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NORTH PACIFIC COUNCIL UPDATE

ACUNA APPOINTED TO AP

Erika Acuna has been appointed to the Council's Advisory Panel (AP) as the Observer Representative. The purpose of the AP is to make recommendations to the Council on all issues. The AP members represent major segments of the fishing industry; catching and processing, subsistence and commercial fishermen, observers, consumers, environmental/conservation, and sport fishermen. The AP now consists of twenty-three members, all of which serve one-year terms (January 1 through December 31). These members may be reappointed or replaced by the Council annually at the December Council meeting.

Thanks to all of you who wrote letters to the Council supporting Ms. Acuna's nomination.

CHANGES TO OBSERVER PROGRAM DISCUSSED (From NPFMC Newsletter 10/19/98)

The Council was scheduled to discuss the future direction of the groundfish observer program at the October meeting, but that discussion was postponed due to the length of the License Limitation Program discussions. Additionally, NMFS has recommended that these discussions be postponed until they complete a broad program review currently being planned.

The Council did however take action on a package of regulatory amendments to the existing pay-as-you-go program, as recommended by the Observer Advisory Committee (OAC). These will be developed for Council review and implementation sometime in 1999. Included in this package are the following:

•Establish regulations prohibiting contractors from distributing personal information (resumés, for example) on observers.
•Establish minimum housing standards for observers at shore plants.
•Limit an observer from having to cover more than one 100% plant, or more than two 30% plants, when pollock fisheries are being conducted.
•Allow NMFS observer program staff to be employed at NMFS' discretion either in lieu of or in addition to the vessel's regular observer.
•Revise shoreside coverage requirement to be based on weekly, as opposed to monthly, reporting period.
•Clarify definition of a fishing day for pot vessels.

[*Editor's Note: The first 3 changes were suggestions proposed to NMFS in a letter from the APO and several observers. Thank you all for your support.*]

SUMMARY OF OAC DISCUSSIONS (from OAC Minutes, Sept. 24-25, 1998 Meeting)

The OAC reviewed a discussion paper provided by Council staff titled 'Redevelopment of Options to Fund the Domestic Groundfish Observer Program in the EEZ Fisheries off Alaska' - this paper summarized the history of the original Research Plan development, identified the primary issues of concern with that program, and outlined some potential program structures for consideration. While that paper, and the OAC, recognize the Council's direction to redevelop a fee-based funding mechanism, a variety of options and alternatives were discussed. These are summarized below.

<u>Primary issues for resolution</u>
As noted in the discussion paper, the primary issues which caused the demise of the Research Plan remain unresolved and include:
1) **resolution of necessary baseline coverage levels by fishery**-the OAC received a report from NMFS which provided some initial information relative to this issue. While there have been analyses done in the past, these analyses were largely aimed at specific catch estimation procedures in specific fisheries (such as the Versar Report and NMFS statistical analyses regarding coverage levels for specific goals). Additional information was provided at this meeting which illustrated the current, effective coverage levels by fishery and gear type in the GOA and BSAI. This information was useful and provided the basis for much discussion, but still does not answer the question of what the effective coverage levels should be in these fisheries.

For example, effective coverage is the BSAI Pacific cod trawl fisheries is about 52%, while the same fishery in the GOA has about 15% effective coverage. Is one too high, or is the other too low? The answer depends on the goal of that coverage. For shoreside delivery harvests, the primary goal is likely PSC accounting, while for offshore processing the goal is also total catch accounting (in addition to stock assessment related data). Further, within the category of vessels for which PSC accounting is the primary goal, there is considerable variability in PSC rates by area and season. This variability in PSC bycatch will likely be a major factor to consider in arriving at appropriate coverage levels by fishery.

What is apparent from these discussions is that the answer lies only partially in statistical analyses, and partially in more practical considerations. Some type of optimization approach which incorporates various goals and objectives, by fishery, is likely the best approach. Because most of the other concerns listed below circle back to the issue of appropriate coverage levels, it remains the fundamental issue for resolution. Because the issue of observer program

goals and objectives are related to the observer's duties/priorities at sea, the OAC has requested that one of the observer trainers be present at the next meeting to provide information in that regard.

2) **overall cost uncertainty** - There is no guarantee that even baseline needs would now be covered by a 2% fee. Then there is the issue of Supplemental coverage and what observer coverage would have to be obtained and paid for above and beyond the 2% fee. Agency budgets and required coverage levels also relate directly to overall cost and there was a mechanism within the Research Plan to address those annually ; however, the first year of that plan did not allow for these issues to be fully addressed as that first year maintained existing coverage levels. As noted above, necessary baseline coverage will define what is 'supplemental', and therefore relates directly to the overall cost issue.

3) **cost inequity** - some operators do not pay at all, and some operators pay a disproportionately high percentage of gross income in observer costs. The OAC feels that the under 60' category should be part of the observer program, either through payment of costs or carrying some level of coverage, or both. The OAC also recognizes that addressing the cost inequity issue may be next to impossible as long as we are under the pay-as-you-go program, and will simply have to await implementation of some type of fee system.

4) **use of standard prices** - the use of standard, as opposed to actual, prices was a source of concern by the industry under the original plan and remains. Work being done now with regard to the IFQ/CDQ fee program has some promise for resolving that issue.

5) **complex and burdensome accounting for processors** - this was and remains a large issue relevant to the accounting and collection structure of any fee-type program. The option of a TAC-based funding mechanism would alleviate this area of concern.

6) **multiple sources for observers** - with the ADF&G/BOF pursuing a GHL-based set aside to fund the crab observer program, it appears likely that any program developed for groundfish would be separate and result in two different observer procurement sources. The potential Supplemental program coverage could result in yet a third source, though there may be ways to incorporate that within the overall groundfish structure.

7) **contracting issues** - the most significant remaining issues relate to the 'arms length relationship' which still does not exist between contractors and vessels/plants. As with cost equity, this issue will likely remain under the pay-as-you-go system. A variety of other contracting related issues were at least partially resolved previously, while some remain and will have to be addressed as this process unfolds.

Potential program structures for further consideration: 1) Federally funded program; 2) Cost recovery program through TAC set-aside; 3) Fishery specific fee systems; 4) A fee only on vessels<60'; 5) Fee based on observer days; 6) 2% Fee (Research Plan type system); and 7) Status quo.

Modifications to current pay-as-you-go program: The OAC discussed several proposed changes to the current program, recognizing that cost equity, flexibility, and conflict of interest (data integrity) are still problems under the current program. There was particular discussion on the arms length relationship issue, and whether conflict of interest at that lever was real or perceived. Collusion is one issue, while coercion (at the observer level) is yet another, and the latter we cannot address under any program structure. The collusion aspect (between contractors and vessels) is still and issue for NMFS, though members of the OAC do not necessarily agree that it is a real problem. To the extent either form of conflict is an issue, it was noted that it will only get worse as we put observers in the position of individual vessel accounting.

A formal grievance process (which works both ways) is one thing the OAC discussed as a way to help address the related issue of when problems arise between observers and vessels - this is not really the conflict issue, but came up as an ancillary discussion. The following specific proposals were addressed by the OAC (see attached list).

Establish minimum 65% retention rate for observers: the OAC feels that this is being addressed via the union contracts, and does not need to go into regulation, which may adversely affect flexibility. If there is a rule promulgated, industry needs to be involved, but it is now premature.

Distribution on personal information on observers: OAC agrees that it should not be released. NMFS proposes to make their policy into regs, though other federal regs may already be in place to disallow this. On the related issue of the vessel owner automatically getting copies of the observer's debriefing report (instead of having to file a FOIA request), the OAC recommends that NMFS explore this further with NOAA GC.

Safety Policy and refusing to board a vessel: This relates to the national level policy passed earlier this year. No OAC recommendations, except that NMFS continue to work with USCG to clarify these issues, and to recommend that this issue be addressed as part of the USCG boarding school orientations. Question was raised - 'at what point can an observer declare a vessel unsafe?' It appears to be vague and open-ended. The way it is proposed is that an observer can call a coast guard officer is he thinks there is a problem - then it will be worked out between the coast guard and vessel skipper and observer.

Standards for observer housing at shore plants: Should such standards be established in regs? The OAC recommends that yes it should, except use of the word 'quiet may be a little hard to define/enforce. Transportation should be provided between plants as well.

Sharing of plant observers and monitoring shoreside deliveries: Should observer be limited from covering more than one 100%, or two 30%, plants? Some feel that the plant coverage is often unnecessary, and observer should be doing multiple plants. NMFS feels the observer is necessary, in order to respond to existing regulations to count salmon, for example, The issue is really relevant only to the pollock fisheries, so the OAC recommends to restrict this limitation to pollock.

A related proposal is NMFS recommendation to ensure that shoreside deliveries are adequately monitored. Requiring the vessel observer to stay through the sorting is likely unreasonable. Primary role of vessel observer is at the offload - this discussion is symptomatic of the larger issue of where the observer is best used. It's also related to the proposal to revise basis for shoreside plant coverage requirements. Restructuring of the pollock fishery currently underway may also affect this. So, OAC has no specific recommendation at this time.

Guidelines for observer sampling stations: OAC agrees with NMFS that this is premature. Whatever guidelines of regs are ultimately adopted need to take into account differences by vessel size.

Deployment of observer program staff at NMFS discretion: This relates to the Observer Corps concept, and so NMFS will need such authority at some point in time. NMFS will continue to work on this concept, as they further develop the 'corps' concept.

Require contractual link between NMFS and contractors: OAC concurs with NMFS that this is not viable under the present system and is part of the much larger issue of program structure.

Revise shoreside requirements from monthly based to weekly reporting period: One disadvantage of this proposal would be the loss of scientific data, on some of the low volume unobserved fisheries, that would no longer be collected. The extra costs to the plants however may not justify this data collection. NMFS may be able to use existing NMFS personnel to make periodic observations on these fisheries. It does not make fiscal sense. Also, there may be instances where short notice for an observer may be difficult to fill. OAC recommends proceeding with this adjustment.

Require catcher vessels to purchase computers for observer: Extra cost may be less than what would be otherwise incurred with extra debriefing time. Good data helps ensure we don't have erroneous closures. On the other hand, and additional computer in the wheelhouse may be impractical, or even impossible. It was also noted that perhaps NMFS should provide the computers, or that the contractors or observer themselves should provide their own (tools of the trade argument and that they would likely be better taken care of by the individual owner). The OAC did not reach a specific recommendation on this issue.

Increased coverage requirements for true motherships: Since the OAC does not have a rep from this sector, we declined comment.

