



Genetics in support of fisheries and aquaculture management

17-19 September

Faro, Portugal



From individuals to ecosystem-based management: implementation of genetics and integration with other approaches

- Background reading – not compulsory!
- Apply knowledge and understanding from course
- Brief Presentation
- Break into 3 equally-sized groups
- 15 minutes to address question: **how can genetic/genomic tools facilitate Ecosystem-based management?**
- Rapporteur from each group – 2-3 minute plenary to Group

INTERACTIVE AND PLENARY SESSION

The ecosystem approach to fisheries

Issues, terminology, principles,
institutional foundations,
implementation and outlook

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Ecosystem-Based Fisheries Management

The U.S. National Oceanic and Atmospheric Administration and the Food and Agriculture Organization (FAO) define ecosystem-based management as:

...an approach that takes major ecosystem components and services (both structural and functional) into account in managing fisheries. It values **habitat**, embraces a **multispecies** perspective, and is committed to understanding **ecosystem** processes. Its goal is to rebuild and sustain **populations, species, biological communities, and marine ecosystems** at high levels of productivity and biological diversity so as not to jeopardize a wide range of goods and services from marine ecosystems while providing food, revenue, and recreation for humans

Importance of **Biological Integrity** (individuals, populations, species, communities and ecosystems)

- Different biological levels of integrity
 - Interactions: biotic and abiotic
 - Human/societal dimension
 - Function and Marine Ecological Status
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- KEY PAPERS: Goodwin et al., 2017; Trochta et al., 2018
[FAO – Technical Paper 143 – *Detailed background only*]