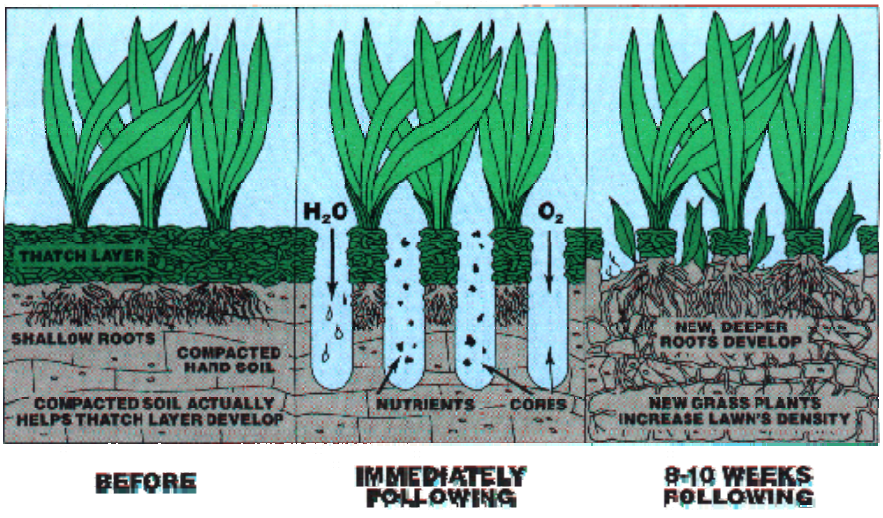
Lawn Aeration

Technically speaking, aeration is the naturally occurring process of air exchange between the soil and its surrounding atmosphere. Practically speaking, aeration is the process of mechanically removing small plugs of thatch and soil from the lawn to improve soil aeration.

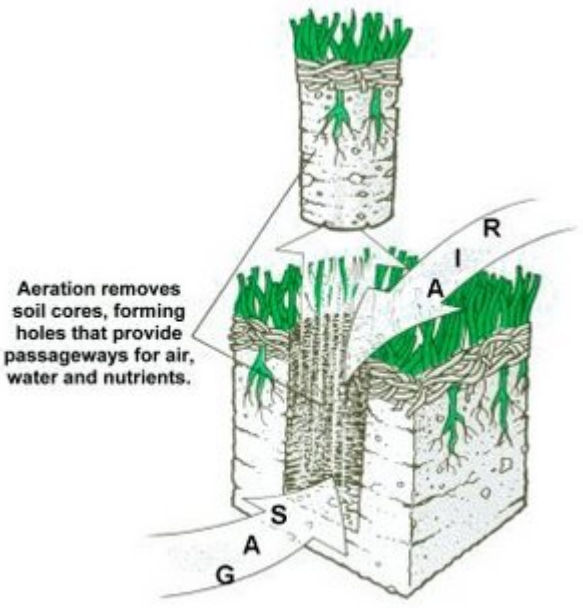
Core aeration helps the lawn's health and vigor, and it reduces maintenance requirements. The following are other benefits of core aeration:

1. Improved air exchange between the soil and atmosphere.
2. Enhanced soil water uptake.
3. Improved fertilizer uptake and use.
4. Reduced water runoff and puddling.
5. Improved turf grass rooting.
6. Reduced soil compaction.
7. Enhanced heat and drought stress tolerance.
8. Improved resiliency and cushioning.
9. Enhanced thatch breakdown.



In most home lawns, the natural soil has been seriously disturbed by the building process. Fertile topsoil may have been removed or buried during excavation of the basement or footing, leaving subsoil that is more compact, higher in clay content and less desirable for a healthy lawn. The lawn needs aeration to improve the depth and extent of turf grass rooting and to improve fertilizer and water use.

Intensively used lawns are exposed to many stresses, including traffic injury, walking, playing, and mowing, all are forms of traffic that compact soil and stress lawns. Raindrops and irrigation increases the soil density by compacting soil particles and reducing large air spaces where roots may readily grow. Compaction is greater on heavy clay soils then on sandy soils, and is greatest in the upper 1" to 1 ½" of soil. Aeration helps heavily used lawns growing on compacted soils by improving the depth and extent of turf grass rooting. Most lawns are subject to thatch, if thatch is left unmanaged, it can lead to serious maintenance and pest problems. Core aeration reduces thatch accumulation, minimizes its buildup and modifies its makeup by incorporating soil into the thatch. As soil is combined with the thatch debris, soil organisms are better able to break down the thatch and reduce its accumulation.



Annual aeration is beneficial for most lawns. Lawns growing on heavy clay or subsoil's and lawns exposed to intense use benefit from more then one aeration each year. In general, benefits from core aeration increase when tine spacing is closer and penetration is deeper. Most turf grasses respond favorably to aeration when it is properly timed. Both spring and fall are ideal times to aerate. In most cases, spring aeration is performed between March and May. Fall aeration is done in late summer and early fall.

Immediately after aeration your lawn will be dotted with small plugs pulled from the soil. Within a week or two, these plugs or thatch and soil break apart and disappear into the lawn. About 7 -10 days after aeration, the aerification holes will be filled with white, actively growing roots. These roots are a sign that the turf grass is responding to the additional oxygen, moisture, and nutrients in the soil from the aeration process. On compacted soils and on lawns with slopes, you should see an immediate difference in water puddling and runoff after irrigation or rainfall.

After aeration, your lawn should be able to go longer between watering, without showing signs of wilt. With repeat aerations over time, your lawn will show enhanced heat and drought stress tolerance. Don't expect miracles from a single aeration, particularly on lawns growing on extremely poor soils. Most lawns benefit from annual aeration. Lawns that receive this care will be healthier, more vigorous, easier to maintain, and have fewer pest problems then lawns that are neglected.