



Observer Confidentiality Issues with
Local Depletion and Fishing Impacts Studies

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Statement of the Problem

The "Confidentiality Guidelines for Observer Information" memorandum from Jim Coe (dated August 22, 2007) provides guidelines for aggregating and presenting observer information applicable to stock assessments. These guidelines, however, may pose some challenges for analysts who rely on observer information for finer scale scientific studies. The "rule of three" requirement, for example, may prevent some finer scale study results from being reported. This is especially acute for studies using observer data from very limited geographic areas and/or over very short time periods, such as in some local depletion and fishing impacts studies.

Depletion studies are often used to examine how measured removals of fish (by regular or experimental fishing) influence the relative abundance (CPUE, or other abundance index) of fish remaining in the total stock or in a designated depletion study area. Detectable localized depletion is dependent upon fishing intensity of sufficient strength to reduce the population size. If the depletion study site is geographically small and the commercial fishery is used to monitor the level of removals (i.e., from observer data), there is the potential that these removals could be based on data from only one or two vessels. These removals may be critical for the success of the study. However, under the existing guidelines, this information would need to be suppressed and could not be presented to the public or any non-authorized user. Also, aggregating up to a higher spatial or temporal scale may not be an option without seriously compromising the original objectives of the study.

The same type of spatial and temporal scale issues apply to local fishing impacts studies, such as those conducted by the Fisheries Interaction Team (FIT) of the AFSC. FIT conducts field studies to examine potential commercial fishery impacts including reduction in the abundance or availability of prey and disturbance of prey fields at the local level. For example, FIT conducted a field study in 2002-2003 to look at effects of the intensive winter trawl fishery on local abundance of Pacific cod in the vicinity of Unimak Pass in the eastern Bering Sea. This study was conducted in a relatively small area, focusing primarily in areas in and around the 10 nmi no-trawl zone boundaries around Cape Sarichef on Unimak Island and Billings Head on Akun Island. If observer data were used to compare and contrast conditions (e.g., catch rates, species composition, maturity conditions, etc.) inside and outside these no-trawl zones, then there is the potential that only one or two vessels may have operated in such a small area. Again, under the existing guidelines, this information would need to be suppressed and could not be presented to the public.

Conclusions, Recommendations and other Considerations

- s Given the recent issues surrounding observer data confidentiality, it should now be clear to most AFSC analysts, if not all, that there is a strong need to be circumspect about how we use and present observer information to the public. This awareness is a good thing.

- eFor finer scale studies where the "rule of three" cannot be met, but the information from one or two vessels is critical to the success of the study, the investigator should work with the FMA Division to contact the vessel owner(s) to seek permission to use that information. If this is not possible (e.g., the vessel is no longer in the fishery, the owner cannot be located, there are too many vessels to contact, etc.) then a decision will need to be made whether to include this information in the study. This will probably have to be determined on a case-by-case basis, somehow balancing the risks to NMFS and the submitters. At this point, I don't have a good recommendation regarding the specifics of this process or who ultimately makes the final decision. Some questions that we may want to consider: Will someone actually want to see the raw observer data? How often have we been asked in the past to produce the observer data used in these types of analyses?

- e As investigators plan future finer scale type studies, they should be cognizant of the observer confidentiality issues that may impinge upon their research and plan accordingly. For example, if an Experimental Fishing Permit (EFP) is used as the underlying framework for a finer scale study, perhaps the EFP should contain a requirement that all industry participants make their observer data available for public disclosure. Another approach is to develop the experimental design of a local depletion or fishery impacts studies in such a way as to maximize the occurrence of three or more observed vessels in the study sites.

- Finally, I think we must continually look at the risks involved with presenting observer catch information, biological samples, and catch distribution information and be willing to make adjustments as experience and situations dictate. I guess what I'm trying to get at is that there doesn't seem to be a one-size fits all when it comes to dealing with observer data confidentiality; what this all really boils down to is determining and/or assessing the level of risk the agency is willing to assume.

If you would like to discuss any of this stuff in greater detail, please don't hesitate to call or stop by.

Seabird Data Confidentiality Issues

Following is a list of the seabird tasks that involve provision of fine-scale confidential information to researchers and staff outside of the APSe. Many of the confidentiality issues we face for seabirds are similar to other species groups, in that we deal with specimens going to museums, tag information (legbands etc.) being provided to researchers, and confidential data associated with mortalities being provided to a potential suite of end-users. Our primary partner and client in these activities is the US Fish and Wildlife Service, along with the Alaska Regional Office and the US Geological Survey. Appropriate guidance will need to be provided to them on how to manage these confidential data and new agreements should be put in place. Other researchers outside of those responsible for FMP work frequently request access to fine-scale data, although none have been granted that request unless they are employed in tasks that NOAA Fisheries has provided funding for.

