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NORTH PACIFIC FISHERIES MANAGEMENT COUNCIL UPDATE

Council Meeting Update

by Erika Acuna, Advisory Panel- Observer Representative

The North Pacific Fisheries Management Council has had two meetings in '99 so far, both held in Anchorage, AK. The first meeting was in February, and the second meeting was recently held during the week of April 19. Here are some excerpts of the main meeting agenda items, some issues relating to Observers, and results of how the AP voted:

1. Steller Sea Lions: an Emergency Rule is currently in place governing the Pollock fishery in 1999. Further rule-making for the remainder of 1999 and also for 2000 and beyond is being analyzed by NMFS in a detailed EA/RIR (Environmental Assessment/ Regulatory Impact Review). In February the AP sent recommendations to the Council for additional analyses on issues such as: trip limits in the GOA, examination of specific critical foraging areas, a comparison of safety issues vs. sea lion needs before implementing haul-out closures, season start dates, stand down periods, buffer zones around Critical Habitat areas, and more.

At the recent April meeting, this EA/RIR analysis was presented by NMFS to the council for the purpose of final recommendations prior to release for public review. Public testimony was given by representatives of the commercial fishing industry and conservation organizations. The document will now be released for public comment, and a final decision on regulation implementation will be made at the next council meeting in June.

2. American Fisheries Act (AFA): The American Fisheries Act was put in place for 1999 which allowed the Pollock catcher/processor sector to form co-ops. The current plan is to allow the Catcher fleet to form co-ops for the January 2000 "A" season. The catcher vessel co-ops are not as easy to define as were the catcher/ processor co-ops (of which there is only one). In question are issues such as: allocations, partial ownership crossovers, impacts on non-AFA vessels, harvest limits, (all termed "sideboards"). Another major issue that needs to be resolved is how these co-ops will be monitored. The current 30% Observer coverage on shoreside catcher vessels under 125 ft would not be enough for the purpose of assessing any possible overages of harvest within co-ops. In order for the data to hold up in court, industry will have to decide how much Observer coverage will accurately represent the total at-sea harvests. It was suggested by a NMFS representative that "perhaps we will have to move to a CDQ-like system of monitoring" suggesting a great increase in Observer coverage.

After two days of deliberation, the AP agreed on recommendations and additions to options and alternatives to the current EA/RIR prior to public review. Final council action will be in June.

3. Seabird protection: Final action was taken to revise regulations for the Longline fleet on seabird avoidance. As many of you know, due to the endangered status of the Short Tailed Albatross the industry has been faced with a very strict 2 bird incidental catch limit per 2 year period. These measures were implemented in '97 to protect seabirds in fixed gear

fisheries, however they have not prevented additional takes. Two Short tailed albatross were taken in late September 1998. Last year, the council approved development of an analysis of seabird avoidance measures at the request of the industry. This analysis was approved at the February meeting, and released for public review.

We heard public comment on the alternatives from industry representatives and conservation organizations. As a result, the AP recommended the adoption of Alternative 2, Option 1 with some changes. This alternative would make requirements applicable for all hook-an-line gear vessels 26ft or longer. These requirements include: weighted groundlines; hooks removed from offal; offal discharged in a manner that distracts birds from setting gear. In addition one of the following must be employed: a). tow a bird scaring line, b). tow buoy bags, c). towing of board or stick must be accompanied by a.) or b.), d). deploy hooks using a lining tube.

Further studies are now under way to make these regulations more specific to gear type, and vessel size.

4. Experimental Fishing Permits Proposals: The AP passed unanimously the recommendations to approve two research projects that relate directly to Observer duties. Both projects (if approved) will be conducted by Groundfish Forum in conjunction with NMFS.

The first project is the HMAP (Halibut Mortality Avoidance Program). This is a pilot program which, if approved for rulemaking will be implemented in 2000. The idea is to test the effectiveness of deck sorting of halibut in order to reduce halibut mortality. This pilot study would be conducted in two trawl fisheries: the deep water flatfish in the GOA (April 2000) and "Oflat" fishery (July 2000). . Currently most trawl fisheries are achieving mortality rates of 70-80%. The purpose of the study is to formally test and refine methods to lower the mortality assigned to halibut bycatch. The HMAP procedures would include rapid sorting of halibut as the codend is emptied, counting and measuring halibut from the tow, assessing viability, and returning halibut to sea. Viability data, averaged across all participants in the HMAP pilot during the first half of the pilot fishery will be used to re-calculate the mortality from the first half of the fishery. This rate will also be used to determine the mortality rate for the second half of the pilot, but the overall effectiveness of the HMAP pilot will be assessed with the data from the entire pilot period. Of course vessels will be taking observers to verify that deck sorting occurs on all tows. This may mean two observers per boat on vessels that fish round-the-clock. Concerns were expressed by NMFS that this type of study is redirecting the priorities of Observer duties. It sounds like it may be too much to ask of observers to assess mortalities to deck sorted halibut followed by the required species composition sampling. What do you think? Comments are appreciated.

