

Community Considerations

fish610.2 Ecological Considerations of EAFM

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Learning Objectives

Role of Trophic Cascades in an Ecosystem

- What are trophic cascades
- Why they should be included in an EAFM framework
- Explain how fisheries impact trophic cascades

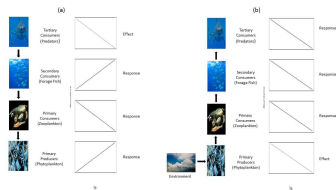


Figure : (a) top-down trophic cascade within a four-level food web
 (b) bottom-up trophic cascade within a four-level food web. Figure was adapted and modified from [?].

Trophic Indicators

- What are trophic indicators
- Why are trophic indicators used
- Types of trophic indicators
- Calculating trophic level

Trophic Interactions: Marine Trophic Index (MTI)

- What is the MTI
- Types of MTI (including cutMTI)
- How is the MTI calculated
- What the results indicate
- Pros/cons of the indicator
- *cutMTI*

Trophic Interactions: Fishing in Balance (FiB)

- What is FiB
- How FiB is calculated
- What the results indicate
- Pros/cons of the indicator

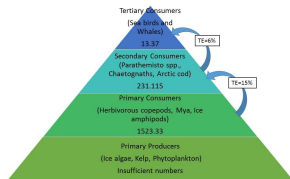


Figure : Energy transfer in $\text{kJ} \cdot \text{m}^{-2} \text{yr}^{-1}$ within the Lancaster Sound Region of Arctic Canada, data adapted from [?].

Trophic Interactions: Pelagic/Demersal Index (P/D)

- What is the P/D index
- How it is calculated
- What the results indicate
- Pros/cons of the indicator

Incorporating Community Considerations into an EAFM Framework

- How to select which interactions to include
- How to include community considerations into EAFM's management objectives