1. Short-tailed albatross sightings.

Sightings of short-tailed albatross are recorded by observers and forwarded to the Ecological Services Division where the data are inputted into a database that contains sightings from all sources. That database includes vessel names, observer names, locations, cruise numbers, and other information and includes sightings from all at-sea sources. The Ecological Services Division currently is working under a confidentiality agreement signed previously. A public access excel file is then generated from that database and provided to the North Pacific Pelagic Seabird Database managers at the U.S Geological Survey in Anchorage, where it is posted on their website. Columns include location, Vessel, Observer Name, and Cruise number. Exact latitude and longitude information is provided, but fishery source information is listed as confidential (i.e., Vessel name, Observer Name, Cruise Number). The sightings are therefore masked by including them with many other sources that include vessel operators, research vessels, and US Coast Guard Vessels. The link to the website excel file is:

 [Distribution.xls](#)

Or access can be obtained through the NPPSD home page at:
<http://www.absc.usgs.gov/research/NPPSD/index.htm>

Provision of these sightings by fishery observers is a requirement under the 2003 BiOp on Short-tailed Albatross. A variety of end-users have accessed the NPPSD and produced maps showing Short-tailed albatross sighting locations. Examples are available upon request.

2. Short-tailed albatross mortalities.

All data associated with each Short-tailed albatross mortality is forwarded to the Ecological Services Division of the USFWS. Our point of contact in that office has

signed a confidentiality agreement in the past. Each take is listed in the Short-tailed albatross biological opinion. Confidential information such as vessel name, observer name, and exact location are not included. Only the date (year, month, day) region (and sometimes generalized location), and type of fishery are listed. Two examples from the 2003 BiOP are:

- "a 5-year-old bird taken in the hook-and-line fishery in the Bering Sea on September 21, 1998"
- \\) "a juvenile taken in the Individual Fishing Quota sablefish fishery in the western Gulf of Alaska south of the Krenitzin Islands on August 28, 1995."

3. Expert Review Committee- possible short-tailed albatross take.

Observers occasionally report that an unidentified albatross fell off (dropped off) the longline during haulback. At times they feel it may have been a Short-tailed albatross. When this occurs, the AFSC seabird specialist convenes a panel of experts to participate in a conference call with the observer (as soon as the observer arrives in port or in debriefing). In addition to the observer, debriefer, and AFSC Seabird specialist, panel participants include the Fish and Wildlife Service, Ecological Services Division and Migratory Birds Management Branch, and the Alaska Regional Office, Protected Resources Division and sometimes the Sustainable Fisheries ESA specialist. Participants are provided with copies of the observer logbook pages and all background information. During the interview, the observer provides information on vessel name, crew names, location, and other confidential information. A record is made of the discussions which also includes confidential information. Recently a confidentiality statement was added as a standard component of that file in order to avoid accidental breaches.

4. Leg-bands, other markers, and electronic tags.

Legbands recovered from seabirds are forwarded to the USGS Patuxent Wildlife Research Center Bird Banding Laboratory (BBL). This typically includes the date, location, band number species, and other such information. A more complete review of what information gets forwarded is needed, and there currently is no confidentiality agreement with the BBL. Due to the highly migratory nature of seabirds, band recoveries from other nations throughout the Pacific are possible. These organizations will be interested in fine-scale information associated with the recovery. Once the data are provided we have very little control, even with an updated confidentiality agreement, due to the nature of these organizations. More and more work is being done on seabirds by individual scientists using telemetry. Usually, these are marked with a return address and a request to send the telemetry device and recovery information to the researcher, who will likely want to use that location. To date we have not recovered any electronic tags. More discussion and research is needed on this subject regarding seabirds.

5. Carcass Recoveries.

Observers return seabird carcasses to the APSC, where in the past they have been forwarded to the FWS or to Museums (the UW Burke Museum and the University of Alaska Fairbanks Museum). There they become part of the standard collections, with location information and sometimes observer information as well (as the coUector). The AFSC Seabird tasks include efforts to develop a seabird carcass clearing house where returned carcasses would be necropsied, biological data such as diet and morphometrics collected, tissues would be both analyzed and stored for long-term studies, and carcasses then sent to museums as requested. We envision a web-accessible database with much of this information, but with confidential data such as precise location protected.