# HAVE THE ADVANTAGE IN YOUR FIELD Advantage Acre has collaborated with industry-leading experts to offer you a new way to look at your field management. With the help of functional soil mapping, you can for the first time, utilize predictive mapping in your field. This allows you and your seed representative to improve efficiency and increase profit potential.

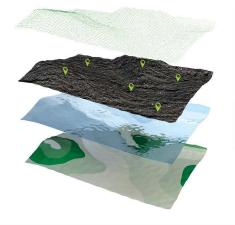
# WHAT IS FUNCTIONAL SOIL MAPPING?

- Improved Accuracy
- · Technologically Driven
- Uses Statistical Models + Science
- Maps Predictive Patterns
- Shows Relationship Between Soil Properties + Field Topography

While standard USDA soil maps generally classify and name soil types as broad units based on appearance, functional soil mapping is more technologically driven, using statistical models and data science to mimic the relationship between soil properties and field topography. With an understanding of the connection between the two, field characteristics can map predictive patterns that help you to better understand where agronomic practices can be applied to achieve the most benefit.

## **HOW DOES IT WORK?**

Standard maps view your field as a two-dimensional space. Functional soil mapping expands that view into three dimensions to more accurately assess your field's unique topography and identify its precision points. Predictions on how the soil changes between these points are made because some soils move easier than others and the degree of slope can impact movement.



3D Field Topography

Precision Point Sampling

Predictive Water Mapping

Yield Potential

# WHAT CHARACTERISTICS CAN FUNCTIONAL SOIL MAPPING SHOW?

Functional soil maps help determine fertility and moisture rates as well as nutrient potential, cation exchange capacity (CEC) and more. These maps can also categorize information like the highest- and lowest-yielding areas, how much water the soil would store after a rainfall and runoff speed.

Armed with the knowledge of the topography's influence on your field, you can better understand how water moves through the field and soil, where it will shed and where it will collect above and below the surface. Paired with Weathertrends360's 11-months-out forecast, a productivity index can be assigned to each unique environment and the recommendation could change year-to-year.



# WHAT DO I NEED TO GET STARTED?

Unlike many soil-related tools in the industry, experiencing the benefits of functional soil mapping is possible without using historical soil maps or previous year's data. However, uploading your current grid samples into the system can enhance accuracy. Knowing the rate at which soils change between the identified precision points in a field, the accuracy of the map can also be further dialed in by pulling soil samples at those points. The results will change the numbers for all points in between, creating more accurate soil map.

### WHY FUNCTIONAL SOIL MAPPING?

Current standard soil maps generally classify and name soil types as broad units based on appearance. These maps are often static within a year while your field continues to change. Functional soil mapping adjusts and determines these changes over time, giving you a better, more up-to-date understanding of what's happening in your field today and throughout the growing season. For the first time, you'll have the power to see how your soils really function, which will optimize your seed placement and improve your overall yield potential. With enhanced genetic research and hybrid development, functional soil mapping gives your seed representative the tools to recommend the RIGHT seed for the RIGHT point in your field at the RIGHT time. Bottom line, you can simplify the management of your field and maximize results.

# WHY ADVANTAGE ACRE?

The Advantage Acre platform brings together three fundamental components of farming today: seed, soil and weather. We combined our knowledge of our genetics, the comprehensive understanding of soil and Weathertrends360's advanced forecast to assign a productivity index to each unique environment. With this enhanced, dynamic knowledge, our recommendations may change from year to year. Next year, you could plant the same hybrid in the same field and get a completely different seeding recommendation. Advantage Acre's recommendations put our hybrids in the precise location in your field that will maximize yield potential. With the challenges you face day-to-day, let us help give you an advantage in your field.