

Summary & Resources - Beiler Farm October 2022 OAK Farmer Field Day



Multi-Species Cover Cropping, Integrated Grazing and Soil Health in Row Crop Production

John Beiler and his farmer have been digging into cover crops on their row crop and dairy cattle operation in Western Kentucky, managing 200 acres for nearly 20 years. Upon visiting the fields, you'll see a diverse mix of crops covering the soil in a textured, green blanket. John says, "I can't sleep if I've got bare ground. I always have a multi-species cover crop mix on my fields." Through years of intensive cover cropping, with support from Chad Parmley of MicroSoil Enhancers, John employs cover crops to wake up the soil's biome between cash crops. He has not added macro or micro nutrients to the fields since 2010. His multi-species cover crops include 4+ (usually 6 or more) plant families to maximize the "sociobiome" of the soil. The different plant families specialize in using nutrients, adding nutrients, activating carbon, balancing the soil's biology and providing living and, later, terminated organic matter to the soil. John Beiler emphasized that the cycle of cover cropping always provides dead matter for living organisms to continue consuming to build a rich soil biology. One cover crop mix might include peas, radishes, hairy vetch, oats, rye grass, sugar beets, buckwheat, sunflowers and phacelia. The mixes change depending on the season, but each is diverse and provides fine forage for his cattle. John will graze his cattle on the cover cropped fields, which provide high protein content for improved animal health and milk production. Check out these resources and tips below, and join us in sending big gratitude to the Beiler family!

RESOURCE LINKS

- OAK Events and Resources:
 - [Upcoming OAK Farmer Field Days](#) - Only 1 left in 2022!
 - [Upcoming Free Training + Lunch in Somerset, October 20, 2022](#) - Removing Barriers to USDA Good Agricultural Practices (GAP) Programs + Grower Buyer Meet Up
 - [Join OAK today!](#)
 - Resources marked with an asterisk provide OAK Member discounts!
 - [OAK newsletters](#) - for farmers, ag professionals and community members.
 - [OAK's Annual Farming Conference](#) - January 26-28, 2023 in Frankfort, KY
 - [OAK YouTube](#) farmer resources/conference and field day playlists
 - [OAK Transition Trainer program](#) - for assistance with certifying organic
 - USDA's [National Organic Program](#)
- Equipment and Resources:
 - Farm King Grain Cleaner - Chad is trialing this as a seed separator
 - EnviroKure [EK-L BioStim](#) composted chicken manure - Beilers apply 18-30 gallons/acre as a foliar spray.
- Tips:
 - Read your weeds! The Beiler's farm used to be covered in spiny amaranth, which, like mustard, is a plant that thrives when soil is high in nitrates. After a few years of cover cropping, only a few spiny amaranth emerge in each field. The cover crop mixes have included plants that uptake the high-concentration of nitrates, like radishes, to reduce the concentration of nitrates present in the soil, making the current soil less ideal for spiny amaranth and more ideal for cash crops!
 - As long as the soil is not too wet and up until a risk of soil compaction, the Beilers can graze cattle on the cover crop through Christmas. The Beilers graze cattle on the cover crops in the spring when they are tall enough.
- Cover Crop Resources:
 - [Cover Crop Chart](#) - USDA Ag Research Service
 - [Cover Crops for Organic No-Till Mulch Systems](#) - Rodale
 - [Cover Crop Economics](#) from SARE's [Conservation Tillage Systems in the Southeast](#)
 - [Managing Cover Crops Profitably](#) - SARE
 - [Building Soils for Better Crops](#) - SARE
 - [Integrating Crops and Livestock](#) chapter
- Researchers and farmers referenced during the Field Day:
 - [Dr Christine Jones](#)
 - [Dr Erin Silva](#) and Organic Grain Resource and Information Network (OGRAIN)
 - [Rick Clark](#)
 - [Jason Mauck](#)
 - [Steve Groff](#)
 - [Gabe Brown](#)