The second experimental fishing permit proposal presented (also proposed by Groundfish Forum) was the Species Composition Methods Testing. This EFP would be looking at the adequacy of the Observer Program's basket sampling method for species composition. A second portion of the EFP will look at the problem of sampling length frequency in the trawl haul. The project, if approved, will likely take place this summer (August or September) in the flathead sole fishery. Two methods of basket sampling for species composition will be tested. One is the standard observer sampling method which will aim for 6 stratified samples of 100kg each evenly spaced throughout the haul. The other will be a mechanical systematic sample which will be drawn automatically from the line. A critical part of the study is an attempt to perform a "whole haul census" of each haul. This will be attempted by using the total haul weight from the flow scales, and weight by species using the vessel specific product recovery rates, and PSC discards. Any major discards may be determined by subtraction from total haul weight. If the EFP is successfully executed, it will be possible to address issues such as: possible biasing of samples, how accurate are species composition samplings, what is the optimum level of observer sampling.

The length frequency portion of the study will look at size stratification in flatfish hauls. Two species will be sampled systematically at 6 locations with 20 fish randomly selected at each location.

The AP unanimously recommended the approval of this EFP mainly because the information gained from a study such as this would be extremely useful for both industry as well the Observer Program. Following approval, Groundfish Forum would begin soliciting vessel applications from industry volunteers next month. It is unclear at this point how observers would be chosen for the project, but to my understanding two vessels will be selected, each with a total of 3 observers per vessel. The main requirement of the observers would be prior experience on a Head & Gut flatfish processor. Stay tuned for more information if interested in participating in the project.

In Conclusion: Many other topics and issues were discussed at both meetings, but I've included only those which I thought dealt directly with Observer issues or interest. If anyone reading this article would like more information on any of the mentioned issues, or other council agenda items please don't hesitate to contact me.

It has been a great honor and challenging learning opportunity for me to represent Observers at the Advisory panel meetings. Although overwhelming at times I am trying to keep up on all the issues to better inform Observers of upcoming fishing industry regulation changes as well as issues directly affecting our duties and requirements. I'll report the council's final action decisions in the next edition of the mail buoy.

In the meantime if you pass through the Seattle NMFS Observer Office at the NOAA WRC, please stop by my office to chit chat. I am located in the same building (4), same floor (first), office # 1176 (east end of building). My office number is **(206) 526-4606** and email at **Erika.Acuna@NOAA.gov**. I would love to hear from you and address any concerns, issues, or attempt to answer any questions you may have regarding the council process.

Observer Regulatory Amendments for 1999 Delayed Again...(KD)

Discussion of proposed regulatory amendments was postponed until the June Council meeting. The original recommendations were made by the Council at their June 1998 Council meeting, discussion and further recommendations were made at the September 1998 OAC meeting, and initial action was to take place last December. The APO has not seen specific language on any proposed regulatory amendments; the NMFS-AK Region has not had the staff time to complete them. However, a new staff person will be hired soon who will be dedicated to observer program issues and analyses.

In addition to the 7 suggestions/comments recommended in the September MB, the APO would like to add the following as a result of increased complaints regarding NMFS' handling of harassment cases:

- On Pages 18-10 & 11 of the Groundfish Observer Manual it states, "Providing a safe and hostile-free work environment is the responsibility of your contractor as your employer and the vessel's personnel, by regulation. It is of utmost importance to the Groundfish Observer Program. However, verbal, physical or sexual harassment of Observers can occur at sea. Observers therefore can be subject to negative attention, comment or actions. If you experience harassment confront it directly, document it thoroughly and report it before the problem escalates. If the harassment is not taken care of by the skipper, or if your problem is with the skipper, report the offense to NMFS and your contractor at the first opportunity. If there is no resolution, **YOUR CONTRACTOR WILL MAKE ARRANGEMENTS FOR YOU TO LEAVE THE VESSEL**" **The APO requested a regulatory amendment stating that contractors must disembark an observer who is requesting transfer from their vessel due to a hostile and unsafe environment without negative repercussions to the observer. Potential negative repercussions include but are not limited to: premature termination of contract, not rehiring the individual in the future, payment of return airfare, etc. APO further suggests if the contractor does not make arrangements for disembarkation, the U.S. Coast Guard should escort the vessel to the nearest port. In either case, NMFS Enforcement officers assigned to the observer program should meet the vessel and observer when the vessel docks. Failure to remove the observer should be grounds for immediate decertification of the contractor.**
- The APO has also requested the Observer Program to modify observer training. More specific training only helps the program overall. Given that observers who are being seriously harassed are not completely objective or may be extremely distraught under these conditions, the more familiar they are with the protocol the better.

The APO will keep you informed. If changes are proposed between scheduled MB publications, we'll send out a separate mailer asking you to send letters to the Region with comments.

Interested in AP seat for 2000?

Erika Acuna may not be available for year 2000 so we're starting our search for interested people early. For the APO to nominate you, you must be a recent observer, be willing and available to attend all Council meetings, be comfortable in a highly diverse and sometimes adverse, challenging environment. The NPFMC meets 5 times/year-3 in Anchorage, 1 in an Alaska town other than Anchorage and 1 in the lower 48. Food, lodging and airfare are provided by the Council. The observer representative must be willing to stay abreast of the ever changing observer program, be an advocate for observer rights and data quality, regularly consult with the APO and AFU, and be motivated to learn about fishing issues other than those that pertain to observers. Most of the issues before the AP concern user access and management issues although most of the information originates from observers.

