



Guidelines for Homeowners

Turf Type Tall Fescue is the Sod of Choice

Maryland, Delaware, Northern Virginia and a stretch through central Ohio makes up what is called the “Transition Zone” when dealing with turf grasses. To the North of this area, cool season grasses, such as Kentucky bluegrass and tall fescue, grow easily and flourish. To the South of this area, you find warm season grasses like Zoysia grass and Bermudagrass that grow with little effort. Unfortunately, we live and are trying to grow a lawn in the area between these growing regions, we are in the transition zone.

What this means is that there really is no grass well suited for this area. It is too hot and humid here in the summer for the cool season grasses and it is too dry and cold here in the winter for the warm season grasses. However, to provide a green healthy turf in this transition zone we must evaluate the characteristics of the different kinds of grasses. We turn to our Land Grant Universities in Maryland and Virginia to plant and evaluate these grasses and to recommend those varieties which will thrive here in our climatic conditions, are commercially available, and are available as certified seed.

Along with the varieties, you must also determine what use this turf will have. Is this to be an extremely high profile turf where professional agronomists are on staff to diagnose and provide technical advice with a very high, almost unlimited budget? Is it important that this turf look green through out the year? Is this turf to be played on by children and/or pets? Is this to be an all around general purpose turf sustaining good color and texture with minimal maintenance?

The Cadillac of turfgrass sod has to be Kentucky bluegrass sod. It is the darkest green color, finest texture, loves full sun, and never clumps. It spreads by underground rhizomes, thus has the capability to repair itself and thus should always look uniform. However, Kentucky bluegrass is extremely high maintenance. It requires more fertility and is more prone to more different diseases than any other turf in this area. It is not known for its ability to survive in shade and is very susceptible to even slight salt spray. This is a turf that requires continual monitoring and considerable funds to keep it looking good. Kentucky bluegrass is the turf for professional maintenance like what is provided to major league baseball fields such as Camden Yards in Baltimore.

Zoysia and Bermudagrass look good during the summer months, however for 8 to 9 months of the year they are dormant and are brown in color. Like the bluegrass, they also spread by underground

rhizomes but Zoysia is very slow to spread (as little as 2-5 inches per year) and Bermudagrass often is too vigorous spreading (up to three (3) feet in a year) making it difficult to keep out of shrubbery beds and even your asphalt driveway. In addition, Maryland is basically the northern limit for Bermudagrass meaning that a bad winter can cause extensive damage and winter kill. The leaves of both of these grasses contain a large amount of silica making the clippings very hard to break down. This causes thatch to build up quickly creating a good micro climate for insects and disease and requires heavy power raking every couple of years. Neither of these grasses do well in shade conditions either.

Thus the one sod which does well in full sun and partial shade, is resistant to most diseases, maintains a good color and texture even in the summer with a little water, requires less fertility, is resistant to moderate salt spray, and stand up well to moderate traffic from children and pets is Turf Type Tall Fescue.

Turf Type Tall Fescue is the only sod which we produce because we feel it is the one sod which will work well in almost any situation. We plant a mixture of different varieties that are currently recommended by the University of MD and VPI. Using a mixture of tall fescue varieties allows for diversification of all the better characteristics. All of our sod follows all the regulations and standards set forth by the Maryland Department of Agriculture's Turfgrass Certification Program and is constantly inspected by the watchful eyes of professional agronomists.

Don't be confused if you are familiar with the old Kentucky 31 Tall Fescue which was recommended 20 years ago. Kentucky 31 is actually a forage tall fescue and while the new turf types have many of the similar characteristics like a deep root system, the new turf types which we use have been refined many times to provide a finer texture, darker color, and more resistance to the few diseases which affected the old Kentucky 31.

So when you are in need of sod and you are looking for a beautiful, all purpose turf that will last for many years, choose Turf Type Tall Fescue sod from a MTA Sod Farm. You won't be disappointed!!

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Measuring for your Sod

Trying to determine how much sod you should order is an important but easy thing to calculate. Take the area to be sodded and determine imaginary squares, rectangles, and triangles to encompass the entire area.

Measure the length and width of the squares and rectangles. Multiply the length measurement by the width measurement this will give you the number of square feet within the area. Measure the length and width of the triangles. Multiply the length measurement by the width measurement and divide the figure by 2 this will give you the number of square feet within the triangle.

Add together all the square foot calculations from the squares, rectangles, and triangles and you have the area within what you want to sod. To ensure you have enough sod ordered, add an additional 3-5% to allow for trimming around any objects which may be present.

Now you are ready to call and order your sod for either delivery or pick-up on the day of your choice. Please keep in mind that you only want to order as much sod as your crew can lay in a four (4) hour period. If necessary split the amount of sod that you need into multiple deliveries or pick-ups. This four (4) hour period is not nearly as critical in cool weather but is extremely important as the temperatures increase.