Clarify definition of fishing day: Abuse is occurring. NMFS has no specific remedy at this time but is soliciting ideas. The problem is not limited to just pot boats but that seems to be the major problem area. - maybe define a 'day' as having pulled a certain minimum number of pots. No specific recommendation on this proposal from the OAC.

90 day rule: Proposed that some flexibility be built in the regulation that an observer be at sea for no more then 90 days, for cost and practicality reasons. NMFS feels that 90 days in itself is a compromise, and that 90 days is a long time. They also have allowed some flexibility in 'emergency' situations. This however imposes subjectivity into the process and they are more rigidly applying the reg. So, NMFS is opposed to changing this reg. The OAC concurs with NMFS.

The OAC did not address a proposal from FVOA to reduce coverage on the over 60' IFQ fishery vessels.

NMFS ANNOUNCES THE EXTENSION OF THE INCIDENTAL TAKE LIMIT ESTABLISHED FOR THE ENDANGERED SHORT-TAILED ALBATROSS IN THE ALASKA HOOK-AND-LINE GROUNDFISH FISHERY (from INFORMATION BULLETIN (98-123) December 17, 1998)

The U.S. Fish and Wildlife Service (USFWS) recently extended the period of the 1997-1998 Biological Opinion on the effects of the Bering Sea/Aleutian Islands (BSAI) and Gulf of Alaska (GOA) groundfish hook-and-line fisheries on the short-tailed albatross, according to Steven Pennoyer, Administrator, Alaska Region, National Marine Fisheries Service (NMFS). This extension will be effective until it is superseded by a subsequent amendment to that Opinion.

The short-tailed albatross is protected by the Endangered Species Act (ESA) and under the law, an incidental take level of 4 birds was established during the 2-year period of 1997 and 1998 for the BSAI and GOA hook-and-line groundfish fisheries. To avoid delay in the opening of the 1999 BSAI and GOA groundfish hook-and-line fishery, that time period has been extended until an amendment to the 1997-1998 Biological Opinion is issued by the USFWS. The statutory deadline for receipt of that Biological Opinion is March 19, 1999. USFWS will make every attempt to deliver the amended Biological Opinion and the accompanying Incidental Take Statement prior to that date.

As reported in NMFS Information Bulletin #98-108, 2 short-tailed albatross were reported taken in the BSAI groundfish hook-and-line fishery during September 1998. No birds were reported taken in 1997. If the incidental take level of 4 is exceeded prior to the issuance of the amended Biological Opinion, any operations causing such take must cease pending reinitiation of consultation with the USFWS. As long as fishermen implement required seabird avoidance measures in a conscientious, consistent, and effective manner, the likelihood of a short-tailed albatross being taken and the fishery closing is negligible.

A NMFS bulletin on short-tailed albatross is available from NMFS. Contact Kim Rivera, Protected Resources Division, NMFS, if you have any questions; 907-586-7424, or 907-586-7235.

NPFMC AND NMFS PROCEED WITH A PROPOSAL TO REVISE THE CURRENT SEABIRD AVOIDANCE REGULATIONS IN THE ALASKA LONGLINE FISHERIES (Dec. 9, 1998 Memo from Kim Rivera, Seabird Coordinator, NMFS, Protected Resources Division, Alaska Region)

At its December meeting in Anchorage, Alaska, the North Pacific Fishery Management Council (Council) heard a Seabird Bycatch Report by the National Marine Fisheries Service (NMFS) and testimony from Thorn Smith (North Pacific Longline Association), Mark Lundsten and Jack Knutsen (IFQ halibut and black cod fishermen). Based on an NPLA proposal, the NMFS Seabird Bycatch Report, and the testimony provided, the Council recommended that NMFS proceed to prepare an analysis for a regulatory amendment that would revise the current seabird avoidance measures in the Alaska longline fisheries. The Council is scheduled to take initial action on the analysis (environmental assessment) at its February 1999 meeting in Anchorage, Alaska, and final action on the analysis at its April 1999 meeting.

The Council motion requested that NMFS consider the following alternatives:

NPLA proposal for lining tubes:

A. Status quo--lining tubes remain optional.

B. Freezer-longliners are required to use lining tubes:

1. Freezer-longliners shall deploy baited hooks through a lining tube, at a depth not less than 1.5 meters when the vessel is fully laden;
2. Weights shall be added to the baited line as necessary to prevent it from resurfacing after being set; and
3. At all times a streamer line, bird buoy or other device shall be towed behind the boat over the baited line for the purpose of discouraging diving birds.
4. This requirement shall apply to:
   a. All freezer-longliners,
   b. All freezer-longliners 100' in length or greater, or
   c. All freezer-longliners 125' in length or greater.
5. This requirement shall be effective:
   a. January 1, 2000,
   b. September 15, 2000; or
   c. January 1, 2001.

Other alternatives that NMFS proposed to be considered:

6. All applicable longline vessels setting gear during daylight hours must use a streamer line or a towed buoy bag, AND

7. Add sufficient weights to the longline gear to cause baited hooks to sink to at least 1-2m before reaching the end of the towed streamer line or towed buoy bag.

8. All applicable longline vessels setting gear during night hours must use a streamer line or a towed buoy bag.

9. Towing of board, stick or other devices [see 50 CFR Part 679.24(e)(3)(ii)] would no longer qualify as compliance with seabird avoidance measures.

Additional alternative that NMFS could consider:

- Removal of hooks from fish heads prior to offal discharge.

Note, these alternatives are written in a general form. Draft proposed regulatory language, particularly for alternatives 6 and 7, could consider appropriate performance standards or design standards, if such applicable information is known or available for the Alaska longline fisheries.

The U.S. Fish & Wildlife Service (USFWS) provided preliminary estimates for seabird bycatch rates and total numbers of seabirds bycaught, by species, by area (Bering Sea/Aleutian Islands and Gulf of Alaska) using 1993-1997 NMFS observer data and NMFS commercial fisheries catch data. The USFWS analysis is preliminary and is being finalized for presentation/publication at the Pacific Seabird Group Seabird Bycatch Symposium---Seabird By-Catch: Trends, Roadblocks, and Solutions, scheduled for the PSG Annual Meeting, 24-28 February, 1999, in Blaine, Washington.

Preliminary USFWS estimates for seabird bycatch rates and total numbers of seabirds bycaught, by species, by area using 1993-1996 NMFS data can be found and is currently available in the FAO Fisheries Circular No. 937. *The Incidental Catch of Seabirds by Longline Fisheries: Worldwide Review and Technical Guidelines for Mitigation* prepared by Nigel P. Brothers, John Cooper, and Svein
Lokkeborg, Preliminary Version, Rome, September 1998.

COUNCIL TAKES ACTION REGARDING STELLER SEA LIONS (Adapted from NPFMC Newsletter, #6-98)

At this meeting, the Council reviewed the Biological Opinion (Section 7 consultation) from NMFS, which concluded with a 'Jeopardy Finding' relative to the pollock fisheries in both the BSAI and the GOA. In order to allow these fisheries to be prosecuted in 1999, the Council took emergency action to implement measures consistent with NMFS' proposed Reasonable and Prudent Alternatives (RPAs). The RPAs, in summary, proposed spatial and temporal distribution of the pollock fisheries as well as additional closure areas around specific rookery and haul-out sites used by sea lions. For the BSAI, the Council's actions include: (1) separating the pollock fisheries into four seasons (A1, A2, B, and C seasons), with a limit of 30% of the total TAC coming from any one season; (2) reducing the overall roe season fishery to 40% of the annual total TAC; (3) limiting the overall A season removals from the sea lion critical habitat area/catcher vessel operational area (CH/CVOA) to 62.5% of the total TAC for those seasons; (4) eliminating a directed pollock fishery in the Aleutian Islands subarea; and, (5) expanding closure areas around rookery and haul-out sites.

For the GOA, the Council also created four seasons with limits on the percentage of the TAC which can be taken from any one season, expanded the closure areas around rookery and haul-out sites, and established a 300,000 pound trip limit for pollock in the western and central Gulf areas.

There is considerable scientific uncertainty regarding the relationships between the pollock fisheries and the Western population of Steller sea lions. This uncertainty lies at the heart of the concerns expressed by the AP and the SSC. The Council recognizes and shares these concerns. This uncertainty has placed the industry at risk, and forced the Council to react to Endangered Species Act concerns in a very compressed time frame and make critical decisions based on incomplete and conflicting data. This is not acceptable.

Nonetheless, as the SSC has noted, the Endangered Species Act involves a fundamental shift in the burden of proof and some basic facts are clear: (1) The Western population of Steller sea lions is greatly reduced; (2) the Western population has been listed as endangered; (3) pollock forms a large part of the contemporary diet of Steller sea lions; and (4) pollock fisheries remove and disperse potential prey. In view of the importance of the pollock fisheries, the Council is compelled to take immediate action to address the Endangered Species Act issues. Therefore, the Council adopted several measures for emergency action in 1999. For a full discription of all adopted measures see Council webpage at *www.fakr.noaa.gov/npfmc/npfmc.htm*

Additional measures were also discussed. These measures are being adopted as an Emergency Rule in accordance with the MSFCMA. They will be in effect for 180 days. In reviewing the possible extension of these measures for an additional 180 day period, the Council will pay great attention to NMFS' response to the following:

1. The Council requests that NMFS, in consultation with the Council, the Marine Mammal Commission, ADF&G, and other relevant management agencies, coordinate an independent scientific review of the biological data, Biological Opinion, and other relevant information relating to factors affecting Steller sea lions and their prey. The purpose of the scientific review is to provide guidance to the Council as it prepares to address the long-term aspects of the Steller sea lion situation through the plan amendment process. The Council requests that the scientific peer review be completed by April 1, 1999.

2. The Council requests that NMFS reconstitute the Steller Sea Lion Recovery Team to address concerns such as those expressed by the SSC to ensure that the Council has an appropriate additional source of advice as the Council prepares for long-term treatment of Steller sea lion issues.

3. The Council requests that NMFS prepare and submit a budget proposal for the FY 2000 budget for a sustained research program to investigate: the efficacy of the emergency actions adopted by the Council; sea lion dietary and foraging patterns; sea lion/fishery interactions; and current trends in sea lion population dynamics.

4. It is the intent of the Council that the NMFS move as quickly as possible to develop National Standards for Vessel Monitoring Systems (VMS) so that such systems can be required on fishing vessels engaged in the trawl fisheries of the Bering Sea and Gulf of Alaska. Furthermore, it is also Council intent that in developing the National Standards that the NMFS consult with affected states, Councils and other federal and enforcement agencies with the intent that the U.S. Coast Guard and other regional enforcement agencies have timely and efficient access to VMS data.

