



TAKE PART IN OUR SOIL HEALTH STUDY

We are sampling fields across the country and across crop systems to better understand how management practices impact soil health. In return we'll provide you, the grower, with an extensive report detailing your results, helping you make the best management decision for you farm.

Further Details:

Who we are:

Ecdysis Foundation is a small research non-profit and farm out of rural South Dakota. We are founded by former USDA researchers who aim to do research in collaboration with farmers, not big ag, to discover a future of agriculture that's good for farmers, rural communities, and the environment. We provide all research results to farmers for free. We are NOT a government organization or sell any services/products. We're funded by donations and grants.

What we're doing:

We are researching all of North America's food system through one big project - the 1000 Farms Initiative. This initiative is surveying many different crop systems to understand how management practices impact soil health, farmer income, crop yield/quality, and the surrounding ecosystem. We provide research results to each individual farmer and publish system-wide findings in easy-to-read reports.

How to participate?

- Contact us via phone or email.
- Answer a short, 10 question survey so we can begin to know about your farm or ranch.
- Provide a field or pasture location.
- Answer an end-of-season, 30 min survey on management and economics (COMPLETELY ANONYMOUS!)
- In the following winter, you'll receive an unique report with your results for free.

Scroll to the next page to see what we test.



WHAT WE'LL TEST:

Soils

*Probe to 15 cm, unless otherwise noted

- Soil organic matter (SOM)
- Total Soil Carbon (TSC) (to 60 cm)
- Total Soil Nitrogen (TSN) (to 60 cm)
- Soluble salts
- Nitrate-Nitrogen
- Phosphorus
- Potassium
- Calcium
- Magnesium
- Sodium
- Sulfur
- Zinc
- Iron
- Manganese
- Copper
- Bulk density
- pH
- Texture analysis

Soil health/Microbial community

- PLFA
- Fungal and bacterial community sequencing
- Haney Soil Health test

Soil surface characteristics

- % Ground cover
- Plant community richness/biomass

Soil water

- Water infiltration rates
- Water holding capacity
- Wet aggregate stability

Crops and forage

- Leaf tissue analysis/Brix levels
- Nutrient density/diversity of yield
- Yield/biomass

Insects and other invertebrates

*Communities will be characterized from the soil surface, and within the crop foliage

- Abundance
- Species richness
- Species diversity
- Functional groups (pollinators, predators, granivores, etc.)
- Pest abundance

Avian (Bird) community

- Total bird abundance
- Species richness
- Species diversity
- Functional guilds (insectivores, rodent predators, granivores, etc.)

Economics

- Gross and net profit