

## Crop Production

# UNL's index measures 'farm' health

## At a glance

- UNL attempts to develop a new tool called the Healthy Farm Index.
- The index would consider what your farm does for the ecosystem.
- One goal is for farmers to think about watersheds and birds.

By **DON McCABE**

**Y**OU participate in soil and water stewardship programs, farm with conservation in mind and enjoy the wildlife on your land, all the while striving to improve your production. But that may not be enough, at least for some University of Nebraska-Lincoln researchers. They want to know if your farm is ecologically healthy.

A new UNL tool, called the Healthy Farm Index, is intended to help farmers take into account the benefits of nature, says John Quinn, a third-year doctoral student and leader of the UNL project to develop the index.

## Finding a balance

"It will help farmers find a balance maintaining profits and yields while enhancing the farm ecosystem," Quinn says. "We really want this to be a tool for farmers interested in looking at a broader spectrum of their farm based on the best science available."

The index is still under refinement and no specific benchmark number has been established for a so-called healthy farm. But two of the objectives include asking farmers to think about protecting watersheds and bird species on their operations. In the latter case, the UNL researchers say they are looking at balancing bird diversity with production and encouraging farmers "to make small adjustments to their management strategy." An example could be reducing yield by 2% but increasing bird diversity, according to Quinn.

He says the purpose of the project is not to be prescriptive. "We are not asking farmers to turn the land back to prairie. We just want you to create a bigger picture of what your farm is. If enough farmers use the index, it can be a conservation piece."



The index "will measure and optimize" what Quinn calls ecosystem services. "We want to ensure that ecosystem services remain in the decision-making process of farmers, agency personnel and other stakeholders."

He defines ecosystem services as the benefits people receive from nature, including clean water, air and soil produced on a farm. He also lists carbon sequestration. "We want to communicate the value of those services to farmers and nonfarmers alike."

The index tool actually is part of UNL's organic farming project and has started with 27 organic farms across Nebraska and Kansas, but Quinn hopes all farmers will someday use the tool. The research team started with organic farmers because they have more diverse systems and have more crops on a smaller scale, he says.

## Web-based interface coming

Researchers have designed the tool so any individual can use it. By the end of the year, they will have a Web-based user interface.

Quinn, a native of Minneapolis, Minn., says the project has received four more years of USDA funding. The project began when Quinn set out to study birds and food production on farm systems. "The more people we talked to, the more we realized that we needed to look at something broader."

The index covers ecological, social and economic factors of farm systems. Current indicators for the index include: production — yield, diversification and acres; biodiversity — habitat, birds, crops and livestock; ecosystem services and conservation practices — soil, water and landscape; personal satisfaction — profit and farm management. Other indicators likely will be added.

So far, researchers have sampled breeding bird populations and associated insect and vegetation communities on the 27 organic farms. They are finishing up their third year of data of early-morning bird surveys. Surveys start at sunrise and finish four hours later. In addition, farmer surveys are being conducted with participating farms for their crop production and management prac-

tics, including their satisfaction with their farm operation.

When it comes to birds, some have responded differently to different vegetation practices, such as windbreaks vs. larger wooded areas.

For more information, visit [hfi.unl.edu](http://hfi.unl.edu).

## UNL project has 4 organic farms

**T**HE UNL organic project began in October 2005. The four organic research farms are located at the Agricultural Research and Development Center near Mead, the Haskell Agricultural Laboratory near Concord, the South Central Agricultural Laboratory near Clay Center, and the High Plains Agricultural Laboratory near Sidney.

For information about organic research at UNL, visit the Organic Working Group Web site at [organic.unl.edu](http://organic.unl.edu) or contact Liz Sarno at [esarno2@unl.edu](mailto:esarno2@unl.edu) or 402-309-0944.

ARE YOU READY TO BE  
**AMP'D?**