The Council recognizes that these management measures represent an incremental step, and are for 1999 only. To fully comply with both the ESA and MSFCMA requirements, amendments to the BSAI and GOA FMPs will be necessary. Such FMP amendments may need to consider additional measures to satisfy statutory requirements."

These measures are expected to be implemented by emergency rulemaking for the 1999 fisheries. Follow-up amendments will have to be prepared for the year 2000 and beyond and could include similar, or additional, measures for sea lion protection. The specific 10- and 20-mile closure areas around rookeries and haul-outs will be detailed in the NMFS rulemaking for these actions.

ARE NO-TRAWL ZONES HELPING STELLERS? MAYBE …(from SeaWeb Ocean Update, December 1998)

The establishment of no-trawl zones around important Steller sea lion rookeries may be helping numbers of the pinnipeds to increase in those areas, according to a recent study presented at the AAAS Arctic Science Conference.

Declines in Steller sea lion populations were first noticed in the eastern Aleutian Islands, then spread east into the Gulf of Alaska and west to the central and western Aleutian Islands. In 1980, there were an estimated 220,000 Stellers in the region; in 1995, the estimate was just 60,000 ? a 75% decline in fifteen years. A report by the National Research Council suggested the declines were probably due to a combination of climatic changes, over-fishing and past over-hunting of predators, such as whales.

Starting in 1990, the National Marine Fisheries Service (NMFS) set up no-trawl zones around certain rookeries. According to Wendy Dunlap-Harding of the Institute of Marine Science, University of Alaska Fairbanks, "it has been difficult to determine whether the no-trawl zones have been effective in aiding in the recovery of Steller sea lions, but preliminary results from recent studies are encouraging."

Dunlap-Harding notes, for example, that between 1991 and 1996 there was an apparent increase in the number of non-pups at rookeries surrounded by 20 nautical mile no-trawl zones. However, rookeries surrounded by 10-mile zones saw a continued decrease in non-pup numbers. Unfortunately, notes Dunlap-Harding, NMFS did not expect to have the test the efficacy of the no-trawl zones and the design and placement of the zones is not conducive to traditional experimental methods. She argues that continued study is therefore necessary before any definitive conclusions can be reached.

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NORTH PACIFIC OBSERVER PROGRAM UPDATE

NMFS EXTENDS THE NORTH PACIFIC INTERIM GROUNDFISH OBSERVER PROGRAM THROUGH THE YEAR 2000 IN THE GOA AND BSAI (From INFORMATION BULLETIN (98-124), December 21, 1998)

NMFS has issued a final rule to extend the current groundfish observer coverage requirements for the North Pacific Groundfish Observer Program (Observer Program) that expire December 31, 1998, according to Steven Pennoyer, Administrator, Alaska Region, NMFS.

The final rule implementing the extension was published in the Federal Register on December 15, 1998 (63 FR 69024), and will become effective January 1, 1999. This final rule extends the existing Observer Program regulations through December 31, 2000. No changes to the existing program were made to the extention.

VESSEL REPORTS and THEIR IMPORTANCE by Sarah Gaichas, NMFS, December 30, 1998

Every Observer who has debriefed in the past few years has had the pleasure (?) of filling out the electronic vessel survey. The vessel survey has become an important tool in improving the standardization of debriefing by ensuring that all Observers are asked the same questions no matter where they debrief. However, there are many other uses for the information in the survey. In this article, I am hoping to answer some of the common questions about the vessel survey, and encourage you to keep up the good work in recording the details of your cruise in the survey.

"Who reads my answers, and how do they use them?"

Well, I do! One aspect of my job is research into Observer program sampling methods. The foundation of this research is a good description of how the current methods are working (or not working) in the field--and that description can only come from Observers. When I am looking into our methods, such as density estimation or random sampling, I will read all Observers' answers to only one or two questions from the survey. This is the only place where I can get the detailed methodology that goes with the data you bring back. This is something to keep in mind when filling out comment sections; survey users may only be reading one of your comments, not your entire survey. Therefore, statements in comments like "see question X" or "see my logbook" may mean that your voice will not be included in the overall picture because some survey users will not have access to your logbook, or to question X.

Your vessel surveys are also being used by Observer program staff to compile vessel profiles. These profiles will contain descriptions of living conditions, sampling areas, sampling techniques for each fishery, and other information to help Observers adjust to the working conditions on specific vessels. Some profiles are already complete for certain vessels, but there is still much work to do on this project which is heavily dependent on your surveys.

Another current user of the vessel survey is the US Fish and Wildlife Service in conjunction with the NMFS Alaska Region Protected Resources Division. They have used the answers to the seabird questions to compile reports and make presentations to the North Pacific Fishery Management Council on the seabird avoidance techniques used in Alaska longline fisheries, and to respond to questions from industry and environmental interest groups.

Future users of the vessel survey information may include the Anchorage Observer Training Center, the NMFS Northwest Region Fishery Management Division, the NMFS Alaska Fisheries Science Center Status of Stocks group, NMFS Enforcement, and the US Coast Guard. All of these groups have expressed an interest in getting information about cruise experiences direct from Observers in a format where they can identify trends over time, vessel types, and target fisheries. There may be more users of the survey as more people become aware of its' existence.

"Is anybody listening to what I say in the survey?"

Yes! I have relied on vessel survey information for making presentations to industry groups and scientific review panels. Your input in the survey is vital in communicating the unique and difficult sampling conditions you encounter at sea. For the industry groups, the main message was that assistance and cooperation are key in improving Observer sampling of catches, because the most widespread sources of sample bias identified by Observers are vessel-related (mechanical sorting, etc.). The scientific review panels were impressed with the continuing assessment of Observer program sampling methodology which is only possible through the vessel survey. Your vessel survey reports were also used to make a presentation to the Enforcement Committee of the North Pacific Fishery Management Council in September, 1997. Your survey responses allow us to categorize the general problems faced by many Observers, which is the crucial first step in solving the problems.

"Why are the questions so repetitive?"

The survey is designed so that each question gets at a distinct aspect of your cruise experience. Some questions seem repetitive if you answer early questions in too much detail because you didn't know that some information will be asked for later in the survey. To help you focus on the information required in each question, and so that you avoid repeating yourself, a list of most survey questions is provided in your logbook. You will find that many questions are closely related to each other, and that some overlap is natural, but in most cases the questions are asking for different information.

Please remember that the survey is most useful when you give complete, detailed information. Try to describe your methods in enough detail that someone else could reproduce them on the same vessel. Point out details of data

collection that do not show up in the data itself. This benefits all observers in the long run, because it gives NMFS a more accurate idea of the conditions you work under at sea and the feasibility of sampling protocols under varying conditions. If you don't tell NMFS you had difficulties, and under what circumstances, NMFS may have unrealistic ideas about what is reasonable to ask for in terms of sampling workload. If you describe your situation in detail, NMFS can use this information to improve sampling protocols.

The Future

I've been using your vessel survey responses for over a year now, and one thing I have seen is continued improvement in the specificity and detail in your comments. Thank you! Your responses are being read, and your ideas are being incorporated into new training and briefing materials. We are attempting to improve the flow through the survey, and some of the questions themselves are being changed for 1999 to help clarify what information we or other users need in your responses. Please continue to bear with us as we improve our technology; the benefits to everyone should be worth the work.

P.S. The Observer survey--why you shouldn't blow it off.

This is your suggestion box. Please use it! Currently, we only hear from a handful of people. We would really like a more inclusive view of your experiences in our training process. The only way for us to make improvements is for us to hear what you think!

OBSERVER COMMENTS on an MS-CDQ TRAINING (Excerpts from letter to Observer Training Staff, Reprinted with permission of Irene Dorang)

Having recently completed the 11/2/98 MS-CDQ training class in Anchorage I feel it is important to point out some concerns I have regarding the MS-CDQ training and groundfish briefing curricula. The current classes suffer from a heavy emphasis on very basic data, a lack of emphasis and sometimes outright failure to impart new information and a general lack of standardization of the content of what is presented. This is resulting in observers being deployed unprepared, reflects poorly upon NMFS and the Observer Program, and especially in the case of the MS-CDQ fishery, creates the potential for an enormous amount of money to be lost due to down-time while an observer waits for a reply from NMFS regarding an issue which should have been addressed in training.

In the interests of the highest quality Observer Program I would appreciate your attention to the following issues.

The main problem observers encounter is that trainers often fail to follow a specific agenda when it comes to the presentation of new material, resulting in some subjects being covered inadequately or not at all unless in response to specific questions. This is frustrating in light of the fact that a comparatively huge amount of time is spent reviewing basic information better suited to a 3-week training class. For example:

In the 11/2 MS-CDQ training class, hours were spent on how to fill out a deck sheet, entering/checking ATLAS data, and filling out self-explanatory forms such as the Sample Station Checklist. **NO time** was spent calculating percent error for a flow scale or platform test, despite the fact that is was new material. In addition,

-The original Platform Scale Test Log form defined the maximum permissible error as "+/- 1.0%" rather than "0.5%" as stated in the regulations;

-The same form had calculated acceptable weight ranges that were actually equal to 0.1% error;

-When referring to observer duties regarding the electronic scales, the terms "test" and "calibrate" were sometimes used interchangeably;

-Instructions on what to do in specific situations changed from one day to the next on several occasions;

-The concept of the importance of data integrity was discussed on a level that was inappropriate for priors in good standing.

In the same training class, while the topics of time management and prioritizing were discussed at length, several potentially confusing situations which could result in needless loss of time seemed to be addressed only because they were brought up by observers. These included the facts that:

-Contrary to written regulations, observers are only required to count (not take lengths on) all halibut on catcher trawl vessels;

-Observer estimates of percent retained for pollock and cod are still important but maximum retainable bycatch amounts are no longer an issue;

-Jellyfish and other non-allocated can be discarded at sea from MS-CDQ vessels.

I realize that the MS-CDQ fishery will bring up many issues for which NMFS has not yet established a policy, and the intent is that observers not bring liability upon themselves by instructing vessels as to what they may or may not do. However, I feel this is being taken to such an extreme that at times the observers are encountering a "you're on a need to know basis" mentality which may prove to be counterproductive given the number of potential unknowns, the amount of time it will probably take to receive a response from NMFS (esp. on weekends), and the fact that often the boat will have to suspend operations until the issue is decided. Observers currently are aware of many potential violations and are accustomed to bringing them to the attention of vessel personnel without making decisions for them.

On a brighter note, I would like to point out that the Conflict Resolution seminar was excellent, the background and the 'how and why' of the MS-CDQ fishery was interesting, and the review of random sampling technique is always helpful. The handouts on groundfish and crab biological data contained invaluable information and would be a good addition to the 3-week training classes.

