

Frequently Asked Questions



- **Can I aerate any kind of soil?**

Yes, but aeration will be most effective on heavier (clay) soils rather than sandy soils.

- **What about rocks in my field?**

It is best to avoid aerating very rocky fields, this could damage tines. Aerators have been known to pull up rocks too.

- **How do I transport it?**

For the smaller aerators (11 ¼ ft and under), a ½ ton pick-up with a standard tow hitch will work. For larger aerators, you will need a ¾ ton pick-up truck.

- **What kind of tractor do I need?**

A good guide is roughly 10hp per foot of unit but this depends on the soil conditions and the topography of the fields. The tractor needs to have hydraulic hoses to raise and lower the unit.

Resources

Contact WNRCD at info@winooskinrcd.org or call 802-288-8155 ext. 104
OR UVM Extension at heather.darby@uvm.edu or call 802-524-6501 find and rent an aerator near you!

Check out these links to see research demonstrating the environmental and productivity benefits of aeration:

- <http://legislature.vermont.gov/assets/Documents/2016/WorkGroups/House%20Fish%20and%20Wildlife/Agricultural%20BMPs/W~Laura%20DiPietro~Literature%20review%20of%20Selected%20Agricultural%20BMPs~1-31-2015.pdf>
- http://agriculture.vermont.gov/sites/ag/files/PDF/BMP/AAFM%20AGO%20Study%20Report_final_DRAFT.pdf
- <https://www.no-tillfarmer.com/articles/2064-manure-injection-in-no-til-and-pasture-systems>



NESARE providing funds for the creation of WNRCD's outreach materials and supporting ongoing aerator studies in VT



WNRCD

Educational Series

Soil Aeration & Aerator Rental Program



Learn about the benefits of soil aeration, how an aerator is used, and where to access and rent



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Soil Aeration

Aerator use is considered a form of *Conservation Tillage* -- practices that keep crop and plant residues on the soil to prevent erosion and runoff.



- An aerator creates a vertical slit in the soil that opens up the soil for better water and nutrient infiltration and decreases compaction at the surface, at least on a temporary basis.

• An aerator can break down thatch, a common cause of runoff in dairy pastures.



Benefits

Potential to Improve Soil Health

Healthy soils absorb water and nutrients and produce higher quality feed and crops. Aeration has been used to restore soil to a healthier balance of mineral soil, organic matter, air and water.

Potential to Reduce Compaction

Compaction makes both wet and dry conditions more severe and increases runoff.

Potential to Improve Water Quality from Field Runoff

The aerator increases infiltration into the soil, decreases compaction of the soil and prevents excess crop residue on the surface of the soil, retaining organic matter and preventing soil erosion.



How is it used?

- Farmers use an aerator before manure application to reduce nutrient runoff and increase manure absorption into fields.
- Farmers also aerate fields to break up sod-bound fields and pastures, loosening the soil before cover crop planting and before frost seeding.



How Do I Access an Aerator?

- The Winooksi Natural Resources Conservation District (Chittenden, Washington and Orange counties) has a 1 ¼ foot Gen Trill Model 1200s aerator available for rent Call 802-288-8155 Ext 104 or email info@winookskindc.org

- The University of Vermont Extension has Aerway models available for rent Call 802-524-6501 or email heather.darby@uvm.edu