Care of Grassy Areas

Discussion 1st April 2026

Information Sources:

Book - Modern Lawn Care by David Hedges-Gower, UK Lawn Care Association

Internet – Premier Lawns based in Northern Ireland

https://www.youtube.com/@Premier_lawns_official

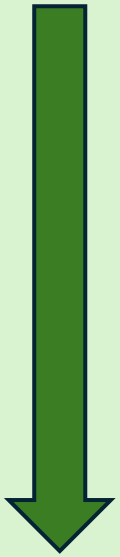
https://www.igrowcarpet.co.uk/blogs/learning-hub

Contents

Spectrum of Grassy Areas

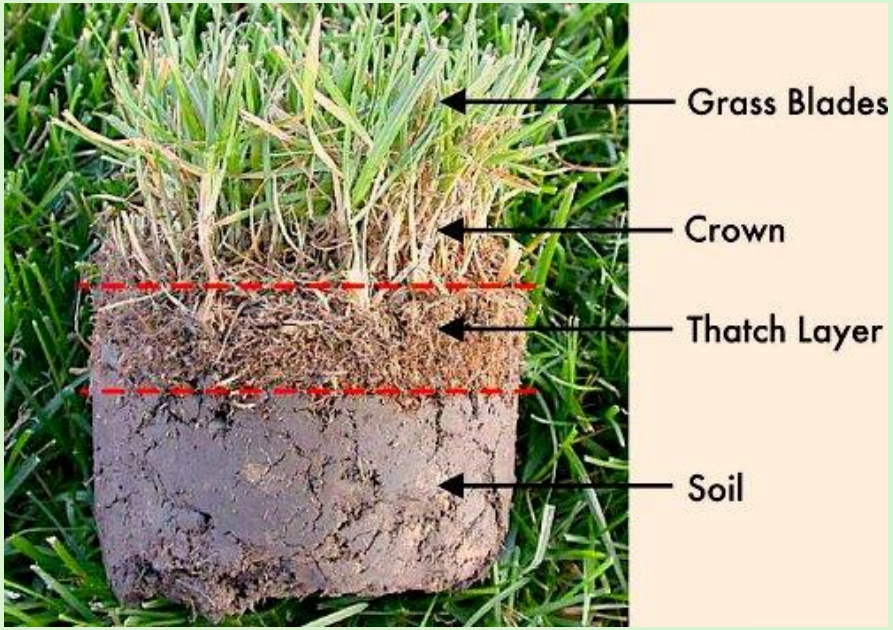
The perfect lawn is simply the lawn that achieves what you need from it

- Unmanaged
- Meadows
- Utility Lawns
- Bowling Green Standard



Work, Time, Cost and Environmental Impact Increase

Layers



Picture from https://cheshirelawndoctor.co.uk/thatch-in-the-lawn/

- Grass
  - Three main families
    - Fescues, Bents, Dwarf Rye
- Thatch
  - Thin protective layer of decomposing material
    - A cooling canopy when hot
    - Retain heat when cold
  - Insufficient can lead to dry / cold soil
  - Excess can starve the grass
- Soil
  - Ideally 50% solid, 25% water, 25% air
  - This mix supports plant nutrient absorption and beneficial microbial activity to reduce thatch

Grasses – Buying Seed / Turf

- Fescues
  - Strong plants - dominant species in the UK
  - Copes with drought / heat
  - Binds turf to give good density
  - Strong growth can lead to excess thatch and the need for thatch management

- Bents
  - Used in fine turf areas like bowling greens
  - Lateral growth habit makes them a good choice for repairs / improving lawns
  - Strong growth can lead to excess thatch, noting that scarification can thicken it

- Dwarf Rye
  - Fast germination, fast growth, good wear and tear resistance and deep green colour
  - Not very dense, as lateral growth is less than fescues and bents
  - Fast growth leads to more mowing, lack of lateral growth reduces thatch but it is less drought tolerant
  - Used in high traffic areas

- All types probably exist in an established lawn

Excessive Thatch - Symptoms

- Symptoms
  - Lawn surface is spongy and uneven
  - Water retention in the thatch layer
    - Grass roots may travel upwards for this water
    - Roots from lateral growth may stay in the thatch
    - Moss present
  - Fertiliser not having the expected effect
    - Doesn’t penetrate to the soil
    - Will encourage roots to stay in this layer
    - Adding more fertiliser to compensate can increase thatch production