CATCHER/PROCESSORS THAT HARVEST POLLOCK CDQ MUST WEIGH CATCH IN ALL GROUNDFISH FISHERIES IN 1999 (from INFORMATION BULLETIN (98-121), December 8, 1998)

Section 211(b)(6) of the American Fisheries Act (AFA) requires the catcher/processors eligible to harvest the directed fishing allowance for pollock in the Bering Sea and Aleutian Islands Area and listed under section 208(e)(1) through (20) of the AFA to weigh all catch on a scale approved by the NMFS when harvesting, receiving or processing any groundfish in Federal waters off Alaska.

For those catcher/processors that will harvest pollock CDQ in 1999, this requirement takes effect on January 1, 1999. For catcher/processors that will not harvest pollock CDQ in 1999, this provision takes effect on January 1, 2000. Catcher/processors that do not weigh all catch on an approved scale starting January 1, 1999, may not harvest pollock CDQ at any time in 1999.

Scales for weighing catch must be inspected and approved by NMFS. A list of approved scales and a request for a scale inspection may be obtained on the Internet at *http://www.fakr.noaa.gov/cdq/scales.htm#Link_3* or by calling Alan Kinsolving, NMFS, 907-586-7237.

AK Fisherman's Union UPDATE

FOUR CONTRACTS COMPLETE THROUGH 2000 by Mark Coles

The atmosphere of contract negotiations this year was generally positive. The fear and anxiety which existed last year was at a much lower level. Having a year of a working agreement that went smoothly under definitely made a difference. For the most part, contractors came to the bargaining table with a willingness to bargain in good faith and reach agreement. Contracts are complete with AOI, Frank Orth, NWO, and Saltwater.

It was apparent most contractors were aware of the more severe problems in their particular agreements. Most signaled their awareness of the problem issues early on and as bargaining progressed they were prepared to make necessary contract changes to fix them. The most notable example being Saltwater abandoning "hostage pay".

Surprisingly, the wage negotiations went the smoothest of any piece of the process. It seemed contractors came to the table understanding rates needed to increase to a level that puts all contractors on even ground. Having the three year contract with AOI setting a base level for wages certainly paved the road. See Table 1 for Contract Summaries (attached as Word document).

It was great to have the assistance of observers in the process. For those of you who called or sent letters, THANK YOU. I would especially like to thank Liz Mitchell, Gillian Stoker and as always, Kim Dietrich for their hands on assistance.

DCI OBSERVERS WIN ELECTIONS FOR UNION DECERTIFICATION (KD)
On October 19, 1998, three DCI observers submitted a petition to the National Labor Relations Board (NLRB) requesting decertification of the union as their representative for contract negotiations. The NLRB sent ballots to the 14 eligible employees on 11/19/98. The voting period lasted 45 days. Ballots were counted on 1/5/99. Eleven observers returned ballots. There were 3 votes in favor of keeping union representation and 6 votes against. Two ballots were contested and not opened.

WHY ARE THE UNION CONTRACTS IMPORTANT? Editorial by Kim Dietrich

Prior to the union contract, competition among the contractors for more clients forced observer wages and benefits downward, not upward even though our job duties, responsibilities and qualifications are ever increasing. See Table 2 attached as an Excel file. It is extremely important observers stand together as a unit. Observers have enough enemies in the world of fisheries; we don't need to undermine one another. The data observers collect is extremely important to the sustainability of the North Pacific fisheries. You have one of the most challenging fisheries biology jobs and you deserve to get paid the wages of a professional biologist. Wages for employees of a non-union contractor may not decrease the first year or two without the union contract. BUT, if we don't stand together, history will repeat itself. Clients have a lot of control over our employers and are constantly pressuring them for a 'better deal'.

While I understand the plight of the small business owner struggling to increase business, I do not feel observer wages should suffer because of this. Competition for clients should be based on factors other than how low the contractors can cut wages (pre-union contract) such as ensuring observers arrive with all gear on the date requested by the client, supplying competent, highly qualified, professional observers, how quickly the contractor can respond to crisis situations such as observer injuries or seasickness, how competently conflicts on the vessel are handled by the contractor, how well the contractor supports the observer when conflicts arise, etc. If one union contract falls, we will all pay the consequences. We're all on the same side so let's stand together.

ADF&G UPDATE

ALASKA BOARD OF FISHERIES 1998/1999 OBSERVER RELATED PROPOSALS Compiled by Felix Canez

The following proposals affecting observers will be considered by the Alaska Board of Fisheries (BOF) at the March 18 - 26, 1999 meetings in Anchorage, AK at Captain Cook Hotel. The proposals concern changes to the state's fishing regulations.

Before taking action on the proposed changes to the regulations, the Alaska BOF would like your written comments and/or oral testimony on any effects the proposed changes would have on your activities. After reviewing the proposals, please send your comments before **Feb. 26, 1999** to:
ATTN: BOF COMMENTS
Alaska Department of Fish and Game
Boards Support Section
PO BOX 25526
Juneau, AK 99802-5526
(907) 465-4111 or 465-5526
(907) 465-6094

When making written comments regarding these proposals, you should list the PROPOSAL NUMBER to which your comment pertains and specifically whether you favor or oppose the proposal. This will ensure that your comments are correctly noted for the board members in relation with the proper proposal(s). You may also provide public testimony during the meeting. Contact the BOF for a meeting agenda and testimony protocol.

PROPOSAL 304 - 5 AAC 39.645. SHELLFISH ONBOARD OBSERVER PROGRAM. Establish a

state-funded onboard observer program as follows:

5 AAC 39.645 SHELLFISH ONBOARD OBSERVER PROGRAM.
(x) Establish a state-funded observer program for the non-Community Development Quota (CDQ) Bering Sea/Aleutian Islands (BS/AI) crab fisheries. ADF&G would have full authority and responsibility for deploying observers on any non-CDQ vessel participating in a BS/AI crab fishery as necessary for fishery management and data-gathering needs. (Adoption of the state-funded program will be contingent on approval of the Alaska legislature to allow ADF&G to conduct cost-recovery fishing for the harvest and sale of BS/AI crab which ADF&G would use to fund the program.)

Problem: Two problems are addressed: 1) costs to those vessel operators that are currently required to carry onboard observers in the Bering Sea and Aleutian Islands (BS/AI) crab fisheries; and 2) insufficient stock status or fishery data from those BS/AI crab fisheries which have little or no current observer coverage.
WHAT WILL HAPPEN IF NOTHING IS DONE? 1) Vessel operators in certain BS/AI crab fisheries will continue to bear costs of the observer coverage that is required in the regulation to meet data-gathering needs. 2) Data needed for fully informed management and regulation development will continue to be lacking from those BS/AI crab fisheries with little or no current observer.
WHO IS LIKELY TO BENEFIT: All participants in the BS/AI crab fisheries will benefit. Costs to vessel operators who must carry observers will be eliminated. Improved data gathering flexibility from current and additional observed fisheries will provide better information for management and conservation of the BS/AI crab resources.
WHO IS LIKELY TO SUFFER? State funding of the BS/AI observer program may allow for the use of the state employees as observers. If so, observer contractors that are currently providing observers in BS/AI crab fisheries would loose contracts and nonresidents of Alaska would be ineligible to be employed as state employee observers.
OTHER SOLUTIONS CONSIDERED: Regulatory establishment of partial observer coverage levels by vessel size category for each BS/AI fishery; funding observer coverage through payments into a pool, a landing tax, or some other user fee. Regulatory observer coverage levels do not allow for the flexibility needed to adapt to changing or specific data-gathering needs. Also, this would result in greater inequity to vessels required to carry an observer under the current "pay as you go" system and would pose considerable logistical problems for vessel operators and the department staff to implement. Payments into a pool, landing taxes, or user fees to pay for observer coverage would be cumbersome to administer and are not as equitable as a program funded by cost-recovery fishing from the crab resources.
PROPOSED BY: Alaska Department of Fish and Game

PROPOSAL 305 - 5AAC 39.645 SHELLFISH ONBOARD OBSERVER PROGRAM. Eliminate Observers on Catcher Vessels in the Area O King Crab Fishery.
PROPOSED BY: Stephen Hall

PROPOSAL 306 - 5 AAC 39.646. SHELLFISH ONBOARD OBSERVER TRAINEE PROGRAM QUALIFICATIONS AND REQUIREMENTS. Change Bachelor of Science qualification degree type for onboard observers as follows:

5 AAC 39.646 SHELFISH ONBOARD OBSERVER TRAINEE PROGRAM QUALIFICATIONS AS REQUIREMENTS. (a).....
(1) a Bachelor degree in the sciences of biology, any branch of biology, or limnology [OF SCIENCE DEGREE IN NATURAL SCIENCES]; or

PROBLEM: Educational requirements of applicants to qualify as a trainee shellfish onboard observer are more restrictive than current State of Alaska Fisheries Biologist I requirements. This disqualifies potential, suitable, observer candidates. The current State of Alaska Fisheries Biologist 1 educational requirements is a Bachelors degree in the sciences of biology, any
branch of biology, or limnology. Many universities now confer this as a Bachelor of Arts degree.
WHAT WILL HAPPEN IF NOTHING IS DONE? Capable applicants who possess a Bachelors Arts degree in the sciences of biology, any branch of biology, or limnology will not be allowed to qualify as a trainee observers.

WHO IS LIKELY TO BENEFIT? Capable applicants who possess a Bachelor of Arts degree with a major in biology, any branch of biology, or limnology. In addition, the industry will benefit from having a larger pool of potential observers.
WHO IS LIKELY TO SUFFER? No one.
OTHER SOLUTIONS CONSIDERED? None.
PROPOSED BY: Alaska Department of Fish and Game

PROPOSAL 307 -5AAC 39.646 SHELLFISH ONBOARD OBSERVER TRAINEE PROGRAM QUALIFICATIONS AND REQUIREMEMNTS and 5AAC 39.142. ONBOARD OBSERVER CERTIFICATION AND DECERTIFICATION. Delete requirements for an onboard observer to hold FCC radio telephone operator's license.
PROPOSED BY: Alaska Department of Fish and Game

PROPOSAL 308 - 5 AAC 39.645. SHELLFISH ONBOARD OBSERVER PROGRAM. Further define harassment of observers and include crew members of the vessels which observers are deployed on as follows:

5 AAC 39.645. SHELLFISH ONBOARD OBSERVER PROGRAM.
(I) When a vessel is required to carry an onboard observer, the vessel owner, owner's agent, [OR] operator, or crew members shall:
(11) not negligently assault, resist, oppose, impede, intimidate, or interfere with an observer;
(12) not negligently interfere with or bias the sampling procedure employed by an observer, including physical, mechanical, or other sorting or discarding of catch before sampling;
(13) not negligently tamper with, destroy, or discard an observer's collected samples, equipment, records, photographic film, papers, or personal effects with out the express consent of the observer;
(14)not negligently harass an observer with insults, taunts, or challenges in a manner likely to provoke an immediate violent response;
(15) not negligently harass an observer by conduct that has sexual connotations, has the purpose or effect of interfering with the observer's work performance, or otherwise creates an intimidating, hostile, or offensive environment. In determining whether conduct constitutes harassment, the totality of the circumstances, including the nature of the conduct and the
context in which it occurred, will be considered. The determination of the legality of a particular action will be made from the facts on a case-by-case basis.