Now the work begins.

Guidelines for Homeowners

Preparation of the Site

Preparation of the site to be sodded is probably the most critical step to the success of the survival of your sod. Sod which is installed over hard compacted soils, sod which is installed over any green material (either weed or grass), sod which is installed over construction debris (gravel, brick, lumber, trash, etc) has very little chance to fully survive and develop into a lawn for which you would desire. Basically, the site preparation is the same for sod as it is for seeding.

When preparing the site, begin with the removal of all trash and building debris such as bricks, concrete, stones, scraps of lumber, stumps, or any other material that is not soil.

Sample and test the soil for all the necessary soil amendments that will be needed to be incorporated into the soil for optimum growth. See our Guideline entitled “Amendments to the Soil” for the procedures for taking proper soil tests, where to have the soils tested, and how to apply the necessary amendments.

Till the soil to a depth of 3-4” using a roto-tiller or similar piece of equipment. Use caution not to till the soil when it is excessively dry or excessively wet. When the soil is either excessively dry or wet, tilling will destroy the structure of the soil, eliminating the pore spaces which are vital for the storage and movement of water and nutrients as well as space for the roots to travel and establish.

Remove any additional debris, weeds, or grass clumps which may have surfaced during the tillage. Apply any necessary amendments which are recommended, from the soil test, to be surface applied.

Hand rake the soil to a uniform, friable surface. This is the stage to be cognizant of the need for any swales or ditches which may be necessary to channel water away from the house, driveway, or other structures. Along the edges of the sidewalks, driveway, street or other areas where people are likely to walk from an impervious surface onto the turf, lower the final grade ½” immediately next to these structures and feather these slopes out toward the main turf area. This will allow the sod to be installed level with these structures and avoid potential tripping hazards and areas where water may collect and freeze during the winter.

If the air and soil temperatures are high (90 degrees or higher), lightly sprinkling the soil with water just prior to installation of the sod will cool the soil and increase the survivability of the sod by providing a better environment for young tender roots.

As the sod is installed, keep a rake handy to remove footprints or tire tracks as you proceed with the installation.

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Rolling the Sod

Rolling the sod is a very important step toward ending up with that “picture perfect” lawn. Rolling the sod ensures the best soil to sod contact so that drying out of the sod roots from air pockets that may exist under the sod are eliminated. If these air pockets are not removed, small to moderate areas of the sod may die from having the roots exposed.

Rolling the sod also levels any small divots, foot prints, or other imperfections that can cause the mowing process to scalp areas of the turf. Scalping areas, when mowing, will also ruin the uniformity appearance of the lawn and may also cause death of that area allowing weeds to get established or at the very least cause unnecessary stress to be placed upon that area of turf.

Most lawn rollers are meant to be filled with water. Start by filling the roller approximately half full. Roll an area of the turf, fold back the sod pad and visually inspect to see if all the deformities in the soil are removed. If all the deformities are not removed, add more water and repeat the above procedure until all are removed.

Once the roller is the correct weight, roll the turf in one direction using caution not to move the sod when turning or changing directions. Once all the turf is rolled in one direction, turn and roll the sod in a perpendicular direction or at least a diagonal direction to the first rolling.

Once this is complete, you may begin watering the new sod.

Rolling may be necessary again in the spring if your soils are prone to freezing and heaving from frost in the soil. This rolling should be done when enough moisture exists to smooth the soil but not so much moisture as to leave ridges from the edges of the roller.

Guidelines for Homeowners

Watering New Sod

The sooner water is applied to your new sod, the better the sod will root and survive. Ideally watering should start within 2 hours of laying your sod, even if you have not completed your project, go ahead and get water onto the area which is complete.

Watering should always be deep watering utilizing a sprinkler, applying a minimum of $\frac{3}{4}$ to 1 inch of water at a time. The roots will attempt to follow the water, so if you just sprinkle with a hose or apply just a light application of water, the roots will tend to stay just under the surface and the sod will have a hard time living when the weather gets hot during the summer.

One of the easiest ways to measure the correct amount of water is being applied is to place a tuna fish or cat food can on your lawn and collect water in it until the can is full, **then**, move the sprinkler and can to another area.

If the correct amount of water is applied, the sod pad should be completely soaked and several inches of the soil beneath should be wet. The area will be “soggy” or even “squishy” to walk on, so it is easier to use multiple cans to collect your measurements (use one each time you move the sprinkler to a new area). Remove the sprinkler from the watered area by pulling it to you by the hose, then pick up the sprinkler and place it on the next dry area to be watered thereby avoiding walking on the wet sod.

