

# Help us record ticks



If you find ticks on your pets or on your body, please send us a photo of the tick or contact us if you wish to provide specimens.

Please scan for more information



Tick - Tick



You can contact us via email: [thethreemosquiteers@gmail.com](mailto:thethreemosquiteers@gmail.com) (or visit our website)



Website: [martinoulab.weebly.com/tick---tick](http://martinoulab.weebly.com/tick---tick)



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UK CEH



PRAGMATIC



ELGO - DIMITRA

# The Three Mosquiteers learn about ticks



Hi, I am Mo



Chubby

Hi, I am Ski. Together we will find out more about ticks



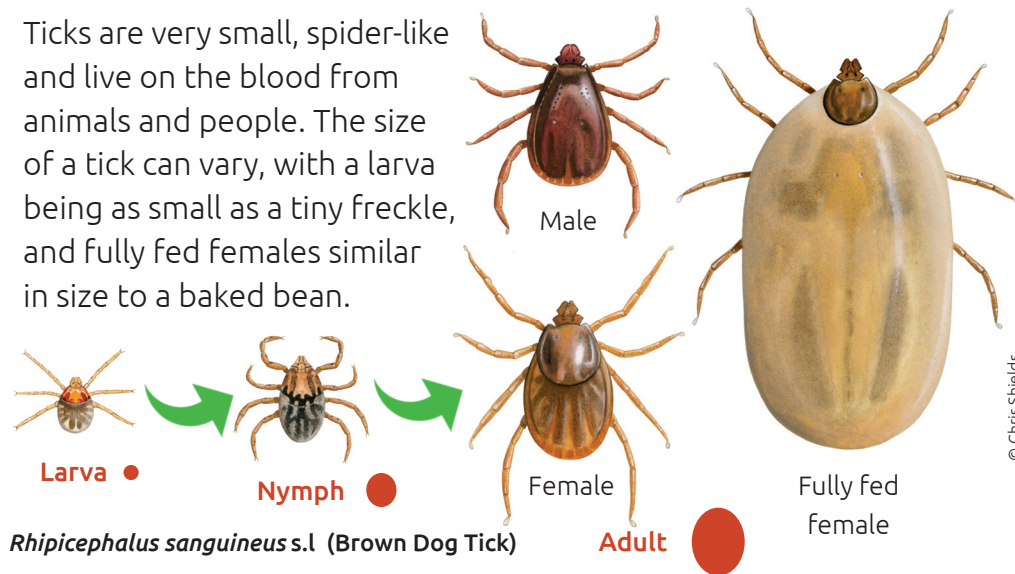
Meow



Hi, I am Do. Please help us record ticks by joining our citizen science programme Tick-Tick



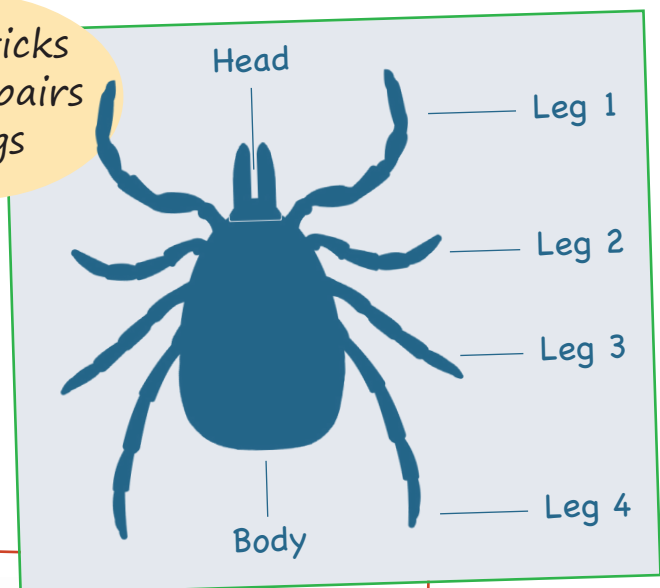
Ticks are very small, spider-like and live on the blood from animals and people. The size of a tick can vary, with a larva being as small as a tiny freckle, and fully fed females similar in size to a baked bean.



© Chris Shields



Adult ticks have 4 pairs of legs

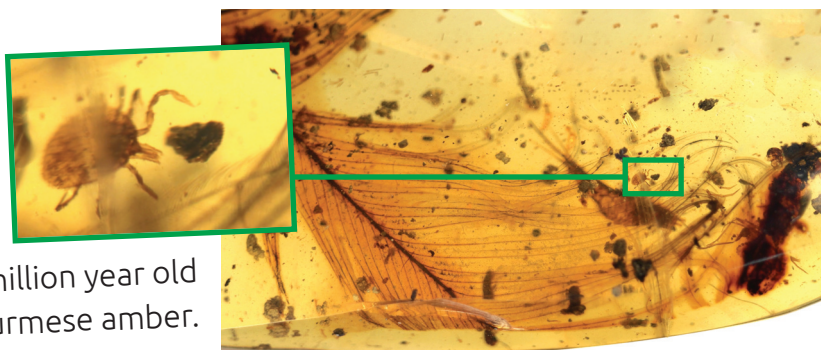


Ticks are classified into two distinct categories: **hard ticks** (Family: Ixodidae) and **soft ticks** (Family: Argasidae)

