Effective Moss Control

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Contact Mark for a consultation
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Hello, I'm your local lawn moss expert

To address moss in lawns, I take several steps to treat it, remove it and replace it with healthy grass.

Please read on to discover things that I do for customers to help eliminate moss and reduce the chance of it taking over, in the future.

Mark Batty

Moss in lawns is a common issue that many homeowners face. Moss is a small, non- flowering plant that thrives in damp, shady, and compacted areas where grass might struggle to grow. It tends to appear in lawns that have poor drainage, compacted soil, excessive shade and low fertility.

When moss takes over a lawn, it can out- compete grass, leading to patches of dense, green moss instead of a healthy lawn. While some people find moss visually appealing, others prefer a lush, green carpet of grass.

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What is moss?

Mosses are non-flowering plants and are distinctive from flowering plants because they produce spores. They have stems and leaves but not true roots.

They are reliant on damp conditions for reproduction because the male cells need to move via a film of water to reach the female cells for fertilisation. Sometimes this is within one plant but can also require them to reach another plant, depending on the species.

These tiny plants have incredible properties and can survive in extreme conditions.

Mosses, and their cousins liverworts and hornworts, are classified as Bryophyta (bryophytes) in the plant kingdom.

There are around 1,000 bryophyte species in the UK.

Among the world of plants, the bryophytes are the second most diverse group exceeded only by the angiosperms, the flowering plants (350,000 species).

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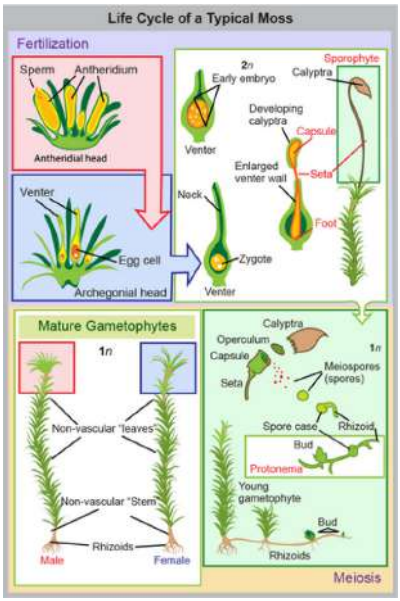
What is moss?

Unlike most other plants, mosses don't have roots.

Instead they have rhizoids, which are small hairlike structures. Their main function is anchoring the plant to rock, bark or soil.

So without roots, some mosses suck nutrients up through the rhizoids and others draw in moisture and minerals from rain and the water around them through their highly absorbent surfaces.

Mosses function like sponges, using their capillary spaces to hang on to water.



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Types of lawn moss

Springy Turf-Moss
(Rhytidiadelphus squarrosus)

Rhytidiadelphus squarrosus can be found in most lawns. The shoots of this pale green moss tend to grow fairly erect, and viewed from above, each shoot looks star-like, owing to the leaves sticking out at right- angles to the stem.

From the side, you can see that each leaf bends back at a right angle to the base, so it sticks out away from the stem, and between the leaves one may be able to see that the stem is red.

Rhytidiadelphus squarrosus forms extensive turfs, often forcing grass plants out to form pure colonies.

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Types of lawn moss

Pointed spear-moss (*Calliergonella cuspidata)* prefers slightly moister conditions than *Rhytidiadelphus squarrosus* and has a preference for base-rich habitats. However, in some areas it is a common moss of lawns, especially in shaded, damper areas.

It has more of a green, or yellow-green colour than *Rhytidiadelphus squarrosus*, and the shoots are usually more obviously branched.

As its common name suggests, the shoots of this species are pointed and spear-like; the leaves towards the stem tips are tightly rolled up to form a point. If you touch the point of the stem with a finger, you will find that they are relatively sharp.

Star moss or Bank Haircap moss *(Polytrichum formosum)*

This moss type represents a division of mosses in which the fruits are borne on the termination of the stem or principal branches.

Usually about 4 to 12 cm long. Its narrow leaves are 5 to 10 mm long with serrated margins and a pointed, sometimes reddish tip, they project from the main vertical stem in a spiral arrangement.

Research suggests that whilst common over the whole of the UK it is particularly prevalent in Leicestershire and Rutland!

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Why do lawns get moss?

