

# Rotational Grazing May Reduce Populations Of Nuisance Starlings

*MU Wildlife Experts Track Starling Breeding Success Near Different Types Of Pastures.*

**COLUMBIA, MO.**

**E**uropean starlings are the bane of U.S. cattle producers and dairy operators. These fast-breeding birds often flock near farmsteads and feedlots, eating and contaminating livestock feed. They also damage property and equipment; create health and safety hazards; and put stress on livestock, which lowers milk production and raises veterinary costs.

On top of the damage they inflict on U.S. agriculture-at a cost of millions of dollars each year-these noisy, aggressive birds compete with Eastern bluebirds and other native cavity-nesting bird species for nest sites. Dense flocks of migrating starlings also have been blamed for several deadly airplane disasters.

Farmers have tried to get rid of starlings by trapping, shooting or poisoning them. They've tried to drive them away with chemical repellents, loud noises and plastic owls. These practices can reduce damage in some circumstances, but they are often expensive to implement.

Two University of Missouri wildlife experts suggest that another approach might include the use of agricultural techniques that make it harder for starlings to nest and forage, thereby reducing the number that hatch each year.

"Starlings are much less of a nuisance in their native Europe. In recent decades, starling populations have actually declined," said MU researcher Walter Wehtje. "The main culprit seems to be a change in agricultural practices that has turned many grazed pastures into hayfields that are too thick and tall for starlings to forage in successfully."

"We are interested in determining if there is a difference in starling nest success around pastures that are grazed continuously with those pastures in which the producer has implemented a rotational or patch-burn grazing system," said Bob Pierce, MU Extension wildlife specialist.

"Starlings like to make nests in and around large areas of closely cropped grass that also provide excellent sites for finding food," Pierce said. "Continuously grazed pastures provide a perfect place for starlings to root in the ground

for worms and bugs, with the added bonus of an all-you-can-eat buffet of cattle feed nearby.

In rotational and patch-burn grazing, on the other hand, cattle munch on grass in any given area only for a limited time. This lets grasses grow tall enough to make it difficult for starlings to forage. As a result, female starlings have to fly farther to find enough food for their young, so they end up spending more time commuting between nest and feeding grounds and less time gathering food.

"Females nesting in areas with less than 50 percent continuously grazed pasture tend to lay fewer eggs and raise fewer young," Pierce said.

Last year, Pierce and Wehtje recruited volunteers and MU Agriculture Experiment Station staff to build, install and monitor 130 starling nest boxes at three sites in the state to see how different grazing and land-management practices affected the breeding success of nearby starlings.

MU's Forage Systems Research Center in Linn County has pastures primarily grazed on a short-rotation basis, while pastures at MU South Farm in Columbia are grazed continuously. Boxes were also placed at the MU Bradford Farm in Columbia to see if starlings would nest around fields of row crops.

"Based upon data gathered during the 2009 breeding season, preliminary observations suggest that fewer starlings attempted to breed at MU's FSRC site than did at South Farm," Pierce said.

In addition, Eastern bluebirds and tree swallows bred successfully at FSRC, while the few breeding attempts by these species at South Farm were unsuccessful. These initial findings suggest that grazing practices have the potential to influence bird breeding success.

"Although we need to increase our sample size and keep the raccoons at bay, I think that this is a promising project and I am looking forward to the 2010 breeding season," Wehtje said.

"This may be another reason for using rotational grazing in Missouri," he added. "Not only does it make good economic sense, it also can make life more difficult for starlings."  $\Delta$

**FMC**

888-59-FMC-AG • FMCCROP.COM

Link Directly To: **FMC**