Serving on the AP is a significant time commitment but the rewards of are rich. Experiencing and participating in the process of managing our nations fisheries is important to building your resume, important for observers to have a voice and important for the nation. Our perspective is unique and often is the most experienced on the Council in terms of what is really going on (the groundtruth) on board many different kinds of vessels in many different fisheries. Many AP members

have not stepped foot on a commercial vessel in many years and your information/ observation is key in many decisions although often it is not information they welcome. Please contact the APO if you're interested.

REVISED REGULATIONS FOR ALASKAN LONGLINERS TO REDUCE SEABIRD BYCATCH (Liz Mitchell)

At the April 22-26 Council meeting, the Council took final action on changes to the seabird regulations originally implemented in 1997 to address the problem of seabird mortality in Alaskan longline fisheries. Below are the 3 options that were presented to the Council for final decision and this authors commentary (in italics).

Option 1: All longliners 26+ feet must:

1. Use groundlines which are sufficiently weighted to cause baited hooks to sink out of reach of seabirds immediately after they are set. Crew must add weights to ground line. Specific weighting regimes will be determined sometime in 2000 after the results come in from tests being conducted by Washington Sea Grant.

Improperly weighted lines have been reported by observers in at least 2 of the 7 short-tailed albatross takes since 1989. It is generally agreed that weighting the groundline, in combination with a properly constructed bird scaring line, is the most effective method of deterring seabirds. According to industry representatives, there are difficulties associated with this method. The freezer/longliners (F/L) are able to add weights to the skate ends where there is a portion of line without hooks. However, this appears to not be enough. A five-ten lb. cannonball will sink the gear in the immediate vicinity of the weight but the rest of the 100 fathoms or so will remain floating at the surface, attracting seabirds. It would require weights attached in the middle of the skate but there are difficulties in adding weights to a line that's going out at 60 hooks per second. Perhaps slowing down the setting speed could be a possible solution.

Experimentation and innovative strategies are currently being investigated by industry to develop a different system to sink the baited hooks quickly. The recommendations from tests to develop groundline weighting regimes could be as long as 2 years away. Again, it appears that no definitive weighting regimes will be required of vessels until then.

2. If offal is discharged while gear is being set or hauled, it must be discharged in a manner that distracts seabirds from baited hooks, to the extent practicable. The discharge site on board a vessel must either be opposite or aft of the hauling station. Hooks must be removed from any offal (i.e. fish heads) that is discharged.

While discharging offal during setting operations may have the immediate effect of distracting birds from baited hooks, it also attracts seabirds to the area. I have noticed that discarding offal (while dressing fish) during setting operations resulted in the offal drifting occasionally over the gear. When birds go after the offal they are in a mad frenzy. In this state, I have seen them totally ignore bird deterrents. However, I have also seen a short-tailed albatross be distracted from the hooks when a crew member consciously threw offal off to the side. While discharging offal during setting may endanger seabirds in general, if done conscientiously, this could possibly be used as a complimentary strategy to distract the birds.

3. Make every reasonable effort to ensure that birds brought aboard alive are released alive and that wherever possible, hooks are removed without jeopardizing the life of the bird.

4. Employ one of the following seabird avoidance measures:

- a. Tow a bird scaring line during deployment of the gear to prevent birds from taking baited hooks. The bird scaring line would be towed directly over the baited hooks and would be of sufficient length (at minimum, two vessel lengths). The forward end would be of sufficient height above the deck (at minimum 10 ft. from the vessel deck) to protect the entire area behind the stern of the vessel where baited hooks are accessible to seabirds. If multiple bird scaring lines are used, they would be immediately adjacent, on each side, of the groundline bearing the baited hooks.

From my observations this formula for a bird line is not adequate. This would allow a 19 meter vessel to have a bird line 38 meters long. I have witnessed black-footed albatrosses with bait in their bills approximately 30 meters past a 60-meter bird line. I never saw a bird line more than 65 meters long and consistently I have seen birds diving on bait aft of the bird lines. This indicated to me that, at 65 meters, the bird lines were not long enough and that, at one 5 kg. weight per 100-fathom skate, this was not sufficient to sink the baited hooks. Also, the height of bird line attachment should be measured from the point of hook departure from the vessel to address those vessels that set high off the water or on the second level deck.

According to researchers in Australia and New Zealand, the length of the bird (tori) line and the height of the forward end above the water surface are crucial in keeping the line above the water. Longliners in Antarctic waters (both pelagic and demersal) are required to have 150 m lines. Some are known to use lines as long as 250 m long. This increases the aerial section needed to scare birds. Essentially, the floating section has one purpose-- to create drag for the line and some longliners use a thicker diameter of line for this section. On several occasions, I've noticed only half or less of a bird line above the water. The rest was floating on the water and appeared to have little effect at scaring birds away.

