

# urban antics

by John Hunter

## Lice, mites, ticks and crosses

From the dusty, dark inner sanctum of a historic Perth boys high school, geography teacher Barney Elliot was again the stickler for absurd correctness in his tests. This particular day in the 50s, I stared in disbelief at the plague of red crosses on my pad when this tiny 'thing' scuttled from the binding and through the minefield of marks to disappear in the cracks of a dilapidated desktop. What could be so small that it could barely be seen and, more intriguing, how many thousands of smaller creatures could I not see?

With the help of a magnifying glass, it was later determined that living among the dust, papers and grotty refuse in our desks, in those years, were book lice. If you want to find these inconspicuous, soft-bodied insects today, they can be found in houses, on trees, and under bark and stones, and generally feed on fungi, lichens, pollen and other vegetable matter.

There are two other forms: the biting lice, with modified mouthparts that bite or suck blood and live in the feathers of birds, and the hair and fur of mammals; and the dreaded sucking lice—blood feeders with radically reorganised mouthparts—the most notorious being the head and body lice of humans.

As the months become warmer, members of another parasitic group—mites and ticks—will radiate to new territories and expand their numbers. These ectoparasites live directly on the surface of hosts and feed on their body juices.

Mites, and their cousins the ticks, are tiny arthropods of a special kind. Relatives of the spiders, they are often incorrectly called insects, but are nevertheless of the order



Arcarina, by far the most numerous and diversified of all the arachnid orders. More than 15,000 species are now known to science and this probably represents only a fraction of the world fauna. They include terrestrial and aquatic forms, and a large number parasitise plants and animals.

Ticks and mites look much alike in body structure, but ticks are larger and only live on animal fluids. However, some mites feed on plant juices and tissues, on decaying matter, and on small insects and other mites. There are few traces of the external body segmentation typical of arachnids in these creatures and quite some differences in mouthparts and limbs. For example, the burrower types can be smooth skinned and have small stumps for legs, while those that hang on can be bristly and have hook-like appendages.

The animal most likely to cause concern in the coming months, as one wanders through national parks and other bush

reserves of the Darling Range and Swan Coastal Plain, is the kangaroo tick (*Amblyomma triguttatum*).

Near Perth, ticks are usually found in bushy areas, where there is some moisture around, usually a reasonable amount of leaf litter and the presence of macropods, rodents and even bobtail skinks. Adult ticks generally mate on the host, and the female, when fully engorged with blood, drops to the ground and lays thousands of eggs in a single batch. The larvae hatch with three pairs of legs, whereas subsequent stages of nymphs and adults have four pairs. The larvae are quite active and, while they can survive for many months without feeding, climb vegetation to drop on any unsuspecting host and so start the cycle once more.

Ticks should not be taken lightly as their mouthparts can easily break off in the bite and cause infection. They must be removed from the skin with as little trauma as possible and antiseptic applied to the wound.

### DID YOU KNOW?

- Ticks prefer body hot spots like armpits and the groin area. Check as soon as possible or, better still, shower with a friend.
- There are about 60 species of tick in Australia. Some in the eastern states cause paralysis to pets, while others elsewhere in the world have caused chronic arthritis and nerve disorders.
- Before venturing into infested country, it is worth spraying your clothes and exposed skin with an insect repellent.

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