Wind

(continued from page eight)

"At the county level, it's more like the utility scale."

Researchers have been able to explore correlations between local renewable energy rules and demographics, including income and politics.

County regulations don't appear to reflect partisan politics, Lyles said. The team looked at voting patterns in the 2020 national elections.

Counties with mid-sized populations appear more likely to pass rules allowing wind power, while counties with larger populations are more likely to pass rules that limit or ban it, the researchers found.

Lyles said wind installations may meet with more opposition in places like Shawnee, Douglas and Johnson counties and along Interstate 135 in central Kansas, while residents of some less populous counties may see turbines as a potential boon to the local economy that could help farmers "either graze or plow around that and keep a farm in the family."

Landowners can collect thousands of dollars in annual payments for each wind turbine that they host on their property. One farm real estate company says the average turbine payment in Iowa is $9,000 per year, but it has seen per-turbine payments that vary from $4,000 to $16,000.

Bigger turbines tend to bring bigger payments.

New wind farms use taller turbines than older ones do. As of last year, about one-tenth of the 4,000 wind turbines in Kansas were taller than the Statue of Liberty.

Feedlot

(continued from page eight)

focus of that and on everybody's mind is normally carbon and greenhouse gases," he says.

"Actually, much of our focus here will be that and also nitrogen management. Housing systems offers one of the greatest ways to change that."

Erickson says placing cattle in deep pit barns is a good way to conserve nitrogen, while also revealing other essential answers.

"If you put cattle in these barns, you get to control the elements. So in the summertime there's less heat stress, and in winter time we have less cold stress. But they're also crowded in there, so we're looking at how do the cattle perform and behave in those systems compared to traditional open lots," says Erickson.

Research done at the University of Nebraska will happen year-round.

Cattle Emissions

Other studies ongoing at the University of Nebraska are finding answers that could be valuable worldwide.

"There's a lot of global concern about how much cattle are actually contributing to global warming. We're trying to answer that question and quantify those emissions," says Rebecca McDermott, a PhD student in beef cattle nutrition at UNL.

Quantifying greenhouse gas emissions is the topic of her research, but her classroom is far from traditional. It's a 27-acre brome grass pasture where you'll find cattle grazing with GPS collars.

"We have an eddy covariance system that actually measures methane and the CO2 that's produced by the pasture and the cattle. Then, we can use the location of the cattle, and if they are in this footprint, we can actually determine what those cattle are emitting. We can determine what their actual methane and CO2 emissions are," she says.

The research is five years in the works, and McDermot says they're already finding impactful insights, including what impact the weather is having on cattle emissions.

"When there's drought, there's less biomass or less forage on the field. So that pasture is actually taking up less carbon. Then, the cattle are carbon positive, meaning that they're contributing carbon to the environment," she says.

"Whereas, in years where there's lots of rainfall, lots of forage, lots of biomass, then the pasture is actually taking up more carbon than what the cattle are emitting. Then the system would be carbon neutral."

Vision for the Future

From tracking cattle in the pasture, to now being able to track cattle's feed consumption with individual ID tags in this feeding system, the UNL research could shape the cattle industry in the years ahead.

"When that tag is scanned by the reader, we can decide whether the animal has access to a specific bunk. We'll also have different diets in these bunks that we can compare," says Erickson.

"So, once that animal's ID is read, we can allow it to either have access to feed or not, and we can also control for how long."

Between the Feedlot Technology Center, the two confinement barns in the middle and the processing facility on the end, this state-of-the art feedlot innovation center is truly one of a kind.

"Maybe most importantly, when we do experiments, we get to randomize cattle to different outcome groups. I always joke cattle to cattle can't lie.

"So when we do our randomization correctly, however the cattle perform in these two different systems that's what the two systems tell us, because the cattle can't fool you," says Erickson.

Market Report

Closing prices on January 15, 2025

Scott Cooperative Assn.

Red Wheat.....	$ 4.78
White Wheat	$ 4.68
Milo	$ 4.04
Corn.....	$ 4.79
Soybeans	$ 9.33

ADM Grain

Red Wheat.....	$ 4.88
White Wheat	$
Milo	$ 4.19
Corn.....	$ 4.84
Soybeans.....	$ 9.33

Weather

	H	L	P
January 7	24	9	
January 8	37	8	
January 9	36	11	
January 10	42	19	
January 11	47	17	
January 12	42	20	
January 13	46	21	

Moisture Totals

January	.12
2025 Total	.12

Food Facts

In the United States, lettuce is the second most popular fresh vegetable.

Friendship 'Meals to Go'
available from the Scott County VIP Center
Individual frozen/sealed trays • Good for special diets • only $3.50/meal • Call 872-3501