

Date: Tuesday June 10th, 2003

Venue: 2nd floor, Gulf of Maine Aquarium, Portland, ME.

People present

Ben Neal	Earl Meredith	Ross Kessler
Bennadetta Sarno	Kevin Kelly	Shelly Tallack
Bill Duffy	Laura Taylor-Singer	Susan Hann
David Martins	Pat Foote	Togue Brawn
Don Clark	Rodney Rountree	Tom Rudolph

Summary of key points presented within the framework of the Agenda

1) Tagging progress to date: presented by each tagging organization.

- **DFO** has undertaken two trips (on Browns Bank and in the Bay of Fundy); the total number of fish tagged is **n=3647** and these have been tagged using both DFO tags and the tags from the NE Regional Cod-tagging Program; both tag types will be entered into the current program's database to monitor for biased return rates. The next step will be to tag during the winter closed season on Browns Bank.
- **Island Institute** is currently recruiting more vessels (both hook and lobster) to assist with tagging in nearshore waters from Sheepscot Bay up to Passamaquoddy Bay. A recent meeting held in Eastport resulted in the successful recruitment and initial training of 10 additional vessel owners; 3 hook vessels (dedicated tagging) and 7 lobster vessels (opportunistic tagging). Island Institute tagging will really get underway over the next few weeks as the lobster fishery becomes more operational; the current estimate of cod tagged by the Island Institute is **<100**.
- **DMR** has had a slow start in **Area 1** (Cashes and Fippennies Ledges); despite 15 days worth of trips, catches of cod have been very low, therefore the number of tagged cod in this area has been limited (n=1316). The scheduling of additional trips in this region is currently on hold, possibly until July and the fall; feedback from the commercial fishermen involved suggests that it should be possible to tag greater numbers of cod at this time of year. Opportunistic tagging also took place through the Inshore Trawl Survey, increasing the total number of tagged fish to **n=1368**. In **Area 2** (Jordan Basin), the progress to date has been mainly organizational, though the first tagging trip was underway during this update meeting. The findings from this trip will determine when additional trips will be scheduled in the Downeast region.
- **SMAST** also had a slow start with poor fish catches on George's Bank, but a dramatic turnaround was seen in recent weeks with tagging totals for two recent trips being n=2000 and n=2500 respectively. With four trips undertaken thus far, one final trip is planned for June, 2003; tagging by SMAST will then cease until the fall. Four trips will take place during September, October and November. The total tagged cod estimate for SMAST is approximately **n=5000**.
- **CCCHFA** have almost completed their tagging for this season. With an estimated tagged cod total amounting to approximately **n=19,000**. The number of fish tagged per day by an individual vessel has ranged from n=0 to n=348 with an average of n=138. The fishermen involved in the Cape Cod region have shared the distribution of tags between the following areas: Chatham, Middle

Rip, Fishing Rip and The Mussels. It is thought that tagging commenced too late to catch cod on Coxes Ledge; this area will be focused on next season. The focus for the summer months will be on outreach and additional training to iron out some inconsistencies noticed in methods of tagging.

- **GMRI** has spent the last few months developing the infrastructure of the program. This includes equipment purchases, data sheets and database design (the latter with Northern Geomatics), outreach efforts, recruitment of coordinators and vessels for DMR, poster and pamphlet design and the design of incentives (T-shirts, hats and mugs). Tagging trips have been undertaken with DMR, DFO and CCCHFA; Shelly still aims to tag with SMAST and the Island Institute before the first season is over. The key issues to focus on in the near future revolve around **outreach**; the design and development of www.codresearch.org is of top-priority, in addition to up-to-date press releases, and coordinating presentations of findings to date at significant fishing meetings within each tagging region. The database will be up and running by the end of June, 2003; in the meantime, the total number of cod tagged for this program is estimated at **n=28,000** with the number of recaptures reported totaling **n=38**.

2) Technical review of tagging technique:

- **Tagging protocols** - Tagging protocols were provided to be given to each vessel involved in tagging and all individuals involved in the tagging for this program; this protocol is thorough and should cover most questions on how to tag cod, what information is required and how to collect and record this information. Please note that the total length is rounded **to the nearest cm (or nearest ½ inch)** and is NOT “rounded up to” the nearest cm as printed in the glossary (p.19).
- **Recaptured tags** – these will be re-tagged if the tag doesn’t look like it is well-embedded or if the original tag looks old; the recently produced *Tagging Protocol* indicates how data sheets should be filled in concerning recaptured fish.
- **Skin tags** – will be removed if close enough to the surface so as not to cause too much tissue damage; the fish will be re-tagged and recorded as outlined in the *Tagging Protocol*.
- **Catching cod at depth** – It was again agreed that the ideal depth is around 50 fathom, but if necessary, cod can be brought up from up to 120 fathom, providing their condition appears strong.
- **Length of tows** – we had originally recommended that tows be 10-20 minutes; it was agreed however, that if catches are very poor the tow can be extended up to one hour.
- **Avoiding fishing in areas where skate are plentiful** – based on observations at sea, **Ross Kessler** (SMAST) commented that cod were often in bad condition when caught amongst large numbers of skate; thus, if the catch consists of many skate, relocating to a new area might prove beneficial in terms of cod-tagging survivorship.
- **Spawning condition** – it became apparent that not all organizations are checking for spawning condition; the final agreement was that all scientists involved in tagging will check for spawning condition, unless they are confident that it is the wrong time of year. Fishermen do not have to check for spawning condition unless they are happy doing so.
- **Tagging Trip Summaries** – **Shelly** will produce a standard template to be reviewed by all; this will then be used by each organization to provide feedback to the vessel owner and crew after each trip.
- **2004 tagging** – the tagging process should be easier to get up and running next year now that the infrastructure is in place; in particular, areas in which cod were maybe “missed” this time around will be well prepared for and targeted.