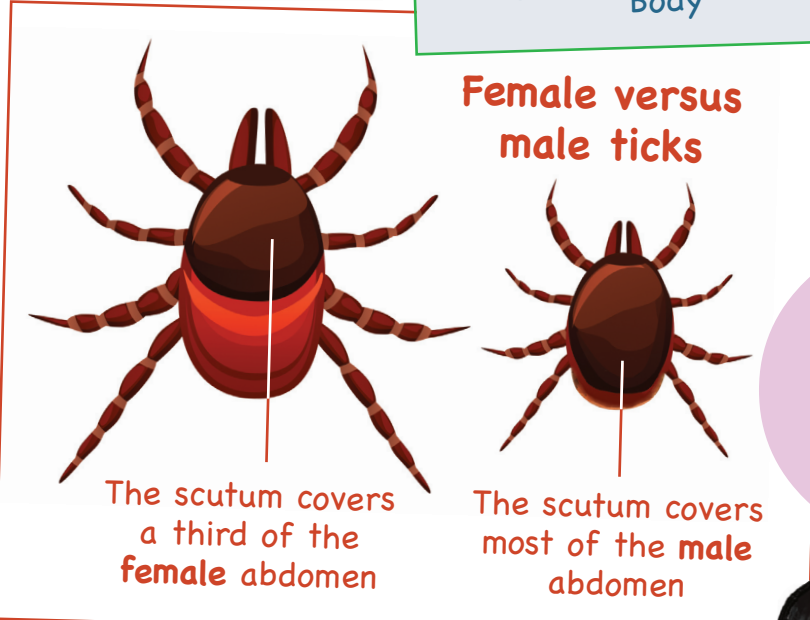
Ticks diverged from other Acari millions of years ago, probably as parasites of the ancestors of modern reptiles and amphibians.



A hard tick found in a 99 million year old Burmese amber.



Peñalver et al., 2017. Nat Commun 8, 1924 (2017). <https://doi.org/10.1038/s41467-017-01550-z>



Female versus male ticks

© ArtAdi/Shutterstock

Different tick species transmit different pathogens

There are about 900 species of ticks worldwide but only a few species bite and transmit pathogens, such as bacteria, parasites and viruses. Some of the diseases they cause are Rickettsiosis, Anaplasmosis, Lyme disease/Borreliosis and Crimean-Congo haemorrhagic fever.



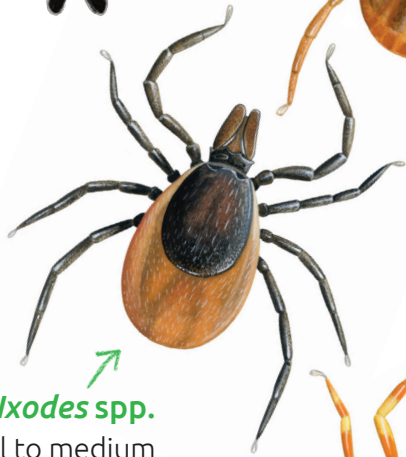


# Adult ticks - the different genera and how to identify them



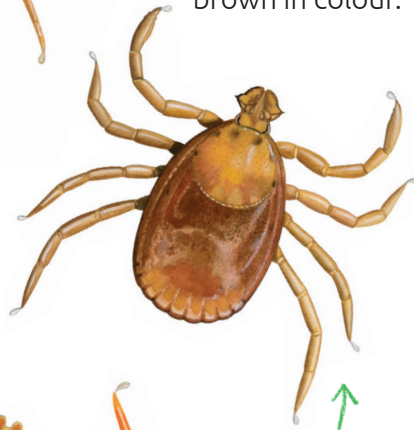
## *Rhipicephalus* spp.

Small to medium size. Short head. Hexagonal head base. Brownish yellow to reddish brown in colour.



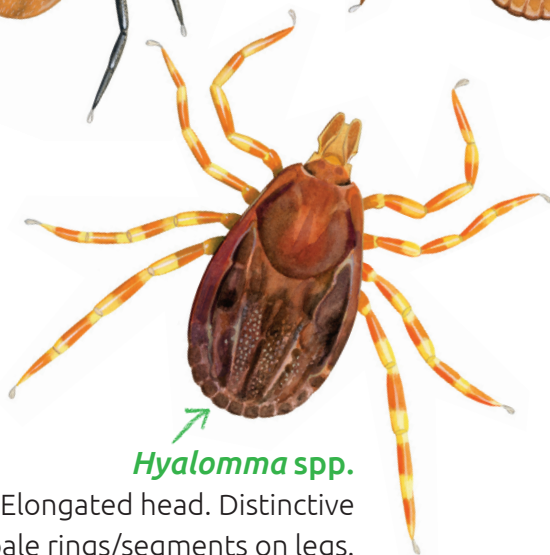
## *Ixodes* spp.

