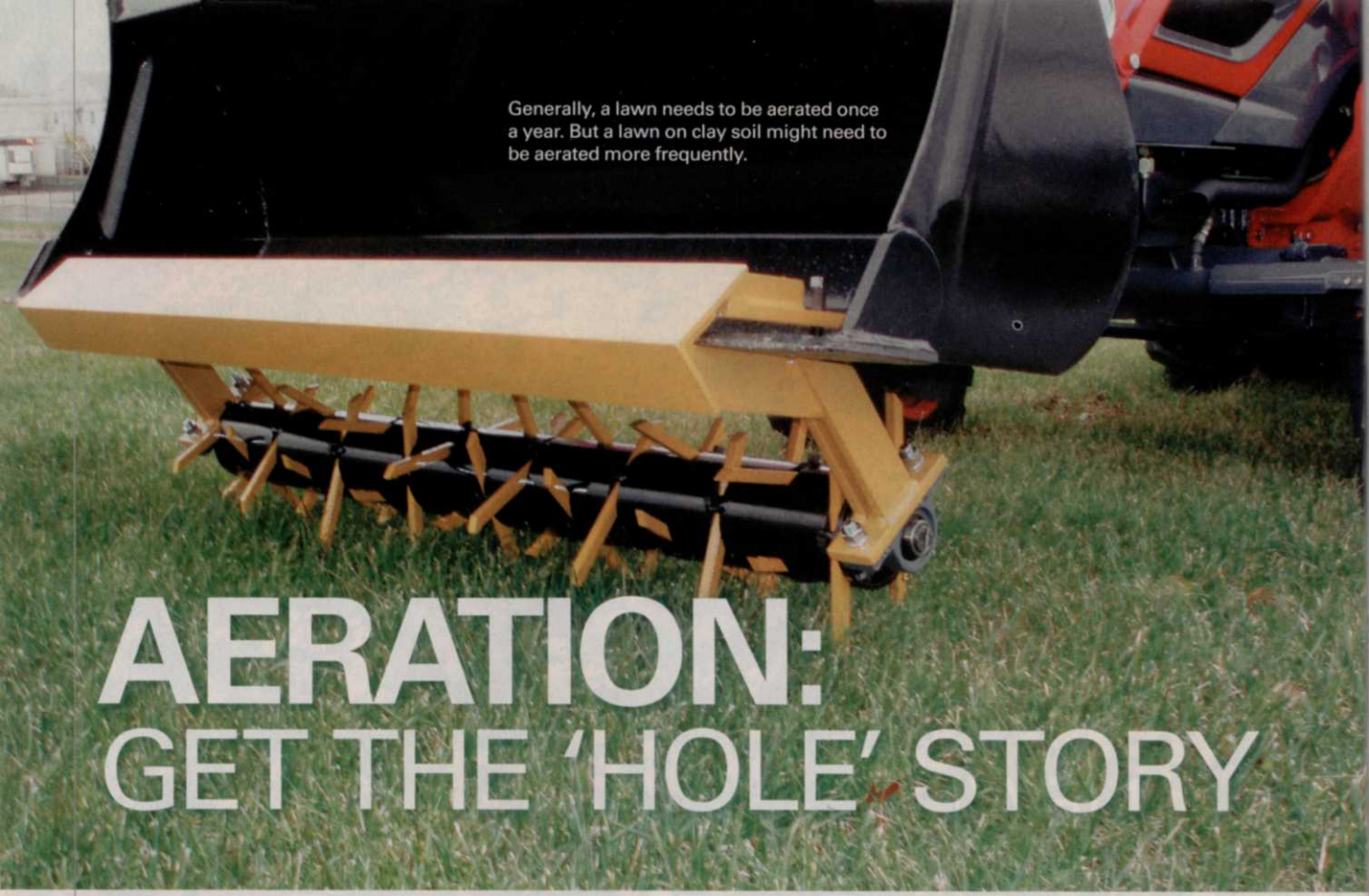

Generally, a lawn needs to be aerated once a year. But a lawn on clay soil might need to be aerated more frequently.

AERATION: GET THE 'HOLE' STORY

When implemented correctly, this service can expand your client base and let you work sooner in the spring and later in the fall.

BY **CURT HARLER**

MANY COMPANIES OFFER aeration, but it's not always an overnight success. To ensure repeat business, a savvy contractor has to educate the customer and perform the service properly.

"There are different reasons for aeration, so a landscaper can't just tell a customer he wants to poke holes in his lawn," says Bob Brophy, director of lawn products for Minneapolis-based Turfco.

While aeration is beneficial, few homeowners have it done regularly. Managed properties usually are more aggressive.

Aeration helps water infiltration, which reduces chemical runoff into streams and keeps the product where you need it, says John Bentley of Earth & Turf Products in New Holland, PA.

