

## OPINION....?



It has been suggested that a regular 'Opinion' page be started in the newsletter. The following article "Endangered Species : are they worth saving?" has been submitted by Andrew Burbidge as a first in this series. He was asked to write this for "Australian Geographic".

The success of the column relies heavily on you - the reader - to submit your "Opinion". What we are after is one page articles from staff on subjects relevant to research in CALM.

All worthy "Opinions" will be published so please use this opportunity to express your views.

'Ed'

### ENDANGERED SPECIES: ARE THEY WORTH SAVING?

by Andrew A Burbidge

**T**wenty-five years ago I started research that I hoped would lead to saving Australia's most endangered vertebrate animal - the Western Swamp Tortoise - from extinction. Since then I have been associated with many other projects to protect endangered species. Some of the projects, such as the conservation of the Noisy Scrub-bird, have been highly successful. Others have yet to attain success - there are now fewer than 50 Western Swamp Tortoises and its only hope is captive breeding.

**S**aving endangered species costs money. Is it worth it? Society makes many demands on Governments, so conservation has to compete for funds with other worthy projects. Are endangered species worth saving, especially if they are of no apparent economic benefit to humans?

I can think of four main arguments for the preservation of species.

**T**he first is that simple compassion demands their preservation. Compassion develops from the view that other species have a right to exist; the needs and desires of humans should not be the only basis for ethical decisions.

**T**he second argument is based on aesthetics. Species should be preserved because of their beauty, symbolic value or intrinsic interest. Most people would feel a loss if banksias, butterflies and honeyeaters (for example), and the wild places in which they live, disappeared.

**T**he third is based on economics. The unique Australian fauna and flora attract tourists. Plants, animals and micro-organisms provide all our food, and almost all our medicines and drugs. They also provide renewable resources such as fuel, building materials, paper and leather. So far we have utilized only a minute proportion of the potential that exists in nature. Many biological resources, including species considered "useless" today, will be found to have new values in the future. Clearly, extinctions reduce our options.

**T**he fourth argument is that other species are vital components of ecosystems that provide us with indispensable free services - the life-support systems of our planet. Other species provide the oxygen we breathe, maintain the quality of the atmosphere, control and ameliorate the climate, regulate freshwater supplies, generate and maintain

the topsoil, dispose of wastes, generate and recycle nutrients, control pests and diseases, pollinate crops and provide a genetic store from which we can benefit in the future.

**B**ut do the rarer species contribute to the provision of life-support systems? Some biologists argue that conservation action should be aimed at the "keystone" species, species which, if removed, will lead to the collapse or partial collapse of an ecosystem. Sometimes rare species are also keystone species. Another of their values is that they allow ecosystems to recover from disturbances - today's rare components may be tomorrow's keystone species as conditions change, and change in the near future is likely to be rapid. Therefore, the loss of species that are rare today may have significant detrimental effects in the future.

I ncreasing rates of extinction world-wide are part of a larger problem - we are getting out of balance with our environment. Humans have tended to regard the environment as limitless and for 99% of our history that view was justifiable. Now, increasing human population and improving technologies mean that we assail the environment in ways that it cannot sustain.

I believe that our attitude to endangered species reflects our attitude to the environment as a whole. If we continue to allow other species to disappear then we will probably allow the world environment to degrade until it can no longer sustain us. Endangered species are like the coalminer's canary.

O nce the challenge was to conquer and subdue the environment. Now the challenge is to learn to live in harmony with it. This will require both a change in attitude and the development of special skills. It is not too late - the signs of change are all around us - but the battle is far from won.

