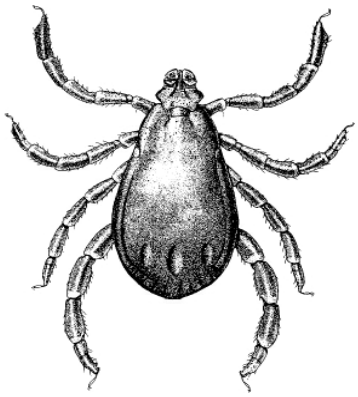
Texas Cooperative EXTENSION
The Texas A&M University System

Controlling Ticks in West Texas

Ticks are one of the most commonly encountered pests in and around the home in West Texas. All ticks are parasites; feeding on the blood of their host animal. Not only are ticks a nuisance but can be a health hazard by transmitting diseases to us and our pets. Understanding their life cycles and behaviors will help in an integrated approach to controlling these pests.

Tick Biology: The most commonly encountered tick in West Texas is the common brown dog tick, *Rhipicephalus sanguineus.* This tick commonly attacks dogs and other animals but rarely attacks man. The brown dog tick, like its' name suggests, is a uniform dark reddish-brown , although the female may possess some lighter markings. Full grown (but not engorged) brown dog ticks are about 1/4in long. Like many of the common ticks found in Texas, the brown dog tick passes through 4 life stages; egg, larva, nymph, and adult. All life stages of ticks, except the egg require a separate blood meal to complete its development, which may require up to 2 or 3 years. Adult females, once engorged with blood, drop from the host and lay several thousand eggs. Larvae soon hatch and climb nearby vegetation or structures (walls, posts, etc.) in wait for passing host animals. Once a host is found the larva attaches to the host and feeds for several days. After feeding the larva drops from the host and molts to the nymph stage. This process is repeated for each stage of the ticks life.



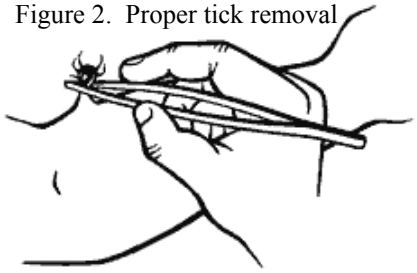
With rising spring temperatures ticks begin coming out from their overwintering sites. If not on a host, brown dog ticks are most frequently encountered near where pets spend most of their time. Like most animals, dogs and cats select favorite resting or lounging places in and out of doors. These areas include dog kennels, sheltered outdoor locations such as under porches or shrubby vegetation, dog runs and indoor resting or sleeping locations. Ticks may also be present even when pets are not. Wild animals frequently carry ticks into areas that provide attractive habitat for them.

Diseases transmitted by ticks: Unfortunately this tick transmits a potentially fatal disease organism to dogs and sometimes cats. This disease is commonly referred to as tick fever. The more technical name for this disease is Canine Ehrlichiosis and is transmitted to the host animal from an infected brown dog tick. The disease organism is a bacterium that infects and kills the animals white blood cells which compromises the animals immune system. Although this disease can be cured through use of specific antibiotics, it is difficult to diagnose because the animal can show numerous symptoms that mimic other illnesses (listlessness, lack of hunger, drinks more water than usual, changes in temperament, and other similar symptoms). The best way to diagnose this disease is through testing the blood for antibodies. This can only be done through your veterinarian. If you suspect that your dog or cat may have ehrlichiosis take your pet to the veterinarian immediately.

Tick removal: The safest and most effective method for tick removal is by using blunt nosed tweezers to clasp the tick as near to the ticks mouthparts as possible then gently pulling the tick from a person or animal. Do not use a hot match, fingernail polish remover or your fingers to remove or kill the tick. Any of these methods could cause the tick to regurgitate into the bite area or to defecate

which increases the chance of infection. Refer to Figure 2 for a n illustration of proper tick removal. Once removed the tick should be deposed of. If there is concern that the tick may be infected with the tick fever disease the tick must be kept alive so it can be tested for the disease organism. The tick can be kept alive by placing it into a small container with moistened tissue paper then placed into the refrigerator. The tick can then be taken to the veterinarian for diagnosis when an appointment is made.

Figure 2. Proper tick removal



Tick control: The most effective way to reduce or eliminate the possibility of tick bites and the diseases they carry is by taking preventative measures. This involves modification of the pets outdoor environment by keeping the lawn mowed and free of tall weeds. If the landscaping provides shady moist habitat with tall plants and shrubs, and is frequented by the pet, then an insecticide treatment may be necessary. All places in the landscape where the pet sleeps or rests should be checked for tick infestations and treated with an insecticide if needed. Bedding material in kennels and dog houses should be inspected or replaced frequently to remove or prevent tick infestations. Tick entry into the home can be reduced by caulking around windows, doors, and gas, waterline, and electrical line entry points into the home. In the home regular vacuuming will remove a substantial number of ticks from carpets and rugs. Indoor bedding areas should be inspected frequently for tick infestations. If bedding is infested it should be throughly cleaned or replaced.

If insecticide treatments are needed treat only areas were the pet spends most of its time and only when ticks are present on the pet or in the landscape or home. Ticks are repelled by direct sunlight, so broadcast insecticide treatments over the entire lawn are not necessary. Insecticide treatments around the perimeter of the home can help reduce the possibility of ticks coming into the home. Remember to allow any insecticide application to dry thoroughly before allowing people or pets access to the treated area. Numerous effective insecticides are available to the homeowner that can be used indoors, outdoors, and on the pet for tick control. See table 1 for a list of some of the more common insecticides for controlling ticks.

Common effective insecticides for controlling ticks		
Trade Name	**Active Ingredients**	**Area of Use**
BioSpot	Permethrin*, Pyriproxyfen	pet treatment
Frontline Top Spot	Fipronyl	pet treatment
Preventic Collars	Amitraz	pet treatment
Sevin	Carbaryl	outdoor
Ortho Diazinon Ultra	Diazinon	outdoor
Ortho Home Defense	Bifenthrin*	indoor/outdoor
Eliminator	Permethrin*	outdoor
Spectracide Bug Stop	Tralomethrin*	indoor/outdoor

Trade names are registered® or trade marked™
Use liquid rather than granular formulations for best outdoor tick control
*Pyrethroid insecticides repel as well as kill ticks

Insecticide labels are subject to change, and changes may have occurred since this publication was printed. The pesticide USER is always responsible for the effects of pesticides on his own plants, animals or household items, as well as problems caused by pesticides drifting to other properties. Always read and follow the label instructions.