

THE HAPPY LAWN COMPANY



5 CRITICAL STEPS

YOU MUST KNOW BEFORE YOU EVEN THINK ABOUT
IMPROVING YOUR LAWN

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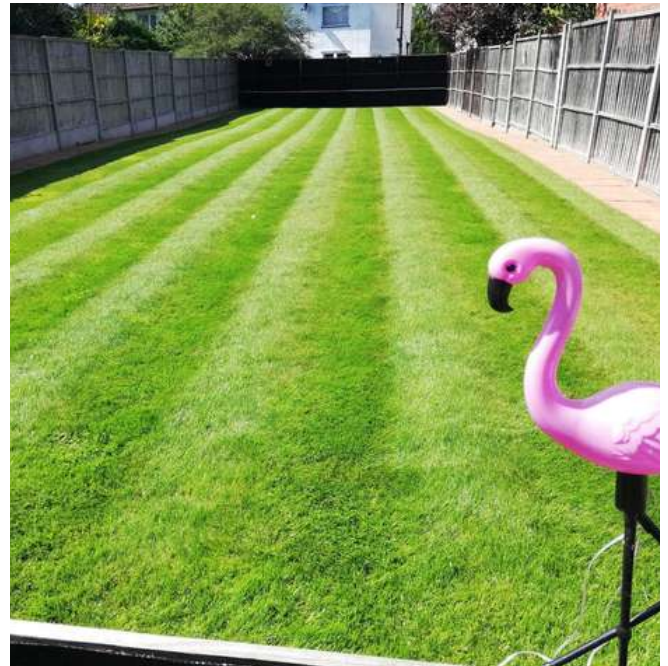
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1. THINK THE BEST RESULTS ARE ONLY ACHIEVED BY PROFESSIONALS? *NOPE! YOU CAN GUARANTEE RESULTS YOURSELF, EVERY TIME.*

Getting the perfect lawn is not an exact science (every lawn is different) but this doesn't mean it has to be guesswork. With thousands of products on the market all touted to be the next best thing, it is definitely a minefield.

However, there are a few things which you can do to guarantee your lawn will be looking lush throughout every year just like the pro's.

**ONLY USE QUALITY PRODUCTS
(THIS DOESN'T MEAN YOU HAVE TO BREAK THE BANK)**



The difference in quality of products available for your lawn is vast. From companies offering spray on seeds to 4-in-1 'solve-all' solutions to premium, granular feed used on golf courses. Don't worry. Using the key products shown below will make sure you don't fall foul to any marketing traps set to part you with your hard earned money.

Spending a little more on quality products will actually save you a lot more in the long run. It will make sure that you won't have to renovate burnt patches (or the whole lawn!) or end up buying more products due to ineffectiveness.

GRANULAR FEED

There's a reason all lawn care service providers use granular fertiliser instead of 4-in-1 products. Because it's better! Not only will it produce superior results but it typically lasts for 8-12 weeks with a controlled release to reduce the chance of scorching.

WHAT IS NPK?

Fertilisers can be told apart by their NPK levels. N for nitrogen. P for phosphorus. K for potassium. Here they are broken down in their simplest terms for your lawn:

Nitrogen: promotes green growth above the soil which the plant uses for photosynthesis.

Phosphorus: promotes growth below the soil. Essential for root health and early plant development.

Potassium: used for absorbing water from the soil, helps grass flourish and fight off disease.

IDEAL NPK

Each season requires different nutrients for your lawn to thrive and cope with whatever conditions the temperamental UK weather can throw at it!

Spring

In spring you need to feed your lawn with nutrients to maintain lush growth without the need for excessive mowing.

Ideal NPK: 22-5-10

Summer

In summer you want to be aware of drier spells so a slow release fertiliser is always best. Keep nitrogen levels high for a lush lawn,

Ideal NPK: 19-3-9

Autumn

Time to prepare the lawn for colder months ahead. Lower levels of nitrogen should be used to maintain green colour while avoiding disease-prone soft growth.

