Signs and Symptoms of Ear Ticks in Horses

- Head shaking and rubbing against posts, feeders, trees
- Reluctance to allow horse to be haltered or bridled
  
  Formerly docile horses may pull back and resist when haltered or bridled
- Ticks may be hard to visualize

Species of ear ticks that get into horse’s ears

- Two main ticks will feed in horse ears
  1. Gulf Coast Tick
  2. Spinose Ear Tick

- Gulf Coast Tick [Amblyomma maculatum (Koch)]
  1. Gulf Coast ticks will feed on the margins and pinna of the ear.
  2. The Gulf Coast tick is a three-host tick. As larva and nymph, the Gulf Coast tick is a common pest of ground-inhabiting birds, such as meadowlarks and bobwhite quail, or small rodents. The adults primarily blood feed on cattle. However, a variety of other hosts (dogs, horses, sheep, deer, coyotes and humans) can be parasitized.
  3. This tick has become increasingly abundant in Oklahoma in the last 20 years.
  4. The adults attach to the ears of horses and are most abundant in early April to mid-June.

Figure 1: Gulf Coast Tick female (left) and male (right). Credit: R. Grantham; Oklahoma State University.
1. Spinose ear ticks prefer to feed deep in the ear canal.
2. The spinose ear tick is a common pest of horses throughout Oklahoma. The presence of large numbers can cause severe irritation, inflammation and deafness of the animal. Secondary bacterial infections may cause sloughing of tissue into the ear canal.
3. Larvae and nymphs are the only life stages found in the ears. The nymph is easily recognized by spines on the integument and the peanut shape of the body.
4. Males and females mate on the ground and females lay their eggs under feed bunks, boards and other suitable protected areas. The newly hatched larvae crawl up feed bunks or other objects and await contact with a passing horse.

Figure 2: Spinose tick from a horse’s ear located in Lincoln Co. Oklahoma. Notice the spines on the tick’s body hence the name Spinose. Credit: R. Grantham; Oklahoma State University.
How to see and remove the ticks?

- Your veterinarian may be able to visualize the ticks with an otoscope
- You or your veterinarian may be able to palpate the ticks from the pinna or ear canal
- PROCEED with caution---these ticks can be extremely irritating to the horse and horses may require tranquilization before the ticks can be visualized and removed

*Figure 3: Pulling ear ticks out of a horse’s ear. Credit: E. Giedt; Oklahoma State University.*
Treatment

- As mentioned above, removing the ticks is ideal. After removal of the ticks, it is best to clean the ear with a warm, soapy moist towel.
- If the horse will not allow removal of the ticks or you cannot get all the ticks, consider using a product containing permethrin which is labeled for horses. These come in a variety of formulations including wipe on and spray on products.
- When using spray on products, use caution when applying to avoid direct spray in the horse’s eyes. Be sure to follow the label to prevent misuse of the product.
- Dust, dirt, perspiration, and water shorten protection time, making reapplication a necessity. Horses pick up ticks as they move through infested areas, so treat their legs and underbellies.
- If Spinose ticks are the most prevalent tick, then the horse owner should spray the main loafing shed, feed through area, or barn with appropriate product.

Prevention

- Use tick control products labeled for horses which contain permethrin.
- All ticks crawl up onto the horse usually from the legs and occasionally from the face as animal’s graze.
- Gulf Coast Ticks are common in pastures where there are more trees than open grazing areas. Locate horses away from problem pastures from late-March through mid-June to help prevent large tick populations from getting on horses.