3) Database Review:

- **Data management progress - Bill Duffy** (NGI) presented and gave an overview of the online data entry tool and the online mapping interface; feedback and suggestions from the group were taken on board and where the budget permits, will be acted on. This database and accompanying mapping tool has proved to be complex and very time-consuming. However, the database should be ready for use by the end of June 2003. Thank you Bill!
- **Data entry** – a data entry protocol will be developed by **Bill Duffy** and **Shelly** to provide all data enterers with precise instructions on how to enter data online. In addition to this, the following key points were made: data sheets should be checked at the end of each trip, whilst the events of the trip are still fresh in mind; thorough checking of data should also take place at the time of entry; once the data has been approved by **Pat Foote** (GMRI), only she or NGI can edit the data further.
- **Datasheets** – these are working as well as can be expected bearing in mind they are designed for a multi-gear tagging program; **Shelly** will be re-ordering and re-distributing data sheets as needed in the near future.
- **Data access** – all data will be available to all organizations involved in this program once it is loaded into the database; it will be possible to download the data as both a Microsoft Access file and as a comma-delimited file (**Shelly** will check with Mark Terceiro (NOAA Fisheries) if these formats suffice). The general public has access to the data via the online GIS mapping website and requests for specific additional information will be considered.
- **DFO and SMAST data** – DFO will add their tagged cod to the database for this program; SMAST will get back to us on this. When SMAST or DFO tags are returned to the central clearing house (GMRI), they will be acknowledged in the response letter. However, GMRI will notify the individual who reported the tags that details on those tags will come directly from SMAST or DFO, not GMRI. Rewards from this program will only be sent out for tags from the NE Regional Cod-tagging study. GMRI will forward any tag information from SMAST and DFO tags to these organizations respectively.

4) Outreach Review:

- **Outreach** - is the next priority for the Northeast Regional Cod-tagging Program; in particular, it will be important to convey the message that this program is region-wide, international and involves a large number of both commercial fishermen and scientists.
- **Website design** – a request was made for people to give input on the key elements or essential material they would like to see on the website – no feedback was given; **Shelly** will begin working on this in the near future; the cod-tagging group will have the chance to review this before it becomes live.
- **Meetings** – it was proposed that we present our progress to date at various fishing and other relevant meetings throughout the study region; ideally each organization should be represented on these occasions, though this may not always be possible. **All Area Coordinators** for each tagging organization are responsible for communicating to Shelly and the group when a relevant event is taking place in their area; **Shelly** will then coordinate the presentations.
- **Recreational fishermen** – these should be considered another target for our outreach efforts, both as ways of getting tags in the water but also to encourage tag-recapture returns.
- **Posters & pamphlets** – these were distributed to each organization. Over the next few weeks, the posters need to be displayed throughout the tagging region. Some smaller, letter-sized posters are also in production and will be mailed out shortly. Laminated letter-sized posters will be suitable for posting in the wheel

houses of relevant vessels.

- **T-shirts, hats and mugs** – T-shirts were distributed to each tagging organization for the crew and owners of vessels carrying out tagging. T-shirts, hats and mugs will be the reward options for all individuals who provide information on tagged cod.
- **Lottery** – a conference call will be scheduled by **Shelly** in the near future to discuss the logistics of the lottery; it is important that the lottery becomes operational in the near future.

5) Year 2 Budget and Auxiliary studies:

- **Year 2 budget** – at present, the total for Year 2 budget requests (\$1.78 million) exceed the money available for Year 2 (\$1.24 million). **Earl Meredith** (NOAA Fisheries) will be reviewing the individual budget requests over the next week and will get back to us on what can be realistically supported.
 - **Auxiliary studies** – various auxiliary studies were discussed, though no absolute decisions were made. Particular studies presented included: mortality studies on tagged fish caught by different gear types (CCCHFA will likely undertake this); Tag retention according to tag-type (i.e. this program's tags versus the DFO tags); Inshore Genetic studies – **Ben Neal** (Island Institute) will obtain more information from Irv Kornfield (University of Maine) and will get back to the group with this; Acoustic tag studies (**Earl**); and closed area tagging (SMASST).
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