Ideal NPK: 10-5-10

Winter

Use a fertiliser or conditioner to support root development for strength over the colder period to prevent disease.

Ideal NPK: 6-5-10

Seeding

Seeding is a special case. When you are seeding you want the new seedlings to develop deep and strong roots for long term success. This requires a fertiliser designed for this rather than for promoting growth above the soil. Also, if you are overseeding (filling out an existing lawn) you don't want your existing grass to grow too lush and outcompete the new seedlings for light and nutrients.

Ideal NPK: 6-10-8

ORGANIC BIOSTIMULANTS

Biostimulants can be used throughout the year to promote healthy and dense root systems and nutrient absorption. Liquid seaweed is one example of an organic biostimulant and has the following benefits:

- Beneficial for seed germination
- Enhanced quality of vegetative growth
- Increased resistance to pest, disease and environmental stress
- Provides high level of plant essential compounds
- Improves soil microbiology (key for long-term results)



IRON SULPHATE

Get FAST results with iron sulphate.

- A **low dose** (2g per SQM) will green up your lawn rapidly but it will not be long-lasting.
- A **medium dose** (3g per SQM) will do the same but also harden your lawn and make it resistant to disease.
- A **high dose** (5g per SQM) will do all the previous benefits but also blacken and kill any lurking moss infestations you may or may not be able to see.

Apply with a pressure sprayer ideally or a watering can with a fine rose head attachment. Make sure to dilute in 100ml of water per SQM and be careful about getting it on any patios or inside as it stains hard surfaces easily.

BONUS: MYCORRHIZAL FUNGI

Now the proper lawn nuts will know that mycorrhizal fungi can revolutionise a lawn. And it's particularly effective in lawns with poorer soil microbiology (e.g. newer lawns). It can increase the surface area on the roots for nutrient and water uptake by over 300%! A few other things mycorrhizae will do:

- Improve establishment of grass seed in new and old lawns
- Greatly improve the root mass and increases nutrient uptake
- Create healthy grass which is less prone to disease and recovers faster from wear
- Aid natural plant health and resistance to stressors e.g. drought

2. HOW TO GET YOUR OTHER HALF BEGGING YOU TO DO THE SAME EVERY YEAR

There is nothing worse than working on the lawn for your other half to say that you've ruined it!

Know one thing - if doing heavy renovation work it WILL get worse before it gets better.

Follow these key steps when doing yearly overseeding and the whole street will be asking for you to come over and take a look at their lawn:

GROUND PREPARATION



Solving any underlying issues is essential for your lawn to thrive each year. Removing excess thatch (the dead layer of material in between the grass and the soil); aerating to reduce compaction and improve drainage; top dressing to improve soil composition and drainage; and pest, moss and weed control are all key to achieving a great lawn. See Point 5 for more on this.

OVERSEEDING

Choose Your Weapon

First make sure you choose the correct seed. Generally people want a hard-wearing and strong lawn to cope with general usage and a mix with a high percentage of dwarf ryegrass strains is perfect for this. If you are looking for a bowls or golf green then you will want to look at fescues which are much finer but harder to maintain.

Mow Short

Mow your lawn short (ideally to around an inch) before overseeding as you don't want to be mowing while your new seedlings are establishing as it can damage them.

Spread Seed

Spread seed using a spreader or by hand and make sure there is an even coverage. Each seed mix will have recommended application rates for overseeding and seeding from scratch.

Apply seed with topdressing or topsoil to increase seed to soil contact. Soil contact is CRUCIAL for germination. If you aren't using a topdressing or topsoil then rake the seed in gently to make sure it has access to the soil.

You can go over the freshly seeded lawn with a roller or tread it in to improve soil contact.

CONSTANT MOISTURE

Now all you must do is stop the lawn from drying out.

