Fisheries Indicators

Are you tracking fishing or the habitat?

We can measure a variety of different characteristics of the fish community to track the effects of fishing on coral reefs. But factors other than fishing pressure can affect indicator values. In Seychelles we explored the effect of both fishing pressure and habitat on indicators that have commonly been used to track fishing impacts on coral reefs. Many of the indicators were more affected by habitat than by fishing pressure.

Size

Proportion of large fish Slope of size spectrum



Life-history
Growth Rate

Size Mean size Function

Functional richness

HABITAT CONDITION

Size

Maximum size

Mean size : Maximum size Mean size : Size at maturity Function

Functional diversity Piscivores : Herbivores

Life-history
Length to achieve optimal yield
Trophic level

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Nash et al. 2016 Ecosphere

Images courtesy of the Integration and Application Network, University of Maryland Center for Environmental Science (ian.umces.edu/symbols/)