

5 Things Every Golfer Should Know About Aerating Greens

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The *ins* and *outs* of AERATION

Aeration: An essential practice that improves the long-term health and playability of golf courses



Size, Spacing & Depth

Tine Size

0.25- to 0.50-inch diameter typical for greens, can be up to 0.875-inch diameter



Tine Spacing

Usually 1-by-1-inch, 1-by-2-inch or 2-by-2-inch spacing



Depth

0.5-1.0 inches deep



Hollow Tines



- Extract soil and remove thatch
- Removes thatch
- Long-lasting benefits
- Alleviates compaction

Solid Tines



- Penetrates ground, remove nothing
- Easy cleanup
- Fast healing
- Less labor
- Deep penetration



10%
A single aeration event typically affects less than 10 percent of the putting surface.

Healthy Putting Greens

Aeration:

- Improves water infiltration (internal drainage)
- Removes thatch ("core aeration only")
- Stimulates microbial activity (soil health)
- Facilitates root zone improvement
- Oxygenates the soil
- Encourages root growth
- Alleviates compaction
- Promotes recovery from stress

Ideal Timing

Creeping bentgrass and annual bluegrass (Poa annua)

Spring, late summer, early fall
April-May and August-September

Warm-season turfgrass (e.g., bermudagrass)

Summer
June to August

Soil temps consistently above 55 F, ideally between 60-65 F

Soil temps 75+ F

[Click here](#) for the full-screen, downloadable version of our aeration infographic.

No golfers are ever thrilled to arrive at a course, only to find that they will be putting on greens that have just been aerated. Aerating putting greens might create a short-term disruption in your game, but the long-term benefits greatly outweigh the inconvenience. Learning more about why and how superintendents aerate putting greens can make it easier to be patient during the process. Here are five things every golfer should know about aeration:



Putting green aeration is never popular, but it is an essential part of providing consistent, high-quality playing conditions.

1. We aerate to improve, not annoy

Putting greens receive more traffic than any other playing surface. The aeration process helps relieve the compaction caused by all that traffic. It also helps create a firm, smooth putting surface by controlling thatch and promoting healthy turf roots.

2. Scratch the thatch

Thatch is a layer of living and dead plant material that accumulates at the soil surface. If thatch on putting greens is not diluted by aeration and topdressing, it will act like a sponge, holding water near the surface. Excessive thatch creates soft playing conditions, inconsistent green speeds and increases the risk of disease.

3. Timing is everything

Do you ever wonder why aeration is commonly performed when putting greens are playing their best? Aerating when grass is healthy and actively growing minimizes damage and allows for a quick return to optimal playing conditions. Aerating at other times may be more convenient for the golf schedule, but it lengthens recovery times, increases the risk of an invasion of weeds and could cause lasting damage.



Filling aeration holes with sand speeds up recovery and helps make the putting surface firm and smooth.

4. It's not as bad as you think

It may seem like there are more holes than grass on the putting greens right after they've been aerated, but this is an illusion. Typically, aeration affects less than 10 percent of a putting surface.

5. Sand is part of the plan

A heavy application of topdressing following aeration may appear to make putting greens less playable. However, filling aeration holes with sand actually helps create

a smoother surface. Sand also creates channels for water and air movement, dilutes thatch and helps putting greens recover from aeration more quickly. To learn more about aeration and other important course care topics, visit the [Course Care Section](#) of [USGA.org](#).