



# Institute of Agriculture and Natural Resources — AT WORK FOR NEBRASKA

September 2007

## From the Vice Chancellor

It's September. Students are back on campus, and it's exciting to hear about their summer internships, jobs, and travels. What a great group of students we have!

These smart, energetic, enthusiastic young people are Nebraska's future leaders. Historically, about 70 percent of College of Agricultural Sciences and Natural Resources graduates take their first job out of college in Nebraska. That's a brain gain for our state.

The independent At Work for Nebraska study\* ([atworkfornebraska.unl.edu](http://atworkfornebraska.unl.edu)), completed this year for IANR, notes the importance of our work for Nebraska's future when it says:

*"As knowledge, intellectual capacity, and technology become the foremost drivers of modern economies, IANR's teaching activities within the College of Agricultural Sciences and Natural Resources (CASNR) likely will continue to grow in their importance to Nebraska's economic progress. Strengthening the lives and communities of Nebraska through research, teaching and extension activities is key to the long-term competitive sustainability of Nebraska's high standard of living."*

Research, teaching, and extension education are the three legs of our land-grant University mission. You can learn more about all three through a new video feature on our At Work Web site. In IANR Conversations ([atworkfornebraska.unl.edu](http://atworkfornebraska.unl.edu), click on IANR Conversations), members of our IANR community talk about ways our diverse work adds to Nebraska's economic and social well-being. New video appears weekly.

Please stop by the site often, and pass it along to others, as well. We're pleased to have this opportunity to share many of the diverse ways we are at work for Nebraska.

John Owens  
NU Vice President and  
Harlan Vice Chancellor, IANR



## Sans sands, these dunes still are tough

Yes, the sands are shifting – just not as quickly as scientists thought. IANR researchers studying Nebraska's Sandhills have discovered just how tough the region is. It took a couple of years after they removed vegetation from some plots for erosion to start eating away at the dunes. It's all part of better understanding what makes this truly unique corner of the world tick.

For more information: [atworkfornebraskanewsletter.unl.edu/#dunes](http://atworkfornebraskanewsletter.unl.edu/#dunes)



## Tending to tendons

IANR research is sounding out – literally – a new way to measure tendon injury and degeneration. The work shows that ultrasounds can be less costly and more



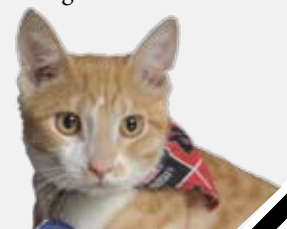
effective than magnetic resonance imaging in detecting and measuring the severity of human tendon problems. That could lead to earlier detection and improved treatment of millions.

For more information: [atworkfornebraskanewsletter.unl.edu/#tendons](http://atworkfornebraskanewsletter.unl.edu/#tendons)

## At CASNR, major developments

Many students are looking beyond traditional fields for career choices in the 21st century. UNL's College of Agricultural Sciences and Natural Resources is meeting that need by adding several new degree programs to its offerings, including forensic science – “CSI,” anyone? – and food technology for companion animals.

For more information:  
[atworkfornebraskanewsletter.unl.edu/#careers](http://atworkfornebraskanewsletter.unl.edu/#careers)



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

## Tracking livestock odors

Wafting odors from livestock facilities can be nipped in the bud, thanks to the new UNL Extension Odor Footprint Tool. The science-based



planning tool helps determine projected impact of odors on surrounding areas. Wind direction and facility size are just two factors in determining how much separation distance is needed between the facility and area residences.

For more information: [atworkfornebraskanewsletter.unl.edu/#odortool](http://atworkfornebraskanewsletter.unl.edu/#odortool)

## New book has flora 'galore-a'

Want to know more about that mystery plant in your backyard? Check out "Flora of Nebraska," a new UNL book that offers details on nearly 2,000 native and naturalized Nebraska plant species. Everything from *abronia* to *zygophyllaceae*. It also includes color plates and line drawings of native and naturalized plants and almost 2,000 maps. The maps depict county-by-county distribution of the listed plants.



For more information: [atworkfornebraskanewsletter.unl.edu/#flora](http://atworkfornebraskanewsletter.unl.edu/#flora)

## How does this garden grow? With much less water

Shoppers at a west Omaha shopping center enjoy trees, shrubs, roses, evergreens, perennials, annuals and ornamental grasses – all low maintenance. The new water conservation demonstration garden, developed by UNL Extension, Village Pointe Shopping Center and Metropolitan Utilities District, needs to be watered only every three to four weeks. Extension Master Gardeners and signs describe the plants and how visitors can conserve water in their own gardens.

For more information: [atworkfornebraskanewsletter.unl.edu/#villagepointe](http://atworkfornebraskanewsletter.unl.edu/#villagepointe)



## New carbon credit tool

Biofuel production has huge ramifications for ag-based economies like Nebraska's, but measuring the efficiency of individual plants will be increasingly important to the fast-growing industry's long-term success. Enter BESS, a new tool from UNL that analyzes total energy yield and efficiency, greenhouse gas emissions and resource requirements for biofuel production systems – from seed to biofuel.

For more information: [atworkfornebraskanewsletter.unl.edu/#biofuel](http://atworkfornebraskanewsletter.unl.edu/#biofuel)

## Tractor test track upgrades

As any tractor enthusiast can tell you, they don't make 'em like they used to. And that means they can't test 'em like they used to, either. That's why UNL's internationally famous tractor test track, the only one in the Western Hemisphere, is getting a facelift – being outfitted with a new wider and thicker surface, the better to put today's larger, heavier tractors through their paces.

For more information: [atworkfornebraskanewsletter.unl.edu/#tractor](http://atworkfornebraskanewsletter.unl.edu/#tractor)

## Conversations anytime!

IANR community members discuss ways IANR's research, teaching and extension education add to Nebraska's economic and social well-being in IANR Conversations, on the Web at [atworkfornebraska.unl.edu](http://atworkfornebraska.unl.edu) (click on IANR Conversations). Please visit often, and share the site with others. New video added weekly.

## Newsletter Info

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Please send subscription requests to: Editor, At Work for Nebraska Newsletter, 108 Agricultural Communications Building, P.O. Box 830918, University of Nebraska–Lincoln, Lincoln, NE 68583-0918.

**Editorial**  
Linda Ulrich  
Cheryl Alberts  
Dan Moser  
Judy Nelson

**Designer**  
Gary Goodding

**Photographer**  
Brett Hampton

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**Nebraska**  
Lincoln | COMMUNICATIONS AND  
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Institute of Agriculture & Natural Resources  
P.O. Box 830918  
Lincoln, NE 68583-0918