Excessive Thatch – Causes and Solutions

- Caused when dead material accumulates faster than the decomposition process
  - Excess grass clippings left after mowing
  - Wind blown debris left on the lawn
  - Too much fertiliser being used
  - Poor aeration and / or excess water – slow decomposition of thatch as microbes deprived of oxygen
- Solutions
  - Don’t mulch the lawn clippings
  - Consider reducing fertiliser rate
  - Moss reduction
  - Thatch reduction by scarification
  - Aeration improves microbial breakdown of thatch – preferably hollow tine

Soil Health

- Soil type impractical to change soil type

- Ideally 50% solid, 25% water, 25% air
  - For roots to absorb nutrients, oxygen is needed.
  - Microbes need oxygen to breakdown thatch.
  - Compaction - traffic squeezes out vital air
  - Water logging / heavy rain / over watering - too much water will mean less oxygen within the soil.

- Solutions
  - Thatch reduction
  - Aeration
  - Improved drainage
  - Soil improvers – e.g. liquid seaweed

Techniques

Mowing

Scarification

Verticutting

Aeration

Mowing – How Short, How Often?

- How short dictates how often
  - The grass blades photosynthesise to create energy for the plant
  - Never cut more than one third current blade length

- Ideal cutting height
  - Depends on grass types and on how you want to use the lawn
  - Predominantly bent / fescue
    - Utility lawn (rotary mower) - 20 to 30mm
    - High quality (cylinder mower) – 15 to 20mm
  - Predominantly rye – nominally an extra 5 mm
  - In practice:
    - Keep reasonably long during periods of strong growth to help root development
    - Can be shorter in summer but keep longer in prolonged dry weather
    - Keep longer in shaded areas
    - Beware – even “short” grass can flop over and create bald patches
    - Avoid scalping
- How often?
  - As and when necessary to stay within the “one third” rule
  - Typically, up to 4 or 5 times a month

Mowing – When?

- March to October, but with high, tidying cuts outside this period
- When the grass is dry and ground permits (water / frost), debris removed
- Time of day
  - Avoid early morning dew, mid-day sun and evenings
    - lawns are most susceptible to fungal infection attacks after dark
  - 10:00 onwards is preferred giving the grass more time to heal before night
  - 16:00 to 18:00 is second best time

Mowing - Machines

- Mowers
  - Rotary primarily for utility lawns – medium height cut, copes with uneven surfaces
  - Cylinder – best suited for flat bowling green lawns, requiring close cut
  - Power - human, mains, battery, petrol
  - Drive – hand propelled, ride-on, robot
  - Mulching blades / mowers
    - Retain moisture on lawn in dry weather / retain nutrients on the lawn
    - Potential to build thatch
- Maintenance
  - Sharp blades are important to stop tearing, making grass susceptible to disease. Sharpen and balance rotary blades at least twice a year – more often?
  - Electric powered mowers are easier to maintain than petrol

Verticutting

- What / why?
  - A gentle vertical mowing technique used to cut lateral growth, and so promote a denser, healthier lawn. Also raises and cuts flopped grass
  - It improves air circulation at the surface, nutrient uptake, and controls some weed grasses
  - It is less aggressive than scarifying, using finer blades, it cuts lateral growth without removing much material
- How you do it
  - Use a verticut blade cartridge in a scarifying machine
  - The cut should skim over the top of the soil
  - Two passes at different angles recommended
  - Mow first, verticut, then clear debris either by raking or mowing again
- When
  - During the growing season every 4-6 weeks
  - Avoid periods when the grass is stressed such as drought or excess water

Scarifying

- What / why?
  - Removal of organic matter from around the stem of the grass plant to maintain a healthy growing environment above and below the surface

- How you do it
  - A raking action deep enough to scratch into the top of the soil
  - The objective is not to remove all the thatch, so possibly follow with a moss treatment
  - Mow shorter than usual first to minimise stress on the grass
  - Powered tools
    - Start high and reduce to required level
    - Two passes at different angles recommended
  - Consider lawn feed afterwards
- When
  - When the grass is growing strongly, so it can recover as scarifying can be brutal
    - March/April and/or September
  - Consider a light scarification and then a full scarification, once a year?

