

## TICKS: INFORMATION FOR PET OWNERS

### What are ticks?

Ticks are blood sucking parasites related to spiders. Adults have a pointed head, a body and four pairs of legs. Mouth parts, which possess a barbed structure, protrude from the head. A tick's body is capable of considerable distension to accommodate the blood that the tick sucks from the host animal it infests.

### The tick lifecycle

- Hungry ticks position themselves on vegetation and attach to passing animals.
- The mouthparts pierce the animal's skin and the barbed structure is then used to anchor the tick to the animal for several days.
- A tick will then feed over several days, sucking blood and passing saliva back into the host.
- Once a female tick is fully fed or engorged, she drops off the host animal to lay her thousands of eggs in the environment.
- Tiny larval ticks (1mm in size) that hatch from the eggs have to find a host on which to feed. They then moult to the nymph stage which also feeds on blood.
- After a second moult, the tick develops into a male or female approx. 4-6 mm in size. Only the female takes blood to any extent and they can reach the size of a small grape.

### Tick species and where they are found:

#### In the UK

- The species of tick most likely to infest dogs in the UK is *Ixodes ricinus*. It is found in woodland and rough upland regions and is well known in deer parks. The immature stages of this tick often infest small mammals or birds, but the adult stages tend to attach to larger animals such as deer, sheep or dogs.
- In parks and urban environments it is often the hedgehog tick, *Ixodes hexagonus* that is found on dogs and cats. As its name suggests, it is related to the sheep tick and it is a specialised skill to tell the two species apart.

## In Europe

- *Dermaacentor reticulatus* is the so-called **ornate tick**; its back is covered in brown and cream patterning. This tick occurs in some parts of England but is predominantly found across Continental Europe from southern Germany southwards (see map).
- *Rhipicephalus sanguineus* is also known as the **brown dog tick**. It occurs worldwide and is found in more southern areas of Europe. It is typically associated with dogs and their accommodation. It can survive and replicate (breed) indoors in the UK. This is of concern because from 1<sup>st</sup> January 2012 under the new Pet Travel Scheme rules there is no longer a compulsory requirement to treat cats or dogs with tick treatments before entering the UK. This is likely to result in increased numbers of this tick entering the country and the possible wide spread establishment of tick populations principally in urban areas.
- *Ixodes ricinus* is common in more northern areas of Europe in particular.

## Why I should I worry about ticks?

- Ticks can cause localised irritation to pets and, if they are scratched off and the mouthparts left behind, small abscesses can result.
- Ticks can spread diseases such as
  - **Lyme Disease** caused by the bacterium *Borrelia burgdorferi*. This bacterium can affect both people and animals. Lyme disease causes flu like symptoms on initial infection. Left untreated, muscles, joints, the heart and nervous system can become affected. Lyme disease is present in the UK.
  - **Babesiosis**, carried mainly by the foreign or 'exotic' species of ticks. Babesia are microscopic parasites that live in red blood cells and can cause serious illness in both animals and people. In the acute form of the disease, Babesia cause sudden rupture of red blood cells resulting in a life threatening form of anaemia. In the subacute or chronic forms, animals are anaemic, lethargic and debilitated. Diagnostic tests often show kidney and liver damage caused by Babesia.
- Tick-borne diseases such as that caused by Babesia are more likely to be acquired after a tick has been attached for more than 24 hours. Daily checking for ticks and removing them promptly will greatly reduce the chance of ticks spreading tick borne diseases to your pet.

### **How can I tell if my pet has ticks?**

- Ticks attach to an animal by embedding their mouthparts into the skin. The size of a small bean, they often look like an immobile growth or wart attached to the pet.
- As they continue to suck blood, the body of the tick expands. Many owners only notice a tick when it has already been feeding for several days and has engorged to full size.
- An engorged tick will often have a grey or brown body, larval stages (hardly ever seen) or ticks that are not yet engorged look lighter in colour, sometimes white.
- Ticks commonly attach to an animal's head and legs but they can be found anywhere on an animal's body.

### **What should I do if I find a tick on my pet?**

Use a proprietary 'tick remover' that enables the tick to be removed without the embedded mouth parts being left behind to cause a small abscess. It is a good idea to have one of these tick removers as part of a first aid box for your pet.

### **Tick control**

- Check your pet on a daily basis for ticks and remove them before they have been attached for any length of time.
- Consider using a tick control product on a regular basis to reduce the number of ticks that can establish a hold on your pet and to reduce the chances of any ticks that do attach from spreading tick-borne diseases.

Please note that some tick control products can be toxic to cats. ESCCAP UK therefore advises pet owners to talk to their vet about using regular tick control products to ensure they are used correctly and safely and part of a parasite control programme tailored to the individual pet and its specific lifestyle factors.