IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

CONSERVATION LAW FOUNDATION, et al., Plaintiffs))))	
) CIVIL ACTION NO.	00-1134 (GK)
V.)	
DONALD L. EVANS, <u>et</u> <u>al</u> ., SECRETARY OF COMMERCE Defendants)))	

DECLARATION OF MICHAEL P. SISSENWINE

I, MICHAEL P. SISSENWINE, declare as follows:

1. I am Director of the Northeast Fisheries Science Center, National Marine Fisheries Service, Woods Hole, Massachusetts. I have more than twenty-five years of experience as a research scientist, research leader, and scientific advisor on marine stewardship issues. The declaration I executed February 22, 2002, gives additional information on my professional background.

2. The purpose of this declaration is to provide information on our discovery of incorrect marks on the cables used by the NOAA Ship ALBATROSS IV to tow bottom trawls. The bottom trawl surveys conducted by the ALBATROSS IV are one source of information used to estimate abundance of New England groundfish.

3. In response to a concern raised by a member of the fishing industry, on September 3, 2002, the trawl cables on the ALBATROSS IV that are used to tow sampling equipment (i.e., a standardized bottom trawl net) were inspected. These cables are commonly referred to as trawl "warps". The purpose of the inspection was to determine if the 50-meter interval marks on the two warps installed in February 2000 were accurate and coincided with each other, and to re-mark the warps, if necessary. The marks are used by the vessel crew to determine how much warp is deployed and if it is being deployed evenly (two warps are towed

to spread the mouth opening of the trawl net).

4. Inspection showed some marks were not exactly at 50meter intervals over the first 1,000 meters of the trawl warps. Furthermore, some marks were not evenly marked between the warps. This means that, at times, more cable may have been deployed on one side of the trawl than on the other. The difference is a matter of inches at shorter lengths, and more pronounced at greater lengths. For example, with 100 meters (328 feet) of cable deployed, just under 1 inch more cable was out on one side; at 300 meters (984 feet) the difference was just under 6 feet. Tows occur at a variety of depths during the bottom trawl survey, most of which use 300 meters or less of cable.

5. As a result, it is possible that the standardized trawl gear may have fished differently from prior surveys in eight bottom trawl surveys conducted since the cables were installed in February 2000. If so, these differences should be accounted for before affected data are used by stock assessment scientists.

6. A memorandum summarizing results of the cable inspection was provided to the Deputy Science and Research Director, Dr. John Boreman, on September 5, 2002. I was on travel at the time and was briefed by phone by Dr. Boreman later that evening.

7. On September 6, 2002, Dr. Boreman briefed Ms. Patricia Kurkul, NMFS Northeast Regional Administrator, on the results of the inspection. In a conference call on September 9, 2002, involving the Northeast Fisheries Science Center, the Regional Office, and Headquarters, a collective decision was made to conduct gear performance experiments on board the ALBATROSS IV as quickly as possible in order to determine the extent to which the unequal warp lengths could have affected the performance of the standardized trawl gear during the eight surveys in question.

8. During a conference call on September 9, 2002, Dr. Boreman and Dr. Terry Smith of the Northeast Fisheries Science Center briefed the executive director, Mr. Paul Howard, and the chair, Mr. Thomas Hill, of the New England Fishery Management Council, on the results of the trawl warp inspection and our plans for addressing the issue. Ms. Kurkul was also on the call.

9. On September 10, 2002, Drs. Boreman and Smith briefed the executive director of the Mid-Atlantic Fishery Management Council, Mr. Dan Furlong, on the results of the trawl warp inspection and our plans for addressing the issue. Ms. Kurkul was also on the call.

10. On September 11, 2002, Dr. Terry Smith briefed the members of the New England Fishery Management Council during their meeting in Providence, Rhode Island, on the results of the trawl warp inspection and our plans for addressing the issue. I also participated in the briefing.

11. During the period from September 16 through 24, 2002, the ALBATROSS IV will be continuing the annual fall survey and testing video equipment and electronic sensors. The equipment will then be used when the ALBATROSS IV sails from Woods Hole on September 25 through September 28, 2002. Individuals from the region's commercial industry and the fishery management councils will be part of the scientific crew that will directly observe net performance by using video equipment, and also record trawl net performance by using various electronic sensors. Experiments will be conducted to determine how uneven lengths of cable affect the performance of the standardized trawl.

12. On October 2-3, 2002, a workshop will be held in Woods Hole in which participants in the September 25-28 gear experiment will be joined by other industry members and scientists. The purpose of the workshop will be: a) to evaluate the world-wide experience in the issue of trawl warp offsets and their effects on trawl performance; b) review the results of the experimental manipulation of trawl warp lengths conducted on board the ALBATROSS IV during September 25-28; and in light of this information c) consider the likely impacts of trawl warp offsets as measured on the ALBATROSS IV in terms of trawl geometry and the implications of those likely impacts for survey catches. The workshop will produce a report that will then be used in updating groundfish assessments as had been previously scheduled for the following week (October 8 through 11). As appropriate, a plan for additional experimental work will be developed.

13. Concurrent with the gear performance experiments being conducted on board the ALBATROSS IV, Northeast Fisheries Science Center scientists are re-analyzing data sets from the last two year's surveys to look for any effect by species, geographic area, or depth that may be attributable to trawl warp offsets. We are also looking (a) at other data sets (Canadian survey indices on Georges Bank, inshore state surveys) that might provide a basis for identifying and quantifying the effect of uneven trawl warps, if any, and (b) for a change in the pattern of differences between observed indices from surveys and model predictions of indices, that might indicate a problem with the survey data. Furthermore, we are conducting simulation studies to determine the sensitivity of stock assessments to various degrees of effects on trawl performance that might result from uneven trawl warps. These simulation studies will give us a better sense of the degree of inaccuracy that might be introduced into stock assessments as a result of uneven trawl warps.

The scientific information on groundfish stocks that 14. was used to produce the Final Report of the Working Group on Re-Evaluation of Biological Reference Points for New England Groundfish (March 2002) ("Working Group Report") is almost entirely based on data collected prior to the installation of the inaccurately marked cables. Only one of the eight surveys that are potentially affected by having uneven trawl warps was used in the groundfish assessments that are the basis for information in the Working Group Report. It is unlikely that any effects in this single survey would have an important effect on the accuracy of the scientific information since many other surveys and other sources of data contribute to the scientific information. However, in light of the normal dynamics of fish stocks, it is likely that stock conditions have changed since early 2000. To account for such dynamics, information is regularly updated. As noted in paragraph 13, a stock assessment workshop previously had been scheduled for the week of October 8, 2002, to prepare just such an update. The update would normally be done using the data from the recent surveys that were potentially affected by uneven trawl warps. At this point, the actual affect of uneven trawl warps on these updates is unknown. The actions described in paragraphs 11-13 are intended to clarify the situation.

15. Our timeline for conducting the gear performance experiments on the ALBATROSS IV and data set analyses is intended to be consistent with the current timeline for implementation of Amendment 13 to the Multispecies FMP. The report produced by the October 2 and 3 workshop and the updated groundfish assessments that will be produced the following week will provide a scientific basis for fishery management decisions. However, because of the schedule, it may not be possible to conduct all worthwhile investigations of the problem of uneven trawl warps in a manner that will permit consideration of the results prior to the November Council meeting.

16. I affirm, under penalty of perjury, that the foregoing is true and correct to the best of my knowledge, information and belief. This declaration was executed in Woods

Hole, Massachusetts, on this 19th day of September, 2002.

Michael P. Sissenwine, Ph. D. Director Northeast Fisheries Science Center