

BASIC TIPS AND RULES OF LAWN CARE: AN OVERVIEW

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ABSTRACT: The term ‘LAWN’, referring to a managed grass space, dates to no earlier than the 16th century. Tied to suburban expansion and the creation of the household aesthetic, the lawn is an important aspect of interaction between the natural environment and the constructed urban and rural space. In many rural areas, there are bylaws in place requiring houses to have lawns and requiring the proper maintenance of these lawns. In some jurisdiction where there are water shortages, local government authorities are encouraging alternatives to lawns to reduce water use. Lawn is a cognate of ‘llan’ which is derived from the common Brittonic word landa (old French-lounde) that originally means heath barren land, or clearing. Common characteristic of a lawn are that it is composed only one grass species, it is subject to weed and pest control, it is subject to practices aimed at maintaining its green colour (e.g. watering) and it is regularly mowed to ensure an acceptable length although these characteristic are not binding as a definition. Lawn are used around houses, apartment commercial building and offices many city park also have large lawn areas. In recreational contexts, the specialized names turf, pitch, field or green may be used, depending on the sport and the continent. Lawn is an area of land of closely mowed grasses that is primarily developed for aesthetic and recreational purpose. Lawn is an integral part of a garden or landscape. Besides aesthetic and recreational purpose, lawn serves several other purposes. The distinguishing characteristic of turf grass the ability to withstand close mowing and still providing a functional, dense and healthy ground cover. Its maintenance requires little patience and care, however the final result is always worth waiting as it gives very beautiful and soothing effect to the landscape. So that, it is also called as “HEART OF GARDEN.”

Keyword: Lawn, turf, pitch, landscape and heart of garden.

A lawn is an area of soil covered land planted with grasses or other durable plants such as clover which are maintained at a short height with a lawnmower and used for aesthetic and recreational purposes. Common characteristic of a lawn are that it is composed only one grass species, it is subject to weed and pest control, it is subject to practises aimed at maintaining its green colour (e.g. watering) and it is regularly mowed to ensure an acceptable length,^[1] although these characteristic are not binding as a definition. Lawn are used around houses, apartment

commercial building and offices many city park also have large lawn areas. In recreational contexts, the specialized names turf, pitch, field or green may be used, depending on the sport and the continent.

The term 'LAWN', referring to a managed grass space, dates to no earlier than the 16th century. Tied to suburban expansion and the creation of the household aesthetic, the lawn is an important aspect of interaction between the natural environment and the constructed urban and rural space.^[2] In many rural areas, there are by laws in place requiring houses to have lawns and requiring the proper maintenance of these lawns. In some jurisdiction where there are water shortages, local government authorities are encouraging alternatives to lawns to reduce water use. Lawn is a cognate of 'llan' which is derived from the common Brittonic word landa (old French-lounde) that originally means heath barren land, or clearing.^{[3][4]} The first recorded lawns were developed in Europe during the middle ages. Lawn at the time were filled with wild flowers and low mounds of turf were created for seating, which were sometimes planted with aromatic herbs such as chamomile. In the early 17th century, mowing of lawns was done more frequently. The mowing was carried out by scythe or with shears used for edging. The 18th century brought the design of even more expansive parks and garden in the estates of wealthy land owner. The invention of the cylinder or reel mower in 1830 made lawn maintenance easier. In the early 1900s lawn become widespread outside of parks, golf courses and large estates. It becomes integral part of garden. Now a days in many metro cities of India Lawns have become a cultural touchstone & the passion in many home owners.^[5]

What is the lawn:- Lawns are a common feature of private gardens public landscapes and parks in many parts of world. They are created for aesthetic pleasure, as well as for sports or other outdoor recreational use. Lawns are useful as a playing surface both because they mitigate erosion and dust generated by intensive foot traffic and because they provide a cushion for players in sports such as rugby, football, soccer, cricket, baseball, golf, tennis, hockey and lawn bocce. Lawn and resulting lawn clipping waste can be used as an ingredient in making compost and is also viewed as fodder, used in the production of lawn clipping silage which is fed to livestock as a sustainable feed when source.^[6]

Why change to natural lawn care:- We can grow attractive, healthy lawns and useless water, pesticides and fertilizer, every time plant, water, fertilize or control pests in your garden, we can

choose methods that protect your health and the health of our environment and aid in the recovery of our salmon runs.

- ❖ Here in Thurston County we depend on ground water for our drinking water. Most of this water lies beneath coarse gravelly soils that provide little protection for contamination.
- ❖ In the summer, 40-50% of our water use goes to lawns and gardens when water supplies are lowest and when people, wildlife and salmon need it the most.
- ❖ Scientists testing urban streams in western Washington found 23 pesticides in streams was 2, 4-D, ingredient in most “weed and feed” products other commonly detected and heavily used pesticides were the herbicide dicamba and the insecticide diazinon.
- ❖ A comprehensive review of research on pesticides effects on human health found consistent link to serious illness such as cancer, reproductive problems and neurological disease among other. The study also shows that children are particularly vulnerable to pesticides.
- ❖ Many lawn and garden products can be harmful if disposed of improperly. Proper disposal is available at HazoHouse. Thurston County’s household hazardous waste facility. Although there’s no charge to use HazoHouse, The County’s cost for hazardous waste disposal is high. By switching to less hazardous products can help to reduce hazardous waste disposal cost.

