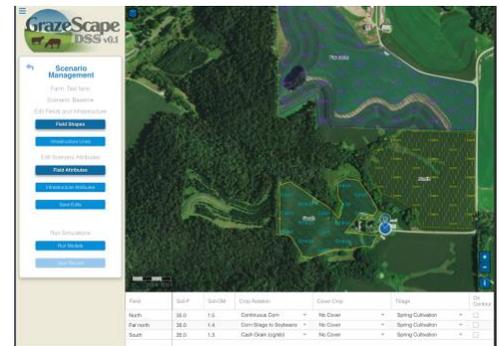




Agricultural systems influence a diversity of outcomes, both on farm and in the watershed as a whole such as crop yields, profitability, soil health, water quality, biodiversity or biodiversity, to name a few. The Grassland 2.0 team has built a series of models and [decision support tools](#) to help communities, farmers, and consultants understand the opportunities, challenges, and impediments of different agricultural systems in a holistic way at both the farm and watershed levels. These tools offer the ability to develop hypothetical farm or watershed “what-if scenarios” that compare the outcomes of ecological and economic indicators under different agricultural systems and their management.

**[GrazeScape™](#)** - A farm-level tool that allows farmers to create hypothetical scenarios that compare different cropping systems and their management and look at impacts to yield, nitrogen and phosphorus runoff, and erosion. A future version of GrazeScape will include economic measures.

**[SmartScape™](#)** - A tool that allows users to evaluate possible outcomes with landscape-level agricultural transformations. The tool will allow entire watershed-level assessments of a range of agronomic (crop yields, dairy or beef production), economic (net profits), as well as ecosystem outcomes (soil erosion, phosphorus loss, biodiversity support) under different management and cropping and production system.



**[Heifer Grazing Compass](#)** - An Excel-based tool, that allows farmers and farm advisors to explore the “What-if” financial outcomes of raising heifers on pasture versus alternative methods of raising heifers (on or off the farm). This tool matches pasture productivity estimates to animal nutritional needs, calculates the economic costs of forages and feeds for heifers (both raised on the farm and purchased), and incorporates stocking rates, pasture rotation frequency, labor time, equipment use, and manure management outcomes into the financial comparisons of raising heifers. Financial outcomes include cash flow measures and comprehensive economic comparisons of first year and later years for farmers transitioning to managed grazing.

**[Beef Grazing Compasses](#)** - Similar to the Heifer Grazing Compass, these beef grazing compasses are Excel-based tools for cow-calf, stocking, and finishing beef on pasture versus alternative methods. Each of these stages match pasture productivity estimates to animal nutritional needs, calculates the economic costs of forages and feeds for cattle, and incorporates stocking rates, pasture rotation frequency, labor time, equipment use, and manure management outcomes into the financial comparisons of rearing beef on pasture.

**For more information about Grassland 2.0 go to [grasslandag.org](http://grasslandag.org)**

For information about GrazeScape and SmartScape contact, Eric Booth, [egbooth@wisc.edu](mailto:egbooth@wisc.edu), tel. 608 265 0697. For info on the Compass tools contact John Hendrickson, [jhendric@wisc.edu](mailto:jhendric@wisc.edu), tel. 608 265 3704.