Moss tends to grow in lawns for several reasons:

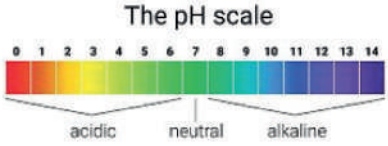
Shade: Moss thrives in areas where there's limited sunlight. If trees, buildings, or other structures block the sun from reaching the grass, it creates a conducive environment for moss to grow.

Poor Drainage: Excessive moisture or poor drainage can create an environment where grass struggles to grow but moss thrives. Areas with compacted soil or where water tends to accumulate become suitable for moss.

Low pH: Moss can tolerate acidic conditions better than grass. Soils that are too acidic may hinder grass growth while providing an ideal environment for moss to take over.

Nutrient Imbalance: Imbalances in soil nutrients can favour moss growth over grass, particularly if there's a lack of nutrients necessary for healthy grass growth.

To address moss in lawns, improving drainage, increasing sunlight exposure, adjusting soil pH, aerating the soil, and ensuring proper fertilisation can help encourage healthy grass growth and discourage moss.



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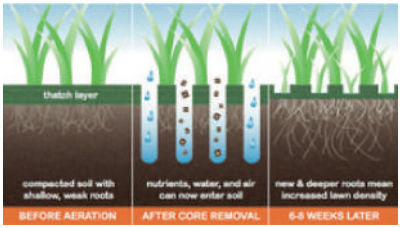
Preventing moss

Preventing moss growth involves creating conditions that are less favourable for moss while promoting a healthy lawn. I take or recommend the following steps for my customers lawns:



Ensure proper drainage by aerating the soil and fixing any areas where water tends to accumulate. Moss thrives in moisture- retentive environments, so improving drainage can discourage its growth.

Trim trees and bushes to allow more sunlight to reach your lawn. Moss tends to grow in shaded areas, so increasing sunlight can inhibit its growth.

Test soil pH and adjust it if necessary. Moss tends to thrive in acidic soil conditions, so adding lime to raise the pH level helps. Lime makes it less favourable for moss growth.

Maintain a healthy lawn by fertilising it properly and overseeding bare patches. A healthy lawn will compete better with moss and prevent it from taking over.

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Preventing moss

Keep the lawn well-maintained by mowing regularly at the correct height for the grass type. Taller grass shades the soil, preventing moss growth. Remove debris and thatch to allow air circulation.

If certain areas of your lawn consistently struggle with grass growth, consider using ground covers that are better suited to the conditions, like shade-tolerant plants or landscaping alternatives that thrive in shade.

Remember, it's often a combination of factors that contribute to moss growth, so addressing multiple aspects of lawn care can be most effective in preventing moss from taking hold.

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Suppressing moss

Treating moss with ferrous sulphate solution suppresses the growth of moss in lawns.

Discolouration of the moss occurs within a few days and in many cases, within a few hours.

The moss turns brown/black so losing its green colour, chlorophyl, and therefore its ability to photosynthesise during daylight.

The application of ferrous sulphate loosens its grip on the soil surface making the next stage of scarification more efficient.

The ferrous sulphate also has a positive effect on the grass blades by thickening cell walls, allowing the grass to be more disease tolerant and stronger over the winter period.

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Physical removal

Scarifying is a process used to remove moss (and thatch) from lawns.

It involves mechanically raking or slicing the surface of the soil to remove the layer of dead moss and other debris that might be blocking sunlight, air, and nutrients from reaching the soil and the grassroots.

I only carry this process out in spring or autumn, when the grass is growing well, as the lawn is able to recover better.

I use purpose built, petrol driven, scarifying machines which are very powerful. How many passes I make over the lawn depends on the severity of the moss/thatch problem.

It is always best to start the job with the blades set to 'high' and then gradually lower them after each pass.

Being too aggressive, initially, may cause damage to the existing grass and their roots, unnecessarily.

I then rake up the debris to remove it from the lawn.

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Re-seeding the lawn

Re-seeding a lawn is a fantastic way to rejuvenate sparse or patchy areas, enhance grass density, and improve overall lawn health.

I use a mix of grass seed types to ensure better resilience against pests, diseases and varying weather conditions.

Grass seed germinates best when it is physically touching bare soil. This helps keep the seed moist and when the first root emerges it can immediately drive its way into the ground. Once in the ground it can supply water to the seed and emerging seedling grass blade.

