Creating and Sustaining Aerobic Soil

By Paul Schneider Jr., AG-USA

Anaerobic soil microbes (microbes that don't need oxygen), bring with them compaction, pathogens (disease), and a sour smelling soil. Anaerobic soil easily becomes water-logged, but when it dries out it can quickly become as hard as a rock.

The end product created by anaerobic microbes is formaldehyde, the fluid used for embalming. Formaldehyde is not at all good for soil life.

On the other hand, aerobic microbes produce a wonderful "earthy" smell, take out compaction and make for a much healthier plant.

Creating Aerobic Soil

Good farming practices, including rotational grazing, cover crops, balancing soil pH and soil nutrients, minimal tillage and limited use of chemicals are all helpful for creating aerobic soil. Applying a biological can also help.

MycorrPlus is all about helping the soil transition to an aerobic state. MycorrPlus contains 70 strains of aerobic bacteria and 4 strains of mycorrhizal fungi, but it is much more than just a microbial product.

MycorrPlus is a bio-stimulant, a food source for its aerobic microbes. These microbes help to balance soil nutrients and pH. They also aggregate the soil, so aerobic microbes thrive.

MycorrPlus helps create conditions in the soil that encourage a greater amount of carbon sequestration. The more carbon that is sequestered, the more highly structured the soil will be. Soil structure means more oxygen is available to support aerobic bacteria!



Super-saturated soil will produce conditions favorable to anaerobic microbes and pathogens.

Rain and Aerobic Soil

Normal amounts of rainfall help the aerobic microbes in the soil. Rain pushes out stale, oxygen depleted air. As rainwater flows farther down into the soil, it draws fresh, oxygen rich air behind it.

However, super saturated soil is very hard on aerobic microbes. Although water does contain a small amount of oxygen, it is quickly used up. Once super saturated soil is depleted of oxygen, aerobic microbes can drown.

In addition, there is a constant battle in the soil between aerobic and anaerobic microbes, and between beneficial microbes and pathogens. When the soil is super saturated for more than a few days, anaerobic bacteria start to take over the soil. Once this happens, it can be a challenge to restore aerobic microbial dominance.

in the soil favor beneficial microbes. these microbes will thrive and take the soil back from pathogens and anaerobic microbes. Once again, MycorrPlus highly structures the soil and helps to create soil conditions in which beneficial microbes thrive.

Restoring Aerobic Soil

Has your ground been water saturated for a week or more? Once things dry up a little, you can apply a quart of MycorrPlus (\$20 per acre) to help quickly turn things around.

Elaine in Georgia experienced something like this. This is her third year to use MycorrPlus. In March, 100 acres of flat, exposed land was hit hard by 5 days of frost, turning the grass brown and causing soil microbes to stop working.

On April 4th Elaine applied a quart

On the other hand, when conditions of MycorrPlus, which jump started the microbes on that 100 acres. On July ninth I spoke with Elaine, and she said that now there is no difference in any of her fields. She said they have never had grass this thick and tall, and amazingly, the clover is still there.

> Gideon in Pennsylvania put on a quart of MycorrPlus in June, 2017 He called in mid-June, 2018 to say that his clover was purple and his grass wasn't growing. Anthocyanin, a purple pigment, can build up in clover when it is cold and stressed.

> Just like many of you, Gideon had a cold, wet spring, which will stress grass and other crops. I advised Gideon to wait until the soil was a bit drier, then to apply a quart of MycorrPlus. Sometimes the soil just needs some help to fire up the aerobic microbes and help restore them to dominance.

Perhaps your fields could use some

help, either creating an aerobic condition in the soil, or in restoring aerobic conditions. Please consider MycorrPlus. Keep in mind that summer and fall are great times to apply it.

Call our toll-free number and request a free information packet!

1-888-588-3139

Or go to: www.AG-USA.net

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Mycorr Plus M

Like a center pivot for dryland farmers!

Reduces the need for LIME and other fertilizers

MycorrPlus is a liquid bio-stimulant that helps to remove compaction by highly structuring the soil. It creates an "aerobic net" in the soil that retains nutrients and moisture. It contains sea minerals, 70+ aerobic bacteria, 4 strains of mycorrhizae fungi, fish, kelp, humic acids and molasses. \$20 to \$40/acre.



Call AG-USA now at (888) 588-3139 for a free information packet, or go to: www.AG-USA.net Organic? Request MycorrPlus-O.

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