Mr. and Mrs. Jones started noticing the brown rings in their green grass a couple years ago. Now the problem was only getting worse. The circle-shaped spots not only dotted their lawn, they had started to appear in neighborhood yards.

The Jones hired several lawn care services to treat their property, but there was no improvement.

Finally, a family friend and employee at the local IFA Country Store examined their yard and diagnosed the problem: Necrotic Ring Spot (NRS).

NRS is becoming more common in northern Utah, especially with certain types of grass. Once the fungal disease infects your lawn, it’s difficult to remove.

But once you recognize the symptoms, there are a variety methods and treatments you can apply to combat NRS. With time, watchful care and healthy cultural practices, you can remove the rings and return your yard to its former beauty.

WHAT IS NRS?

Ophiophaerella Korrae, more commonly known as Necrotic Ring Spot, is an aggressive, devastating, hard-to-control lawn fungus that colonizes roots, crown and rhizomes of many common grass varieties. In Utah, it’s more common in Kentucky and Bluegrass, but it’s capable of colonizing others, including Fescues.
You’ll find this fungus attacks grass in irregular round shapes and spreads over time. The fungus grows below the surface in the soil of the root zone where it kills the roots and crowns. The spores transfer by soil and turf contact from one part of the yard to another.

A lawn with the NRS fungus will have brown spots with the texture of healthy grass. It’s not dry and brittle. The ideal conditions for NRS include cool and moist conditions, between 55 and 83 degrees Fahrenheit, although symptoms may more readily be apparent in summer heat or drought conditions. Frequently, the turf will survive the infection and re-grow in the center of the patches, giving them a ring-like “frog eye” appearance. In the spring, rings may appear as just a light green color. Other symptoms may include depressions in the soil where rings are present, easily-pulled roots or Hyphae in the roots, which makes the plant more prone to environmental factors.

You might consider contacting a Utah State University Extension Agent or IFA Country Store specialist to help diagnose the problem.

**HOW DO I TREAT NRS IN MY LAWN?**

When found to be infected with NRS, people have attempted to dig up and replace their lawns. The truth is it’s an expensive venture and it doesn’t guarantee complete removal.

Start by improving the health of your soil. It’s the best long-term solution, but it will take time. Soil health is most easily improved with humates and organic matter that can be spread like fertilizer, penetrating into the soil.

Annual aerating will help increase the air supply to the roots, improve water penetration, fertilizer penetration, and help prevent thatch and compaction.

Sulfur amendments can reduce the severity of NRS by acidifying the soil, roots and inhibits. A higher application rate will give you better control, although be sure to thoroughly water the product into the soil to avoid leaf damage to your lawn.

For the best results, we recommend you apply these fungicides:
- Headway G Fungicide will help the grass stay healthy.
- Bonide Infuse Fungicide
- Fertilome F-Stop

We also recommend Ring to Green, a soil enhancement product that not only controls the fungus, but also promotes new growth.

**CAN I COMPLETELY RID MY LAWN OF NRS?**

Unfortunately, treatment for NRS is not once and done. It’s a continuous, watchful, year-after-year process. However, improving soil health and lawn care practices does help significantly.

Fungicide applications will generally be most effective if you make multiple applications and vary the fungicide you use. Focus on spring and fall when the fungus is active. Fungicides that control NRS include Myclobutanil, Fenarimol, Propiconazole and Thiophanate methyl. Remember to lightly water the fungicide into the turf.

Good cultural practices like mowing and watering will make a difference in dealing with NRS. Water the affected areas lightly and regularly — the opposite of what you would normally do. The height setting on your lawn mower should be set between 2.5 and 3.5 inches.

You’ll want to apply soil amendments like humates and organic matter. Humates will increase the carbon ratio in the soil.

Use a balanced blend of N, P & K (Nitrogen, Phosphorus & Potassium). Don’t make it too “hot,” use slow release nitrogen sources and avoid applications that will cause rapid top growth.

Consider using grass and plant types that are resistant to NRS. No turf grass variety is completely resistant to NRS, but Perennial Rye Turf Grass shows the most resistance.

When aerating, do it with a clean machine. The aerator teeth need to be 100 percent clean before and after use as fungus spores transfer easily from lawn to lawn with aerators and mowers. We recommend spraying the coring teeth with one part rubbing alcohol to 10 parts water to sterilize your aerator after cleaning.

Finally, a healthy, vigorous turf is always the best prevention of disease, insect and weed problems.

Information for this article was provided by Doug Howell, Region Manager, IFA Country Store; Lorenzo Lopez, Professional Turf Manager, IFA; Kent Mickelsen, Utah Certified Nurseryman, IFA Country Store; and Ken Holt, Lawn & Garden Category Manager, IFA Country Store.