

Institute of Agriculture and Natural Resources — AT WORK FOR NEBRASKA

Fifteen to one. Conservatively.

That's the return Nebraska, from its urban eastern border to its most western point, receives on state tax dollars invested in the Institute of Agriculture and Natural Resources (IANR) at the University of Nebraska–Lincoln (UNL).

An independent study* conducted for the Institute reports:

"... it is evident that IANR's research, teaching, and extension activities are having powerful impacts on Nebraska's economic growth and on economic and social sustainability in the State of Nebraska. ... the impact of IANR's programs and expenditures represents a leverage of state funding that exceeds fifteen to one."

The study found IANR is at work on issues with significant impact for both urban and rural Nebraskans. IANR addresses water, health, food safety, business, youth, family and community issues, as well as much more benefiting Nebraska's economy and quality of life.

Following are a few of the myriad ways IANR is at work for all of Nebraska.

*No state tax funds were used in financing this study.

Water quality

Reducing metro soil and sediment losses

Washed into streams, lakes and rivers, soil becomes a major pollutant. UNL Extension Erosion and Sediment Control Seminars teach building industry professionals about stormwater management issues and regulations to reduce soil and sediment losses from construction sites. Anywhere from 140 to 322 people, including engineers, architects and grading contractors, have attended sessions annually since 2003. In 2007, 93 percent of participants said they would apply new knowledge from the seminar in their work.

Youth, families and communities

4-H at Offutt

Military 4-H clubs provide 4-H opportunities for youth whose parents are on U.S. Air Force bases, including Offutt Air Force Base at Omaha. In 2007 at Offutt, 152 youth were in UNL Extension 4-H. All Air Force bases, Army installations and Naval bases in the world now have 4-H clubs. Whenever families have to move they always have a 4-H club to go to, to ease the transition associated with moving frequently. The program at Offutt promotes 4-H to youth across the base, which includes various 4-H club activities and 4-H camps.

Health and food safety

Fighting cholesterol with beef tallow and soybeans

Cholesterol is a concern for many. Human trials are testing a new cholesterol-fighting compound that mixes stearic acid from beef tallow with plant sterols from soybeans. Developed by an IANR nutrition scientist, the compound outperformed commercially available plant-based food additives in animal studies and works at least as well as widely prescribed cholesterol-lowering statin drugs.

Check, please!

Americans eat half of all meals away from home, so assuring food safety in restaurants, schools and nursing homes is important. It's also a big job – and the goal of UNL Extension's ServSafe program, conducted in cooperation with state agencies and the Nebraska Restaurant Association. More than 12,500 Nebraska food-service employees have learned safe food-handling procedures through the program since 1994. At least 90 percent of ServSafe participants pass a national certification test following training. Evaluations conducted at the end of the workshops indicate participants increased their knowledge in food-handling practices, including proper hygiene, cooling and cooking temperatures.



Medicare prescription drug enrollment

The 2003 Medicare Reform Act's prescription drug benefit program prompted questions and concerns for Medicare recipients and their families facing a gauntlet of paperwork and choices.

UNL Extension was one of five extension systems nationwide USDA tapped for a pilot program educating and enrolling eligible beneficiaries. From mid-2008 to mid-2009, extension helped educate 2,295



Nebraska caregivers, beneficiaries and/or family members about the new Medicare Prescription Drug Program or Medicare Part D. Extension enrolled 938 Nebraska beneficiaries, conservatively saving them an estimated \$646,000.

And more

What's that you're wearing?

Turning agricultural waste products into fabrics can make the U.S. textile industry more sustainable. A UNL textiles science team has discovered how to make fibers from cornhusks, cornstalks, rice and wheat straw, sorghum leaves and stems, and switchgrass. They offer excellent mechanical and acoustic properties for automotive interiors



and other uses. The team also discovered how to obtain natural protein fibers from chicken feathers and can make fibers from proteins in wheat, corn and soybean.

Close to home

Keeping kids from lead poisoning

UNL Extension is a collaborator in the Omaha Healthy Kids Alliance, along with the Douglas County Health Department, City of Omaha and other organizations. Their purpose is to make an Omaha Superfund site safer for children at risk of lead poisoning from contaminated soil and peeling paint. Together they've taught nearly 450 real estate professionals and over 550 contractors about minimizing lead poisoning, and worked directly with 166 families at seven toy testing sites. In 2008 37,800 contacts were made through the Omaha Public Schools and county health workers. Extension is a leader in the Omaha-area lead educational effort.

Terminating termites

Since 1995, UNL Extension's research-based termite education workshops have empowered more than 1,650 Nebraskans to make sound decisions about termite treatments, thus saving money while protecting their homes. Over the last four years, 111 pest control professionals and home inspectors attended extension's Hands-On Termite School held at privately owned homes, which received a termite treatment after the program was over. This program has attracted participants from Kansas, Iowa and South Dakota, as well as Nebraska.



Masterful advice

Unbiased, research-based, Nebraska-specific guidance can be hard to come by. UNL Extension's Master Gardener program has helped fill that need for more than 30 years, training a corps of volunteers across the state to help Nebraskans with their gardening questions, including how to develop sustainable, water-wise landscapes that emphasize native plants. In 2008, extension specialists and educators provided 3,500 total hours training Master Gardener volunteers, resulting in more than 80,000 contacts by 447 volunteers in 46 of Nebraska's 93 counties.

Who's at the zoo?

Lush imported exotic plants in the 61,000-square-foot rain forest at Omaha's Henry Doorly Zoo could be a haven for termites and indigenous insects – but they're not. UNL Extension identifies pests that could potentially destroy the plants and provides expertise for the least toxic means to control them. Extension, together with School of Natural

Resources students, also is helping the zoo determine whether amphibian numbers are declining in Nebraska as they are worldwide; and is working with Omaha-area pet stores to address dangerous salmonella bacteria that can potentially be spread through reptiles.

THE POWER OF RED.™ AT WORK FOR NEBRASKA.

Visit atworkfornebraska.unl.edu for more information about how IANR is at work for Nebraska.