PROBLEM: Lack of an efficient mechanism for the prevention of negligent unjust treatment of observers. The current applicable mechanism to ensure members of the industry are responsible for the decent treatment of observers can be cumbersome and inefficient. Adopting regulations paralleling the current National Marine Fisheries Service regulations dealing with the treatment of observers, would benefit the state of Alaska Shellfish Observer Program. Current Alaska statutes, which protect observers, are not specialized to include specific situations encountered in the observer's line of work. The current Alaska statutes, which deal with the negligent unjust treatment of individuals, are not located in the commercial fisheries regulations. If regulations outlining the of negligent unjust treatment of observers were adopted in the commercial fishing regulations, the process of prosecuting individuals who negligent treat observers unjustly, would become more effective and efficient.
WHAT WILL HAPPEN IF NOTHING IS DONE? Negligent unjust treatment of observers will continue to be difficult to prosecute.
WHO IS LIKELY TO BENEFIT? The fair treatment of observers will be outlined in readily accessible to members of the industry commercial fishing regulations. Observers will be further protected under the adopted regulations.
WHO IS LIKELY TO SUFFER? The vessel owner, owner's agent, operator, or crewmembers who negligently treat observers not in accordance to the regulations proposed for adoption above.
OTHER SOLUTIONS CONSIDERED? None
PROPOSED BY: Alaska Department of Fish and Game.

PROPOSAL 356. 5AAC 34.031 and 5 AAC 35.031. LANDING REQUIREMENTS. Establish criteria when carrying King or Tanner crab transiting out of state waters could not need to carry an observer.
PROPOSED BY: Doug Wells, Baranoff Fisheries

PROPOSAL 359. 5 AAC 34.XXX. RECOVERY OF LOST KING CRAB POTS. Establish a permit to recover lost king crab pot gear in closed waters, an Observer would be required to be awake and present during the recovery process.
PROPOSED BY: Jerry Matson, Handler Corporation, F/V Handler

OBSERVER COMMENT ON BOF PROPOSALS NO. 304 AND 308 by Felix Canez

I received a copy of the ALASKA BOARD OF FISHERIES 1998/1999 PROPOSALS booklet and among the other 359 fisheries related proposals I encountered seven observer related proposals and two that could have a profound impact on future working conditions.

Proposal No.304 to establish a State-Funded Observer Program has both advantages and drawbacks. Overall, Proposal No. 304 is a good deal in which all--Fishermen, Observers and ADF&G--will benefit without a doubt. Direct "costs to vessel operators who must carry observers will be eliminated. Improved data gathering flexibility from current and additional observed fisheries will provide better information for management and conservation of the BS/AI crab resources"[1]. And "Observers total compensation package will be (approx.) $5500.00 per month plus benefits"[2].

However, Proposal No. 304 has no safeguards to guaranty that prior certified Shellfish Observers would have hiring priority. Many of the long term shellfish observers are not AK residents, but rely on this job for their livelihood. I hope that current observers are taken into consideration and grandfathered into any new program. The proposal is a very good idea if an individual is interested in pursuing a career with ADF&G. All they have to do is to move to Alaska and apply for a position with the ADF&G. With the ADF&G Shellfish Observer experience it is very likely that a prior Observer will be hired as a Biologist 1. And what is much better, when not observing there may be different positions available with the Department. An individual can work in town, have a life and family to live with and more important, the benefits and the necessary remuneration to support it.

ADF&G proposed No. 304 in response to pressure it received from vessel operators regarding prohibitive Observer costs. However, conveniently no one noted that Observer expenses are currently inherent to fishing operations along with fuel, bait, communications, food, gear and vessel maintenance. Therefore OBSERVER COSTS ARE TAX DEDUCTIBLE the same as any other business expense occurring during normal fishing operations. It is impossible to argue the need for any other expense. However, it is easy to complain about the Observer because it is thought that an observer is not needed. The importance of observers isn't fully appreciated by the industry (See "Tragedy of commons" in this issue).

While I did my best to present the drawbacks and advantages of proposal 304, there is no doubt in my mind that we need to comment in favor of Proposal 308. Harassment of observers must be further defined to include crew members of the vessels which observers are deployed on. For the first time an important regulation has the chance to be implemented in the State of Alaska to prevent Observer harassment and to independently prosecute those Captains or crewmember(s) that provide negligent unjust treatment to Observers. Please speak up and FAVOR PROPOSAL NO. 308 TO STOP OBSERVER HARASSMENT! Voice your opinion, share your experiences and give your testimony to the Alaska Board of Fisheries!

As a true enthusiastic person I would like to think that changes, whatever they are, will be made accordingly to the best interest of data quality as well as the majority of the people that comment on the proposals. Send your comments before Feb 26, 1999 to: ATTN: BOF COMMENTS, Alaska Department of Fish and Game, Boards Support Section, PO BOX 25526, Juneau, AK 99802-5526. You can find the proposals in the Boards Support Homepage *www.state.ak.us/local/akpages/FISH.GAME/boards/bordhome.htm*, or if you need more information contact Laird Jones, Executive Director *LairdJ@fishgame.state.ak.us* or Art Hughes, Publication Specialist *AuthurH@fishgame.state.ak.us*.

[1] From BOFP proposal No. 304.
[2] From APO Mail Buoy April 14, 1997 article written by Kim Dietrich.

[*Editor's Note: For additional comments on the proposed State-funded Observer Program, see Mail Buoy, April 14, 1997*.]

PACIFIC COUNCIL UPDATE

NATIONAL MARINE FISHERIES SERVICE TO PROPOSE OBSERVER REGULATIONS (from *Council News*, November 3-6, 1998, Vol. 22(5), p.6)

The NMFS Northwest Regional Office is in the process of drafting proposed regulations that would require observers on catcher-processors and motherships over 125 feet. Currently, all at-sea processors over 125 feet voluntarily carry at least one observer, but regulations are necessary to ensure integrity of the data and to manage observer and contractor performance. Observers on these vessels provide data that have been used to estimate total landed catch and discards, monitor the attainment of annual groundfish allocations, estimate catch rates of prohibited species, and assess stock conditions.

The proposed regulations would require either one or two observers per vessel. Since all the at-sea processor vessels participating in the Washington, Oregon, and California whiting fishery are also subject to the Alaska observer provisions, the proposed regulations are intended to be as similar as possible to the Alaska observer regulations. Implementation of these regulations would be contingent on continuation of administration of the program by the North Pacific Groundfish Observer Program. The Pacific Council will review the proposed rule at its March 1999 meeting.

COUNCIL HEARS THAT GROUNDFISH OBSERVER PROGRAM IS NECESSARY (from *Council News*, November 3-6, 1998, Vol. 22(5), p.6)

The Ad-Hoc Groundfish Total Catch Determination Committee (TCC) presented its first report to the Council at the September meeting and recommended the Council push for federal funding and implementation of an observer program as soon as possible. The TCC concluded that some level of observer coverage is necessary to determine total groundfish catch by all West Coast fisheries that take groundfish, although not all fisheries would necessarily be observed at the same level. Currently there is no federal funding designated for an observer program and no mechanism for the Council to generate funds. The two possible approaches through the federal government are 1) a direct appropriation, or 2) authorization for the Council to collect fees from the industry to cover all or part the cost of an observer program. The TCC also stressed the need for better recreational data. The Council concurred with the need for a cost-effective program to gather fishing mortality, discard, and associated biological information to improve management of the groundfish resources.

The Council considered the committee's recommendation to request the U.S. Secretary of Commerce (Secretary) to develop and implement a data collection program under Section 402 (the data collection provision) of the Magnuson-Stevens Fishery Conservation and Management Act. The provision states the Secretary "shall undertake such an information collection program if he determines that the need is justified, and shall promulgate regulations to implement the program within 60 days after such determination is made. If the Secretary determines that the need for an information collection program is not justified, the Secretary shall inform the Council of the reasons for such determination in writing." In June 1998, NOAA released a report titled *Managing the Nation's Bycatch: Programs, Activities and Recommendations for the National Marine Fisheries Service (NMFS*), in which it recommends NMFS "develop and implement an at-sea observer program in the Pacific groundfish bottom trawl fishery cooperatively with the Pacific Fishery Management Council and the Pacific Coast fishing industry."

Throughout the meeting, Council members stressed the need for discard and total catch mortality information to effectively determine regulatory and harvest recommendations. However, the Council does not want to petition the Secretary until it is clear that federal funds will be provided for the program, noting the industry cannot cover all the costs. The Council asked that the data collected in the Oregon Enhanced Data Collection Program be analyzed as soon as possible so the results can be used to determine the necessary coverage levels and other aspects of the

program. The Groundfish Management Team will review program cost estimates in time for the next TCC meeting, which will probably be in late February or early March.

For further information on Pacific coast fisheries and potential observer program, contact Jim Glock at the Pacific Council office (503-326-6352) or visit their web page @ *www.pcouncil.org*.

Observers find 44% of fish haul dumped and discard rate for rockfish and other species is much higher than earlier estimates by Hal Bernton of The *Oregonian* staff, November 6, 1998

Observers monitoring a small portion of trawl fishermen off Oregon and Washington found that nearly 44 percent of their 1997 fish harvest was dumped overboard. Fishermen discard fish that lack markets or to avoid exceeding landing limits. The 1997 throwaway rates are higher than previously estimated and raise the possibility that some species were overfished that year.

The observers work aboard trawl boats that pursue a multitude of rockfish, sole, thornyhead, black cod and other species. These West Coast harvests, conducted with large mesh nets, have been worth more than $90 million annually through much of the 1990s. As the nets are emptied on deck, observers weigh and count the mostly dead or dying discarded fish.

