



THE UNIVERSITY OF ARIZONA • COLLEGE OF AGRICULTURE AND LIFE SCIENCES

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## **Bunker Buzz: Fairy Ring**

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During your rounds, you may have noticed rings of dead or dying grass in the overseeded areas of the golf course. These circles are the symptoms of a whimsically named turfgrass disease, fairy ring. Caused by soil-inhabiting fungi, fairy rings are a common occurrence on valley courses and lawns during the overseeding season. At other times of the year, fairy rings manifest themselves as rings or arcs of darker green turfgrass, often visible on putting greens. Sometimes, mushrooms will grow in the same circular pattern.

Biology: Turf scientists have determined that there are over 60 different species of fungi that can cause fairy rings. The fungus grows into a thick mat, reaching as deep as 3-12 inches under the soil surface. These thick mats prevent water from penetrating into and through the soil. Turfgrass roots in the region of the affected soil cannot take up enough water to survive, so the turfgrass wilts, and results in a sunken ring of dead turf - the fairy ring. Because the organisms that cause fairy ring do not directly attack the turfgrass plant, and are active well beneath the soil surface, control of the disease is difficult. Fungicides and fertilizers are often used to reduce or mask the symptoms of the disease, but total eradication is rare. The following year, the rings will most likely return, having grown a few inches in diameter.

Mythology: Originally thought to be the midnight tracks of dancing elves, turf scientists have since implicated fungi as the causal agents of fairy rings. The mushrooms and toadstools that occasionally occur were once considered the 'chairs' where the elves sat and played their musical instruments.

Trivia: Most fairy rings range from 2 feet to several feet across, but a fairy ring in France was discovered to be almost a half-mile in diameter and estimated at 700 years old.

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