

**2015**  
IMPACT REPORT



**EXTENSION**

# **NEBRASKA STATEWIDE IMPACT REPORT**

## **Community Environment Action Team**

### **Signature Outcomes**

#### **Water**

- ✓ Nebraskans with private drinking water wells and/or onsite wastewater systems need unbiased, research-based information to assist their management decision process.

#### **Landscape**

- ✓ Sustainably designed and managed landscapes and community green spaces are necessary for quality environments, healthy lifestyles, and vital, vibrant communities.
- ✓ Pesticide safety education (PSEP) helps protect human health, wildlife, and the environment. PSEP provides training on integrated pest management and the use of least toxic pesticides and alternative methods of pest control.

#### **Food**

- ✓ Consumer interest and demand for safe locally produced foods continues to grow across Nebraska.

### **Action Team Impacts**

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- ✓ Water Signature Outcome – page 6

# Community Environment Action Team

## Food Signature Outcome

**Locally grown foods are safer as fruit and vegetable growers implement production and handling practices to prevent microbial contamination.**

### Good Agricultural Practices (GAPs)

The goal of the National GAPs Program is to reduce microbial risks in fruits and vegetables by developing a comprehensive extension and education program for growers and packers.

- Over **59 Nebraska fruit and vegetable producers** were updated about the changes to the Food Safety Modernization Act and how it could impact their operation, as well as the importance of implementing GAPs practices in their production operations during 4, 2-day GAPs workshops held in Omaha, Lincoln, Grand Island, Norfolk, and Scottsbluff.
- Evaluations were collected following the workshop (n=47). As a result of attending the GAPs workshops, producers will reduce potential food safety risks by modifying current practices or will implement future practice changes related to:
  - 87% recordkeeping
  - 66% postharvest wash and cooling water
  - 64% harvest sanitation
  - 64% postharvest packing house sanitation
  - 62% postharvest storage
  - 57% domestic and wild animals on/near produce fields
  - 57% manure and compost use
- As a result of the workshops, 98% of participants indicated they would develop a farm food safety plan in 2015. The farm food safety plan outlines what practices producers are doing in their operation to decrease microbial risks and how to conduct these practices; i.e. conduct water tests, record keeping of manure applications, wildlife control.

### Local Foods Programs

At the Kimmel Orchard 2015 AppleJax Festival over **950** people compared apples to potatoes; learning about learning about density, enzymatic browning, and starch conversion to sugar as demonstrated by iodine staining.

### Buy Fresh Buy Local® Nebraska

BFBLN's mission is to "encourage the purchase and enjoyment of locally grown food." We encourage Nebraskans to develop resilient communities with local food and farming. By conveying to consumers

that purchasing local grown food from farmers in and near their communities will make Nebraska the most livable place in the Midwest – environmentally, economically, socially and culturally.

- BFBLN offered three farm tours for consumers and farmers looking for ideas on how to expand their specialty crops products. We visited the Nebraska Mushroom Farm, Martin's Hillside Orchard, and Heartland Nuts 'n More Cooperative. A total of 152 attended the tours.
- Conducted a consumer survey to find out what customers valued most when purchasing locally grown food direct from the grower. The top 3 reasons, supporting the local economy was number 1, number 2 supporting a sustainable environment and number 3 transparency/integrity of growers.
- BFBLN filmed 4 innovative farmers to show how Nebraska farmers are developing year round food production to fill the needs of consumers for locally grown food they can purchase and enjoy year round. The films will be released the first of February.

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# Community Environment Action Team

## Landscape Signature Outcome

**Better design and management practices taught by Extension assist greenspace managers to reduce pesticide & fertilizer inputs and use less labor in landscapes.**

### Extension Master Gardener Program

In 2015, Nebraska Extension personnel provided over **12,000 hours** over education to over **750 Extension Master Gardener Volunteers**. These volunteers in turn have reached **773,000 Nebraskans**, through 25,000 volunteer hours – equating to **\$576,000 in volunteer contributions or 12 FTEs**.

In addition, some volunteer Master Gardeners have headed up projects centered on urban agriculture and creating produce donations. One such group at the HOPE Garden in Douglas County produced over **10,615 pounds** of food for local food banks.

### Backyard Farmer

Backyard Farmer was an integral component to Nebraska Extension Community Environment Team. BYF and NET held two successful remote tapings this year. In July, Lauritzen Gardens hosted BYF for a mid-season show, with over a **100 person live audience**, and NET and the BYF panel ended the year at the Nebraska State Fair in the Raising Nebraska Exhibit for a face-to-face question and answer session and the live-to-tape final show (**350 people total audience**). The shows seasonal viewership held consistent as 2014, the repeated show on Saturdays doubled in viewership, and the May and July reports showed a 100 percent rise in viewership.

