

# Extension Connection

**AGRICULTURE NEWSLETTER**

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## Study: Combining ear tags, implants stimulates cattle growth

*Research shows large increase in protection against pesky horn flies*



MANHATTAN, Kan. – A Kansas State University study has shown that cattle producers can improve their profits and add another layer of safety

for their herds by using ear tags in combination with growth implants.

Beef cattle specialist Dale Blasi said using the two treatments reduces horn flies, a nuisance that costs the U.S livestock industry approximately \$1 billion in losses each year, according to a recent study from Oklahoma State University.

The Kansas State University study showed that when using the two treatments separately in stocker cattle grazing for 90 days, those animals increased live weight gain by 15 or 16 pounds.

“But when the treatments were used together, “our gains were incredible,” Blasi said.

“We were picking up 30 or 40 pounds of live animal gain relative to doing one or the other alone.”

Though the actual benefit to producers’ profits will vary, at a price of 70-80 cents per pound, Blasi said the added value could be about \$25. “And after you remove the cost of the products, you’re still several dollars ahead.”

Growth implants are used in beef production systems throughout the United States to increase growth efficiency and stimulate the development of lean muscle.

The university’s work was a follow-up to an earlier study in which researchers looked at the effectiveness of ear tags in reducing horn flies, which slow cattle’s growth due the stress and resulting energy loss they cause.

Blasi said the university’s newer research paired growth implants with either the ear tag or an injectable dewormer to see what the potential response would be.

Ear tags contain insecticides that reduce the fly populations and allow the cows to graze stress-free. The Kansas State study showed that cattle with one ear tag gain an additional nine pounds of live weight, and those with two ear tags gained 12 pounds.

A separate study tested the use of growth implants in combination with an injectable dewormer called Long Range, a product that was not known previously to be a deterrent to flies. Blasi and his colleagues used a digital camera and software to count horn flies in a field where cattle were grazing.

“What we observed was a significant decline in the number of flies compared to another product,” he said. “There was a dramatic difference.”

The injectable dewormer provided about 10 weeks of control for horn flies, and a single ear tag provides about eight weeks of protection.

The research was presented recently at Kansas State University's Cattlemen's Day and is available online at [www.asi.k-state.edu/research-and-extension/beef/research-and-extension/2017CattlemensDay-2-24-2017.pdf](http://www.asi.k-state.edu/research-and-extension/beef/research-and-extension/2017CattlemensDay-2-24-2017.pdf)

Blasi also will be talking about this study at the Beef Research Roundup, taking place April 20 at the Western Kansas Agricultural Research Center in Hays. For more information on that event, visit [www.wkarc.org](http://www.wkarc.org).

### **With several cases of avian influenza near Mississippi Flyway, poultry specialist urges vigilance**

*Kansas State University's Scott Beyer gives tips*



MANHATTAN, Kan. – With several cases of avian influenza confirmed in four states near the [Mississippi Flyway](#), Kansas State University's Scott Beyer is urging Kansas poultry producers to be vigilant and take

precautions.

Avian influenza has been confirmed in poultry flocks in Tennessee, Alabama, Kentucky and Georgia, plus on a turkey farm in Wisconsin.

Beyer, a poultry specialist with K-State Research and Extension, said he's been fielding calls from Kansas producers regarding what to watch for and steps they can take to keep their flocks safe.

No avian flu outbreaks have been reported in Kansas so far this year. The outbreaks in the states affected have resulted in the euthanasia of more than 200,000 birds in efforts to keep the virus from spreading.

Avian influenza outbreaks have occurred in both commercial and backyard poultry flocks, he said, mostly near the Mississippi Flyway as wild migratory

waterfowl return to summer loafing areas in the north. Commercial flocks have implemented tight biosecurity programs, but there are risks that owners of small flocks should recognize because most are kept free range.

"With avian flu," Beyer said, "we have to think of an 'outbreak' in the economic sense, because even if one bird is confirmed to have the disease, that whole particular flock, whether it's 10 birds or 300, will be euthanized to try to stop it from spreading."

