

Scientific approach:

- (1) Combine top-down [*consumption-based models*] and bottom-up [*production based models*] approaches to describe Georges Bank food webs
- (2) Use these analyses as a precursor to dynamic modeling

Principal Tools:

- Linear Network Analysis (Vezina 1999; 2000)
- Nonlinear dynamical modeling (Collie & Delong 1999)

Focus on two major issues:

- (1) Imbalance between primary production and fish production. “Leakage” hypothesis v. microbial web dynamics.
- (2) Magnitude of top-down (*fish*) v. bottom-up (*microbial web*) processes.

