

# Fairy Rings

## What are they?

Fairy rings are caused by soil borne fungi that are naturally occurring in the soil underneath a lawns surface. There are three main common types found in the United Kingdom, which we will discuss later.

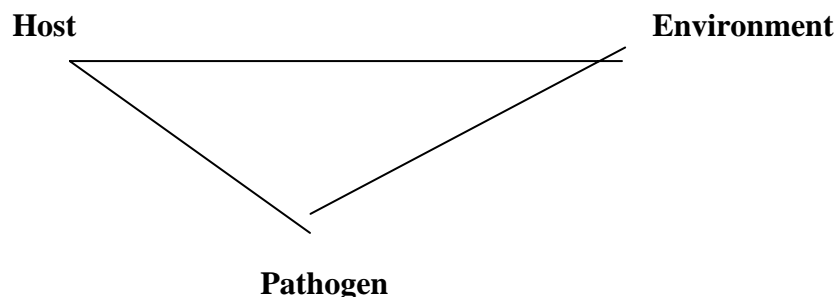
## Where has it come from?

Over 60 species of Fungi have been recorded as being identified as likely to cause Fairy Rings. The Old Wives Tale of trying to dig the ring out is a little counteractive as it is so easy to leave behind microscopic stands of fungal mycelium that will then go onto grow yet another ring. It is noted that Fairy Rings prefer light sandy dryer soils but they can be found on all soil types.

They will appear on the surface of the lawn in the shapes of arcs, ribbons and rings and can spread outwards each year. Sometimes the fruiting bodies or toadstools can be viewed when the weather is suitable for the development of them.

## The Disease Triangle

Any lawn disease needs to follow the principle of the Disease Triangle where there is a Host (Grass Specie), Pathogen (Disease) and ideal Environment (Temperature, Moisture). When lawn owners enquire as to why they have toadstools on their lawn, it is mostly because they have always had the spores in the soil, just that the environment for the spores to germinate and develop and thus produce a fruiting body are ideal for that particular time of year.



## Type One Fairy Rings



Type 1 rings appear as circles of dead or severely stressed turf bordered on both sides by lush green stimulated grass growth. Mushrooms or toadstools may be present in the rings. The reason for the lush green growth on the outer circumference of the ring is the soil bacteria within the ring eating the thatch and fibre exuding Nitrogen, which in turn is a food source for grass. The reason for the dead grass within is a secondary by product from the bacteria and fungi

namely a waxy substance that literally coats the surface of the soil particles meaning that they are unable to attract and hold onto available soil water, and the soil becomes hydrophobic within the circle and watering with normal water will not resolve the issue.

## Type Two Fairy Rings



Type 2 fairy rings appear as darker rings, ribbons or arcs of faster growing grass. Mushrooms or toadstools may be present in the rings. They are not usually as damaging as Type 1 rings. Applying fertiliser to the complete lawn, trying to miss applying fertiliser to the stimulated grass to deepen the colour and increase the growth can often mask them. Type Two rings do not damage the turf and the problem is more visually unsettling to the viewer.

## Type Three Fairy Rings



Type 3 rings have no detrimental effect on the quality of the turf. They consist only of mushrooms or toadstools. These mushrooms or toadstools may be in rings, arcs, lines, patches or solitary. They can be removed by brushing or mowing, which will also help to prevent the spores being spread.

## How Do I get rid of a Fairy Ring?

The best solution is not to create the conditions (environment) that may give rise to the development of the fungi.

If the surface of the lawn is becoming really dry, the use of a wetting agent will assist in the prevention of Dry Patch. This technical subject is covered on a different technical leaflet. Trying to water an area affected by Fairy Rings with normal tap water will be problematic, as the water will simply run off the surface. A Wetting Agent (see below) will lower the surface tension of water (making it wetter) and allow it to penetrate a really dry area. Localised spiking of the ring, ahead of applying a wetting agent will assist in the percolation of the product into the soil below. Once the soil becomes wet again to a depth, the areas affected by the fairy ring can be over seeded, especially the dead patch within a Type One ring. It is important to follow the timely curative and preventative programme but be aware that complete eradication is difficult to achieve.

There are no amateur approved control products available and only a few professional control products available to Green Keepers and Groundsmen. They too would need to get the area wet before a control product was applied.

Fairy rings are naturally water repellent. Prevention is better than cure and following the programme below will go a long way to reduce the visual effects of a fairy ring. Easier and cheaper than digging it out!

## How do I apply a wetting agent to the lawn?



The problem requires your continued commitment. You will need one of the green and white hand held Miracle Grow Diluters or Westland Horticulture with a clean and empty reservoir. They are available from good DIY warehouses or garden centres for approx £5.00. The product that is in the container needs to be transferred to the Miracle Diluter to permit application to the grass. You may be able to scoop the product out with a spoon if you have the Drencher Essential

tablet, which is brown in colour or cut out if you have the standard tablet, which is white. The Drencher tablet will treat in total some 3000 sq metres per single application dependant upon your water pressure. The Drencher has micronutrients in it to aid the effectiveness of the product. Once the soil is wet again, then lawn renovation can commence. The picture above shows that the Drencher Tablet container will screw straight onto the Miracle Grow Diluter – this is just coincidence, scoop the product out as suggested above.

Connect the diluter to the hosepipe and hand water the problem areas until the water starts to run off the surface. Little and often is the key. You may notice some foam on the surface of the lawn but this will soon dispense. When the task is complete, simply keep any residual product in the diluter until next time! Do not mix with any fertiliser products. It is possible to over apply the wetting agent with the net result of brown grass.



## How often should I apply the product to my lawn?

Please follow this programme –

Apply once a night in the first week - Curative

Apply once a week for the remaining weeks of the first month - Curative

Apply once a month thereafter between March and September – Preventative

If the grass trying to grow in these dry patch areas is dead, it is unlikely to come back if it is totally dead so some localised over sowing will be required. Nothing will grow in the garden without water!

## How much does it cost?

When you have run out, we can supply you with another tablet at a current cost of £25.00 Inc P&P and VAT. It really does work and it can be applied to the complete lawn by following mowing lines, it can be applied in the rain and will only solve the problem if used as per the programme above so stick with it. To see if the soil is becoming wet again, cut out a small plug with your gardening knife.

## I have an irrigation system, is the product available as a liquid?

It is possible to obtain a liquid wetting agent that can be dispensed via a side dispenser into the irrigation system. The products are safe for plants and you will infact require less water as the wetting agent makes water wetter, making it possible to penetrate dry soils easier. They are quite effective products, one litre can treat 18 golf greens for example so if an irrigation system has a 100-litre diluter, you would only require a small quantity each month to be dispensed around the garden. Localised problematic areas should be treated by hand to cure the problem as irrigation systems do not always provide 100% coverage across a lawn.

Wetting agents are also available in a granular form that is incorporated following aeration. They can be applied diluted with water as a liquid spray via a knapsack sprayer too.

Special thanks to The Sports Turf Research Institute ([www.stri.org.uk](http://www.stri.org.uk)) for images and some of the text contained within this leaflet

**To seek assistance - email [technical@lawnsociety.org.uk](mailto:technical@lawnsociety.org.uk)**