

Center for Community-Based Resource Management (CBRM)

Natural Resources Institute, University of Manitoba

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Case Study Name:	Fishermen's local ecological knowledge on Southeastern Brazilian coastal fishes: contributions to research, conservation, and management		
Author:	Silvano, R.A.M. and Begossi, A.		
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Region:	Latin America and the Caribbean		
Country:	Brazil		
Ecosystem Type:	Coastal marine		
Social Characteristics:	Other (local community)		
Scale of Study:	community		
Resource Type:	biodiversity conservation		
Type of Initiative:	Research-driven project		
Community Based Work:	Resource management, conservation		

Keywords:	Ethnobiology, Fish behavior, Fish ecology, Human ecology, Small-scale fisheries
Summary:	<p>We analyzed fishermen's local ecological knowledge (LEK) about the feeding habits, trophic interactions, habitats, fishing grounds, migration, and reproduction of nine coastal fishes in Búzios Island, southeastern Brazilian coast. We interviewed 39 fishermen using standardized questionnaires. Fishermen's LEK on habitat use and trophic interactions for the studied fishes agreed with the scientific literature, allowing the organization of reef and pelagic food webs. The interviewed fishermen mentioned that submerged rock formations would be important habitats for some large commercial fishes, such as <i>Seriola</i> spp., <i>Caranx latus</i> and <i>Epinephelus marginatus</i>. In some instances there was no scientific data to be compared with fishermen's LEK, and thus this kind of knowledge would be the only available source of information, such as for reproduction and migration of most of the studied fishes. We suggest herein ways to apply fishermen's LEK to develop and improve fisheries management measures, such as zoning of marine space, marine protected areas, and closed fishing seasons. Fishermen's LEK may be an important and feasible support to fisheries management and co-management.</p>