Scarification Results

- Produces lots of material!
- Far too much to catch
- Remove waste by raking or blowing
- Lawn will look awful for a couple of weeks

Soil Aeration

- What / why?
  - Aeration is the process of introducing air channels into the soil root zone to restore this balance and so maintain a healthy ecosystem
  - Ideally healthy soil should be 50% solid, 25% water, 25% air.
  - Compaction affects this ratio, hollow tine aeration can relieve this
  - Good for root development and the microbes that help thatch decompose
- How you do it
  - Hand tools - forks, spiky boots etc or powered machines
  - Solid tine aeration can allow air into the soil, but can add to compaction
  - Hollow tine aeration relieves compaction, allows air into soil and can help drainage
    - Remove cores afterwards or leave to return the goodness (decompose or chop with a high level scarify)
- When
  - When the soil is moist, between September and May
    - Avoid dry periods as aeration can accelerate the soil drying out
  - Every 1 to 3 years?

Lawn Feeding and Watering

Feeding

- For roots to absorb nutrients, air is needed in a useable form - aeration
- Three key nutrients
  - Nitrogen (N) for strong shoots leaves and dense growth
  - Phosphorus (P) for strong root systems
  - Potassium (K) for improved resistance to stress, disease, drought, wear and cold weather
  - NPK – up, down, all around
- Granular feeds are easiest to apply at the right dose, but not easy
- Fertiliser mixes have an effective life, once applied
  - This dictates how many treatments per year – 2, preferably 4?
- Need to feed different ratios at different times in the season
  - Avoid high nitrogen (up) mixes in late autumn – energy should go into roots, not leaves
  - After seeding use high phosphate (down) mix
  - Use high potassium (all around) mix in autumn / winter to prepare for the cold weather
- Fertilisers need to be washed in with rain to activate.
  - If it contains a moss killer, it must be watered in asap, otherwise the grass may burn.
- Weed and feed granular mixes are considered less effective than separate products

Watering

- Signs that watering is needed
  - Poor colour
  - Poor growth
  - Weather pattern
  - Perhaps these problems are being caused by excessive thatch???

- Rules
  - Don’t water in the middle of the day
    - Avoids unnecessary evaporation
  - Avoid shallow watering as will cause shallow rooting
  - Avoid over watering
    - Will force air our of the soil, affecting the beneficial microbes
  - Newly seeded areas
    - Keep the top few millimetres of the soil permanently moist

Common Problems

Moss

Weeds

Overseeding, Repair, Levelling

Moss Control

- Strong, healthy grass helps prevent moss

- Ferous sulphate moss killer works best in a liquid application.
  - Applied in a dry granule form, it cannot attach to the moss effectively
    - Note some fertilisers include some iron but this is to encourage the grass to green up, not to act as an effective moss control
  - You can apply after scarifying
  - Apply when the moss grows between from September and March
  - Will stain paths and drives, so beware

Weed Control

- Prevention is the best way to control weeds
  - A healthy lawn leaves little space for weeds to flourish
- Tolerate
  - But watch out for weeds that spread quickly and compete with the grass
- Hand weeding is an option
- Chemical treatment is the alternative
  - Most liquid broad leaf treatments are growth hormones that accelerate growth and exhaust the weed until it dies
  - Apply when the weed is actively growing
    - Spot treatments
    - Broadcast application is very difficult to apply in the required dose.

Overseeding, Repairing, Levelling

- Overseeding the lawn to thicken the sward or repairing small patches, consider the following steps:
  - Mow the grass short to allow the sun to reach the surface and also aid scarification
  - Aeration
  - Scarification to reduce thatch and to create grooves for the seed to hide in
  - Apply seed mix
  - Lightly cover with a seeding soil (Gro-sure) or may be a suitable compost
  - Ensure seed / soil contact by tamping / using a drag mat
  - Apply seed fertiliser
  - Keep the seed watered
- Overseed / repair in the strong growing seasons
  - September – more chance of rain to keep the seeds moist
  - April – longer time to establish before winter but strong sun can bake seeds
- Levelling
  - Like above but use seeding soil, not compost as compost decomposes

The End