Except for the initial watering, all watering should be accomplished during the morning or afternoon of the day. The ideal time to water is during the heat of the day, provided $\frac{3}{4}$ to 1 inch of water is applied, since the watering also tends to cool the micro climate of the turf. Regardless of when during the day you water, you always want to make sure the turf leaf surface is “dry” before going into the cooler evenings. Limiting the time that the grass leaves have water droplets on them reduces the probability of most lawn diseases.

The number of times it is necessary to water your lawn is dependent upon the temperature. Generally the following schedule should be followed when daytime temperatures are reaching into the high 70’s or 80’s. Remember all watering should be $\frac{3}{4}$ to 1 inch per application.

- Day 1 Water as soon as possible after installing
- Day 2-7 Water everyday
- Day 8-14 Water every other day
- Day 15-21 Water every third day
- Day 22-28 Water every fourth day
- Day 29-35 Water every fifth day
- Day 36 on Water once a week until weather cools

The watering schedule above can be modified by skipping applications if the weather cools and natural rains occur. If temperatures spike into the 90’s, this schedule can be modified by delaying starting to skip days or watering everyday while temperatures remain high.

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Mowing your Sod

Mowing possibly has more to do with the long term survivability of your sod than any other function you will perform. Proper mowing will provide a beautiful, thick, uniform turf. Improper mowing will provide a thinning, weedy, patchy lawn.

Tall fescue sod should be maintained at a height of 2.5 to 3 inches. Usually this is the highest possible setting on most walk behind or push mowers. Blade height can be easily measured by placing the mower on a concrete surface, removing the spark plug wire, and measure from the blade tip to the floor. It may be necessary to change spacers on the blade shaft or even replace the mower wheels with larger wheels to obtain the correct mower height.

No more than 1/3 of the blade length should ever be removed at a single mowing. Thus if you are maintaining a 3 inch turf, you should mow when the blade length is no longer than 4 inches long.

It is always best to leave the clippings to naturally breakdown into nutrients and organic matter, however, if due to wet weather, the spring growth gets ahead of you, bring the growth down with multiple mowing until you can achieve the desired blade length. If excessive clippings or windrows of clippings develop, it will be necessary to vacuum or rake the clippings off the turf. Avoiding mowing when the turf is damp will also reduce the accumulation of clippings. Excessive clippings can cause smothering of the living turf and at the very least cause excessive thatch to build up which will slow water movement and may make any applications of pesticides ineffective.

Regular mowing will cause the individual turf plants to spread horizontally by a process called "tillering". During tillering, new shoots are sprouted from the crown (just above soil level) area of the plant and these new tillers grow as new branches of the plant.

Always mow with sharp blades. If a day or two after mowing, the turf tips appear to be brown, torn, and tattered, your blades are dull. These blades should be sharpened and balanced or replaced with new blades before mowing again.

Mowing is in fact pruning each individual branch of these plants, so avoiding mowing when heat is excessive, above 90 degrees, will improve the health of the plant and the individual mowing.

Mowing should only be done with equipment which is in good repair, all safety guards are in place, and proper safety precautions are taken by the operator including wearing proper shoes and ear protection.

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Feeding your Sod

By now you have completed your project, you have repaired or replaced your lawn and it looks wonderful, but you wonder how much fertilizer you should place on top of your new sod. The answer is **none at this time!**

You have prepared the soil properly, amended the soil with lime and/or fertilizer according to your soil tests, and have installed Maryland Certified Sod. This sod has been grown under the most stringent requirements in the United States to agronomically provide you with the best turf possible for the Mid-Atlantic area. No further applications of fertilizer or lime are required for at least the next 45 to 60 days.

Unless your soil tests require additional applications of a balanced fertilizer (a balanced fertilizer includes a mixture of nitrogen, phosphorus, and potassium i.e. 10-6-4) the next applications should be feeding your lawn with straight nitrogen using a Urea based fertilizer (46-0-0).

If you installed your sod during **December, January, February, or March**, apply:

- 1.5 to 1.75 lbs. per 1000 sq. ft. Mothers Day Weekend.
- 2 to 2.5 lbs. per 1000 sq. ft. Labor Day Weekend.
- 2 to 2.5 lbs. per 1000 sq. ft. Halloween Weekend.
- Repeat each year.

If you installed your sod during **April, May, June, July*, or August***, begin your applications Labor Day Weekend and follow the above schedule. *(July and August applications should be avoided if at all possible as excessive amounts of water will be required if sod is installed during this period).

If you install your sod during **September, October, or November**, apply 3 lbs 30-45 days after the installation and begin the schedule above on Mother's Day Weekend.

By following this schedule you will keep a good uniform color, on a thick sod, throughout the year with minimal disease and minimal need for weed control. Soil tests should be repeated every three (3) years and amendments added as recommended.

Enjoy your new Maryland Certified Tall Fescue Turf, supplied by Murray Sod LLC.