#### BYF Social Media Numbers

- YouTube
  - 20,000 viewers weekly
  - 3 million lifetime views – generating over \$10,000 funding
- Facebook/Twitter
  - An increase of 85% in likes in one year
  - 180,000 plus total reach with the BYF Facebook page
- iTunes U
  - Backyard Farmer remains the most downloaded program the entire University offers in iTunes
  - In the top 30 downloads of the 'top collections' category

### Commercial & Homeowner Contacts

Over **13,355 Nebraskans and green industry professionals**, through 283 Nebraska Extension programs, have increased their use of environmentally and economically sustainable greenspace practices.

Fifty-seven youth based education programs were completed and reached out to **2,963** Nebraskan children who learned about entomological and horticultural topics. Over **1,640** packets of White Satin Carrot seeds were distributed to youth in over **66** counties across Nebraska as part of the SPECIAL GARDEN PROJECT. Project taught youth how to successfully grow a new cultivar & implement new sustainable gardening techniques. Because of this years' experience, 43% of youth plan to change a gardening method they have used. Youth "Plan to till the ground better & mix more compost into it". Additionally, educators and assistant educators were able to individually educate over **14,558 Nebraskans** through emails, phone calls, site assessments, and walk-in visits.

Other projects included the Raising Nebraska Outdoor, the landscape that was planted by over **45** volunteers who contributed 300 hours at the site equaling **\$6,921** in labor cost savings, **350,000** people attended the 2015 Nebraska State Fair.

## Pesticide Education

UNL's Pesticide Safety Education program developed **6** publications (new or revised manuals, ECs, or NebGuides), **3** enhanced digital manuals, a video segment, and **7** full-length training videos in 2015. About **10,000** applicators recertify their licenses each year. The PSEP office develops all Educational materials and programs needed.

### Post training surveys of private and commercial applicators indicated:

- 97% of commercial and private applicators planned to make pesticide applications according to the pesticide label
- 94% of commercial and private applicators planned to use personal protective equipment to protect their health
- 97% of both private and commercial applicators planned to take steps to prevent carrying pesticide residues into the home
- 88% of private and 85% commercial applicators planned to use drift reduction nozzles to prevent herbicide drift

When asked to consider actions they took resulting from previous attendance at pesticide safety education training, 95% of private and commercial applicators indicated they frequently or very frequently used safe storage, handling, and application practices for pesticides.

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## Community Environment Action Team Water Signature Outcome

**Nebraskans have a safer drinking water supply and are ensured wastewater is being treated to a higher standard before being recycled to groundwater.**

### Decision Makers of Tomorrow Learn about Protecting Water Resources

The "Stormwater Sleuth and Running Rain" water science supplement kit was provided to 117 schools across Nebraska, 49 teachers attending water festivals, and ten 4-H/youth development staff. Support was provided by a \$3,000 grant from the Nebraska Academy of Sciences funded by Nebraska Environmental Trust. This education kit was developed by Nebraska Extension to teach 4<sup>th</sup> – 6<sup>th</sup> graders, our decision makers of tomorrow, about conserving and protecting water resources. It focuses on increasing awareness of - and education about urban stormwater issues and innovative green infrastructure solutions. Of students who took pre and post- tests, and teachers who used the resources, 100% increased their awareness and understanding of stormwater issues and green infrastructure.

### Onsite Wastewater Management

The onsite wastewater management team was instrumental in developing a completely new training curriculum focused on vulnerable water resources and virtual design of onsite systems. The programs were entitled "Vulnerable Landscapes and Water Resources", and "Planning and Layout of Onsite Systems". The goal of the vulnerable sites training was to provide greater depth of knowledge about the risks that onsite wastewater systems pose to water resources that are vulnerable to pollution. The goal of the planning and layout, or advanced design, training was for each participant to design an onsite solution for a "virtual" site. Each curriculum was designed for six hours of learning, and was delivered at five separate locations across Nebraska. A total of 239 onsite wastewater professionals attended the vulnerable sites training sessions, and 172 onsite professionals attended the advanced design session. Anonymous clicker-based survey data were collected to assess both short-term gains in awareness, and long-term knowledge gain resulting in changes in practice.

Survey results indicate that 84% of respondents either strongly agreed or agreed that they were more knowledgeable about vulnerable sites and the importance of onsite wastewater systems. In addition, 82% indicated that they either strongly agreed, or agreed that they are more aware of the concept of environmental risk, and how NDEQ regulations help to manage risk, and maintain the quality of groundwater. With respect to the advanced system design training, 84% indicate that they are more aware of how to design systems, and how to use Title 124 for help. Finally, 77% responded that they intend to follow the procedures spelled out in the regulations to protect water quality, watersheds and water wells. Analysis of the extended survey data shows that the participants either work on, or install, about 1,650 onsite wastewater treatment systems per year. Using typical system loading rates, this translates into treatment of about 301 million gallons of wastewater per year, before the water is recycled to the environment.