In 1996, observers found that trawlers dumped 32 percent of the more than 3 million pounds of sampled harvest. In 1997, the observers surveyed the fate of more than 2.3 million pounds of fish brought onto the trawler decks. They reported that more than 1 million pounds – representing 43.5 percent of the catch and more than 14 species of fish -- were tossed back overboard. The Oregon Department of Fish and Wildlife hired the observers to work in the experimental four-year tracking program scheduled to expire at years end. Mark Saelens, a state biologist who helped set up the observer program, cautions that the survey encompassed only a fraction of the total trawl fleet harvest. So its impossible to say whether the overall fleet discards rates are higher, lower or matching those of the surveyed boats. But the survey still offers the most detailed analysis yet of the waste generated by the trawl fleet that taps into public fisheries within a 200-mile federal zone off Northwest coasts. Trawl skippers typically try to target certain species by fishing with special gear, within special areas or at special depths and tow speeds. But they never know just what will come up in the net. Even species that fetch top dollar back on shore may get dumped because of restrictions on how many can be brought back to shore. The restrictions are intended to prevent overfishing. So fishermen may bring back to port only the largest fish that fetch the highest prices and dump the rest overboard.

Fishery biologists say that accurate knowledge of discards is key to determining the total amount of fish removed from the ocean, thus vital to setting safe harvest limits as required by Congress. Observer programs have been launched in many of the major fisheries around the country. The biggest observer program is in Alaska, where all trawl boats are required to at least periodically carry observers. Late in 1995, the Oregon-based observer program was launched with about $600,000 in state, federal and industry funding. Since then, the tracking effort has gained new urgency as scientists have reported sharp declines in the populations of some commercial species and struggled to pinpoint just how many fish are being removed from the sea.

But many fishermen remain cool to observers. They are reluctant to share their often-cramped ship quarters. They also are frustrated by tight landing restrictions, which force them to jettison much of their prime fish. And they fear that widespread observer coverage will lead to even tighter restrictions and even more discards. During the four years of the West Coast program, less than 25 of the more than 200 boats in the trawl fleet have agreed to carry observers. Some of the industry is very interested in this, and some don't want to touch it with a 10-foot pole, said Joe Easley of the Oregon Trawl Commission. The observer information is now being compiled for submission to the Pacific Fishery Management Council, a group of state, industry and federal officials that helps set harvest limits. But initial reports indicate that the sampled discard rates of several species were much higher than the estimates used to by the Council to set 1997 harvest limits.

For example:

• Fishery officials used a 16 percent discard estimate to help calculate an annual safe harvest level for several species of rockfish known as the Sebastes Complex. In their samplings, observers reported discard rates of 36 percent in 1997.
• Fishery officials also used a 16 percent discard rate to help calculate the safe harvest levels for yellowtail rockfish. In their samples, observers reported that 35 percent of those fish were thrown overboard.
• Fishery officials used a 16 to 25 percent estimate of discards in setting safe black cod harvest levels. In their samplings, observers reported 43 percent discard rates of black cod.

Pacific Fisheries Management Council members got their first glimpse of these numbers in June(1998), but they still are awaiting a complete analysis of the information. Meanwhile, the observer program is scheduled to largely shut down in December, so next year there won't be any shipboard tracking of discards. The council is trying to develop new ways to organize the harvest to minimize discards. It also hopes to launch a new observer program that could begin operations in the year 2000 and is scheduled today to consider a plan of action. But council officials are still debating how much sampling should be undertaken and whether the observer program should be expanded to include hook-and-line fishermen.

Money also is a problem. Industry officials are reluctant to finance a broad-scale observer program at a time when tight catch limits have slashed their earnings.

ADDITIONAL ARTICLES OF INTEREST

Q. WHY DO WE NEED OBSERVERS?
A. TO PREVENT THE TRAGEDY OF THE COMMONS Adaptation* by Felix Canez

"Many fishermen, frustrated by unwanted regulations, wonder why government officials have the right (or the nerve) to tell them how much they can catch, where and when they can catch it, and how they can catch it. The answer is found in something called "the tragedy of the commons."

Common Property Resources: Hundreds of years ago, community leaders observed that when a resource was owned by the people, no one took any responsibility for maintaining the resource. Human nature being what it is, each person tended to use the resource to the maximum extent. There was a little incentive to conserve or invest in the resource because others would then benefit without contributing to the welfare of the resource. In the case of common (public) grazing areas in England, grass soon disappeared as citizens put more and more sheep on the land held in common. Everyone lost as "the commons" became overgrazed and this became known as "the tragedy of the commons".

To prevent the "tragedy of the commons" most common property resources are held in trust and managed for the people by state or federal government agencies. Fish living in public waters are such a common property resource. The government has the responsibility of managing the fish for the benefit of all citizens, even those who do not fish.

So who owns the fish? YOU DO – ALONG WITH THE OTHER 270 MILLON CITIZENS OF THE US. In order for all to benefit from this renewable resource, the fish are managed on the basis of some basic management principles."

If a Fisherman wants to catch fish and is required by the regulations to carry and pay for an observer, it is because that fish belongs to the people of the United States. Some sort of fee is reasonable and there is precedent for such a fee. Remember that if a logging company wants to cut down a tree, it has to pay a fee to the Department of Interior because that tree belongs to the people of the United States.

Managing fishery resources is ultimately the responsibility of elected officials. Elected officials in most states and in the federal government, however, have delegated much of the responsibility to resource agencies that employ people trained in the sciences of fisheries biology, economics, and natural resources management.

* Adapted from Richard K. Wallace et. al., *Fisheries Management for Fishermen*, Auburn University Marine Extension & Research Center. MASGP-94-012. A publication of Auburn University pursuant to National Oceanic and Atmospheric Administration Award No. NA37FD0079

COMMERCIAL SHARK FISHERY OBSERVER PROGRAM (CSFOP)--1996-1997 DRAFT FINAL REPORT ABSTRACT (from North Pacific Groundfish Observer Program website)

Since 1994, observers have been placed aboard voluntarily participating commercial shark vessels to sample the catch and effort of the southeast U.S. commercial shark longline fishery, and thus enhance the reliability of management strategies. During 1996, this award supported performance leading to documentation of ~1.7% of the large-coastal shark commercial fishery quota; observers logged 150 sea-days on 43 fishing trips documenting 1.2 million hook-hours of effort with a catch of more than 5,600 sharks. Additional information gleaned during the first two months of 1997 was used limitedly for additional comparisons in specific analyses. More importantly, these data contributed to an overall 3-year database representing ~ 4.1 million hook-hours of fishing effort, and a catch of more than 16,500 sharks which resulted in 158 metric tons of landings (2.0% of the quota over the period). Two large coastal shark species, blacktip and sandbar sharks, dominated the catch and landings in the monitored regions. 1996-97(1) results, compared to results for 1994-95, illustrated the need for long-term fishery dependent monitoring to adequately characterize and assess the status of the stock and fishery because of annual variations in fishing effort. For the sandbar shark, each of the three regions surveyed had distinctly different catch patterns according to fish size and depth of capture. There is a size segregation by area; catches of juveniles and adolescents dominated in the North Carolina area, the South Atlantic was dominated by sub-adults and adults with a few juveniles taken in winter, and in Gulf Florida waters, the entire catch was composed of sub-adult and adult fish. Annual catch rates (sharks per 10,000 hook-hr) for the sandbar shark have not shown any consistent trend that would indicate any changes in the stock, except perhaps for North Carolina. 1994-1996 annual sandbar shark catch rates were 24, 27, and 47 for North Carolina; 5, 12, and 10 for the South Atlantic; and 8, 5, and 6 for the eastern Gulf of Mexico. Similarly, length-frequencies of the sandbar shark taken from each region have not shown any truly distinguishable changes over the program period, except for North Carolina. For North Carolina, the increased CPUE and changing length frequency was caused by an increasing number of juvenile and adolescent sharks being taken during the winter fishery. The 1989-1992 sandbar shark cohorts appear to be recruiting strongly to the fishery, and may represent a substantial contribution to the overfished stock if appropriate management measures are implemented to protect them. Based on the size structure of the catch and the known biological parameters of the sandbar shark, a 140 cm FL minimum size limit is recommended for a management measure which should allow for recovery of this overfished species under continued measured fishing effort. For blacktip sharks, the size distribution is opposite that of the sandbar shark; the North Carolina catch is dominated by adults, there is a greater contribution of juveniles in the South Atlantic, and the Gulf Florida catch is primarily juveniles and adolescents. A catch rate and length-frequency analysis did not indicate any changes in the size structure of the catch over the three year period; the only noticeable trend was a greater contribution by juvenile, adolescent, and sub-adult fish during the summer fishing seasons.

Reprinted from: MARFIN FINAL REPORT Cooperative Agreement NA57FF0286 "Continuation of an observer program to characterize and compare the directed commercial shark fishery in the eastern Gulf of Mexico and South Atlantic". A draft final report (33 pages, 11 tables, 20 figures) summarizing the results of the first three years of this federally funded program is available through the Foundation [telephone: (813) 286-8390; email: *judy.jamison@worldnet.att.net* or *gulfsouthfdn@worldnet.att.net* for five dollars ($5.00 US) to cover the cost of copying and mailing. Payment must be in US funds; personal checks are fine, but credit card orders cannot be handled.

ALASKA SEA OTTERS IN DECLINE AS ORCA PREDATION INCREASES (from SeaWeb Ocean Update November 1998)

After a century of recovery from commercial over-hunting, sea otter populations are in decline over large areas of western Alaska, according to a recent report in the journal Science. According to the report's authors, the most likely cause for the sea otters' decline is increased predation by killer whales, or orcas. This has, they say, likely been prompted by collapses in populations of Steller sea lions and harbor seals, normally the orcas' primary prey, in the region.

Reasons for the pinnipeds' collapse remain uncertain. However, a 1996 report by the National Research Council of the National Academy of Sciences suggested that the most likely trigger was a sudden "regime shift" in the Bering Sea ecosystem in the 1970s, in which changing sea temperatures, combined with human exploitation of whales and fish, prompted a change to an ecosystem dominated by the relatively nutritionally-poor pollock. Several environmental groups charge that continued, intensive exploitation of pollock has exacerbated the pinnipeds' declines.

The reduction in sea otter numbers is also, say the report's authors, resulting in further impacts on the region's ecosystem. Sea urchins, on which the otters normally feed, have increased, resulting in significant decreases in kelp forest density as a result of the urchins' foraging.

