

The wonders of the Kimberley

A glimpse at its unique environment. *'The importance of ants'* (by Brian Kane)



Ant colonies can provide us with a model of how a community should work. They thrive on cooperation, division of labour and a well-developed communication system which has allowed them to utilise their environment in ways approached by few other animals. Endless lines of ants create bare highways across the pindan as they tirelessly work even on the hottest Kimberley days. While passing each other they stop only momentarily in acknowledgment before continuing on their busy schedule.

The ant fauna of Australia is large and diverse with 15% of the known world species and their role is to carry out important ecosystem functions such as nutrient cycling and seed dispersal. A typical colony contains an egg-laying queen, male ants and an army of female workers who are responsible for the nest construction and maintenance, foraging, tending the queen and for nest defense. The female workers are sterile and do not lay eggs, while queens are generally similar to the workers except they have larger bodies.

The majority of ants are predators or scavengers, collecting a wide range of prey including other insects and seeds. Adult ants feed exclusively on liquid foods. They collect these liquids from their prey and store it in the upper part of their digestive system. Upon returning to the nest the workers squeeze through a small entrance hole and proceed to regurgitate a portion of this stored fluid to other workers.



(photo – BK)

Ants can cause problems primarily when they forage in buildings for food or water and when they construct nests in buildings and gardens. A few species will occasionally attack electrical wiring, apparently being attracted to either the insulation or the magnetic fields produced by the wires. In these situations extensive damage can occur.

Ant communities change significantly when environmental conditions are altered by such things as bush fires. As a consequence, the monitoring of the state of ant communities has become important in making decisions about managing the environment and ecosystems and in determining priorities with regard to conservation and sustainable use.

Further information: BK's Kimberley nature web site:
<http://www.stmarysbroome.wa.edu.au/home/nature/aaopen.html>

