4th Annual Heceta Head Coastal Conference

"Oregon's Ocean: Changes & Consequences"

Florence Events Center ~ October 24-25, 2008

SUMMARY of CONFERENCE PROCEEDINGS

Master of Ceremonies: Craig McMicken, Chairman, Heceta Head Coastal Conference, Inc.

Friday, October 24

"Marine Reserves: The New Zealand Experience" [This Abstract combines this Lecture and the Keynote Address]

Dr. W. J. Ballantine, Leigh Marine Laboratory, University of Auckland, Warkworth, New Zealand

Highly-protected Marine Reserves are areas of the sea in which human disturbances are minimized so that the full natural biological diversity is maintained or, more often, allowed to recover to a more natural state.

Europe has very few Marine Reserves, they are very small and almost all are in the Mediterranean. There are at present no official plans to create effective systems of Marine Reserves.

Europe has many so-called Marine Protected Areas (MPAs). These are marine areas with some extra regulations or planning procedures. MPAs are user-oriented, knowledge-based, locality-dependent, problem-solving extensions of standard marine planning and management.

Marine Reserves are quite different. All extractive and potentially-disturbing human activities are prohibited. The burden of proof is reversed; no evidence of damage or danger to particular species or habitats is required; all marine life is protected on principle.

The concept of Marine Reserves is simple and practical, but because it is new, different and additional to existing marine management, the idea is seen by many as revolutionary.

Basic biological principles and practical experience in many countries make it clear that Marine Reserves are important to science and education, essential for conservation, and useful in resource management. These features apply in all regions and ecosystems. They are independent of climate, biogeography, current human activities, and the present management. Representative and viable systems of Marine Reserves are needed in all regions.

Fishing and other human disturbances have been widespread and intensive for so long that it is very difficult to predict the stages of recovery that occur in Marine Reserves. Furthermore, while some features change rapidly (e.g. numbers of previously targeted species), recovery continues for a long time (e.g. 5th and 5th order trophic and structural changes after >25 years).

None of this alters the fact that in scientific terms, Marine Reserves are controls not manipulations. Such controls are required if scientists are to understand the intrinsic processes and obtain data that are not confounded by human activities (e.g. separating natural variation from fishing effects).

No significant progress will be made to establish Marine Reserves until scientists speak out strongly and clearly on the issue. We consider it is part of our professional duty as marine biologists to state publicly and frequently the need for a representative, replicated, networked and sustainable system of highly-protected Marine Reserves. We doubt if our grandchildren will accept any excuses if we fail.

[DVD available; see back page]

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