Source: J.A. Estes, M. Tinker, T.M. Williams and D.F. Doak. 1998. Killer whale predation on sea otters links oceanic and nearshore ecosystems. Science

Contact: James A. Estes, U.S. Geological Survey ? Biological Resources Division, University of California, Santa Cruz, CA 9064. E-Mail: *jestes@cats.ucsc.edu*

AMERICAN FISHERIES SOCIETY SEEKS TO IDENTIFY NORTH AMERICAN MARINE FISH STOCKS AT RISK (from SeaWeb Ocean Update November 1998)

The American Fisheries Society has launched an initiative to identify endangered marine fishes in North American waters. The initiative is being conducted in conjunction with scientists from the National Marine Fisheries Service (NMFS), Canadian Department f Fisheries and Oceans (DFO) and the Species Survival Commission (SSC) of IUCN, the World Conservation Union.

Specific objectives of the AFS Endangered Marine Fishes Initiative include:

- To determine what major factors contribute to the loss of marine fish biodiversity
- To identify marine fish stocks at probable risk of extinction in North American waters
- To examine and clarify extinction risk criteria and develop risk categories for marine fishes
- To classify North American marine fish stocks at risk into those categories

The AFS will then seek to develop policy initiatives concerning the conservation of marine fish stocks at risk.

Contact: John A. Musick, Virginia Institute of Marine Science, The College of William and Mary, PO Box 1346, Gloucester Point, VA 23062. E-mail: *jmusick@vims.edu*

NEW STUDY UNDERLINES IMPACT OF FISHING GEAR ON SEA FLOOR (from SeaWeb Ocean Update December 1998)

A new book published by the Boston, MA-based Conservation Law Foundation (CLF) highlights the effects of fishing gear on the sea floor. The book, *Effects of Fishing Gear on the Sea Floor of New England*, contains 28 papers by scientists and fishermen that describe and illustrate the sea floor, fishing gear, fish habitat, and fishing gear impacts.

Fishing gear makes contact with thousands of square miles of New England’s sea floor each year while targeting fish and shellfish that live on or near the bottom. Fishing effort increased in the region after 1976, when the U.S. declared exclusive rights to fishery resources within 200 miles of shore. Effort in some bottom fisheries has declined in recent years as a result of regulations to address overfishing, but remains high. However, says the CLF, although "no one questions the impact of heavy fishing on the species that are targeted …What about the sea floor itself? How has the ocean bottom been affected by repeated passes of trawls and scallop dredges?"

In addition to providing an overview of the sea floor of New England, the papers in the volume also describe studies of the impacts of fishing gear on the sea floor, and presents options for minimizing such gear impacts. One of the most dramatic studies of gear impacts is provided by Fred Bennett, a longliner from Chatham, Massachusetts. He notes that the damage done to the sea floor topography of one area is so great that, twenty years after his depth

recorders had registered a series of peaks and troughs on the sea bottom, with some steep peaks whose height from top to bottom was 10 fathoms, his instruments now recorded "a couple of little bumps in the bottom, just little hills, none higher than two to
three fathoms."

The information presented in the book, says CLF, "is directly relevant to one of the important requirements of the [1996] Magnuson-Stevens [Fishery Conservation and Management] Act." Under the Act, fishery management plans are now required to "minimize to the extent practicable adverse effects on essential fish habitat caused by fishing."

Source: E.M. Dorsey and J. Pederson, eds. 1998. Effects of Fishing Gear on the Sea Floor of New England. Boston: Conservation Law Foundation.

Contact: Eleanor Dorsey, Senior Scientist, Conservation Law Foundation. Tel: (301) 260 1553

TWO STUDIES DEMONSTRATE IMPACTS OF FISHERIES ON MARINE HABITAT (from SeaWeb Ocean Update November 1998)

Two separate studies have highlighted the extent to which certain types of commercial fisheries can impact benthic and coastal marine environments.

The first study, published in the journal Ecological Applications, examined the impacts of commercial fishing along 18 sites in Hauraki Gulf, New Zealand, site of major commercial trawl and seine fisheries for snapper. In addition, there is also a dredge fishery for scallops in the inner Gulf. The authors of the paper estimate that, in the year prior to their study, 1568 square kilometers were swept by bottom trawl gear, 8274 km2 by seine fisheries, and 8.9 km2 by scallop dredges.

The paper's authors studied the sea bed with side-scan sonar and video shot from a remotely-operated vehicle (ROV). Sediment samples and fauna were also collected at random locations. In areas of decreasing fishing pressure, they observed increases in the density of echinoderms, in long-lived surface dwellers and in total number of species and individuals. The data, say the authors, "provide evidence of broad-scale changes in benthic communities that can be directly related to fishing." Fishing, they note, "is by far the largest human impact on the marine environment. Our data provide evidence that the fishing industry needs to first recognize these environmental impacts and then act decisively to reduce and mitigate them where appropriate."

In the second study, published in the Journal of Sea Research, field observations by divers indicated that a high rate of predation of whelks by starfish occurred in an area disturbed by scallop dredging, even though the whelks appeared mostly to be alive or externally undamaged. Laboratory tests on the impacts of direct physical contact with bottom fishing gear showed that whelks which had been rolled took significantly longer to right themselves and were significantly less likely to show an escape response than whelks that had not experienced this treatment. The study's authors note that whelks "have declined in numbers in many parts of the North Sea. In the Dutch Wadden Sea, a decline in whelk numbers began in the 1920s, and they have been locally extinct since 1991. This decline has been attributed to the effects of overfishing … chemical pollution … and mortality caused by beam trawling. Our study suggests that due to increased vulnerability to predation, indirect fishing mortality may also be contributing to their decline."

Sources: (1): S.F. Thrush, et al. 1998. Disturbance of the marine benthic habitat by commercial fishing: impacts at the scale of the fishery. Ecological Applications 8(3): 866-879. (2): K.Ramsay and M.J. Kaiser. 1998. Demersal fishing disturbance increases predation risk for whelks (Buccinum undatum L.) Journal of Sea Research 39: 299-304.

Contact: (1): Paul K. Dayton, Scripps Institution of Oceanography, University of California San Diego, La Jolla, CA 92093. (2): Kirsten Ramsay, Ecology Group, School of Biological Sciences, University of Wales Bangor, Deiniol Road, Bangor LL57 2UW, United Kingdom. E-Mail: *k.ramsay@cefas.co.uk*

JOB OPPORTUNITES

RESEARCH ASSOCIATE 2, Department of Biological Sciences, Louisiana State University.
This position is part of a cooperative agreement between Everglades National Park and Louisiana State University; the position is funded through LSU, but personnel are stationed in ENP. This position will participate in ongoing research projects involving ecological field work on vegetation in Everglades National Park. Duties will involve lay-out of plots to sample vegetation, collection of field data from plots, data entry and management, and analyses of data. *Required qualifications*: B.S. or equivalent degree in science and 1-2 years related work experience. Knowledge of the flora of Southeastern US. Experience with vegetation sampling. Must be able to work independently with minimal supervision, and must be able to withstand high temperatures and humidity and tolerate high insect presence. Send letter of application, c.v. and 3 letters of reference to: Dr. James DeCoster c/.o Dr. Bill Platt, South Florida Natural Resources Center, Everglades National Park, 40001 State Road 9336, Homestead, FL 33034.
Ref: # 022297

Application deadline is January 8, 1999 or until suitable candidate selected. Starting date is February 1, 1999.

Research Specialist I (Artificial Reef Technical Specialist)
SALARY: $2,336/mo.
ADDRESS: 17629 El Camino Real, Suite 175, Houston, TX 77058
PHONE NO.: 281/461-4064, Ext. 30
FAX NO.: 281/448-1752
CLOSING DATE: January 8, 1999

GENERAL POSITION DESCRIPTION:
Position assists the Department's Artificial Reef Program by technical coordination of all administrative and maintenance duties related to artificial reef monitoring activities, reef clearance verification, buoy maintenance, dive planning, technical equipment, diving gear, small boats, vehicles and GPS equipment. Duties also include participation, preparation and implementation of appropriate educational activities related to public outreach for the artificial reef program.
WORKING CONDITIONS:
(1) Normal work hours are from 8:00 a.m. to 5:00 p.m., Monday through Friday; (2) Work at other times including weekends and nights may be required frequently; (3) Field work required outdoors and on boats and large vessels, offshore and sometimes during adverse conditions; (4) Frequent out-of-town and overnight state travel required.
MINIMUM QUALIFICATION REQUIREMENTS:
Education: Graduation from an accredited college or university with a bachelor's degree with specialization in marine biology, aquatic biology or related field. Experience: (1) Three years experience as a Certified Dive Master; (2) Experience with Excel, Access, WordPerfect, and similar computer programs; (3) Experience with purchasing and maintenance of dive equipment. Experience may have occurred concurrently. License: (1) Must possess or be able to obtain a Texas class "C" vehicle operator's license; (2) Current Dive Master Certification.
SELECTION CRITERIA: Knowledge, Skills and Abilities: (1) Knowledge of American Academy of Underwater Scientist (AAUS) diving regulations dealing with scientific diving and maintenance of specialized gear; (2) Knowledge of aquatic field sampling methods and equipment; (3) Ability to work with databases including associated computer skills; (4) Ability to demonstrate good work habits including being reliable and able to follow instructions; (5) Ability to correspond effectively in writing; (6) Ability to work independently and to accomplish several tasks simultaneously; (7) Ability to interact effectively with the public, youth groups, technical equipment specialists, representatives of government agencies, universities, and the private sector in a diplomatic and professional manner; (8) Ability to correspond effectively in writing; (9) Ability to work outdoors under adverse; (10) Ability to work on sea-going vessels; (11) Ability to handle and schedule maintenance of small boats, engines, and vehicles; (12) Knowledge of Arcview or ArcInfo applications. Additional Requirements: Copy of official college transcripts. FORWARD APPLICATION TO: Jan Culbertson, 17629 El Camino Real, Suite 175, Houston, TX 77058 or TPW, Employment, Recruitment and Retention Branch, 4200 Smith School Road, Austin, TX 78744.

The California Waterfowl Association in Sacramento seeks to hire a **Waterfowl and Wetlands Intern**, **Waterfowl Research Technicians**, and a **computer technician**. Intern will assist with a variety of waterfowl research projects and wetland projects in the Central Valley of California. Stipend of $240/wk. Position for 6-8 months starting in February/March. Full-time. At least two years of college experience in biological, wildlife, or environmental sciences preferred. **Closes January 10th**. For details contact Greg Yarris at 916-648-1406. Technician positions run April through August (nest searching and banding) and June through August (banding only). Several positions available throughout California including Sacramento Valley (near Gridley), Grizzly Island (near Fairfield), and the San Joaquin Valley (near Los Banos). Stipend is $280-330/wk. DOE. Field assistance is required for a variety of waterfowl studies including waterfowl nesting evaluations, duck banding, and breeding population surveys. Housing likely provided at study sites, but be prepared for primitive conditions. Positions are not advisable for those suffering from grass allergies. Candidates with at least two years completed toward degree and strong interest in waterfowl and/or wetlands ecology preferred. Closing date is February 15th. For details contact Dan Loughman at 916-648-1406. For info on computer tech contact Cindy Miglino at 916-648-1406.

