



## Removing Thatch from Your Lawn

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**D**uring the hot summer months, lawns are once again growing at full speed, and mowing, irrigation, fertilizer application, and other lawn-care chores can become a weekend routine. Early summer is a good time to take a close look at the condition of your lawn.

One potential problem can come from excessive thatch buildup. Thatch is the brown, stemmy layer that builds up between the soil surface and the green leafy part of the grass. When thatch is more than 1 inch thick, it begins to make the lawn feel soft and spongy, which often results in “scalping” damage when mowing. Heavy thatch also interferes with movement of water and fertilizer into the soil and provides a good hiding place for harmful lawn insects. Excess thatch can be removed in several ways. The idea is to remove most if not all of the underlying brown, stemmy growth and allow new growth to come back from the remaining turfgrass stolons and rhizomes.

One option is to mow the grass down to a much lower height. You can use a rotary mower or a strong gas-powered string trimmer. If a rotary mower is used, the grass can only be cut down to 1 inch, because that’s as low as that type of mower will cut. This will leave much of the thatch intact. Cutting lower with a string trimmer will give a very uneven cut, resulting in a clumpy regrowth; it is also very time-consuming. However, scalping the lawn down with a rotary mower is a good first step to prepare for a more effective method called verticutting.

This preferred method of thatch removal is done with a heavy-duty mower called a verticutter. This specialized piece of equipment has evenly spaced, knife-like blades that swing perpendicular to the soil surface. The blades

slice into the thatch and remove many pieces of runners growing near the soil surface. Since this process is usually needed no more than once a year, it is much more economical to rent a verticutter rather than to buy one.

It is very important to use the correct blade spacing and cutting depth when verticutting different turfgrasses. Use a blade spacing of 1–2 inches and a cutting depth set to just reach the soil surface for bermudagrass, zoysia, and seashore paspalum. These grasses all have underground runners called rhizomes and can survive if most of the above-ground stolons are removed, because most of the new growth will come from the rhizomes. Centipedegrass and St. Augustinegrass have thicker stolons and do not form rhizomes, so a blade spacing of 2–3 inches will work better for dethatching. The cutting depth should be set so that the blades do not reach the soil surface, thus leaving a thin layer of stolons behind. If thatch accumulation exceeds 2 or 3 inches, which is common in St. Augustinegrass, the lawn should be verticut in increments at intervals of several weeks using gradually increasing depths of cut. This will prevent potential severe damage by removing too much at one time. Scalping with a rotary mower is not recommended for St. Augustinegrass or Centipedegrass.

After dethatching, all of the loose debris, consisting mainly of pieces of cut stolons, should be raked up and removed from the lawn. An average-size lawn may yield several pick-up truck loads. These stolons can be used as planting material for establishing another lawn if used within a day or two. Following cleanup, the lawn can be closely mowed to remove any remaining debris, then thoroughly watered to prevent drying of exposed roots and rhizomes. Sometime during the next few days will be a good time to core-aerate, using a machine designed for the purpose, followed by spreading a thin layer of compost to fill the cored holes. This is especially beneficial

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if the soil seems compacted and drainage is poor. Apply three or four pounds of a good turf fertilizer for every 1000 square feet of lawn to encourage new topgrowth. Continue to irrigate until the new growth is well established. This should take only a few weeks if done at the right time of year.

The best time to verticut is when the grass is healthy and actively growing. In Hawai'i the best time is from April through September. Make sure that your lawn is not too stressed. It would be a good idea to fertilize and irrigate regularly for several weeks before verticutting.

Vertical mowing is an effective means of removing thatch, but it will result in at least a temporary state of unsightly disruption to the lawn. If not done correctly, the grass can be so severely damaged that it might not survive. Experience with the method and equipment, knowledge of the type of grass being renovated, and doing it in the right season are all essential. It is also a physically demanding job. Unless you truly enjoy being your own yard guy, it might be advisable to have a reputable lawn maintenance company do it for you. Ask them ahead of time how they plan to do it and if the follow-up care is included.