

ECONOMIC VALUE OF BIODIVERSITY

NATURAL PEST CONTROL

IMAGINE at least 14 spider species, lizards and frogs being the main insect control method in a commercial blueberry orchard! *Land for Wildlife* members Greg and Susan Luke are the major blueberry producers in the south coast region. After netting the orchard to keep birds out, they noticed a rapid increase in the number of spider webs in amongst the blueberry bushes. Closer examination revealed at least 14 different kinds of spiders that have made their home in the orchard. Along with the lizard and frog populations all the necessary insect control on the orchard is being carried out by our wildlife.

Sue and Greg purchased their 24 ha property along Eden Rd on the Nullaki Peninsula south of Denmark in 1983. The property was uncleared, and included a paperbark wetland, peppermint/sheoak scrubland and karri/bullich woodland. They built a house which looks northwards over Young's Lake, which is called 'Kooriup Lake' by older residents and means 'place of frogs'. From the verandah they do much of their bird watching, contributing to the Australian Bird Atlas project.

Greg, who has worked extensively with AGWEST, has a

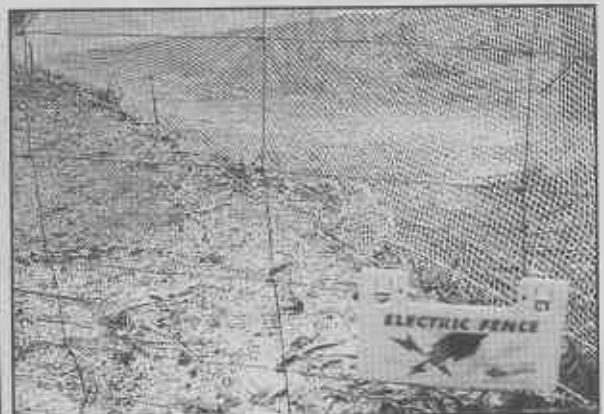
strong interest in soil science. Greg and Susan had specifically been looking for a property with acid soils and plentiful underground water where they could grow blueberries. Examination of topography and soil maps of the south coast showed that the Nullaki Peninsula area had a dominance of old parabolic coastal dunes which have fairly acidic soils and a good underground water supply. The Lukes went ahead, cleared a 3 ha area and installed a blueberry orchard.

As the orchard has grown, the Lukes are learning more and more about the plants. Some of the insects that pollinate blueberries include honeybees and native wasps. They have also found that one of the small local mammals, the quenda, has no respect for man's bird protection endeavours, and can rip holes in the bird netting. This expensive activity had to be managed by installing a 'miniature' 3-strand electric fence round the base of the main fence to keep the quendas away from the netting!

In the peak season summer months, the smell of blueberry jam wafts out of the Luke's kitchen as Susan tries to keep up with public demand. The shop next to the orchard sells a wonderful array of blueberry produce - jam, muffins, icecream and even wine - and these are also sold to local and state markets. Tourists are given the option of collecting their own blueberries, which gives them a delightful close-up experience with the spiders - many a nervous shriek is heard from the orchard! Susan would welcome the assistance of a 'spider person' to visit their "Eden Gate" property to confirm the identity of the resident orchard spiders she has listed. Any takers?

- common crab spider
- giant huntsman
- great garden spider
- red-backed spider
- southern lace weaver
- violin spider
- mosquito catcher
- decoy orb weaver
- malabe orb weaver
- brown widow spider
- glass house spider
- daddy long legs
- Australian trapdoor spider

Sylvia Leighton



The miniature electric fence around the outer edge of the netting to deter the bandicoots.

Orchard in the bush