Week 1 - 2

Water with a very fine spray, twice a day if possible. Large droplets or heavy watering will move or puddle the seed, ruining the even distribution.

Week 3 - 4

Water once a day or every other day. If things start drying out, increase the frequency.

Week 5 - 8

Water more heavily and less frequently; twice a week will do.

Week 9 and beyond

Water once a week and keep watering if things get dry. New grass is prone to drying out in the first six months.

OTHER POINTS TO CONSIDER...

- To improve germination rates and new root growth you should use a seeding fertiliser and biostimulant. Further improvements can be made through the use of a mycorrhizal fungi-based product.
- Try to avoid watering at night regularly as it promotes disease and pests.
- If the lawn is moist from rainfall you do not have to stick to these watering recommendations.
- In warmer periods and during the summer, you will have to increase the amount that you water. At a minimum make sure that you keep the soil constantly moist for the first few weeks or your new grass will not germinate.
- You can seed at any point during the growing season (late March to early October depending on the weather) but be aware seed only germinates at a minimum of 8-12C soil temperature. Soil temperature stays fairly consistent once it gets up to those numbers so don't worry about outside temperature fluctuations (British weather!) but you can always use a soil probe to check.
- Try to wait until the new grass hits 5cm before mowing. When you mow be very careful. Make sure the grass is dry and your mower is sharp. Cut on the highest setting possible initially before bringing it down over the next few cuts.
- Avoid using the lawn for the first 4 weeks so you don't damage the new grass and keep activity light until 8 weeks after seeding.

3. DON'T DO ANY OF THESE.

YOU WILL DESTROY YOUR LAWN.

In the short term, your lawn can turn into a nightmare overnight if you use the wrong products (see Point 1) or accidentally misuse products. 4-in-1s are particularly notorious for leaving burn marks or uneven growth.

In the longer term, your lawn will deteriorate over the course of the growing season or a few years if you let it become overrun with weeds, moss or pests.

MISUSE PRODUCTS

Over-fertilising



Make sure to follow all product dosage guidelines or risk scorching the roots and the grass blades, similarly to when pets leave marks on the lawn from urine. Once the grass is killed due to scorching it will need to be fully raked out and reseeded as it won't grow back.

If you think you have overfertilised then water the area thoroughly for the next ten days to help wash it through the soil.

Uneven spread

Another important factor is not spreading your lawn products evenly. In order to achieve uniformity, desired results and prevent lawn burn, use a spreader instead of applying solid products via hand and use a pressure sprayer instead of a watering can for liquids.



LEAVE MOSS & WEEDS TO SPREAD

Once you start leaving moss and weeds they begin outcompeting the healthy grass for air, water and nutrients. On top of this, the knock on effect of not having healthy, lush grass actually encourages pests and disease to take over your lawn as the grass is weaker. So make sure to stay on top of everything using the products on the next page.

Moss Control

Iron Sulphate. Due to legislation, iron sulphate cannot be sold as moss control without a license. However, rest assured that it is all the same stuff and is the best way to kill off any moss populations. In addition to blackening and killing off moss, iron sulphate will also harden your turf (make it more resistance to disease and wear) and give a quick 'green-up' effect.

Apply at 4-5g per diluted in at least 100ml of water per SQM to blacken and kill moss.



Weed Control

Various Methods. Some weeds are more difficult to get rid of than others so don't be surprised if a repeat application is required in some cases.

Selective Herbicide

A selective herbicide is one which targets and controls only the desired plants and doesn't affect others. In this

case you want a herbicide which kills the weed and leaves the grass. Weedol is one commonly used selective herbicide or there are other professional solutions such as Cabadex which require a license to spray.

Always ensure to follow all safety and application recommendations as these products are harmful and dangerous if misused.

Manual Pulling

The old school way. Get on your knees and pull. Or invest in a manual weed puller. You want to try and get as much of the root out as possible or you risk the weed coming back.

