

IMPROVING GREEN HEALTH THROUGH VENTING

As the weather heats up and turf growth continues, destructive gasses such as methane and CO₂ can build up in the root zone. Couple that with the excessively wet weather and you have a recipe for sick turf.

This is the ideal time of year to vent greens. Venting allows bad gasses to escape and oxygen to penetrate the root zone. It also improves drainage and penetration of water. By reducing water, increasing oxygen, and allowing bad gasses to escape the soil microbes become more active, roots thrive, and overall plant health improves. The turf is now much stronger to heal traffic damage and fend off disease pressure. All without golfer interference!

There are several venting options; solid 1/8", 1/4", or 3/8" tines are traditionally used. However there have been new developments the past few years. Bayonet tines cut a thin channel and tend to grow over the top quickly, but stay open deep into the root zone longer than other solids tines. Cross tines will shear root hairs off which stimulates new root growth and greater root density. They also interfere less with putting, than a similar sized round, solid tine.

Use minitine heads with the small 1/8" or 1/4" tines and use the regular coring heads with the bayonet and cross tines. Following are some suggestions:

John Deere and Toro minitine heads: 2T125103, 2T125104, 2T250106, 2D375104

John Deere and Toro 3/4" heads: 2B750113, 2X500106

Ryan GA11/GA24 minitine heads: 2R250105, 2R375105

Ryan GA11/GA24 5/8" heads: 2B750112, 2X500105

Some courses may also benefit from venting their fairways. The bayonet tine has been a very popular choice for that job. Most machines will use 2B750123.



Cross Tine



Solid Tine



Bayonet Tine

Consider mixing different aeration styles over the course of the summer. One month cross tines, the next bayonets. Some courses may want to do a weekly 1/8" solid tine.

Another consideration is to increase the use of quad tines to pull a tiny core and remove thatch. The weather conditions over the past eight weeks have been ideal for the accumulation of excessive thatch. This is going to create problems for greens through July and August. Poor water movement, disease buildup and poor recovery from traffic are all likely. Using minitine heads with close spacing, core the greens to a depth of 1". Follow with a light topdressing and golfers won't even know you were there. The removal of the thatch material today will help greatly over the summer months in hnad with continued venting.