

**Size- and Trait-based Modelling of Fish Communities for the Ecosystem
Approach to Fisheries Management**
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The ecosystem approach to fisheries management requires that managers develop the ability to make impact assessment of management actions on the level of the entire ecosystem, and not just on a single species. I will introduce a modelling framework that is specifically aimed at making impact assessment of fishing for an entire fish community. The framework is based on size (weight or length) of individuals and on their traits, in this case asymptotic size or size at maturation. The application of the model framework will be illustrated with examples of trophic cascades, "balanced fishing" and the maximum yield that can be extracted from the ecosystem in terms of protein or rent while respecting constraints of conservation. The model framework has been implemented as web applications for a single species: <https://www.stockassessment.org/spectrum/> and for an entire community: <http://130.226.135.24/SSC>