I use a seed spreader to evenly distribute the seed of the lawn.

Lawn edges need to be sown by hand to minimise the seed settling in flower borders, in between paving slabs or on loose stone.

Top Dressing over fresh seed, improves 'seed to soil' contact thereby encouraging germination and aiding healthy seed establishment.

Seed types

Few lawns consist solely of one grass type or species. Professional seed producers generally mix seed types and species to help the finished lawn hedge its bets i.e. it can tolerate differing conditions, uses and foot traffic.

Perennial Ryegrass *(Lolium Perenne)* A tufted grass which has a dark green appearance, good tolerance to wear and tear and requires a medium level of fertilisation.

Normally a lawn will contain some Ryegrass as it provides a good strong base.

Chewing's Fescue *(Festuca Rubra spp. Commutate)* A dense grass that grows in tufts has a medium green appearance, moderate tolerance to wear and requires low levels of fertilisation.

One of its main characteristics is that it can survive very close cutting, down to 5mm and therefore is often used in mixtures for golf greens.

Brown Top Bent *(Agrostis Tenuis)* A creeping grass, producing slender stolons and rhizomes, these are shoots that run horizontally along the surface and just below the surface of the soil. It has good tolerance to wear and requires a medium to low level of fertilisation. This grass is regularly used in quality lawns.

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Seed types

Seed mixes are blended for differing turf requirements and uses.

I tend to use two different mixes i.e. Shade Tolerant and General Utility mixes. Shade Tolerant seed is generally made up of:

- 40% Strong Creeping Red Fescue
- 25% Dwarf Perennial Ryegrass
- 15% Hard/Sheeps Fescue
- 5% Slender Creeping Red Fescue
- 10% Smooth Meadow Grass
- 3% Browntop Bent
- 2% Wood Meadow Grass

General Utility seed is generally made up of:

- 30% Tetraploid Perennial Ryegrass
- 20% Creeping Perennial Ryegrass
- 30% Perennial Ryegrass
- 20% Strong Creeping Red Fescue

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Germination sheeting

I often use germination fleece sheets when re-seeding a lawn each spring and autumn.

Seed germination is a delicate process that depends heavily on the right temperature.

Germination sheets act as nature's thermostat creating a warm micro-climate.

By trapping heat from the sun these sheets elevate the soil temperature by a good few degrees or more, accelerating the germination process, significantly.

The sheets allow light and water in whilst keeping the birds out. Moisture retention is key in helping the new seedlings grow quickly, too.

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Regular aeration

What is Aeration?

Aeration is a lawn care practice that involves perforating the soil with significant holes to alleviate compaction and promote better air, water, and nutrient penetration to the grassroots. Over time, lawns can become compacted due to various activities like foot traffic, heavy machinery, or the natural settling of the soil.

Compaction limits the movement of air, water, and nutrients, hindering the health of the grass. Grass roots struggle to grow healthily into compacted soil as well.

How do I carry out Aeration?

I use specialist mechanical, petrol driven aerators which are manufactured to be heavy and powerful. This enables the right sized holes to be punched into the soil, in the quickest time and at the correct spacing.

Some people use a garden fork but soon become weary due to the effort involved.

Aerations should be carried out at least once a year.

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Fertilisation

Fertilisers provide essential nutrients like nitrogen (N), phosphorus (P), and potassium (K) that might be deficient in the soil. These nutrients are vital for healthy plant growth, aiding in functions like photosynthesis, root development and disease resistance.

If the grass is strong and healthy then it should keep moss formation at bay.

I use a specialist spreader on wheels to evenly distribute the fertiliser pellets over the lawn.

It is very important to follow the manufacturers application rates as too much nitrogen (N) can quite easily scorch and kill the grass plants. This avoids the need to reseed these resulting dead areas by getting it right in the first place.

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The way forward

Call me, your moss expert, for a personal and bespoke lawn consultation.

At that stage I will:

- Understand what you want from your lawn
- Discuss your lawn's history
- Perform a pH level test
- Perform a soil compaction test
- Perform a thatch test
- Identify the causes of moss growth
- Provide a bespoke remediation programme
- Provide a bespoke annual maintenance programme
- Provide a comprehensive quote
- Give you a free lawn care booklet

10 DAY OFFER
FREE
MICRO-NUTRIENT APPLICATION
with your first moss application

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the biz club AWARD WINNER 2023

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