

## Make Your Soil Great and Give the Earthworms a Break

Are earthworms a benefit or a detriment? Lately, earthworms are being accused of contributing to climate change in that they are creating carbon loss in the soil. That sits with me about as well as a cocklebur stuck to my backside when I sit down in the tractor! I believe God created amazing organisms including earthworms to help feed us all. Without earthworms and their microscopic friends, our food supply would be in big trouble.

We at *Micro-Energy* love talking about the benefits of seeing more earthworms in your fields as a result of using our *Energy-Pack*. Soil that has been digested and excreted by earthworms is five times richer in Nitrogen. Their castings are rich in other nutrients such as phosphorus which then is available for the plant roots to absorb. Soil that is rich in worm castings is much more likely to have 1,000 times more beneficial bacteria than soil that isn't rich with worm castings. Having earthworms in the ground also affects water! Earthworm burrowing improves water filtration by up to 10 times and soil abundant with earthworms is less likely to have flash flooding. They can live up to eight years and their eggs can lay dormant for years. This is why a field that hardly has any worms now can in a few years be crawling with our wiggly friends when properly stimulated. In order to see those benefits, earthworms need the right conditions to thrive.

Let's chat about the steps you can take to help the earthworms thrive and thus in turn, improve the health of your soil and the production of your crops. Avoid too much tillage. This spring in our very dry conditions, those that used strip-till have some very nice-looking crops. Maintain good nutritional balance in your soil. For example, too much manure could leave your soil salty for a time. Think of your soil like your stomach. We need balanced nutrition to stay healthy and so does the soil. Strive for a neutral pH in your soil. Although it is often times difficult to lower your pH if it's too high, tiling may help. There are crop inputs like aglime that can raise your pH. Even though most of us are guilty of this from time to time, be careful not to drive in your field with any type of machinery when the soil is too wet. Earthworms are vital little creatures but are fussy. They don't like soil that is too wet or too dry. Tile and proper drainage can help with over-saturated soil. Excessively dry soil conditions can only be helped by reducing tillage and improving soil health. Healthy soil can hold many times more pounds of water than unhealthy soil. Think of healthy soil like a sponge. The sponge-like soil grabs and holds the water and slowly releases it to the plant roots. It is also helpful to add more crop diversity in your rotation and if you are able, occasionally include cover crops to help improve your soil health.

In my humble opinion, earthworms along with soil microbes are one of the greatest unsung heroes of agriculture, and I will proudly defend their work. No matter what farming practices you use, our *Energy-Pack* from *Micro-Energy* is designed to help encourage the naturally occurring earthworms, fungi and soil microbes which all contribute to making your soil great again. You can apply our *Energy-Pack* for only \$2.50 per acre and mix it in with any liquid application including side dressing across your fields. Some nitrogen-loving crops like corn benefit from two applications during the growing season. We would enjoy the opportunity to be a part of your soil health program.

Go visit [microenergy.us](http://microenergy.us) to see our research and find your local *Micro-Energy* representative or give us a call at 701.640.3222!