

MOSS PREVENTION PROGRAM

The Pacific Northwest is the moss capital of the US! Truly it is. Our natural environmental conditions - a cool wet climate, shade and low pH soils - allow moss to more easily grow and thrive here. And it grows everywhere!! On the side of buildings, roofs, walkways, on soil, plants, in lawns, even on vehicles! It is aesthetically enjoyable in the right areas, plus it adds beneficial organic matter to your soil in the form of peat moss. But, in your Turf? Not so pleasing.

For decades moss control programs have been advertised by national retailers. Fertilizer with moss control, granular moss control, and liquid moss control. The key word is always control not prevention in lawns!

The main moss control product is iron. A common name for iron in moss control is Ferrous Sulfate. It is the staining form of iron that will turn your walkways orange if you are not careful; we have seen plenty of damaged concrete over the years. Ferrous Sulfate will burn moss back and turn it black. But, is it really dead? In most cases it will just reform where it was burned back. So, it must be removed regardless if it has turned black.

A key fact about ferrous sulfate (iron) - ferrous has high amounts of sulfur. A 30% concentration of ferrous sulfate will have 18% sulfur. Sulfur is acidic and sulfur is one of the main minerals used to lower soil pH. So, if iron is applied each year, it will lower your pH even further! And in doing so, it contributes to moss formation in the future.

Synthetic fertilizers can also contribute to lowering pH! A synthetic fertilizer that contains ammonium sulfate, which is in most synthetic blends, also contains sulfur, which as we mentioned is acidic and acts to lower pH with each application.

We offer some simple and successful recommendations starting with **MOSS REMOVAL**, followed by a regimen of **MOSS PREVENTION**.

MOSS REMOVAL

Since moss doesn't have any roots it rakes out very easily. This can be done with a stiff rake or power rake for large areas of moss. A power rake will also remove thatch. No need to spray moss with iron when it can be removed so easily. Take time to remove all moss from your lawn area.

MOSS PREVENTION

Improving wet areas in lawns:

- Moss mainly forms in wetter areas with poor drainage or compacted soil.
- We advise checking your drainage and soil conditions, following the steps as we teach in our **"Get Down & Dirty with Your Soil"** class for mitigating poor draining soils or poor soils in general.

- One very beneficial recommendation is aeration. In poor draining soils we recommend two passes of aerating rather than one, and to definitely remove all plugs rather than raking back in. Use our **Hendrikus Sun/Shade Seed Mix** or a combination of compost, sand and one of our recommended fertilizers to fill in the holes and provide a light base for over-seeding/reseeding of cleared areas.
- We also recommend **AxisDE[®]** (Diatomaceous Earth) by itself or mixed with the sand to help provide structure and improve water holding/releasing capabilities in the soil. This will help hold moisture during the warm months.

IMPORTANT: *Is your moss in an area of lawn that is a northern exposure that gets no sunlight all winter long? If that is so, you have an area that is not, by nature, conducive to successful lawn growth and will have a tendency to produce moss. If our recommendations, including soil improvement, do not help improve conditions, this area may be better suited for other than lawn.*

Reseeding after moss removal:

This is a must! If moss is removed and not replaced with new grass then undesirable grasses or weeds will invade. Plus new moss can reform!

- Seed these areas with **Hendrikus Sun/Shade Seed Mix**. It is an aggressive seed mix that will fill in the area and help fight off future invasion of weeds and moss.
- Make sure the seed stays moist with a light mulch application. Seed will not germinate if it dries out.

Check your pH & add lime or dolomite lime:

- Ideal pH for turf is 6.5, slightly acidic soil. When your pH is below 6.5 it is too acidic and can help moss to form. Although there are home pH meters you can purchase, we have found they are not reliable.
- To know for sure we advise getting your soil tested via a lab for its pH. The lab we recommend is Wallace Labs (wlabs.us) in Segundo, California. Residents of King County can also send to King County Conservation District for free testing (or check your local Conservation District)
 - » *Take several samples of soil from 2 inches deep in your lawn. Mix the samples together to create 2 full cups of soil. Be careful not to mix duff or grass into this soil sample.*
 - » *When you receive the soil results back there will be recommendations on how much lime to apply to raise your pH to 6.5.*
- If you don't want to do soil testing and have not applied lime or dolomite before, with our naturally (often too) low pH soils, doing an application of **Calpril[™]** at 20-25#'s per 1000 square feet will almost always be beneficial. If you have moss formation, it is highly probably that your soil pH is below 6.5.

Fertilizer application:

A healthy lawn will help reduce moss formation with thicker and stronger grass. Our organic fertilizers will not add acidity in your soil, and will aid in promoting strong root and blade development to deter moss growth.

Hendrikus Organics has 3 fertilizer options for your lawn, depending on your lawn and soil needs:

1. **Nitrogen Plus™ 10-0-2:**

If your lawn has had synthetic fertilizers in the past, this is the recommended first application. It will give a little bit of food up front to green up your lawn if needed. Plus start the process of building microbes in your lawn and give you a slow release of additional nitrogen. Future applications of **Nitrogen Plus™ 10-0-2** will depend on the needs of your lawn. If your lawn is yellowing from wetness after winter or in cool conditions, or you neglected your lawn and want to give it a little boost faster, **Nitrogen Plus™ 10-0-2** is a great option.

2. **Seasons™ 8-0-4:**

This is your go-to maintenance fertilizer. **Seasons™ 8-0-4** works great to maintain fertility in your lawn and its green color. Don't wait until your lawn gets hungry to apply it as it is a steady ongoing release and you want to keep this supply available during the entire season. This fertilizer will add nutrients to keep your lawn green without peaks and valleys. **Seasons™ 8-0-4** can also be used as a starter fertilizer for new seed or new lawns if your soil tests indicate high levels of phosphorus and you do not want to add any when fertilizing. (Phosphorus is the middle number of the N-P-K listed on your fertilizer bag).

3. **Complete™ 6-4-4:**

This is our starter fertilizer for newly seeded or sodded lawns, plus large areas of over-seeding for problem areas. It will give your new lawn a balanced feeding of Nitrogen, Phosphorus, and Potassium. It will release very slowly and give the turf the nutrients it needs for proper rooting and development. **Complete™ 6-4-4** should be applied at the same time as seeding.