Small to medium size. Elongated head. Deep brown colour.



## *Haemaphysalis* spp.

Small to medium size. Short head wider in the middle. Rectangular head base.



## *Hyalomma* spp.

Large size. Elongated head. Distinctive pale rings/segments on legs.



© Chris Shields



# Tick life habits



Ticks survive in a wide variety of habitats depending on the species, from completely dry to humid areas.

We encounter them amidst dry/wet leaves and grass or on the ground in forests, meadows, shrubs, and scrublands, as well as within agricultural fields, urban parks, and even home gardens.

Ticks are active throughout the year, but mainly in spring, summer and autumn.

Ticks don't fly or jump. They wait on vegetation for a host to pass by, and then climb on. Some species also hunt actively



They attach themselves to the skin and feed on blood for several days, increasing their weight up to 100 times, before falling back to the ground



Joseph Higgins/Unsplash



# The tick life cycle

Ticks go through 4 life stages:

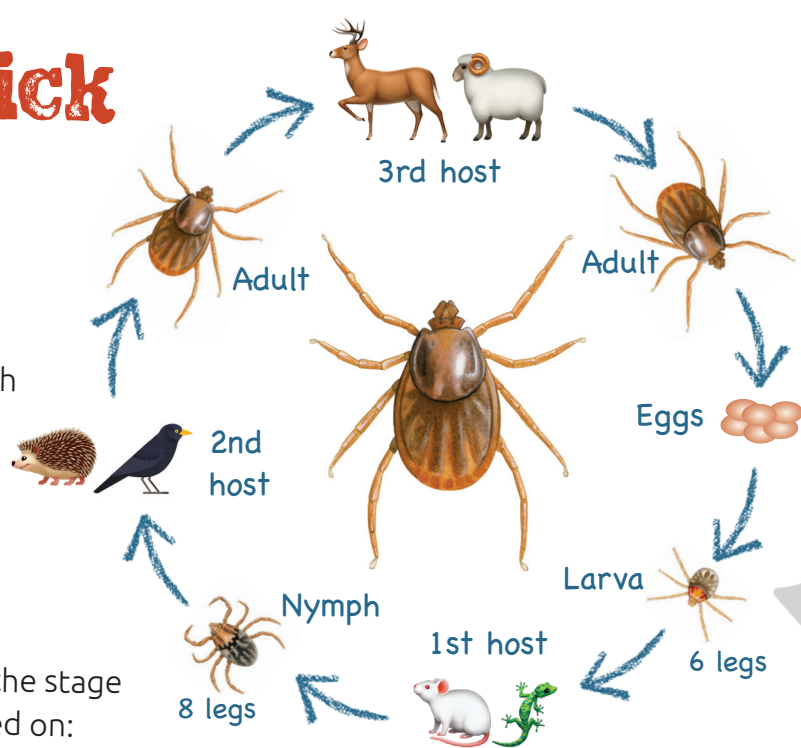
- Egg
- Larva
- Nymph
- Adult

Depending on the stage ticks usually feed on:

**1st and 2nd hosts:** small to medium sized animals (birds, reptiles, small-to medium sized mammals).

**3rd hosts:** large animals (production animals, dogs, foxes, cats, mouflons).

Their life cycle lasts months to years and a meal is needed at each stage.



In the Mediterranean all stages of the most common tick *Rhipicephalus sanguineus* s.l. are found on dogs



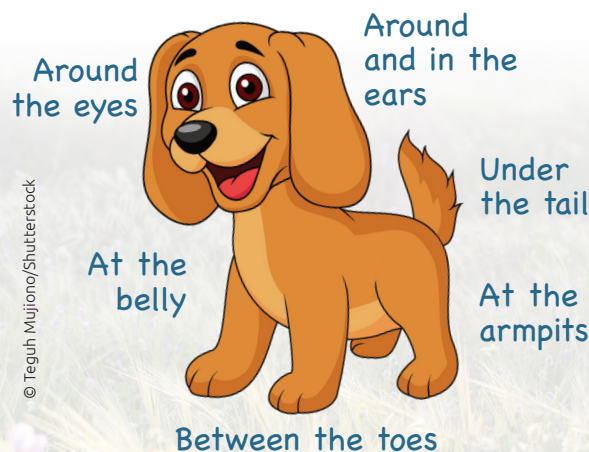
# Protect yourself and your pets

Tick-borne pathogens utilize animals, ticks, or both as natural reservoirs and circulate between them. Humans can be infected incidentally in rare cases when a tick, typically an adult or nymph, carries the pathogen and is not promptly removed.

Wear long, light coloured clothes and use insect repellent on exposed body areas when engaging in outdoor activities

Check for ticks on clothes and body outdoors and after returning home. Shower afterwards

Use a tick treatment on your pets that either kills or repels ticks. Check them regularly for ticks.



**If you are bitten by a tick...** carefully position a pair of tweezers with pointed ends near the skin and gently pull the tick upward.

