## NORTH DAKOTA STATE UNIVERSITY

NDSU Extension Service ND Agricultural Experiment Station accessibility

search

NDSU Agriculture Communication

you are here: home  $\rightarrow$  columns  $\rightarrow$  beeftalk  $\rightarrow$  beeftalk: sustainable soil and integrated beef systems

#### navigation

#### Links

- News Home
- <u>Columns</u>
- <u>Archives</u>

### Feeds

- All News RSS
- BeefTalk 🔤
- Dairy Focus RSS
- Prairie Fare RSS
- Economics **ESS**

- Renewable Accounts RSS

- Small-business Savvy R55

#### Twitter

- On Twitter follow NDSU Ag News

# BeefTalk: Sustainable Soil and Integrated Beef Systems

Beef production needs to think outside the box.

By Kris Ringwall, Beef Specialist

NDSU Extension Service

Forward thinking is important in beef production.

The focus in beef production is how to raise the best, most marketable, most tender, best-tasting beef and, in some cases, simply another beef cow or bull. At the end of the day, the word "production" needs to be replaced with the word "business."



Images

Good business concepts help with the dollars, but

#### columns

Spotlight on Economics: Spotlight on Economics: Just Hang Up (2016-07-13) Studies have found that drivers tend to downplay the risk of their own phone use. FULL STORY

SEARCH

**BeefTalk: BeefTalk: Sustainable Soil and Integrated Beef Systems** (2016-07-21) Beef production needs to think outside the box. <u>FULL STORY</u>

# **<u>Prairie Fare</u>: Prairie Fare: How to Stay Cool and Hydrated in the Heat**

(2016-07-21) Extreme heat can have dire health consequences on every organ of your body. <u>FULL STORY</u>

Small-business Savvy: Smallbusiness Savvy: A Small Business Must Think Big (2016-07-21) Distinguish your business from all the others. FULL STORY production methods still seem to take up a lot of the discussion. Among producers, beeves are being discussed and the outcome will be the best final product.

That is, until producers step from their pastures into the bigger picture. For some, beef production is fine in its present form with no need for alternative production models. Yet many producers are seeking production models that will stand the test of time.

Sustainability, to support, to withstand or to bear the forces applied, is critical within the developing models of beef production. Defining sustainability, however, seems to cycle in a pattern similar to the beef cattle cycle. Producers have work to be done, data to be collected and knowledge to grow when the beef industry speaks of sustainability.

Where is beef going to go? Perhaps a look at agriculture in general would be good.

Ideally, production agriculture will continue in its present role, but too often the words "sustainable" and "appeasement" are used side by side. The status quo is sufficient. However, given current data and trends, the sustainability of current systems is a subject of spirited discussion, particularly if community and population trends are added to the equation.

Expandable and, we hope, more sustainable systems need to be evaluated to assess current

#### use of releases

The news media and others may use these news releases in their entirety. If the articles are edited, the sources and NDSU must be given credit. trends. In a word, that's diversification. For the future, all avenues for additional revenue streams need to be explored to enhance the economic viability for beef producers and the rural areas associated with beef production.

This compensation may come from not only beef but also synergistic crop production. For example, small-grain production systems can integrate rotational cropping practices, high-residue management and annual forages (with attention to wildlife habitat enhancement) to diversify income while opening the door to other valueadded opportunities for beef production in concert with crop production. Agriculture is no longer simply production agriculture; it involves increased urban and recreational components as well.

This multiple approach to a dynamic agriculture also provides opportunity for enhanced economic sustainability for rural producers. The Dickinson Research Extension Center, as part of North Dakota State University, takes seriously the need for sustainable beef systems in the world of agriculture. The center is striving to develop sustainable and integrated production strategies that match conditions of western North Dakota and surrounding regions.

The inclusion of forages into traditional cropping systems can provide the resources necessary for the development of integrated production strategies that increase sustainability and profitability. Forage-based cropping systems come closer to the native plant community present when homesteaders first arrived in this region.

A need exists to develop agro-ecosystems that optimize the balance between forage-based and grain-based crop/livestock systems reflective of the many individual ecosystems. These integrated systems must be synergistic to, or enhance, the native and agronomic plant communities, thus providing the base for future beef production.

In addition, marketing and obtaining a fair value for commodities produced from forage-based systems is key. Because the general population requires protein, a need met by meat and highprotein crops, meeting this demand is a unique opportunity that a forage-based system integrated with crop production can respond to in addition to current cropland use.

These thoughts are changing how the Dickinson Research Extension Center addresses the future. Previous work certainly has set baseline production for high-residue cropping systems, grassland systems and livestock systems. However, further definition, integration and refinement of these system efforts is critical. Beef production needs to think outside the box and the center also needs to do the same.

Challenging the limits of conventional thinking by linking the components of agricultural management

systems with value-added opportunities ensuring long-term sustainability of beef and cropping systems within the environment is critical. In response, a new approach - a concept of integrated agricultural systems that truly entwine crop, beef and forage production as a working unit for the betterment of all - needs to be embraced,. That betterment rests with the soil all systems are based on: sustainable soil.

May you find all your ear tags.

For more information, contact your local NDSU Extension Service agent (<u>https://www.ag.ndsu.edu/extension/directory</u>) or Ringwall at the Dickinson Research Extension Center, 1041 State Ave., Dickinson, ND 58601; 701-456-1103; or ■kris.ringwall@ndsu.edu.

NDSU Agriculture Communication - July 21, 2016

source:	Kris Ringwall, 701-456-1103, <mark>≡1</mark> kris.ringwall@ndsu.edu
editor:	Ellen Crawford, 701-231-5391, ellen.crawford@ndsu.edu

Attachments
Attachments
PDF - Long-term Sustainability -
Develop sustainable and integrated
production strategies that balance forage-
based and grain-based crop/livestock
systems synergistic with sustainable soil. 🐧
you a developer? The out the HTML to PDE API



