

ICRI statement on Coral Reef Fish Spawning Aggregations

This statement was approved by the ICRI members at the ICRI General Meeting held in Cozumel, Mexico (22-23 October 2006)

Fish Spawning Aggregations (FSA) are a critical part of the life cycle of many fishes that use this reproductive strategy to produce and fertilize eggs, including many coral reef fish and many of significant commercial value.

Many FSAs attract individual fish from a large area to a confined site (known as a transient aggregation) - certain species may migrate several hundred kilometers - and the fertilized eggs and larvae produced in FSAs may travel far before settling out of the plankton to develop and mature. A single transient FSA thus has an impact on fish populations over a large area. Consequently, fish populations that use FSAs as a reproductive strategy are very dependent on healthy FSAs. When this system is broken down, the health and resilience of both fish populations and the entire coral reef system is compromised.

Collectively, transient FSAs can represent 100 percent of the reproductive potential of a spawning species, leaving it highly vulnerable to over exploitation. FSAs are frequently fished, by commercial as well as artisanal fishers, and have been fished to population collapse in parts of the world (e.g. the Nassau grouper in parts of the Caribbean has is threatened by aggregation fishing and, as a result, is classified as Endangered on the IUCN Red List). Indeed, spawning aggregations are extremely attractive to fishers and are widely viewed as fishing opportunities, rather than vulnerable life history phases in need of management.

Despite their vulnerability, FSAs have not typically been, and are largely not, considered in the formulation of reef and fish management strategies and legislation in many parts of the world, nor in the designations of MPAs. This is mainly due to a lack of information and awareness among key stakeholders, notably policy and decision makers, reef and fisheries managers and fishers, and even some NGOs, and leads to unsustainable management and resource utilization practices.

Recognizing this, ICRI's Second International Tropical Marine Ecosystems Management Symposium, held in 2003, called to

action to conserve spawning aggregations through robust management strategies. Further, the 3rd IUCN World Conservation Congress in Bangkok, Thailand, November 2004, adopted Recommendation 3.100 on "Reef-fish spawning aggregations". The recommendation expresses the concern of IUCN's 1,072 member institutions about the increase in exploitation of reef-fish spawning aggregations in many parts of the world, and about the dramatic ecological and socio-economic effects that such exploitation could lead to.

The recommendation urges governments to establish sustainable management programmes for sustaining and protecting reef fish and their spawning aggregations, including a range of spatial and seasonal measures that can be adapted to local needs and circumstances. Further the recommendation requests international and regional fisheries management organizations as well as non-governmental organizations to take action to promote and facilitate the conservation and management of fish spawning aggregations, including by raising awareness of the long term ecological, economical and societal values of spawning aggregations and in respect of their high vulnerability to uncontrolled fishing.

ICRI encourages ICRI Operational Networks and Members, as well as other inter-governmental, governmental and non-governmental organizations and the private sector, to contribute, as appropriate, to the implementation of the recommendation through appropriate projects, initiatives and campaigns that promote the conservation and sustainable management of reef fish spawning aggregations.