Glyphosate

Glyphosate is a very strong herbicide and won't distinguish between your lawn and weeds. It is often used when lawn owners want to start again or if the lawn is too infested with weeds.

LET PESTS INFEST YOUR LAWN

Pests are actually becoming more and more common across the UK and have turned many a lawn from perfect to completely ruined in the space of a season.

The two most common pests are leatherjackets and chafer grubs. While a few pests are to be expected in most soils, it is essential to deal with them if they are present in high numbers.

Leatherjackets

Commonly known as the larvae of the crane fly, these pests can completely destroy a lawn if left unchecked. While a small population is becoming more and more common in domestic soils and isn't always essential to treat, a larger population definitely needs to be controlled.



How To Spot Them

Leatherjackets are grey with a tubular body with no legs or obvious head. They are typically found in large numbers in the soil beneath areas of stressed or dead grass as they feast on the grass roots.

A sudden increase in bird or badger activity is a sure sign of leatherjacket infestation. These predators leave holes in the lawn (or tear the whole thing up in the case of badgers!) as they try to feed on the leatherjackets.

How To Deal With Them

Control of the pests can be achieved using specific leatherjacket nematodes from April through to May or in September through to October. Ensure to follow product application guidelines carefully for nematodes as they are a living organism and die easily. It is also worth noting that in spring a double dose is required as the fully mature larvae are less susceptible to nematodes.

Chafer grubs

The larvae of chafer beetles are very similar to leatherjackets in that they feed on the grass roots, can be spotted using the same methods and are dealt with using specific nematodes.



How To Spot Them

Chafer grubs are milky white and curved in a C shape.

How To Deal With Them

Chafer grub nematodes.

Ants

Another pest which plagues some lawn owners is ants. While they are not always an issue, their mounds can be unsightly and can create an uneven surface.

How To Deal With Them

You could simply brush the ants away if you are not bothered by the infestations. Alternatively there are various solutions on the market such as ant powders (e.g. Ant Stop). Or you can use ant-specific nematodes which the ants do not tolerate being close to so they move their nests. To achieve total control a combination of a course of 3 ant nematode treatments followed by a final application of ant powder in any remaining nests is recommended.

4. HAVE YOUR LAWN LOOKING LIKE WEMBLEY

How DO they keep their grass looking perfect for every game?! Random fact for you: Anfield (Liverpool's football stadium) is actually 3% artificial grass.

While not everyone is looking to achieve playing surface quality, there are a few things you can do to get as close as possible. You won't need a team of groundskeepers for your back garden if you stick to the following.

PROPER MOWING PRACTICES

Height

The number one rule in mowing is:

Never cut more than $\frac{1}{3}$ of the height of the blade of grass (this decreases to $\frac{1}{4}$ on new lawns)

Cutting too short will expose, damage and stress the lawn. This process of scalping your lawn will reduce growth levels and turn your lawn yellow/brown.

Conditions

Avoid cutting in wet conditions if possible.

Cutting in wet conditions can damage your lawn as the quality of the cut is reduced and the mower sinks into the lawn.

Direction

Cutting in the same direction continually can eventually create ruts and trenches from your mower which leads to flattening the grass rather than cutting it.

Blades

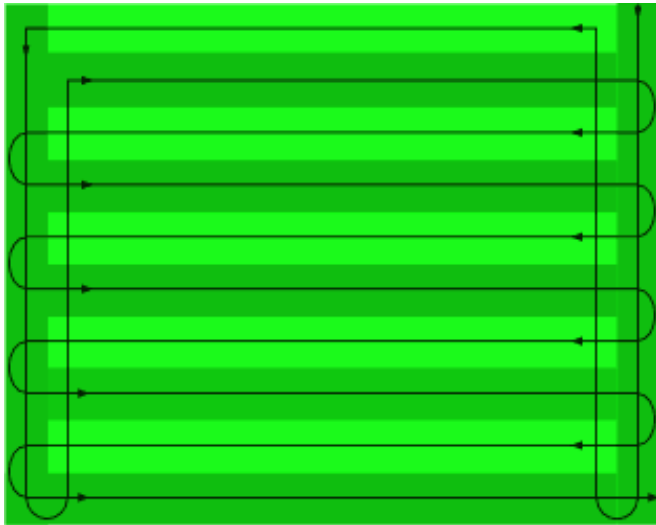
Keep your mower blades sharp or the grass will become frayed rather than receive a clean cut. Once a year is normally fine for sharpening the blades.

