

Marine Conservation

THIS issue of *Pacific Conservation Biology* is devoted to marine conservation. There are several reasons for this.

First, and probably most important, the area of estuaries, coastal waters and open ocean in the Pacific Region vastly exceeds the area of land, yet we hear very little about the conservation and management of marine resources. Almost all the papers submitted to *Pacific Conservation Biology*, for example, are concerned with the terrestrial environment. I hope that by devoting an issue to conservation biology others will be encouraged to comment on or submit papers concerning marine conservation biology.

Second, 1998 was the "Year of the Ocean" and Pat Hutching's Edith Cowan University Research Lecture offered an overview of marine conservation issues that will hopefully extend the "year" to a "century". For people living alongside and frequently surrounded by the Pacific Ocean nothing could be more appropriate or timely. We enter the new century confronted by

the reality of global warming, rising sea levels and plunging stocks of marine fisheries.

Third, and not least, the 1998 Symposium of the Society of Conservation Biology at Macquarie University in Sydney, Australia hosted a very good symposium on marine seagrass conservation. The papers in this symposium go beyond the normal boundaries of the Pacific Region, but one could argue that Planet Earth is one ocean and bunch of islands. Seagrass conservation and management is especially important to people living in the Pacific and it seemed especially relevant to me to publish a symposium on seagrass conservation biology in *Pacific Conservation Biology*.

Paul Lavery, a noted seagrass ecologist, has written the first guest editorial for *Pacific Conservation Biology*. I plan to include such editorials as regular features and invite readers to indicate an interest in being a guest editorial writer.

HARRY F. RECHER

Guest Editorial

Marine Management: Marine Conservation

THE research papers in this volume highlight some of the major issues in marine conservation and offer some exciting insights into future directions for research and management. It is particularly pleasing that the issue focuses on seagrasses, a component of marine biodiversity that is well recognized and with profound ecological significance, but has suffered widespread decline in its distribution over the past half century. The absence of any accurate inventory of seagrass resources makes it difficult to accurately assess the cumulative impact of human activity on them. However, the need to conserve seagrasses is well recognized and it is exciting to see the significant advances being made in bringing conservation biology techniques to seagrass research. The work of Waycott and Kenworthy (this issue) is clearly showing dramatic differences in the life-history strategies, genetic diversity and population structure of different seagrasses. It suggests that seagrasses are far from the homogenous organism that they seem to have been viewed as up until now. This also supports findings elsewhere which suggest that many of the classic

paradigms regarding seagrass biology and ecology are based on inappropriate generalizations from a few species. For example, the work of Paling and others (in this issue) challenges the generally held view that we are unlikely to be able to transplant temperate species of seagrass back into disturbed areas.

Marine managers, particularly in Australia, have been well aware of the benefits of pursuing habitat-based conservation for some time. However, with the current push to establish a comprehensive and representative marine reserves system, we are forced to question whether the presence of a habitat type in a marine reserve is an adequate strategy. As Waycott shows in her paper, simply ensuring that a seagrass habitat is included in a marine reserve does not ensure that the genetic or population diversity is captured. This may seem a well-trodden path in terrestrial conservation, but marine managers have been able to largely ignore the issue on the basis of an almost complete dearth of information on life-history strategies and population structure of marine plants. The work on seagrasses in this volume