Also, if vessels are required to have their bird line directly above their gear without adding into the equation sufficient height above water and sufficient length of bird line, the end result may be worse than before. Vessels kept their bird line off to the side, away from the gear, because the closer it was to the gear, the greater chances of it becoming entangled. However, it gets entangled because of an inadequate length and height of the forward end above water. This results in a flaccid floating bird line and, in combination with insufficient weighted lines, the bird line gets caught in the gear. So what we will have is a bird line that will be useless in a shorter period of time than with what they were using under the 1997 regulations.

b. Towed buoy bags or float devices and bird streamer lines would qualify as bird scaring lines if they are properly constructed to effectively deter and prevent seabirds from accessing baited hooks. Towing a board or stick during deployment of gear would no longer qualify as an acceptable seabird avoidance measure.

c. In addition to 4a above, deploy hooks underwater through a lining tube at a depth sufficient to prevent birds from settling on hooks during deployment of gear.

This option will mostly apply to the F/L vessels. While this method does reduce bird bycatch in comparison with using nothing, glitches have to be worked out and one longliner appears to have been using it successfully. However, studies have indicated that if groundlines are not sufficiently weighted the baited hooks could still float back up to the surface in adverse weather conditions and endanger seabirds. This could result in a big disappointment to the fleet, if, after spending \$40,000 on the equipment, they still catch a short-tailed albatross.

d. In addition to 4a above, deploy gear only during the hours specified in regulation "hours of darkness" 679.24(e)(3)(iv), using only the minimum vessel's lights necessary for safety.

This is important because it recognizes that longliners must use weighted lines and a bird-scaring line at night also. Many short-tailed albatrosses were caught during times when there was more than 8 hours of darkness, so this is not an unreasonable regulation. In southern oceans, night setting has been shown to reduce seabird mortality significantly. However, we still don't know the foraging habits of short-tailed albatrosses and the latest kills last September were caught at night. Moon phase/brightness (cloud cover) may have an effect as well. Also, because observers aren't required to report time of set deployment, we have no way of knowing how this would factor into seabird mortality rates in Alaska.

Option 2: Differs from Option 1 in that (in addition to the regulations listed) it would require the use of a lining tube for specified vessels. Weights added to the groundline would be required to prevent the groundline from resurfacing after it was set.

Option 3: Differs from Option 1 in two ways: Towed buoy bags and float devices would not qualify as bird scaring lines and night-setting would be required of all specified vessels.

While properly constructed and deployed tori lines were proven effective in southern oceans, I don't think the element of construction that renders a bird-scaring line effective has been conclusively determined. It may be that buoy bags and float devices work fine, but only with the use of properly constructed streamers, adequate length, etc.

How this Affects Observers: Observers are currently not able to thoroughly monitor for compliance of these regulations. Most of the mitigation measures required by vessels occur during setting operations. In a round-the-clock operation, this may be the only time an observer has to sleep. In addition, the majority of the fleet (<60 feet) is without observer coverage.

Monitoring of mitigations measures cannot be accomplished without a reduction in observers' current duties and this will probably not be considered for quite some time. Since 1997, observers were asked to list the seabird mitigation measures

in use. Most longline observers know that a towed device includes many different styles. They vary in effectiveness, according to use and construction, and occasionally get entangled, which obviously would render the device completely ineffective, not to mention illegal. Not surprisingly, the US Fish and Wildlife found observer data to be of limited use. This year, observers are asked to describe the mitigation measures in their vessel survey to find out what is currently being used.

The Council's final decision was Option 1. However, the 26' language was changed to include only vessels > 35' LOA.

It is imperative that regulations be developed that are effective and that the fishermen are willing to work with. The fleet has been experimenting for two years now and yet there has been no systematic monitoring of this process. The international team for the Food and Agriculture Organization Technical Working Group on Reduction of Incidental Catch of Seabirds in Longline Fisheries reported that an "at-sea observer programme is regarded as the most effective means of gathering representative and independent data" on the effectiveness of mitigation measures. This is a part of the FAO Plan of Action to reduce seabird mortality in longline fisheries worldwide (FMI see the FAO Web site: <http://www.fao.org/WAICENT/FAOINFO/FISHERY/faocons/faocons.htm>)

OBSERVER PROGRAM UPDATE

A LETTER FROM BILL KARP DOMESTIC OBSERVER PROGRAM TASK LEADER

Dear Observers:

Kim and Liz asked me to write a few words for this edition of Mail Buoy. We have gone through a lot of changes during the last year and more changes will occur before the end of 1999. So now is a good time to think about our recent accomplishments and the challenges we will face in the new millennium.

Credit for all of our important accomplishments belongs to observers and to program staff. For example, development of the ATLAS system required a great deal of hard work from staff. But the success of ATLAS is as much in the implementation as in the development, and implementation has required observers to learn new skills, work with staff and vessel personnel to resolve (often perplexing) problems, and change their work patterns. The benefits of this innovative system for transmitting data and providing feedback to observers in the field have been tremendous, and they have been achieved through the partnership between observers and staff which characterizes the Observer Program.