Estimated seasonal mowing schedule

Spring	Every 7-14 days
Summer	Every 4-7 days
Summer (drought)	Every 14 days
Autumn	Every 7-14 days
Winter	Never

Stripes

The lawn enthusiasts bread and butter. Defined lawn stripes are achieved using a mower with a rear roller attachment to flatten the grass in different directions. Start by cutting along the short ends to make sure you don't miss any of your lawn. Then mow up and down the longer sides while overlapping slightly to make sure no grass is missed. Make sure you have reached the end of your lawn before turning.



KEEP YOUR LAWN LUSH

Maintaining a well kept lawn not only looks great but it prevents pests, weeds and diseases from taking over.

Overseeding

Fill out any bare patches and low growth levels through overseeding. Carrying this out every spring will keep your lawn thick and lush each year. In turn this helps prevent weeds and moss from taking over any spaces in the lawn.

Fertilising

As explained in Point 1, there's a fertiliser for each occasion. Making sure to feed your lawn with the appropriate fertiliser at least 4 times a year will keep your lawn healthy and thriving. Strong roots mean the lawn is less susceptible to pests and keeps its green vigour throughout the year.

Drainage improvements

Stadiums have state-of-the-art drainage systems in place now to prevent the heavy waterlogging that could be seen in games years ago. Waterlogging and poor drainage in general is bad news for your lawn.

Too little drainage and you create conditions favourable for moss and diseases. Too much drainage and the grass doesn't get a chance to use the water in the soil for growth.

Solving too little drainage

Aeration - see Point 5.
Topdressing to improve soil composition - see Point 5.

Installing drains - if your lawn has really poor drainage then you may have to look at the possibility of digging it up and installing drains. This is obviously a costly and labour-intensive task so definitely try the previous two options a few times first.

Solving too much drainage

Water retention treatments - allow your lawn to hold more water in the root zone so the roots have greater access for longer.

Water penetration treatments - break down the hydrophobic properties of the soil and allow water to penetrate more freely (can also be substituted with a mixture of fairy liquid and water if on a budget!).

Watering

Not everyone wants to (or agrees with!) watering the lawn but in extended periods of drought it is essential to keep your lawn green.

Note: if your lawn has turned yellow in drier weather then don't worry. It takes many weeks for established grass to die due to lack of moisture. The grass will typically remain dormant then spring back to life when wetter conditions return.

General Tips:

- Avoid watering in the middle of the day in hotter periods as the majority of the water evaporates before being put to good use (no one wants to be watering for no reason!)
- Avoid watering in the evening regularly as it promotes the growth of fungus and disease. Watering in the morning allows your lawn to absorb all the water you put down.
- In dry periods water deeply and often when possible.



5. FOLLOW THIS OR RISK IT ALL BEING FOR NOTHING

Ground preparation is the KEY foundation to a great lawn. Without proper prep you can chuck all the fertiliser and seed on in the world and it won't thrive over the long term.

ALWAYS BENEFICIAL

Aeration

Aeration can really turn a lawn around as it allows the lawn to access air, water and nutrients more freely. The lawn can then thrive and the root systems can develop further.

In addition, aeration will reduce compaction in the soil which will improve any drainage issues.

The budget version of this is poking holes in your lawn with a garden fork. This method, however, doesn't reduce compaction as it is pushing the soil down and compacting it more.