Importance:-

- ❖ Soil erosion control and dust stabilization vital soil resource protection.
- ❖ Reduces run off from precipitation and contributes to flood control.
- ❖ Enhance ground water recharge.
- ❖ Enhance heat dissipation through temperature moderation.
- ❖ Decreases noxious pest and allergy related pollen.
- ❖ Lowers the fire hazard and provides security for vital installation.

TYPES OF LAWN PLANTS

Lawns need not be, and have not always been, made up of grasses alone. Other plants for lawn like usable garden areas are sedges low herbs and wild flowers and ground covers that can be walked upon. Thousands of varieties of grasses and grass like plants are used for lawns, each adapted to specific conditions of precipitation and irrigation, seasonal temperatures and sun/shade tolerances. Plant hybridizers and botanists are constantly creating and finding

improved varieties of basic species and new ones, often more economical and environmentally sustainable by needing less water, fertilizer, pest and disease treatments and maintenance.

Types of lawn grasses:- Many different species of grasses are currently used, depending on the intended use and the climate. Some grasses are adapted to oceanic climates with cooler summer, and other to tropical and continental climates with hotter summers.

There are two types of lawn grasses.

- Cool season grasses
- Warm season grasses

Cool Season Grasses:- Cool season grasses start growth at 5⁰C (41⁰F) and growth at their fastest rate when temperature are between 10⁰C (50⁰F) and 25⁰C (77⁰F), in climates that have relatively mild/cool summers, with two periods of rapid growth in the spring and autumn.

- Blue grass – *Poa species*
- Bent grass – *Agrostis species*
- Rye grass – *Lolium species*

Warm season Grasses:- Warm season grasses only start growth at temperatures above 10⁰C and grow fastest when temperature are between 25⁰C and 35⁰C with one long growth period over the spring and summer.^[7]

- Zoysia grass – *Zoysia species*
- Bermuda grass – *Cynodon dactylon*
- Carpet grass – *Axonopus species*
- Buffalo grass- *Buchloe dactylodes*

PLANTING AND SEEDING OF LAWN

Early autumn, spring and early summer are the primary seasons to seed, lay sod (turf), plant 'liners' and 'sprig' new lawns, when soil is warmer and air cooler. Seeding is the least expensive, but may take longer for the lawn to be established. Aerating just before planting/seeding may promote deeper root growth and thicker turf. Turfing provides an almost instant lawn and can be undertaken in most temperate climate in any season but more expensive and more vulnerable to drought until established. Hydro-seeding is a quick and less expensive method of planting large, sloped or hillside landscapes. Some grasses and sedges are available and planted from 'liner' and 4" (100mm) containers, from "flats", "plugs" or "springs" and are

planted apart to grow together.^[8] Many planting methods are used for the lawn grasses development.

1. Seeding: The most popular grass suitable for seeding is "Doob" grass (*Cynodon dactylon*). It has the fast spreading mat forming habit, radically forms roots at the nodes, the foliage is dark green, narrow with parallel veins. A lawn from seed is thought of only when grass roots are not available. About 30 kg of seed is required for planting one hectare. The soil should be reduced to fine tilth and given a light rolling. The site should be divided into suitable small squares or rectangles, the seeds are mixed with double the quantity of finely sieved soil and should be rolled again and watered liberally with rose can. The seeds take four to five weeks for germination. Care should be taken not to flood the site. For the first few times, the grasses are cut with a scythe. Lawn mower may be used for easy maintenance and for its spreading.

2. Turfing: The turfs are nothing but pieces of earth with compact grasses on them. These turfs should be cut uniformly in squares from a place where the grass is short, compact and free from weeds. These turfs should be placed on the prepared ground site, side by side and beaten down flat with a turf beater. The cavities in between should be filled with fine soil. The entire turfed area should be rolled and watered liberally. This is the most expensive way of lawn making.

3. Turf plastering: The doob grass can be procured in large quantities free from weeds and chopped properly into small bits of 5-7 cm long. Two baskets of chopped grass pieces should be mixed well with one basket each of garden soil and fresh cow dung and a shovel full of wood ash with required quantity of water to form a thick pasty substance. This mixture is then spread uniformly on the surface of a previously wetted perfectly levelled ground to a thickness of at least 2.5cm and watering should be done with a rose can. The next day, ground should be rolled and the grass should be allowed to spread. The grass will shoot up in a fortnight. To start with, cut with a scythe and after three months, use the lawn mower.

4. Dibbling roots: This is the cheapest but time consuming method. Small pieces of grass roots should be dibbled 10-15 cm apart in a levelled ground when it is wet after rain. The roots spread and grow underground in the course of six months making a fairly compact lawn by frequent mowing, rolling and watering. After care it includes rolling, mowing, watering and restoration of patchy places, which should be done regularly.

