

CORE AERATION GIVES YOUR LAWN A BIG BOOST



You can rent aeration equipment or hire a professional. Either way, mark all sprinkler heads before aeration begins to avoid costly repairs to the irrigation system. With either type of grass (cool- or warm-season), aerate when temperatures are mild. Test the moisture level with a trowel. The soil should be moderately moist for easier penetration. If the soil sticks to the trowel as you remove it, the soil is too wet for aeration.

On most aeration equipment for home lawns, the coring tine diameter ranges from 1/2 to 3/4 inches (12.7 mm to 19.05 mm), with penetration depth of from 1 to 6 inches (2.54 cm to 15.24 cm) and tine spacing from 2 to 6 inches (5.08 cm to 15.24 cm). Covering the lawn in one direction with tines 3/4 inch (19.05 mm) in diameter, a penetration depth of 3 inches (7.62 cm) and spacing of 6 inches (15.24 cm) removes 1.2 percent of the soil volume within those 3 inches (7.62 cm) of the soil profile. It would take only one pass with 3 inch (7.62 cm) spacing to remove the same amount of soil. Typically, for the most effective results, two passes are made, one going north to south, the second east to west.

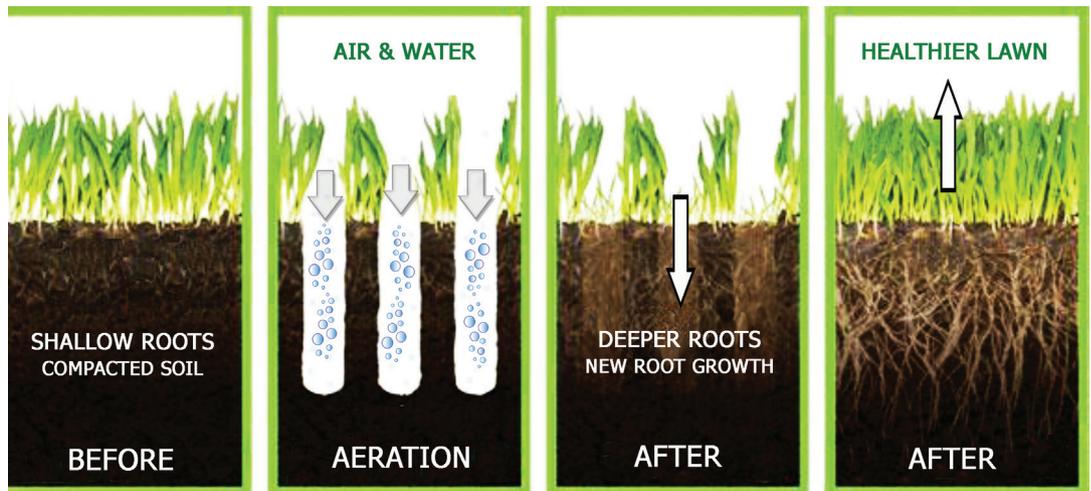
Aeration is the process of creating openings in the lawn to help air, water and nutrients move into the soil to reach the turfgrass roots, alleviate soil compaction and reduce thatch. Aeration equipment accomplishes this by coring, spiking or slicing into the soil.

Core aeration is the most effective method to aerate your lawn. It uses spoon-shaped or hollow tines to remove cores or plugs of soil and deposit them on the surface of the lawn. Spiking uses solid tines to create holes in the soil. Slicing uses rotating blades to cut narrow slits in the soil. Spiking and slicing move soil rather than removing it. They make little visual impact on the lawn surface and accomplish less when compared to core aeration. Annual core aeration helps create and maintain a thriving lawn.

The type of grass determines the best time to aerate. For lawns with cool-season grasses such as Kentucky bluegrass and tall fescue, fall is best. With cooler temperatures, you'll avoid heat stress and reduce the chance of invasion by annual weeds. Schedule your aeration approximately two weeks prior to the final fertilization for the year and five to six weeks before the first frost to allow the grass good growing time to recover. For warm-season grasses such as zoysiagrass, centipedegrass, carpetgrass, St. Augustinegrass and bermudagrass, the best time to aerate is late spring or in the summer, when the grasses are actively growing.

Allow the plugs that have been pulled to remain on the lawn. They will gradually decompose and return their nutrients to the soil. To speed this process, mow with a low-cutting blade once the plugs are dry. Make two passes, going in opposite directions, to assure an even break-up and spreading of the plugs. After mowing, water the lawn to help further dissolve the plug residue. Your lawn will look better and feel smoother underfoot.

Modified illustration: Jim Novak



For more information on lawn care and helpful "How to" tips, visit The Lawn Institute at <http://www.TheLawnInstitute.org>.