Summary: NTAP Working Group
19 November 2018

Overview and Introduction

- Any changes to doors may involve changes in scope to achieve target performance.
- Incorporation of results into stock assessments may be easier under new assessment process, but still depends on stock assessment working group and external input and review.

Status of Wingspread Analyses

- Area-swept adjustment did not alter index estimates significantly.
- Adjustment for assumed relative efficiency adjustment had little effect on TRAC stocks, because TRAC stocks are not in extremes of depth ranges. Effect on summer flounder index in some years was large, however.
- Empirical data on relative efficiency at different wingspreads would improve understanding of potential magnitude of impact.

Twin trawl survey design

- Split time between shallow and deep strata (vs. focusing on one depth component)
- Timing: August/September (Karen Elizabeth availability)
- Habitat effects: not included in previous experiments, and not assumed to affect behavior. Day-night differences will be important, however.

Twin trawl survey design

- Categoric treatment or continuous function?
  - Categoric
    - Shallow/underspread: 9 m vs. 12.9 m; 11 m vs. 12.9 m
    - Deep/overspread: 12.9 m vs. 14.2 m; 12.9 m vs. 15.5 m
  - Continuous: develop a smooth relationship to identify inflection points
    - Start at extreme treatments and move in when sampling is adequate to detect a difference
    - Monitor species and length composition sampling while under way

Twin trawl survey design: target species

- Demersal (vs. pelagic/semi-pelagic)
- Split 14 days between Southern New England/ Mid-Atlantic Bight and Northern/Gulf of Maine
- Northern/Gulf of Maine
  - American plaice
  - Monkfish
  - Winter flounder
  - Red hake
  - Witch
  - Thorny skate
  - Halibut
  - [Windowpane]

Twin trawl survey design: target species

- Southern species targets
  - Monkfish
  - Red hake
  - Summer flounder
  - Windowpane
  - Winter flounder
  - Yellowtail flounder
  - Possibly skates, silver hake

- Need to refine sampling priorities within these lists, and target sampling areas

Review of door evaluations

- Limited testing of Thyboron type IV doors was undertaken during fall survey. Optimum spread of 13 m was achieved at shallowest sites with 10:1 scope.
- Future gear testing: 8 sea days requested; some options for spring survey.
- Need to prioritize gear to be tested: candidates include 1.5m^2 Thyboron Type 21 flipper doors and Bison doors.
- Need to leverage expertise of NTAP members in this process and communicate ; NTAP members are invited to join future gear trials.

Next Steps, Door Testing

- Prioritize list of doors for testing: more doors than time
- Other Bisons, Thyborons or Polyice doors?
- Gear experts develop recommendations for gear configurations
  - Bison: Alexander, Goethel
  - Thyboron IV: B. Ruhle, J. Ruhle
  - Others: TBD