5. Astro turf: - It is a synthetic lawn popularly used in developed countries in roof gardens as well as in play grounds. It dispenses the normal maintenance usually required for normal lawns.

Constant sprinkling of water is one of the prime requisite to bind the synthetic fibre to provide a surface akin to a lawn carpet.

Mowing and other maintenance practices:- Maintaining a rough lawn requires only occasional cutting with a suitable machine, or grazing by animal. Maintaining a smooth and closely cut lawn, be it for aesthetic or practical reason necessitates more organised and regular treatments. Usually ones a week is adequate for maintaining a lawn in most climates. ^[9]

1. Fertilizing the lawn thrice a year is adequate to maintain rich greenness. Application of urea or ammonium sulphate at the rate of 1 kg/50 sq. m during February-March, June-July and October-November is quite beneficial. At times well decomposed compost at 10 kg/10 sq. m area will be sufficient as top dressing.

2. Weeds should be removed as soon as they appear, otherwise they spread and seed multiply and overpower the grass. Fill the gaps with grass roots and fine soil. In the absence of rain, watering is done regularly at weekly intervals.

3. A mower should not be employed until a firm green sward has been formed. The grass is first cut with sickle and the surface is then rolled. Heavy roller should be used frequently but not when the ground is either too wet or dry.

4. Mowing should be done at brief intervals and never allow to produce seed stalks. Avoid cutting the grass too short as this can damage the grass, inhibit a deeper root system from setting up and give rise to weeds. Different grasses have different heights at which they can grow best, so make sure you enquire about this from the vendor or your landscaping company. The ideal height of most grasses is 3 to 4 inches. Removing more than one-third of the grass leaf in a single cutting is not recommended. Mow only on dry grass and not when the grass is wet. Make sure you mower's blade is a new and sharp before starting a fresh mowing session. To ensure smoothness make sure you change the mower's oil once or twice during mowing season.

5. Once in a year rake the lawn before rain and top dress with rich mixture of decomposed manure and soil. This will accelerate the grass with new vigorous growth.

6. The best time to water the lawn would be during the early hours of morning. Watering during this time will allow the water to reach the roots without evaporating. Mid afternoons may lead to water getting evaporated soon and watering at night times can give rise to the possibilities of diseases. While watering, care should be taken to spread the water homogeneously across the lawn without over flooding or missing certain areas/spots. If the lawn is placed on heavy slopes

make sure that the water does not run-off. Several applications of water would be necessary for such surfaces to ensure adequate penetration.

BASIC TIPS AND RULES OF LAWN

- ❖ Set mowing height up to two inches for most lawns to develop deeper roots and crowd out disease.
- ❖ Regular mowing maintains a healthy balance of root and leaf growth.
- ❖ Leave the clipping on the lawn, this is called mulch mowing and can provide one quarter to one half of the nitrogen your lawn needs in a year.
- ❖ Natural fertilizers are made from plant, minerals or animal by-products such as bone-meals, fish-meals, composted manure dolomitic/lime stone or rock phosphate. Many “slow-release” synthetic fertilizers are sulphur or polymer coated urea. The products label should be specify at least 50% water insoluble nitrogen. By releasing slowly natural and slow release fertilizers allow the grasses to absorb nutrients more efficiently.
- ❖ Using fertilizer combination products spreads pesticides over a large area, even though weed may not be wide spread and insect pest may not be present.
- ❖ Grasses do better when the whole root zone is wetted and then allowed to partially dry out between watering. Shallow watering causes shallow rooting.
- ❖ Water early or late, not in the heat of the day, early morning is the best time. Let the weather be your guide use less water in late spring and early falls.
- ❖ Annually aerate hard, composed soil in April/May or September. Aeration fosters grass growth by allowing air and water to penetrate through the thatch layer to the root zone. For best results rent an aerator or hire a professional.
- ❖ Grass grows best on well drained soil in full sun or partial shade. Steeps slopes are difficult to mow and water.
- ❖ Perennial rye grass lawns on sandy soil will not survive if allowed to dry out completely.^[10]

WEED MANAGEMENT

Once seeds have germination, the mode and timing of weeding is of prime importance. Most herbicide is toxic to newly germinated plants. Therefore application of post emergence herbicide should be delayed as long as possible. A healthy, dense lawn is an indication of good cultural operations and is the best defence against. When weed are in less in numbers and small ,a narrow bladed khurpi or trowel can be used to remove the entire weed, including roots , to prevent re

growth in areas of heavy weed infestations, the entire area need to be treated and renovated. However, herbicides can be used to control most of the lawn grass weed.

CONCLUSION

Lawn is an area of land of closely mowed grasses that is primarily developed for aesthetic and recreational purpose. Lawn is an integral part of a garden or landscape. Besides aesthetic and recreational purpose, lawn serves several other purposes. The distinguishing characteristic of turf grass the ability to withstand close mowing and still providing a functional, dense and healthy ground cover. Its maintenance requires little patience and care, however the final result is always worth waiting as it gives very beautiful and soothing effect to the landscape. So that, it is also called as “HEART OF GARDEN.”

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