At highest risk are small flocks that have domesticated waterfowl mixed in with the poultry. These birds will attract and possibly mix with migratory fowl which could easily transfer the infection to the home flock, Beyer said. He offered several tips:

- Keep yourself and your pets out of ponds and away from banks around them. Don't go into places where wild birds roost and feed. If you accidentally step where you shouldn't, don't wear those clothes and shoes around your birds.
- Keep wild birds away from your flock. The biggest potential threats are birds building nests in the barns and birds that steal food from feeders. Don't leave food out overnight in feeders. Birds are attracted to eat from the feeders, as are nightly visitors such as mice, rats, opossums and raccoons, which carry Salmonella and E.coli. Who wants other animals stealing expensive feed anyway?
- Place feed in feeders during the day when poultry are eating, then move it to an inaccessible place overnight. Store feed in rodent-proof containers. Some owners determine how much feed their birds need each day, then fill their feeders with only that much feed each morning so it runs out at the end of the day, leaving the feeders empty.
- If an outbreak and subsequent stop-movement order occur, bird swaps, sales and shows may be closed. This does not mean that birds or chicks cannot be purchased or sold to individuals. It normally refers only to events where birds are

brought together then allowed to return to farms at the end of an event. An example would be selling live poultry at a farmer's market or auction.

The [Centers for Disease Control and Prevention](#) consider human health risk from avian influenza to be low, but Beyer said the risk for poultry, especially in an outbreak of the high-pathogenic form of the virus, can be great.

“This is a good time to remember that keeping a closed flock will help reduce your chances of diseases spreading to your birds,” Beyer said.

More information on avian influenza is available on the U.S. Department of Agriculture's [Animal and Plant Health Inspection Service website](#). K-State Research and Extension has a fact sheet, “Avian Influenza Prevention in Gamebird and Ratite Facilities available online at <http://www.bookstore.ksre.ksu.edu/pubs/MF2114.pdf> or at county or district extension offices (ratites are flightless birds such as ostriches and emus).

### Controlling Grassy Sandbur



Grassy sandbur is the “sticker” plant that looks like a grass. It will often invade thin lawns, especially in dry years. Therefore, the best control for this weed is a thick, healthy lawn. However, if your lawn is thin this spring and grassy

sandbur was a problem last year, use a preemergence herbicide before the sandbur comes up. However, not all preemergence herbicides are effective. The three products that can help minimize grassy sandbur are oryzalin, pendimethalin and prodiamine.

Oryzalin is sold under the trade names of Surflan and Weed Impede. It can be used on all warm-season grasses as well as tall fescue. It should not be used on cool-season grasses other than tall fescue such as Kentucky bluegrass. Apply oryzalin about April 15 when redbud trees approach full bloom.

Pendimethalin is sold commercially as Pendulum as well as several other names. On the homeowner side, it is sold as Scotts Halts. Pendimethalin is best applied as a split application with the first half applied about April 15 and the second about June 1. Alternatively, make the

first application when redbud trees approach full bloom and the second six weeks later.

Prodiamine is sold under the commercial name of Barricade. It is also the active ingredient in a number of homeowner products. It can be used on all of our common lawn grasses. Apply as is done for oryzalin, about April 15 or when redbud trees approach full bloom. Only one application is needed per year.

None of the “weed preventers” will give complete control but each should help. Quinclorac (Drive) can provide some postemergence control especially if the sandbur is in the seedling stage. Quinclorac is also found in a number of combination products that control both broadleaf weeds and crabgrass such as one of the following.

Ortho Weed-B-Gon Max + Crabgrass Control  
Bayer All-in-One Lawn Weed and Crabgrass Killer.  
Monterey Crab-E-Rad Plus  
Fertilome Weed Out with Q  
Trimec Crabgrass Plus Lawn Weed Killer  
Bonide Weed Beater Plus Crabgrass & Broadleaf Weed Killer  
Spectracide Weed Stop for Lawns Plus Crabgrass Killer

Again, the best control for grassy sandbur is a healthy, thick lawn.

Oryzalin is also sold as a combination product with benefin as Green Light Amaze. As with oryzalin alone, it can be used on all warm-season grasses as well as tall fescue. It should not be used on cool-season grasses other than tall fescue such as Kentucky bluegrass. Apply Amaze about April 15 when redbud trees approach full bloom. (Ward Upham, KSRE Rapid Response Specialist)

### Henbit and Chickweed in Lawns



The plant with the little purple flowers that have been showing up in home lawns is called henbit. If you are not sure this is what you have, check the stems. If they are square rather than round, you have henbit. A plant that also is low growing but has round stems and tiny white flowers is chickweed.