Aeration holes need to be spaced properly and uniform in depth, says Michael Hileman, sales rep for Clemmons, NC-based tine-maker JRM. "If you emphasize uniformity with chemical applications, you should do the same with coring," he says.

A typical landscaper uses a 7.5-in. coring tine, and depth is key with coring tines, Hileman says. "You have to be consistent for the whole job," he says.

One aeration a year is enough generally, Bentley says. A lawn with tight roots should be aerated three or four times the first season, then aeration can be done annually. A lawn on clay soil might need more frequent aeration. By contrast, a lawn on sandy loam can be aerated once a year.

Bermudagrass lawns should be aerated in the fall because the grass emerges from dormancy in the spring, and it's important to allow the roots to grow with minimal disturbance, Hileman says. Cool-season grasses can be aerated at a season's start. A second aeration might be appropriate for heavier soils.

Anywhere a pristine look isn't required, it's good to aim for about 15% removal, Hileman says. A 7.5-in. tine will plug to a depth of 4.5 to 5 in. in loose soil. Once the tines begin to wear and that depth decreases, it's time for new tines.

"You can't go across the lawn once and think you're done," Bentley says. "The lawn should look like you've just about killed it." He recommends 18% to 20% soil disturbance.

Many lawns allow an inch or two of penetration, Bentley says. These need to be worked frequently. Newly constructed lawns require aeration because topsoil usually is scraped off, and the subsoil is used to cover the ground, Bentley says.

"It's difficult to core aerate subsoil," he says, recommending shatter tines. "Even if you don't get much of a core, it's better than none at all."

Different tines serve different purposes. Don't slice home or business complex lawns.

"In a running grass such as Bermuda

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PHOTO COURTESY: EARTH & TURF PRODUCTS

POKING HOLES

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or zoysia, you're cutting the runners and getting new shoots," Brophy says. On home lawns, the intention of most aerations is different.

Spiking – a solid piece of steel pushed into the ground, which fractures the soil and breaks up thatch and the soil beneath – is more appropriate.

"It's a short-term solution for soil ventilation where you don't want to pull up a core and leave it on the ground," Brophy says. An example is a sod area around a swimming pool.

Spiking opens up holes that typically last until the first heavy rainstorm or soaking. Then the holes close. So, spiking has to be repeated often.

Core aeration tends to be the best solution for home lawns and office parks. The machine pulls up a soil plug and leaves it on top of the ground. This allows soil to break up slowly and helps control thatch, Brophy says. It should take several weeks for the plugs to disintegrate and the holes to close.

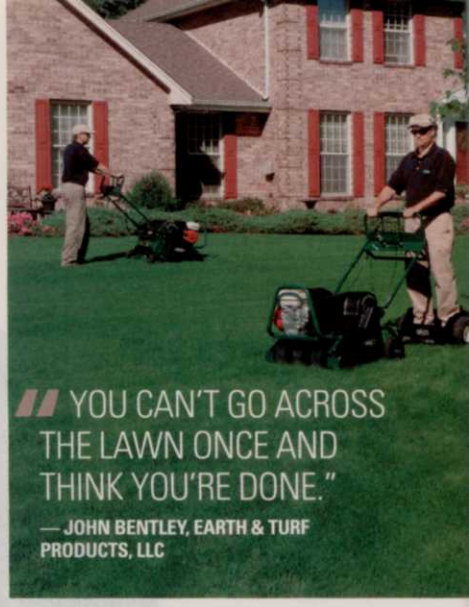
Coring is a good standard for landscapers, Hileman says. A coring tine will fit most drum rollers. Some landscapers use the solid tine because it doesn't leave cores on the surface. If you're taking the time to aerate, you might as well pull a core, he says.

Core aeration allows oxygen into the root zone, eliminates methane gas that builds up around dead or decaying roots and allows the soil to break up slowly on the ground's surface. "Don't pick up the plugs – that defeats the purpose," Brophy says.

Core aeration helps stimulate root growth by getting oxygen down past the upper, yellowish part of the root and closer to the growing white part that takes in nutrients.

There are two basic kinds of core aeration. Piston aeration shoots a tine straight down into the soil and comes up and out. This is the favored method in damp conditions, but it can actually compact the soil, Brophy says. Second, a rolling drum sends the tine into the ground at a 30-degree angle and moves under the soil. This action rips and loosens the soil.

"This is the solution for a turf where it doesn't have to be perfectly level," Brophy says. LM



Warm-season grass should be aerated in the fall. Cool-season grass can be aerated in the spring.

"YOU CAN'T GO ACROSS THE LAWN ONCE AND THINK YOU'RE DONE."
— JOHN BENTLEY, EARTH & TURF PRODUCTS, LLC