in spring and fall.



## **KENTUCKY BLUEGRASS MAINTENANCE**

Taking good care of your lawn often requires no more work overall than taking poor care of it. A lawn that is properly mowed, fertilized and watered has far fewer problems with weeds, diseases and insects. A well kept lawn also remains dense and attractive, providing you much more enjoyment and environmental benefits.

### **WATER NEEDS:**

Moderate - apply 0.5 to 1 inch of water as a deep soaking every 5 to 7 days to encourage a deep healthy root system during dry or hot periods. Avoid frequent, shallow watering that results in shallow roots, permitting weed germination and growth.

### **MOWING & THATCHING:**

Optimum mowing height 2 1/2 - 3 1/2\ inches for a high quality lawn. Mow regularly with a sharp rotary or reel mower, allowing clippings from frequent mowing to remain on the lawn. Never remove more than 1/3 of the shoot growth at one mowing. Kentucky bluegrass may develop some thatch at higher nitrogen levels. Prime time to dethatch is in early fall.

### **SOIL & FERTILIZATION NEEDS:**

Performs best in fertile, non-acid reacting soil with good drainage. Fertilize twice a year, spring and fall, with a complete fertilizer containing nitrogen, phosphate and potassium. Apply 2.5 to 4 lbs. actual nitrogen per 1,000 sq. ft. per year for higher requiring nitrogen varieties also apply fertilizer at 0.5 to 1 lb. nitrogen per 1,000 sq. ft. every 4-6 weeks. During summer, fertilizer rates should be reduced by 50%. Water thoroughly after fertilization.

### **DISEASE, WEED & INSECT CONTROL:**

New varieties have improved resistance to diseases such as leafspot, stripe smut, powdery mildew, dollar spot, Typhula blight, summer patch and rusts. If broadleaf weeds need to be controlled with herbicide, the turf should be well established and in vigorous condition. Practically all insects that damage lawns can be controlled biologically or with insecticides.

All information is based on average/normal conditions; individual sites and situations may differ. Therefore, contact your local nurseryman or county Extension Office if more detailed information is needed on specific maintenance questions.

### **Sod Facts.**

#### **Above Ground...**

Grass plants are 70 to 80% water

Grass clippings are 90% water

Grass clippings contain 4% nitrogen, 2% potassium and 0.5% phosphorus

A 10,000 square foot lawn will contain:

6 grass plants per square inch

850 plants per square foot

8.5 million plants total

### **Below Ground...**

90% of the weight of grass is in its roots

A single grass plant has 387 miles of root

There are 329,000 miles of root per square foot

3 billion miles of roots in a 10,000 square foot lawn

Sod is a superior form of erosion control, with tests documenting:

A dense lawn is 6 times more effective than a wheat field and 4 times better than a hayfield at absorbing rainfall.

Sediment losses from sodded areas will be 8 to 15 times less than for tested man-made erosion control materials and 10 times less than for a straw covered area.

Runoff from a sodded area will take 28 to 46 times longer than other popular erosion control materials.

\* A 50 by 50 foot lawn (2,500 square feet) releases enough oxygen for a family of four, while absorbing carbon dioxide, hydrogen fluoride and perosyacetylene nitrate.