Washington Representative for Global Population Stabilization Program *Job Activities*: 1. Collaborates with Washington D.C. Conservation staff to design campaign strategies for Global Population issues, and lobbies as necessary. 2. Develops educational and campaign materials and does training for Club Population Program activists. 3. Serves as the Club technical specialist on Population and related issues. Prepares written materials, conducts research studies. 4. Assists in fundraising efforts for the Population Program, in cooperation with the Major Gifts Department and Sierra Club Foundation. 5. Handles all administrative duties related to the program. 6. Edits and assists as required in the production of the quarterly Population Report and action alerts. 7. Attends meetings as necessary with government officials, representatives of other organizations. 8. May represent the Sierra Club to the media or to outside officials. 9. Performs miscellaneous duties as directed. Standard Overtime: The standard Sierra Club work week is 37.5 hours. However, overtime is a standard requirement of this job. This will include occasional weekend and evening meetings and travel on a regular basis to complete work assignments. Anticipated overtime is as follows:
Workday: Usually will not exceed 10 hours Workweek: Usually will not 50 hours
Travel: Usually will not exceed 10 days/month or 70 days/year.
Excessive overtime should be approved in advance by the supervisor and the employee, at which time they should arrange for an opportunity for the employee to take compensatory time off.

Knowledge & Skills:
-- B.A./B.S. degree in Environmental Studies, Political Science, or a closely related field.
-- At least 3 years' experience in legislative lobbying activities at the national level.
-- Strong demonstrated written and oral communication skills. Demonstrated public speaking ability.
-- Excellent knowledge and background in the specific environmental program field that is assigned.
-- Prior experience and knowledge of the national legislative process.
-- Demonstrated ability and effectiveness working with volunteers.

SALARY: $35,000+/YR COMMENSURATE W/SKILLS AND EXPERIENCE PLUS BENEFITS

Resumes should be sent to: Sierra Club, 408 C Street, NE, Washington, DC 20002, Attn: Population Representative, Fax: (202) 547-6009

Bigelow Laboratory is seeking a **Field/laboratory technician** to assist research projects supported by NOAA's Sea Grant and National Undersea Research Programs on the ecology of the American lobster in New England. The objective of the study is to determine the influence of habitat quality on rates of emigration and mortality in lobsters nurseries from Maine to Rhode Island. Responsibilities include: organizing and participating in dive operations and field work, coordinating 3-4 summer interns, handling
small boats, conducting lab-based sample processing, data entry, and statistical analyses.

Applicants should have (1) at least a BA or BS degree in biology, ecology, oceanography or a related field, (2) scuba certification with experience in open water diving and boat handling, (3) at least one year of lab/field experience, and (4) Computer skills including word processing,
spreadsheet, statistical and graphing programs.

This is a one year position available immediately with support pending for a second year. To apply send resume, transcripts, and two letters of recommendation by January 22, 1999 to: Richard A. Wahle, Bigelow Laboratory for Ocean Sciences, West Boothbay Harbor, Maine 04575, fax: 207 633 9641, email: *rwahle@bigelow.org*

Physical Oceanography Technician/ Assistant The Bermuda Biological Station for Research (BBSR) has an immediate opening for a research technician position in Physical Oceanography within the Bermuda Atlantic Time-series Study (BATS) program.

We require a technician whose responsibilities will include: processing of the CTD, IMET and underway data sets; maintenance of the biogeochemical database; software development and participation on the research cruises. The candidate will also be expected to collaborate with the BATS principle investigators to develop data products relating to their areas of interest.

The applicant must have a sound background in mathematics, physical oceanography, and scientific computing. The ability to program in MATLAB, C, and FORTRAN within a UNIX and PC environment is essential. It is anticipated that the candidate will have sea-going experience and be familiar with oceanographic instrumentation. It is also highly desirable for the candidate to have experience with PlotPluS, HTML programming and basic UNIX systems administration, and with time-series data. The ability to perform routine chemical and biological analyses would also be an asset.

An annual tax-free salary of $26,000 to $31,000 depending on experience will be provided.

Applications should include a letter of application, a resume and a list of the names, addresses, phone numbers and e-mail addresses of at least 2 references. Please FAX (or e-mail) the application information to:

Dr. Deborah K. Steinberg
Bermuda Biological Station for Research
17 Biological Station Lane
Ferry Reach, GE01 Bermuda
FAX: (441) 297-8143
debbie@bbsr.edu

WILDLIFE BIOLOGIST, GS-0486-07/09, Vacancy Announcement Number: BLM/OI-99-17/CVA
Closing Date: 01/11/1999; Salary: $26075 per year - $41470 per year; Duty Location: MEDFORD, OR
For full announcement, see OMP website at *www.usajobs.opm.gov*

MISC. NOTES & TIDBITS

NEW MEMBERSHIP: if you want to become a member of the APO, please write, email or call Kim Dietrich. An annual donation of $10 is required. Donations are used to publish and distribute the *Mail Buoy* and to pay for costs of testifying at Council meetings out of state. Also, if you are not an observer but would like to receive your own copy of the *Mail Buoy*, there is an annual charge of $15.

APO T-SHIRTS are available. Size options: L or XL. Color options: Black, Purple (L only), Teal . The price is $15 (sales tax included).

Due to lack of interest the APO online discussion group has been discontinued. It may be revived if there is interest in the future. The APO website also has a link titled BOOKS. Any books you buy from Amazon.com via this site brings revenue to the APO.

THINGS TO DO (if you're a Fishhead):

Attend the UW School of Fisheries Quantitative Seminar every Friday, 12:30-1:20pm, Rm. 288, Fisheries Center. Visit *http://weber.u.washinton.edu/~calvarez/qua~nti.html* for more information.

Attend UW School of Fisheries Department Seminars (Fish 520) every Thursday, 3:30-4:20pm, Rm. 201, Fisheries Center. Contact School of Fisheries for an itinerary.

The Joint School of Marine Affairs/Industry Seminar Series meets monthly during the school year. Contact SMA for more info.

Join the **Women's Fisheries Network.** WFN's Northwest Chapter sponsors monthly dinner meetings on various fisheries related topics. The NW chapter of WFN generally meets the 3rd Tues. of each month at Ray's Boathouse (6049 Seaview Ave NW, Seattle) from 5:30-8pm. For more info call WFN at 206-789-1987. Non-members are welcome. Attendance and membership is not limited to women.

IMPORTANT PHONE NUMBERS/email

Kim Dietrich	206-547-4228/*kdiet@aa.net*
Erika Acuna	*Eacuna6855@aol.com*
Liz Mitchell	*emitch@efn.org*
Mark Coles, AFU	206-441-3425/*Mark.Coles@juno.com*

NMFS staff (email format *first.last@noaa.gov):*

Bill Karp	206-526-4194
Shannon Fitzgerald	206-526-4553
Martin Loefflad	206-526-4194

OTC	907-257-2770
NPFMC (Council)	907-271-2809

Briefing/Training Schedule

Dec 28- Jan 15	3-week	Seattle (+Jan 2)
January 4-8	5 day MSCDQ	Anchorage
January 5-8	4 Day	Seattle
January 12-15	4 Day	Anchorage
January 12-15	4 Day	Seattle
January 18-22	5 day MSCDQ	Anchorage
January 26-29	4 Day	Anchorage
Jan 25- Feb14	3-week	Seattle

*All prior observers are required to take one 4-day basic briefing before his/her first deployment of the year. Subsequent deployments during the year must be preceded by a 1-day basic briefing (unless a second 4-day basic briefing is required based

on the observer evaluation). Additionally, to be deployed in a MSCDQ fishery, prior observers must also attend an annual 5-day MSCDQ training in Anchorage. If the MSCDQ-trained observer is not deployed within one month of the MSCDQ training, he/she will also need to have a one day MSCDQ briefing made by appointment. The MSCDQ 1-day briefings are not on this schedule.

MEETINGS AND OPENINGS

January 1	P.cod opens for fixed gear in BSAI
January 7-8	**VBA** and **HMAP Committees**, Alaska Fisheries Science Center, Room 2079 @ 11am. They will be discussing a pilot program for both VBA and HMAP.
January 20	Bering Sea opens for pollock(A1) and most trawl fisheries; GOA opens for pollock trawl gear
January 21-22	**Ecosystem Committee,** Anchorage Hilton Hotel, 500 W. Third Avenue, Anchorage (Phone: (907) 272-7411). On January 21, the meeting will be held in the Dillingham Room and on January 22, the meeting will be held in the Foraker Room. The focus of the meeting is to provide the Council with concrete recommendations on how to move forward with ecosystem-based management. The four major topics to be discussed are as follows: 1.The NMFS Ecosystem Panel Report (due in December) recommendations and how the Council does/can implement them. 2.Regime shift/climate variability and fisheries in the northeast Pacific. 3.Marine reserves as a component of fishery management. Note that a framework is being developed to identify habitat areas of particular concern. 4.Time/area dispersal of fisheries.
February 1	**North Pacific Fisheries Management Council**, Anchorage Hilton. Contact the Council office for further details—907-271-2809.
March 8-12	**Pacific Fisheries Management Council**, Portland, OR. For more info. visit their homepage at *www.pcouncil.org* or call 503-326-6352.
April 19	**North Pacific Fisheries Management Council**, Anchorage Hilton. Contact the Council office for further details—907-271-2809.

Cool Websites:
http://www.york.biosis.org/zrdocs/zoolinfo/zoolinfo.htm
http://home.istar.ca/~gadus/sci.html
www.psmfc.org
www.fakr.noaa.gov

INTERESTED IN WRITING/PUBLISHING THE MAIL BUOY IN April? Volunteers needed--talk to Kim, Liz or Erika. We're still looking for extra help with some insurance research, grant writing, taxes.

The APO continues to be interested in your ideas - if you have an idea for an article or story, would like to respond to a previous article, or think the APO has overlooked some issues, drop us a letter or call any time. Contributions from all sectors are welcome. Thanks to Liz Mitchell, Mark Coles, Erika Acuna, Bill Monheimer, Felix Canez, Sarah Gaichas, Teresa Turk, Gillian Stoker, Irene Dorang and Marcus Bradley for your articles, your prompt answers to questions and/or your editing contribution. Thanks again for all of you who contributed to this issue. Your efforts are greatly appreciated. (KD)