

● ALTERNATIVES

PESTICIDE-FREE TECHNIQUES FOR COPING WITH A MOSSY LAWN

BY CAROLINE COX

What does moss in your lawn bring to mind? Are you intrigued by the beauty of these unusual plants? Do you see them as a sign that your lawn is stressed? Do you see soggy, muddy plants that detract from the appearance of your lawn? This article will help you understand all three of those perspectives about moss, and give you some nonchemical strategies to use if you decide you need a lawn without moss.

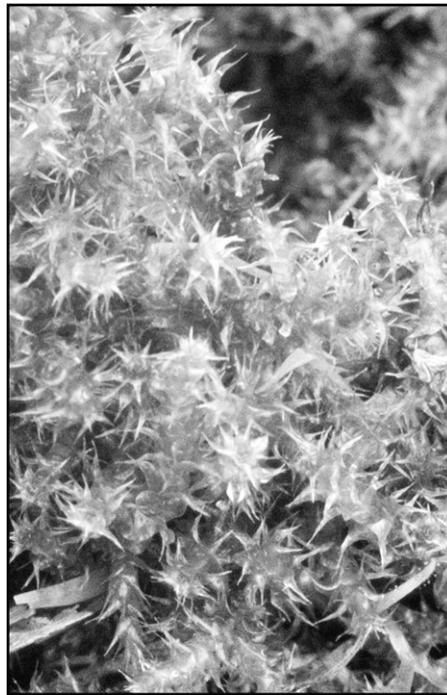
Moss Facts

Mosses are unique. They have no roots, and no system for carrying water from the soil to other parts of the plant.¹ They reproduce from spores or vegetative parts, not seeds.² They thrive in conditions that are quite different than conditions that are good for most lawn grasses.¹ The mild, wet winters in the western parts of the Pacific Northwest encourage moss growth.³

Living with Moss

Moss can be a beautiful addition to your yard. When you find it growing well, you can incorporate it into your plans for your yard and encourage it. "Moss is not a bad ground cover,"² according to Rutgers Cooperative Extension (New Jersey). "You don't need to water, fertilize or mow it, and it looks attractive year round. Moss will also stay green with less water than will grass."²

Many people have found that moss gardening is rewarding. To encourage mosses in your yard, Berks County (Pennsylvania) master gardeners



Malcolm Storey/ www.biimages.org.uk

suggest acidifying the soil in areas where you want mosses to grow and transplanting moss "sod," if available, to bare areas. There are commonly lots of tiny moss spores in the air, so it's often not necessary to plant anything.⁴

Keeping Moss out of Your Lawn

If living with moss is not something that will work in your situation, and you decide that you'd like to have a less mossy lawn, remember that "moss is a symptom of lawn problems, not a cause of them,"⁵ as Mary Robson, Washington State University extension agent has written. "Think of moss in the lawn as an indication that the turf is stressed by one or more common problems."⁵ To solve the moss problem, you need to have a

healthy lawn.

The most common conditions that lead to moss problems are a lack of soil fertility,⁶ acid soil,⁶ dense shade,³ compacted soil,⁶ wet soil,³ and injured turf.³ Here's how you can solve each of these common problems:

Fertility — A lawn that doesn't receive enough nitrogen favors moss.³ You can solve this problem by applying fertilizer in the right amounts at the right time.³ Public agencies in the Northwest recommend organic fertilizers because they release their nutrients slowly and are less likely to run off into streams.⁷ Consult your county extension agent for recommendations about how much fertilizer to apply and when to apply it.

Acid soils — Lawns don't grow well in acid soils. You can improve the health of your lawn by liming if your soil is acid. Ideally, soil for a lawn has a pH between 6.0 and 6.5.³ Lime does not kill moss, but encourages a healthy, vigorous lawn that outcompetes mosses.⁶

Shade — In dense shade grass does not get enough light to grow well. If your moss problem occurs in the shade of a tree, you can prune or remove trees to make the area less shady.³ If you like the shade, or if your problem spot is in the shade of your house, you have several options. You can plant a shade-tolerant species of grass,³ use the areas for a moss garden,⁴ or you can try other shade tolerant ground covers.² Ask your county extension agent for recommendations of grasses and other ground covers that do well in shade.

Compacted soil — Grass roots have trouble growing in compacted soil, making the grass less able to compete with moss. Aerating your lawn can help.² One way to aerate your

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lawn is with a tool that looks like a large fork with hollow tines. You can also rent a power aerifier.⁸

Wet soil — If your soil doesn't drain properly, or if you water your lawn too much, the wet soil provides a "perfect environment"³ for moss to germinate and grow.³ Thatch removal (with a thatching rake or a vertical mower) removes dead grass that can hold water.⁶ You may also need to raise the ground level of low spots. Be sure that your lawn slopes away from your house, so that water doesn't form puddles near your house.⁶ You may want to consider installing a drainage system if you have ground that has been compacted by heavy equipment⁵ or has a high water table.³ You should also avoid frequent watering, particularly in fall or early spring when moss grows vigorously.³

Injured turf — If your turf has been injured by insects, diseases, chemicals, or lawn care practices, mosses may find it easy to encroach.³ Lawns that are not watered during the summer get thin and brown, and may not start growing quickly

enough in the fall to compete with moss.³ The solution to this problem is to water deeply, but not too often, when you haven't received enough rain.⁹ Severe thatch removal in the fall can also cause thin turf.³

Renovating a Mossy Lawn

Washington State University Extension recommends four steps to a moss-free lawn.¹⁰

- Dethatch or rake to remove moss.
- Overseed bare areas with grass that is well-suited to your area.
- Topdress the areas you have seeded with loose soil, potting mix, or sand. Be sure that whatever material you use is weed-free. The topdressing should be about 1/4 inch thick.
- Keep the area moist until seedlings are established.

Then, be sure to keep your lawn healthy so that mosses don't return.¹⁰ For tips about maintaining a healthy and pesticide-free lawn see JPR 23(4):8-9 or www.pesticide.org/lawns.html.

Moss Herbicides

A variety of commercial moss-kill-

ing herbicides are available; most use iron or special soaps to kill moss.¹⁰ These are chemicals that typically are not regarded as being particularly harmful to humans or other animals: "None of these materials pose serious threats to the environment,"¹⁰ according to Steve Whitcher, a Washington master gardener program coordinator. However, they won't solve moss problems, and only provide a temporary respite. "Unless the underlying conditions are changed, moss or other weeds are likely to reappear."¹⁰

Conclusion

If you have a mossy lawn, you have several pesticide-free options. First, you can think about whether a moss garden is appropriate for your yard. If it's not appropriate, look at the health of your lawn and make sure that nutrient levels, soil acidity, drainage, and shade are all encouraging grass and discouraging moss. To remove moss, you can use a nonchemical tool like a thatching rake. ♣

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Hound Dog Products, Inc.



This aerating tool pulls cores out of the soil, solving compaction problems and encouraging grass growth.

Pruning shears are a useful tool for removing branches from trees or shrubs whose shade is encouraging moss.

A thatching rake can be used to remove moss from lawns. Dethatching your lawn also improves soil drainage



Union Tools