What you ideally need is a hollow-tiner, either mechanical or handheld. Hollow-tiners will pull cores out of the soil which is fantastic for creating channels for air, water and nutrients to flow through the root zone. Mechanical aerators will allow you to cover an area quicker and can be rented by the day from places like Hire Station.

It's a great idea to aerate your lawn frequently (once in spring and once in autumn) to keep everything healthy and moving as it should!

Topdressing

One of the main reasons overseeding isn't successful is because the seed doesn't have enough contact with the soil. Topdressing the lawn before seeding or mixing the seed with topdressing (saves time) will help to make sure that the seed has enough contact with the soil for germination.

The benefits of top dressing don't stop there, however:

Thatch prevention: Topdressing will cover the thatch in your lawn and allow the grass to re-root and become denser.

Drainage: Using a top dressing with a high percentage of sand will improve your soil composition for better drainage. If you have a heavy clay soil you can topdress with compost to break down the soil over time. If you do have drainage issues you will want to make sure you aerate regularly.

Levelling: You can also use topdressing to raise areas of your lawn so that they are level before seeding.

Moss Control

What makes moss control always beneficial is actually the additional benefits of using the product rather than just killing moss. Iron sulphate produces a rapid green-up of turf and hardens turf which is both pleasing to the eye and helps the turf become more resilient.

Moss control does become essential if you have moss infestations in your lawn as they will compete with your grass for nutrients and spread over time.

Iron sulphate is dissolved in water in the correct proportions for your lawn size and applied using a watering can (with a fine rose head for more even spread), hose-end diluter or ideally a pressure/pump sprayer (for the most even spread).

Once this has been applied and the moss has turned black you should rake it out fully using a spring tine rake. An easier way to extract the dead moss is using a mechanical scarifier which will remove thatch at the same time.

Repeat applications may be necessary as it is unlikely all the moss spores will be removed.

ONLY IF NEEDED

Weed Control

Keeping on top of the weed population is important for your lawn to thrive as weeds will compete with your turf for sunlight, nutrients and water. On top of that they can be very unsightly!

Common lawn weeds include: daisy, clover, dandelion, buttercup and plantain.

Weeds that are more difficult to get rid of in lawns and which are more likely to require repeat application include: speedwell, lesser celandine, trefoil, yarrow and self-heal.

You will need to apply a quality selective herbicide to your lawn and be sure to take care as weed controls are usually harmful.

Some weeds can be particularly hardy and may require repeat application. Weedol is one product you can look at for controlling any weed populations. Keeping a well maintained and healthy lawn will help to prevent weeds from growing in the future.

The chemical-free option is to manually pull the weeds out. You can do this by hand, using garden tools or using a weed puller. Ensure to get as much of the root as possible to prevent regrowth.



Scarification

Scarification is for removal of excess thatch in your lawn OR when you have a lot of dead moss to extract.

Thatch is a layer of dead material in between the soil and your grass. You can tell when there is an excess layer through visual inspection (lift a bit of your turf up) and when the grass feels spongy to walk on. A small layer of thatch is fine and can go untreated.

Removing excess thatch, like aerating your lawn, will allow your grass to access air, water and nutrients more freely and therefore improve overall health and growth levels.

You can scarify using a spring tine rake or using a mechanical scarifier. A mechanical scarifier is quicker and more effective and can be rented for the day from places like Hire Station. When you're scarifying make sure to do 2 passes of your lawn in different directions for maximum effectiveness.

Rake out scorched grass and reseed

This is necessary if the lawn has been scorched through fertiliser misuse or dog urine or has turned dead/yellow (unless due to drought conditions). If your lawn has been burnt by the sun in periods of drought then usually it will become green again through watering over time.

Simply rake out the scorched areas fully and water well to wash out any remaining product if necessary. In particularly bad cases you can scarify the entire lawn on a deep setting to extract all the dead grass.

When you have raked out the dead grass and are left with exposed soil you are ready to reseed.

