

## **Transboundary Resources Assessment Committee (TRAC)**

### **Benchmark Assessment of Eastern Georges Bank Cod**

**April 2013**

#### **TERMS OF REFERENCE**

##### **Context**

The Transboundary Resources Assessment Committee (TRAC) was established in 1998 to peer review assessments of transboundary resources in the Georges Bank area and thus to ensure that the management efforts of both Canada and USA, pursued either independently or cooperatively, are founded on a common understanding of resource status. While stock assessment results are needed routinely to serve the management system, it is not practical to evaluate the assessment approach each time the assessment is conducted. Instead, reviews of the assessment approach (benchmark assessments) are conducted periodically, generally at a separate meeting. The previous two TRAC benchmark reviews for cod were conducted in February 2002 and in 2009 (January- data meeting, April- model review).

At present, the USA assessment for the whole of Georges Bank is conducted independently from the TRAC assessment of eastern Georges Bank. There is some concern that differing assessment approaches may make reconciliation of results difficult.

##### **Objectives**

This meeting will have two primary objectives: 1) to review the assessment framework for the Eastern Georges Bank cod management unit (5Zjm for Canada), with the agreed benchmark model formulation to be used in the June 2013 TRAC for 5Zjm cod, and 2) to discuss criteria for timing of and allowable changes to TRAC benchmark model assessments. More specific objectives for the meeting include:

- Review tagging data for application in stock assessment, particularly with respect to estimation of natural mortality.
- Examine relevant ecological and biological data such as, but not limited to, growth, maturity, fecundity, recruitment, environmental factors, and trophic interactions to estimate natural mortality.
- For the Canadian groundfish fishery operating in NAFO Division 5Z - 6 during 1978 – 1996, summarize the conclusions on discarding from the contemporary Research Documents, where available. Where no previous review has been done, or discarding was suspected, evaluate discards (unreported catch) of cod and associated uncertainties.
- Explore a full range of pertinent assessment methods for estimating current abundance and exploitation rate, in particular, to address the issue of retrospective bias.
- Calculate fishing mortality reference points based on the agreed assessment approach.
- Formulate projection procedures for harvest advice based on the agreed assessment approach.

- Assess stock dynamics to investigate potential changes in stock productivity.
- Discuss criteria to determine: 1) when a benchmark assessment should be conducted, and 2) what degree of modification is acceptable to make to a benchmark model formulation during an update assessment.

### **Outputs**

TRAC Proceedings (which will document the details of the benchmark)  
TRAC Reference Documents

### **Participants**

DFO Maritimes scientists and managers  
NMFS Northeast Region scientists and managers  
Canadian and USA fishing industry  
USA State and Canadian Provincial representatives  
Northeast Fisheries Management Center representatives