A NEW DATABASE ON THE BIOLOGY AND ECOLOGY OF LAGOONAL AND REEFAL FISHES OF THE SOUTH PACIFIC.

LABROSSE P., LETOURNEUR Y., KULBICKI M .& F. MAGRON

ORSTOM, Nouméa, Nouvelle-Calédonie

FISHEYE is a database currently developed at the ORSTOM Center of Nouméa. The main objectives of this database are to provide information on several aspects of the biology of numerous fish species (such as reproduction, diet, length-weight relationships, etc) and the ecology of fish communities and/or populations (species richness, densities, biomasses, different types of structures, etc). FISHEYE includes data issued from various types of sampling (visual censuses, trawling, rotenone poisoning, gill netting, handline fishing, lagoonal bottom long-line fishing) monitored by ORSTOM since 1985 in various locations, mainly New Caledonia, but also Chesterfield Islands, French Polynesia, Indonesia and Tonga. Different from a CD-Rom which has a fixed content, FISHEYE is a dynamic database, because new records are constantly added and new types of presentation of the results may be developed. Summary information is derived on demand directly from the original data. The addition of data from Fiji is likely in a near future.

COMPARATIVE BIOGEOGRAPHY OF CHONDRICHTHYANS OF THE TROPICAL SOUTH-EAST INDIAN AND SOUTH-WEST PACIFIC OCEANS.

LAST P. R. & B. SÉRET

CSIRO Marine Laboratories, Hobart, Australia

The tropical Australasian region, which includes Australia, New Caledonia, New Guinea, and the eastern sector of the Indonesian Archipelago, breaches two major ocean basins. Its complex palaeohistory is strongly reflected in the size and structure of its chondrichthyan fauna where almost a third of the world's fauna (more than 300 species) occurs. The western (Indian Ocean) and eastern sectors (Pacific Ocean) each have surprisingly high levels of subregional endemicity that are evident at both sector and subsector levels. Despite poorer sampling efforts off Indonesia, diversity was found to be significantly greater in the Indian Ocean than the Pacific reflecting a strong regional influence of the mega-diverse Indo-West Pacific biota. The strength of widely distributed Indian Ocean elements diminishes from west to east across the region but it is still stronger off New Caledonia than the Pacific component reflecting the comparatively low biodiversity of the Pacific Plate. Tropical Australian subregions in both oceans are penetrated by substantial components from temperate areas to the south of which about half of the species are endemic to their respective oceans. Greatest biodiversity exists within demersal habitats with the continental slopes being slightly richer in species than the shelves adjacent. Slope habitats also exhibit higher levels of endemicity than shallow water habitats challenging the generality of the depth-dispersal paradigm. Recent French and Australian deepwater surveys of the region have provided new insights into the composition, structure and origins of this fauna.

Labrosse P., Letourneur Y., Kulbicki Michel, Magron Franck. (1997).

A new database on the biology and ecology of lagoonal and reefal fishes of the South Pacific.

In: 5th Indo-Pacific fish conference: abstracts. Nouméa: ORSTOM, 56 multigr.. Indo-Pacific Fish Conference, 5., Nouméa (NCL), 1997/11/03-0