Changes associated with implementation of the Multi Species Community Development Program (MSCDQ) have also brought significant benefits to the program. Requirements for weighing catches at-sea and for agency-approved observer workstations, together with special requirements for selection and training of MSCDQ observers have allowed us to address the increased requirements for high quality data and evaluate innovations which might improve the broader program. Staff worked hard to ensure that all of these requirements were developed and implemented on time, and observers have taken on these new responsibilities with characteristic enthusiasm and professionalism. For this partnership to be successful, we must rely on observers to give us feedback on the effectiveness of changes in sampling requirements and to provide us with suggestions for resolving problems they identify. Almost everything we do can be improved, and many important improvements have been made in response to suggestions from observers.

We have made significant improvements in training and debriefing this year, and more will occur in 2000. During the next few months, we will begin hiring staff for the North Pacific Groundfish Observer Cadre (*formerly the Observer Corps*). The Cadre will be based in Anchorage but staff will spend considerable periods of time in the field, at shoreside plants and at sea. The goal of the Cadre is to enhance Observer Program outreach to the fishing industry and observer contracting community, increase NMFS field presence in support of observers and their data collection responsibilities, and improve problem solving associated with sampling, observer placement, and other Observer Program functions. While we have yet to develop the specific duties and responsibilities of these staff members, they will include: boarding vessels with observers to review observer and crew responsibilities with skippers before embarkation, meeting observers as they disembark to identify and resolve problems, working with fishing companies to improve sampling situations for observers, assisting in debriefing and development of reports for NMFS Enforcement, and going to sea as observers to improve program understanding of sampling issues and address specific problems which are identified by observers. It is our intent to reinforce the position that the North Pacific Groundfish Observer Program is a NMFS Program, and that NMFS will support its observers wherever and whenever it is necessary.

The North Pacific Groundfish Observer Program is large and complex and changes are sometimes difficult to make. But we make important improvements through this process of change, and we are fortunate to have so many good, hard working people working for the program as observers and members of staff who are dedicated to making the best Observer Program in the world even better.

Keep up the good work. Sincerely, Bill Karp

1998 CONTRACTOR EVALUATIONS RELEASED IN FEB. (KD)

Last year the NMFS Domestic Groundfish Observer Program (DGOP) began formally evaluating the 5 NMFS certified contractors. Observers/APO were informed this evaluation would be conducted thoroughly every year. The 1997 evaluations provided some interesting results and actually pointed to specific tasks contractors had ignored or failed to perform thereby violating their certification agreement with NMFS. The APO expected the same kind of in depth and comprehensive evaluations to continue.

Unfortunately, the 1998 contractor evaluations were completely ineffectual and uninformative. Each evaluation is a 1-page form letter best summarized as 'all contractors performed in a satisfactory manner' and best categorized as a rubber stamp of the status quo. The APO has been formally notified regarding one incident (and has knowledge of others) where the contractor did not act appropriately to remove an observer from an unsafe situation. This incident was not acknowledged in the contractor's evaluation even though some fault has been admitted by both the contractor and NMFS.

By downplaying or not addressing this issue, NMFS perpetuates an environment where the welfare and safety of observers is not a serious issue and can be easily overlooked. The APO urge NMFS to evaluate each contractor honestly and in much greater detail and urges observers to inform NMFS of all instances where you think a contractor may have not been acting in the best interest of you or the Observer Program. Imagine if contractors had to undergo the same debriefing process regarding their performance that observers do at the end of a cruise. Few or perhaps even none of them would receive a satisfactory score.

If you'd like to learn more, the evaluations are posted on the APO website.

Summary of Observer Hiring Practices in 1998 by Contractors (KD)

Last December, the APO submitted a FOIA to NMFS so that we could determine how well the contractors were performing with respect to their commitment in the AFU contract to hire priors. The info. received included observer name, contractor name, training/briefing class, date debriefed. From this the APO separated observers into prior or trainee by contractor. This summary does not include observers who were briefed/trained after Dec. 15 or priors who were deployed without briefing.

<u>Contractor</u>	<u>Total # Deployments</u>	<u>Total # Priors Deployed</u>	<u>% Priors Deployed</u>
FOA	17	16	94
DCI	24	20	83
AOI	184	148	80
NWO	83	64	77
SWI	205	140	68
Total	513	388	76

Sperm Whale Special Project Alive and Kicking

The National Marine Mammal Laboratory (NMML) initiated the Sperm Whale Longline Interaction special project in 1997 to assess the nature and magnitude of interactions between sperm whales and longline vessels in Alaskan waters. During 1998, twenty-two observers participated in the project aboard 48 cruises and monitored 1042 longline sets for marine mammals. No sperm whales were reported during any of the 457 sets observed in the Bering Sea. Sperm whales were present during 19% (112) of the 585 longline sets monitored in the Gulf of Alaska. Observers reported predation on longline caught fish during 37% of the sets (41) in which whales were present.

