

Fairy Rings in Lawns

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Many ancient superstitions are associated with fairy rings. In Holland, fairy rings were believed to mark the places where the devil churned butter. Butter from cows that ate the grass from a fairy ring would be inferior in quality. In France, many people would not enter a fairy ring because they believed that enormous toads abound there. In Sweden, some believed that a person entering a ring passed entirely under the influence of the fairies. In England, building a house on land with fairy rings was regarded as a good omen. In German mythology the circular spots were attributed to resting dragons. Many natural phenomenon such as lightning, thunder, whirlwinds, ants, moles, haystacks, etc., were at various times believed to cause the rings.

of spores which fall to the ground or are blown to other parts of the lawn.

Fairy rings start from the point of germination of a fungus spore and spread outward a few inches to a few feet each year. Where the turf is not uniform or is thin, the rings may not be completely circular, resulting in crescents and interrupted rings. These bands may range from 4 to 12 inches wide, with the diameter of the circle varying from 2 or 3 feet to over 100 feet.

As the fungus spreads outward, it uses organic matter in the soil as a source of nutrition. Growth of the grass inside and outside the ring is then stimulated by the release of plant nutrients, principally nitrogen, from organic matter decomposed by the fungus.

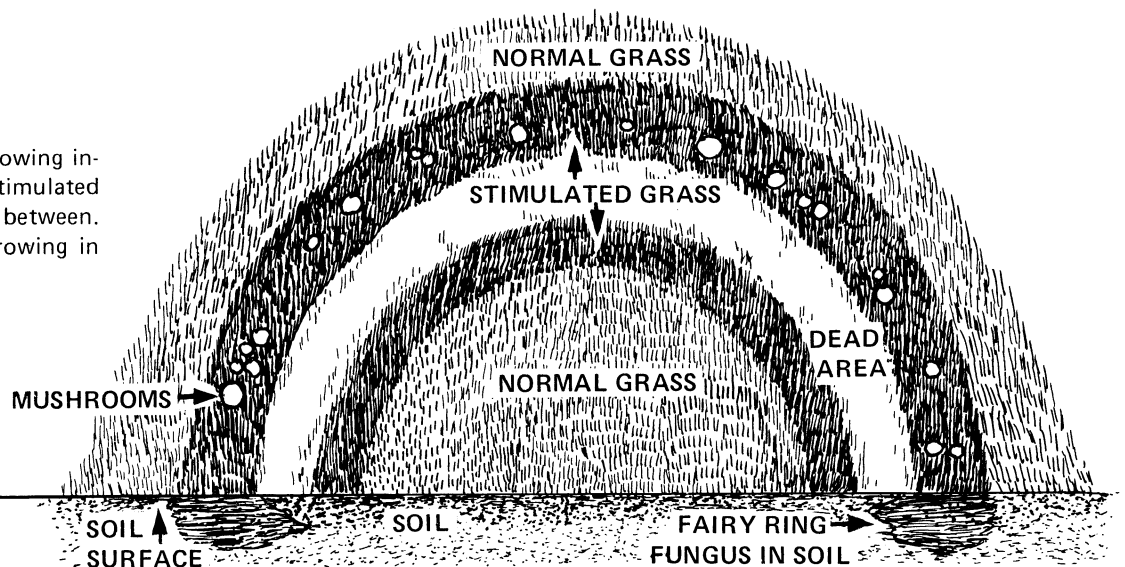
Cause and Symptoms of Fairy Rings

“Fairy ring” is a term used to describe circles or arcs of dark green grass surrounding areas of light colored or dead grass. Such rings may be produced by the growth of any one of over 50 species of fungi. All lawn grasses are subject to these fungus growth patterns. During the spring and fall, mushrooms may develop in the circles or arcs outlining the fairy ring. The mushrooms produce a prodigious number

The band of soil occupied by the fungus is permeated by a dense, white fungus growth called *mycelium*. In fact, the fungus growth becomes so dense that the soil becomes somewhat impervious to water and is usually very dry. The grass in this zone is depressed, goes dormant, or dies from lack of water.

As the fungus grows outward, its older parts die. This releases nutrients for use by the grass and contributes to the formation of the inner green ring.

Section of a fairy ring showing inner and outer rings of stimulated grass with dead grass between. Note fairy ring fungus growing in soil.



Control of Fairy Ring

You can combat fairy ring in 2 ways — suppress it or try to eradicate it. Suppression is more practical for most lawn owners. The following are methods of suppression:

1. Remove cores of soil 1/2 to 1 inch in diameter throughout the zone of dense mycelial growth. This will help water to penetrate the soil. The larger holes can be filled with new soil that is free or low in organic matter.
2. Forcibly inject large quantities of water 12 to 24 inches deep into the soil, at 12 inch intervals, just inside the ring of dead grass. Use a tree-feeding lance or root feeder attachment on a garden hose. Treat the rings at the first sign of wilting grass. Repeat whenever the grass in the rings begins to wilt.
3. Loosen the soil with a spading fork, then apply a large amount of water. You may need to repeat this measure a few times a year.

Fairy rings often can be eradicated by one of these methods:

1. Remove the infested soil in the ring. Dig 12 inches or more deep and 18 inches on each side of the ring. Replace the soil with new soil that is free or low in organic matter.
2. Carefully strip the sod from the soil and fumigate the soil with methyl bromide, formaldehyde, or Vapam.*

Both methods are laborious, expensive, and not always successful. Both require resodding or reseeded. The chemical materials in the second eradication method are extremely hazardous to handle. Both methods are best done by an experienced lawnman.

*The toxicity of these pesticides is relatively high. Trade names are used only to identify the chemicals as they are known in the marketplace. No endorsement by the University is intended, nor is discrimination implied against products not listed.

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