

[From: *Environment Tobago Newsletter* (Scarborough) 1(3):7, 2007]

UNDER THE SHADE OF A COOLIBAH TREE

Review of:

Barry P. Moore 1978. *Life on Forty Acres*. Faringdon: E. Classey 184 pp.
[Ninth in a series on "naturalist-in" books.]

Barry Moore was born in England in 1925, where he did his university degrees. He emigrated to Australia in 1958, where he had a successful career as a research chemist. In 1968 he bought a badly overgrazed 40-acre (16-ha) plot in the country outside of Canberra, named it Calosoma after a genus of conspicuous ground beetles (Carabidae), and set out to restore it.

This attractive book is the account of Moore's first eight years at Calosoma, his observations of plants and animals, and his experiences in restoration ecology. It is illustrated with many of the author's drawings of plants and especially animals. The prose is sometimes rather belaboured, but one easily overlooks this amid the righteous material.

At about 35°S, the area around Canberra lies between those latitudes with pronounced summer rains and those with winter rains. Annual rainfall is within the normal range for Trinidad & Tobago, but with a great deal of yearly variation and no regular seasonality. Rainless weeks are uncommon, and it is rare to go as long as two or three weeks with no rain at all. Still, occasional severe droughts are an important environmental factor. Allied with this is the danger of wildfires, as we occasionally hear in news from Australia.

In such circumstances, one would expect the native biota to show marked adaptations to the possibility of fire, and this is an important theme in the book. Eucalypts, in particular, burn readily but also regenerate well after fire. Some plants are even dependent on periodic burning of their habitat in order to reproduce. At the same time, human activities have increased the incidence and severity of fires, so that it is no longer entirely a natural phenomenon.

There is more to restoration ecology than protecting the land from further degradation and letting it heal itself. Moore listed the native plants from the area and used this as a guide in replanting. CSIRO, Australia's national research administration, had a field station adjoining his property, so that he had the benefit of expert advice. In addition, he actively removed introduced weeds and struggled to keep the numbers of that great pest of Australia's farmlands, the European rabbit, in check.

There is much in this book about native wildflowers and when they appear, with attention to scientific names. The core of Moore's botany, though, is the chapter on "The Noble Gum" devoted to eucalypts. This group of over 700 species of trees and shrubs -- most in the genus *Eucalyptus* is almost entirely native to Australia. They form the dominant vegetation over most of the continent and in a wide range of climatic conditions.

Eucalypts tend to monopolize sunlight and soil water, and they litter the soil surface with their leathery dead leaves and bark, which inhibit the growth of other plants. For these reasons, they account for most of the native forest. Even so, they are almost never found in pure stands but with several species intermingled. Moore found seven species on Calosoma, with another five close by.

Aside from eucalypts, marsupials are the group that springs to mind as characteristic of Australia. The gray kangaroo, *Macropus giganteus*, was common in Calosoma and the surrounding area. When Moore first moved there, he had a

considerable struggle against poaching. One night, though, a hunter was shot dead by another, which sort of dampened their enthusiasm. It puts one in mind of the marvelous scene in *Crocodile Dundee* in which a kangaroo shoots back at a group of hunters.

There are engaging remarks on some of the other mammals, especially two species of marsupial mice, *Antechinus flavipes* and *A. stuarti*. And -- most wonderful of all -- the short-beaked echidna *Tachyglossus aculeatus*, one of just five living species of monotreme mammals in the world, was fairly common in the area.

We also find chapters on birds, herptiles and insects. The latter is rather narrowly conceived. It starts out with several pages on butterflies, a rather obvious choice, before turning to the group that really interests Moore: beetles. Even these are treated in a rather mundane fashion, so that if there is anything extraordinary about the beetle fauna of Australia or the Calosoma area it is not revealed. Various other orders are passed over in rather perfunctory fashion, but what really annoyed me was the treatment of termites. Australia is remarkable for its mound-building termites, yet in two pages on this order no particular genera or species are mentioned, and next to nothing is said about their nests.

The last chapter is about the uncertain future of the environment in and around Calosoma.

Christopher K. Starr
Dept of Life Sciences
University of the West Indies