Observer photographs of sperm whales have been of tremendous value and we now have a flat rate per copy for immediate copy reimbursement to observers. Because sperm whales come so close to the vessels, photo opportunities are abundant and

even instamatic cameras have provided re-sights. Individual whales from three of the five sets of sperm whale photos provided by observers were matched to previous sightings.

This project has been successful due to the dedication and interest of the observers. Many thanks to those of you who have participated during the first two years of this project. NMML, with the help of fishery observers, will continue the special project during 1999. Any questions concerning or information about the project should be directed to Scott Hill at (206) 526-4048 or *scott.hill@noaa.gov*. Beginning in July of 1999 the point of contact for this project will be Anita Lopez (NMML), who will take over as manager of this program. Thanks very much for those who provided photos for the sperm whale ID Catalogue.

Marel Flow Scale Operation (excerpt from a letter to Shannon Fitzgerald, NMFS from observers Irene Dorang and Jim Gill dated 3/14/99)

During our 1999 A-season cruise we noticed that the way in which the Marel flow scales are currently operated could potentially result in large inaccuracies in Official Total Catch. Once we became aware of these problems they were easily avoided, due in part to some changes made by the vessel.

Problem #1

The Marel flow scale occasionally goes into fault mode, at which time it stops registering catch weight. However, the scale belt continues to run, and fish pass over the scale without being weighed until the fault is cleared. Faults are cleared by someone using the screen keypad or through a self-correcting function. In order to self-correct, the scale belt must be operating with no weight on it. When fault mode occurs the scale readout flashes, and an explanation for the fault appears on the screen. However, it is at the discretion of the vessel employee operating the scale to:

- a) notice the fault, which requires checking the scale readout screen;
- b) stop the flow of fish to the scale belt;
- c) clear the fault before continuing to run fish.

Alan Kinsolving pointed out that NMFS is aware of the problem. He stated "the scale won't stop if there is a fault condition, and our regs only require that there be a 'visible or audible signal'. There is an audit trail printout, which is inaccessible to the scale user, that shows us the time and date when the scale is operated in a 'fault' mode".

Audit trail printouts are easily obtained; however, we were never requested to do this in training, or even told that an audit trail existed. According to the Marel manual, one of the ways to determine if the scale is being used incorrectly is by comparing the variation in a certain "p" value from one audit report to the next. It seems that this would require audit reports to be printed consistently throughout the trip, rather than after the completion of a season during which time numerous fault incidents may have occurred.

The following are problems directly related to the current Marel flow scale mode of operations:

- a) There is no way for observers to know when the scale is operated in fault mode unless they are present at the time it happens.
- b) Even if vessel personnel decide to inform the observer of the fault, there is no accurate way to calculate how much catch passed over the scale without being weighed.
- c) Anyone could deliberately fault the scale and run fish for however long the observer is not in the factory.
- d) An audit trail printout (assuming one is obtained and analyzed) shows the length of time the scale is operated in fault mode. It does not record the rate at which fish are being run across the flow scale at the time of fault, again making it impossible to estimate the amount of catch not weighed.
- e) Even on a vessel trying to operate in compliance, it is only a matter of time before a factory worker runs the scale during a fault condition simply due to human error.

Solution #1

These problems were avoided when the vessel electrician altered the scale set-up following the advice of a Marel representative. Now, a fault condition automatically shuts down the incline belt leading from the live tanks to the flow scale. This cuts off the supply of fish to the scale belt. The only catch not weighed is a minimal amount already on a belt located between the incline belt and the scale belt. Once the fault is cleared, the incline belt restarts automatically. This works extremely well, as we witnessed on several occasions. According to the sorters, it has also functioned correctly when no observers were in the factory.

The potential for large inaccuracies in Official Total Catch due to flow scale faults was easily avoided. It is our recommendation that the procedures for installation of flow scales on other vessels be adapted to include measures equivalent to those implemented here. In addition, we feel that more in-depth coverage of flow scale operations needs to be included in the observer-training curriculum.

Problem #2

Catch weight can be erased from the Marel computer database before an observer has the chance to see it attributed to a particular haul. This is possible because the scale program allows an operator to erase previously recorded data. Every twenty hauls, catch information must be deleted in order to make room in the database for subsequent hauls. Once information has been erased it is irretrievable.

An operator can enter the program at any time and change the haul number that weight is being registered to. It is therefore possible to change to a future haul while fish are being run, accumulate weight on that haul number, then zero it out immediately afterwards. An observer would have to be checking the readout screen in the factory to see that catch weight was being attributed to the wrong haul. The weight would register permanently on the cumulative total, but would not show up on a haul by haul listing once it had been deleted from the database.

Solution #2

Observers can track this by periodically verifying that the sum of individual haul weights matches the change in cumulative total. Obtaining printouts of scale data on a regular basis ensures that discrepancies will be traced.

Currently observers are not requested to conduct this verification. It is our recommendation that this be a standard procedure for observers monitoring flow scale operations.

NATIONAL OBSERVER PROGRAM COORDINATION TO IMPROVE (Vicki Cornish, Office of Protected Resources, Washington D.C.)

On March 25, 1999, the NMFS Executive Board met in La Jolla, CA and approved the establishment of a National Observer Program office at headquarters.

