Abstract

Fishing has become a major threat to marine fishes. Effective conservation requires timely identification of vulnerable fish species. However, evaluation of extinction risk using conventional methods is difficult due to limitations in data that should be gathered about the fish species and required by such methods. This paper presents a fuzzy expert system that integrates life history and ecological characteristics of marine fishes to estimate their intrinsic vulnerability. There are lots of general and special purpose expert systems that help society in a life particular sector. So, a professional one is selected and adapted for helping in marine wealth preservation. Finally, the proposed fuzzy expert system is used as a decision support tool in fishery management and marine conservation planning.

References


3. AN. Subramanian, "Introduction: Marine Environment", Centre for Marine Environmental Studies, Ehime University, Japan.


Index Terms

Computer Science

Fuzzy Systems
Keywords

Expert System; Forward Chaining; CLIPS; Marine Wealth Preservation; Fuzzy Set Theory engines.