

NOAA Scientific Survey Gear on Albatross IV Inspected, Error in Rigging Found & Corrected *Re-evaluation of data underway*

WHAT HAPPENED?

Acting on the advice of industry members, we inspected the trawl cables (warp) on the NOAA Ship *Albatross IV*'s sampling equipment on September 3, 2002.

We found that the cable attaching scientific survey gear to the vessel was inaccurately marked at length intervals used by the vessel crew to determine how much cable is deployed. The mismarked cable was installed in February 2000, and used in eight bottom trawl surveys, beginning with Winter 2000 and ending with Spring 2002.

WHAT HAVE YOU DONE ABOUT IT?

The cable has been correctly marked and installed, and is use on the Autumn 2002 survey.

HOW DID IT HAPPEN?

We are investigating this further in order to prevent any such error in the future. It appears that the cable was not marked at true 50 m length intervals before winding onto the cable drums.

The cables are marked at 50 m intervals from the eye to the 1000 m mark, so that the lead fisherman deploying the gear can tell how much cable is out. These marks were not consistently placed at true 50 m marks on the cables, and the differences were not consistent between the cables.

WHAT DOES IT MEAN?

At times more cable was deployed on one side of the trawl net than on the other.

This is a matter of inches at shorter lengths, and more pronounced as more cable is deployed. For example, with 100 m (328 ft) of cable deployed, just under 1 inch more cable was out on one side; at 300 m (984 ft) the difference was just under 6 ft. Of all tows made in the surveys, 75% deploy 300 m of cable or less.

As a result, the gear may have fished differently from prior surveys, and data collected (catch per tow, for example) may have been influenced in a way that should be accounted for before those data are used by scientists. When we understand what the effect was, we can likely compensate if the differences are significant.

WILL THIS CHANGE THE SCIENTIFIC ADVICE ON STOCK STATUS?

We don't know. When we better understand if there was an effect, and how significant it may have been, we can answer that question.

WHEN WILL YOU KNOW?

We are working on this problem now. A preliminary review of existing data sets does not reveal an obvious effect attributable to the change in cable. However, it will take time to reliably

document how the gear performed and how that might have influenced catch.

HOW WILL YOU KNOW?

Through field work with the gear and by analyzing data collected pre- and post-cable change.

Field work: Next week (9/16/02), experimental work will begin off the *Albatross IV* towing the gear at various depths, using cable deployments of equal and unequal lengths. This work will directly observe net performance by using video equipment, and also record net performance by using various sensors. Additional work to be conducted October 15 to 25 will further document gear performance.

Analyses: We are reanalyzing data sets from the last two years surveys now to look for an effect by species, geographic area, or depth. We are looking at any data sets that might provide a basis for identifying and quantifying this effect, if any: Canadian survey indices on Georges Bank, inshore state surveys, any differences between observed and predicted indices derived from our most data-rich indices, and analyses simulating the effect in assessments across species and age groups.

Consultation: We are seeking advice from experts in the U.S. and Europe familiar with the deployment of sampling gear for fisheries research on how they may have resolved similar situations.

WHAT IS YOUR GUT FEELING ABOUT THE EFFECTS ON SURVEY RESULTS?

It is important that we know, not speculate.

However, over the 40 year history of the survey, we have performed several major recalibrations of the gear in order to keep our results consistent within the time series. If we can detect and quantify this effect, we can likely account for it as well.

WHAT WILL YOU DO WITH NEW INFORMATION?

We will use it to update any analyses that have already been performed and make revised information available.

DOES THIS MEAN THERE IS MORE COD?

Too early to say. However, the relative trends in cod stocks derived from the survey to date agree with similar trends derived from Canadian surveys and from state inshore surveys for the years in question.

WHAT DOES THIS MEAN FOR AMENDMENT 13?

We are obligated to act on the best available scientific information and intend to do so. The present FMP development allows for incorporation of new biological and fishery-based information. Much depends on three factors: how quickly the effect of gear misrigging on survey results can be reliably quantified, whether there is an effect attributable to cable differences, and how significant the effect is.