As those of you who attended the impromptu "Observer Working Group" meeting in Seattle last March may remember, the subject of having an observer liaison position at headquarters was debated and, in the end, attendees were in support of having a recommendation go forward in support of having a position created at headquarters. Bill Karp, Bridget Mansfield, Nikki Bane and I drafted the recommendation last March.

HQ Office Directors supported the concept and asked that a committee of representatives be appointed from the Office of Protected Resources (PR), the Office of Sustainable Fisheries (SF), and the Office of Science and Technology (S&T) to prepare a proposal for the Executive Board's consideration.

The proposal outlined the need and the history of efforts to coordinate NMFS observer program activities. It also recommended that a National Observer Program be created to:

- 1) Improve communication about observer program issues both within and outside NMFS;
- 2) Provide consistency and coordination in funding, safety, training, contracting, insurance, liability, and data confidentiality among other things. This would include the drafting of policies and procedures that would provide national guidance yet still allow for regional flexibility.

The proposal recommended that up to three persons be permanently hired at headquarters to begin working on these tasks, under the lead of S&T, and that an advisory group, similar to the Observer Working Group, be formally established to enhance communication with the field and to assist in the development of national policies and procedures.

The Executive Board was in support of the concept of a National Observer Program and in having S&T take responsibility as the lead office. They suggested that the program also address observers placed on dredging operations and oil and gas platforms, and that the list of objectives be expanded to include vessel compliance

and sampling design. At Bill Karp's suggestion, they also remarked on the need to integrate the efforts of this program with other fishery data collection activities, such as Vessel Monitoring Systems and logbooks.

The Executive Board resolved to find the funds necessary to start this program in FY2000. Contingent on that funding, S&T will likely start recruiting for the program this summer. At least two positions will be filled right away - one senior position to work on policy issues and coordination, and one more junior position to assist in policy development and to provide technical expertise. Both positions could benefit from having persons with direct observer program experience (a rotational assignment may even be considered). Once these positions are filled, I expect that a request to the field for appointees to the advisory group will follow.

I hope that you will join me in applauding the Executive Board's decision to formally recognize the need for increased communication and enhanced coordination of NMFS observer program issues so that the agency's goals of scientific data collection, resource management, and compliance monitoring may be better served.

ALASKA FISHERMAN'S UNION NEWS (Submitted by Mark Coles, AFU President)

When I first started working for the Alaska Fishermen's Union (AFU) my boss gave me a sage piece of advice. He said, "We must never forget where we came from." At that time the AFU was 80 years old. Too long ago for me to know anyone from the beginning. But the union history had been handed down. I was told how and why those fishermen in San Francisco, San Pedro, and Monterey organized into a union in 1902. "Never let anything go lightly out of your contract." I was told, "Somewhere in the past someone fought hard to get it in there for a reason."

In the Observer's case we are the beginning. Our unionization is only two years old. We will be passing down the history. The advice I received applies here as much as ever "We must never forget where we came from." It is so easy to forget. It would be easy for an observer to start having thoughts like:

- The wages are good. I get paid for training. I get paid for briefing and debriefing. I get gear allowance and a few bucks for health insurance. Things are pretty good. It would be nice not to have to pay union dues. You know, I don't think we need this union anymore.

Don't go there ! Where we came from was wages of \$70 per day for newbies with no pay for training. Where we came from was about \$120 per day for priors max with most making less. Where we came from was no pay for briefing and no pay for debriefing. Where we came from was no gear allowance, no money for health insurance and low morale.

It is my belief if we forget where we came from eventually we will find ourselves back there. So please don't forget why the observers organized themselves into a union. Remember to share the story with new observers. Let them know their dues are a small price to pay for the progress we have made.

As long as we are talking about "don't forget". Please remember:

- To call the Union if you have a problem
- To call the Union if you have questions
- You can call the Union collect
- To let the Union know if you change your address
- Through your Union membership you can join Alaska U.S.A. Federal Credit Union and have access to the Union Privilege Program which offers credit cards, mortgages, legal advice, prescriptions at lower prices for union members.

PACIFIC FISHERY MANAGEMENT COUNCIL UPDATE Submitted by Bob Eaton, Executive Director, PMCC

At its April 1999 meeting in Sacramento, the Pacific Marine Fishery Council (PFMC) committed to a mandatory observer program to determine total groundfish catch. During Council testimony, the program drew support from environmental, conservation and fishing groups. The only negatives came from several members of the fishing community who believed that, while an observer program was important, it may not be the highest priority.

The Council referred observer program planning and implementation to a committee of state and federal agency representatives to the PFMC. This group can seek advice of scientists, fishers and others but, it was felt, can move the process expeditiously. The committee charge, according to the April Council News Flash found at <http://www.pcouncil.org>, is "to design a statistically valid program to sample across sectors based on total groundfish poundage or other criteria as

appropriate." There was debate about the two options presented the Council....sampling based on total poundage, or based on trips. The Council preferred poundage but left the door open if the committee thought there was a better way.

