TICK CONTROL MEASURES

There are approximately 850 different species of ticks in the world. About 100 species are capable of spreading disease or causing economic losses from decreased weight gain or secondary infections. To control them and prevent disease spread, it is important to understand their life cycle.

Life cycle

- Ticks progress through 4 life stages: egg, larva (6 legs), nymph (8 legs), and adult; sometimes each stage takes one year and is on a different host animal.
 - The egg, larval and nymph stages are often very small, making them difficult to see with the naked eye; several would fit on the head of a pin.
 - Adults are often bigger, but can range from a pin head to a nickel in size, depending if they are newly attached or full of blood.
- Each life stage, besides the egg, attaches itself to an animal or human, feeds on blood, then drops off to change or molt (3 host ticks) or remains attached (1 host ticks).
 - It is the blood feeding on different animals that causes disease spread.
- Three-host ticks molt on the ground in grass or areas with abundant vegetation.
 - Nymphs, larvae and adult ticks "quest" or seek out animals by climbing to the top of a blade of grass and latching onto the legs of animals that pass by.

Animals, pastures

- Cattle should be examined regularly for the presence of ticks.
 - Some ticks prefer to attach to the ears of cattle, others will attach to the groin and scrotum, while some can be found around the tail head and anus.
- Dogs and other small mammals can transport ticks and should also be examined.

- To protect against certain species of tick infestation, there are topical products labeled specifically for monthly application in dogs; consult your veterinarian for more details.
- Keep pastures short by grazing or mowing to minimize vegetation where ticks could live.

Acaricides: products that kill ticks

- Many products are available; check with your herd veterinarian or local extension office for approved products in your area.
- Directly applied animal products
 - Many pour-ons or sprays are approved for use on food producing animals (read all label directions and apply accordingly) and are effective against certain types of body ticks.
 - Whole body dips are common for full coverage, but can be expensive and labor intensive.
- Insecticide cattle ear tags
 - Read all labels and apply accordingly (only specifically labeled ear tags are to be used with lactating dairy animals).
 One tag in each ear is recommended for ear tick prevention.
 - Work with your herd veterinarian to select the best impregnated ear tags for your cattle.

Tick removal and identification

- To remove a tick attached to an animal, apply slow steady pressure near its mouthparts with a narrow-tip tweezers.
 - Never squeeze an attached tick. If it is carrying a disease, this could enhance spread by injecting the tick's body fluids into the animal.

 Humans can become infected with some tick spread diseases, so if you find a tick attached to a person, use the same removal technique. Leaving part of the tick embedded in the skin can cause an infection.

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- Place the tick in a sealed container with a small piece of a damp paper towel.
 - Place the container in a sealed bag and give it to your local veterinarian or extension office for identification.
 - To make identification easier, only place the ticks from similar species (cattle, dog, human) into the same container.
 - Identification of ticks is important because they are small, many can look alike and different species spread different diseases.
- It is a violation of state and federal law to use a pesticide in any manner that differs from the product label. Use only according to label directions to avoid meat or milk residue hazards, environmental damage, and animal or human injury.

Tick References:

- D.P. Furman and E.C. Loomis. 1984. The Ticks of California. University of California Publications, Bulletin of the California Insect Survey, Vol. 25. University of California Press, California.
- Kansas Insect Newsletter, Department of Entomology, Kansas State University, Gulf Coast ticks make their presence felt in Kansas accessed November 4, 2005 at http://www. oznet.ksu.edu/dp_entm/extension/ KIN/KIN_2005/kin-8/05ksnew8.htm
- University of Nebraska-Lincoln NebGuide on Controlling Ticks published electronically August 1995 and accessed November 7, 2005 at http://ianrpubs.unl.edu/insects/g1220.htm.