Both these plants are winter annuals and start to grow in the fall. They spend the winter as small plants and so most people do not pay much attention to them until they start to flower in the spring. Trying to kill either one at this late stage with a herbicide usually is a waste of time and money. Though plants

may be burned back, they will rarely be killed. So what should you do? Remember, these are winter annuals that will die as soon as the weather turns hot. Keep the lawn mowed until nature takes its course.

However, you can do something next fall that will help next spring. Henbit and chickweed usually germinate about mid-October. Spraying with 2,4-D, Weed-B-Gon, Weed Free Zone, Weed Out, or Trimec in late October to early November can go a long way toward eliminating these plants as they are small and relatively easy to control. Choose a day that is at least 50 degrees F so the young plants are actively growing and will take up the chemical.

Spot treating will probably be needed in the spring (March) to catch the few plants that germinate late. Use Weed Free Zone, Speed Zone, Weed Out, Weed-B-Gon, Trimec, or one of the special henbit herbicides early in the spring before they have put on much growth. (Ward Upham, KSRE Rapid Response Specialist)

### Help for New Vegetable Gardeners



Kansans that are new to vegetable gardening often don't know how much of each crop to plant. K-State Research and Extension has a publication that can help. The "Vegetable

Garden Planting Guide" gives information on the size of planting needed per person and the average crop expected per 100 feet. Also included is a garden calendar highlighting suggested planting dates and expected harvest dates. Crop specific information is detailed including days to germinate, plants or seeds needed per 100 feet of row, depth of planting, spacing within the row and spacing between rows. You can find the publication at your local county extension office or online at:

<http://www.ksre.ksu.edu/bookstore/pubs/mf315.pdf> .

Another, more in-depth publication titled the "Kansas Garden Guide" is also available. This 77-page booklet has sections on planning a garden, composting, improving soil, seeding and planting, garden care, watering, planting gardens for fall production, insect and disease control, container gardening, season extension and harvesting and storing. This is followed by an extensive section on how to grow specific vegetables and herbs. You may order the print publication at

<http://www.ksre.ksu.edu/bookstore/Item.aspx?catId=534&pubId=8219> . This web page also provides a link to a free PDF copy of the same publication. If you don't know the location of your county extension office, see <http://www.ksre.ksu.edu/Map.aspx> (Ward Upham, KSRE Rapid Response Specialist)

### Grow Your Own Food in a Community Garden

For a small fee, you can rent a plot of land to grow food at a community garden! The Finney County Extension Master Gardeners' Community Garden will be available for the fourth year, to anyone interested in having a garden plot. Plot sizes are 10' x 10' and cost is \$20 per plot. At the end of the garden season, \$10 will be refunded when the plot(s) plant compost is cleaned. The primary focus of the Community Garden is to increase and expand access to healthy, fresh foods.

This Community Garden has some unique features to help people desiring a place to garden. Master Gardeners and the Finney County Extension Office will be glad to provide assistance in answering questions about gardening. A limited numbers of tools, hoses and watering equipment are available for gardeners to use in their plots. The Community Garden is located next to the Finney County Extension office, 501 S 9<sup>th</sup> Street in Garden City.

If you are interested in a plot, Registration Forms and Rules and Regulations are available at the Finney County Extension office. Register now and reserve a garden plot or two. Gardening season is here, so don't delay and sign up for a plot before they are all gone.

If you have any questions about the Master Gardeners Community Garden, contact the Finney County Extension Office by phone 620-272-3670 or email [kbarth25@ksu.edu](mailto:kbarth25@ksu.edu).

### Calender

#### **April**

**22<sup>nd</sup>: Small Animal Tagging & Showmanship Clinic**

#### **May**

**8<sup>th</sup>- 9<sup>th</sup>: Small Animal Tagging  
5-7 p.m.**

**19<sup>th</sup>-20<sup>th</sup>: Finney County Spring  
Livestock Show**

**23<sup>rd</sup>: Tractor Safety Training**

**29<sup>th</sup>: Office Closed for Memorial Day**