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# Collecting and Submitting a Turfgrass Sample To the Plant and Pest Diagnostic Clinic

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**K**nowing how to properly submit a turfgrass sample to the C. Wayne Ellett Plant and Pest Diagnostic Clinic can help in the easy and speedy diagnosis of the problem. Samples can be submitted that have come from golf courses, athletic fields, and residential lawns. If a problem is suspected, send a sample from the declining area as soon as the symptoms begin. Use the following steps to ensure you have the correct sample, packaging, forms, and shipping information.

## Step 1: Collecting the Sample

For “high cut turf” such as residential lawns, athletic fields, parks, commercial sites, and sod farms use a shovel, spade, or knife to collect the turf sample. Collect a sample that is at least 6 inches by 6 inches and 2–3 inches deep. Often it is advised to send multiple sections of healthy and infected turf and these may be strips of turf say 6 inches x 3 inches with the roots. It is important that the specimen include both healthy (unaffected) and sick (infected) tissue so a comparison of the healthy grass to the affected areas can be made.



If you are taking a sample from a golf course, a cup cutter is an essential tool. Use the cup cutter to collect a sample or several to depict the affected and unaffected turf. If there are various stages of decline, include samples to illustrate the progression of symptoms. Make sure the samples are clearly labeled to note different sites and different stages of the problem. For both high cut turf and golf course samples, be sure the sample includes roots. A lot of people might not think about the environment beneath the ground, but it can have a huge influence on the health of a plant.



## Step 2: Completing the Diagnostic Form

It is important that the sample form be filled out as detailed as possible. Include information such as environmental factors, weather data (temperatures and rainfall), who is using the turf, symptoms, shape and size of the patches, amount or size of affected area, when the problem began, has this problem occurred in the past, is the area irrigated, is the problem worse in the sun or shade, chemicals applied (rate and formulation), were growth regulators used, etc.

The turf sample form, as well as other landscape and plant forms, can be found at <http://ppdc.osu.edu>. It is recommended that you send pictures of the area. These can greatly assist the diagnostician. The more information you provide, the more complete the reply will be from the diagnostician. Place the form and photos in a plastic bag to prevent moisture from damaging the papers. Place it on top of the sample and seal the box tightly.

### Step 3: Packaging

The way your sample is packaged can have a large impact on what the diagnosticians will be seeing when they open your package. Wrap your sample tightly in aluminum foil or newspaper. This will keep the soil (root zone material) from moving and getting on the leaves. When soil covers the leaves this makes diagnosis difficult and can cause contamination with other microbes that might be in the soil. Do not add water to the sample and do not put the sample in a plastic bag. If samples are too wet the turf will rot and will make diagnosis impossible. Choose a sturdy box and pack newspaper or bubble wrap around the sample to ensure it will not move around or break apart.



### Step 4: Shipping

It is essential that the sample be shipped overnight so a fresh, representative sample arrives at the clinic. It is hard to diagnose a sample that is completely dead or deteriorated while in shipment. Try not to send samples on a Friday, since the box will sit in a warehouse over the weekend. Send early in the week to ensure the package arrives at the clinic quickly. The address for the clinic is:



**C. Wayne Ellett Plant and Pest Diagnostic Clinic**  
Department of Plant Pathology  
201 Kottman Hall  
2021 Coffey Road  
Columbus, Ohio 43210

Following these steps can help the diagnostician to correctly diagnosis the problem(s) and provide you with an accurate prompt response. There is a fee for diagnostic work at the C. Wayne Ellett Plant and Pest Clinic. Prices can be found at <http://ppdc.osu.edu>. If you have questions regarding a sample you can contact the staff at 614-292-5006, fax 614-292-4455 or e-mail, [ppdc@postoffice.ag.ohio-state.edu](mailto:ppdc@postoffice.ag.ohio-state.edu).

To see a step-by-step video on how to submit a sample, please visit the following web sites:

**Submitting a golf course turf sample:**  
[http://www.youtube.com/watch?v=9BPhtjE\\_QAQ](http://www.youtube.com/watch?v=9BPhtjE_QAQ)

**Submitting a residential turf sample:**  
<http://www.youtube.com/watch?v=3lCgu6fCGYk>

Also visit the clinic web site at <http://ppdc.osu.edu> and the Department of Plant Pathology's web site at <http://plantpath.osu.edu> for more information on plant diseases.

### Other References

- Plants Get Sick Too! An Introduction to Plant Diseases: [http://ohioline.osu.edu/hyg-fact/3000/pdf/PP401\\_01.pdf](http://ohioline.osu.edu/hyg-fact/3000/pdf/PP401_01.pdf)
- Diagnosing Sick Plants: [http://ohioline.osu.edu/hyg-fact/3000/pdf/PP401\\_02.pdf](http://ohioline.osu.edu/hyg-fact/3000/pdf/PP401_02.pdf)
- 20 Questions on Plant Diagnosis: [http://ohioline.osu.edu/hyg-fact/3000/pdf/PP401\\_03.pdf](http://ohioline.osu.edu/hyg-fact/3000/pdf/PP401_03.pdf)
- Keeping Plants Healthy: An Overview of Integrated Plant Health Management: [http://ohioline.osu.edu/hyg-fact/3000/pdf/PP401\\_04.pdf](http://ohioline.osu.edu/hyg-fact/3000/pdf/PP401_04.pdf)
- Integrated Turf Health Management Bulletin: <http://ohioline.osu.edu/l187/index.html>
- Turfgrass Disease Fact Sheets: <http://ohioline.osu.edu/hyg-fact/4000/index.html>

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