Forage testing, along with follow-up consultations and recommendations by Extension agents and specialists, prevented over 16,000 cattle from being exposed to toxic forages during the 2017 drought. Other Extension drought responses:

- developed a platform to streamline weekly drought condition reporting
- played a key role in testing forage and water for producers
- answered questions through one-on-one conversations, articles and videos, and hosting meetings
- provided information to producers through meetings, presentations, media interviews, news releases and columns, publications and web-based materials

In 2017, 292 North Dakota gardeners evaluated 106 promising home vegetable and herb varieties. 99% of responding households were introduced to new varieties. 87% of responding households reported more productive gardens. 89% of children in responding households who grew vegetables improved their diets. 89% of children in responding households improved their level of physical activity.

Approximately 6,932 downloads of the Extension Pest Management App since 2014, combining the Extension Plant Disease Management, Insect Control and Weed Control guides into a digital form. The app has the potential to save future printing costs of $3 per copy.

N.D. producers using precision ag technologies of all kinds realized an $88 per acre benefit compared to producers not using them. Extension has been providing educational programs on precision ag for more than 23 years.

For more information on these and other impacts of NDSU Extension, go to www.ag.ndsu.edu/extension or contact Charlie Stoltenow at 701.231.7171 or charles.stoltenow@ndsu.edu.
Ag and Natural Resources
Educational Programs

- **Cropping Systems**
  - Soybean cyst nematode
  - Increasing salinity and sodicity awareness
  - Managing weeds under different production systems
  - Managing herbicide-resistant Weeds
  - Prevention of Palmer amaranth incursion into North Dakota
  - Managing Cercospora in sugar beets
  - Managing root maggot in sugar beets
  - Shop Talks: Sugar beet production
  - Managing soil water through drainage and irrigation
  - Using farm chemicals safely
  - Pesticide application certification program
  - Managing soil fertility
  - Enhancing soybean yield and profitability
  - Management of cereal crop diseases
  - Wheat midge soil survey
  - Management of stored grains
  - Integrated pest management
  - Introduction to organic agriculture
  - Precision agriculture technology and data management

- **Livestock Management**
  - Stop the Truck — reviewing livestock health records before shipping
  - Livestock mortality composting
  - Antimicrobial stewardship
  - Improving lamb quality and value
  - Sheep education for new flocks
  - Corn silage quality program
  - Manure management
  - Managing livestock during a drought
  - Nitrate management in feeds and forage
  - Feeding cattle for profit
  - Livestock quality assurance
  - Bovine emergency response program

- **Natural Resources Management**
  - Setting stocking rates
  - Range and pasture management — grazing readiness
  - Cover crops for healthy soil
  - Reclamation and remediation of soil impacted by oil extraction
  - Healthy soil schools
  - Sodic soils: Should I tile the field or add an amendment?
  - Café Talks: Soil Health — guiding farmer learning through networks
  - Preparing for floods

- **Services Offered**
  - Crop and Pest Report — weekly
  - Market Adviser column — monthly
  - Plant Diagnostic Laboratory
  - Certified Crop Adviser School
  - Scout School
  - Nitrate testing
  - Feed testing
  - Livestock water testing
  - Variety trials and demonstrations

- **Youth Programs**
  - Livestock Camp
  - Judging teams
  - Kids, Compost, Crops and Consumption

This is a partial listing only. Please check with your local Extension office for more programs.