Funding for observers continues to be a concern. The Pacific States Marine Fisheries Commission (PSMFC) estimated an observer program that would provide statistical representation across the groundfish fleets would cost about \$2.4 million/year. PSMFC officials and others have been working DC to get funding put into the federal budget. In fact, \$2M has been included in the President's FY 2000 budget, earmarked for a West Coast observer program. If that money can survive the budgetary process, it would provide core funding to get the program built and functioning while work continues to secure funding for an extended period of observation, estimated at three to five years.

The Pacific Marine Conservation Council (PMCC) had previously testified in favor of an observer program, written letters to congressional representatives urging funding, and joined with others in speaking to NMFS officials. At the April meeting, PMCC encouraged the Council to commit to an observer program so DC would receive a clear message that this is a West Coast priority. PMCC also supported the agency-led committee over the Council's current "Total Catch Determination Committee" (TCDC) as the group to forward the observer agenda. Mandy Merklein, an observer veteran and member of PMCC's Board of Directors, was instrumental in helping the TCDC reach the observer program recommendation to the Council.

PMCC will continue to work with those fashioning an observer program to lend expertise, comment and support. We don't see how the Council, the fisheries and the agencies can get to where they want to go without the data provided by an observer program. The sooner observers are in place, the better.

(PMCC is a membership organization that can be reached at 1-800-343-5487, or at <http://www.pmcc.org> on the web.)

ADDITIONAL ARTICLES OF INTEREST

More unusual events afflict Bering Sea ecosystem (from Jan/Feb SeaWeb)

A series of unusual events swept through the Bering Sea in 1998, further adding to scientists' concern that the region's ecosystem is undergoing profound changes.

Among the recorded happenings over the previous twelve months:

- The sea surface temperatures were the warmest ever recorded
- The largest bloom of coccolithophore algae ever recorded in the Bering Sea appeared and re-appeared throughout the summer.
- Almost 200,000 short-tailed shearwaters, approximately ten per cent of the region's population, died, apparently of starvation. The birds that remained were lighter in weight than they had been a year earlier.
- On the Pribilof Islands, up to 15 per cent of the female population of northern fur seals were afflicted with a fungal infection of a kind never before recorded in Alaska.

The events of 1998 are just the latest in a series of changes in the Bering Sea ecosystem over the past twenty years. The mid-1970s witnessed what scientists refer to as a "regime shift" in which the ecosystem changed into one dominated by so-called "trash fish" such as pollock. This regime shift coincided with a sharp increase in sea surface temperatures.

Perhaps the best-known change to take place in the Bering Sea ecosystem is the recorded decline, by up to 80 per cent, in the western stock of Steller sea lions and some populations of harbor seals. A 1996 report by the National Research Council of the National Academy of Sciences attributed the declines to a combination of climate change, overfishing, and overhunting of predators such as whales. In a recent development, a paper in Science last year reported that, as a result of pinniped declines, orcas in the regions were preying on sea otters, leading to declines in otter populations and consequent increases in the otters' sea urchin prey, which in turn are causing serious deforestation of kelp beds (Ocean Update November 1998).

For further information: A copy of the draft NOAA report, and a chat room, is available at <http://www.pmel.noaa.gov/bering>.

The National Marine Fisheries Service (NMFS) is required to publish Stock Assessment Reports for all stocks of marine mammals within U.S. waters, to review new information every year for strategic stocks and every 3 years for non-strategic stocks, and to update the stock assessment reports when significant new information becomes available. Pacific stock assessment reports published by the Southwest Fisheries Science Center (SWFSC/NMFS) are now available via the Web through the Southwest Fisheries Science Center Homepage (<http://swfsc.ucsd.edu>) 'Publications' link. Reports may be accessed directly through link. Reports may be accessed directly through <http://swfsc.ucsd.edu/sars/>. In addition, reports from SWFSC and other NMFS centers (Alaska and Atlantic regions) are now available in PDF format through the NMFS Office of Protected Resources Home Page at http://www.nmfs.gov/prot_res/mammals/sa_rep/sar.html.

Pacific stock assessments published in 1997 contain information on all marine mammal stocks which occur in EEZ waters of California, Oregon, Washington, and Hawaii. The 1998 Pacific report contains significant new information on 7 marine mammal stocks in California, Oregon, and Washington waters (harbor seal, northern fur seal, harbor porpoise, Mesoplodont beaked whales, and minke whale). See Barlow, J., K. A. Forney, P. S. Hill, R. L. Brownell, Jr., J. V. Carretta, D. P. DeMaster, F. Julian, M. S. Lowry, T. Ragen, and R. R. Reeves. 1997. U.S. Pacific Marine Mammal Stock Assessments: 1996. NOAA Technical Memorandum NOAA-TM-NMFS-SWFC-248. 223pp. AND Barlow, J., P. Scott Hill, K.A. Forney, and D.P. DeMaster. 1998. U.S. Pacific Marine Mammal Stock Assessments: 1998. NOAA Technical Memorandum NOAA-TM-NMFS-SWFSC-258. 40pp.

JOB OPPORTUNITIES

Aquatic Equipment and Services, Inc. of San Diego, CA is a company which builds large aquariums, lakes, koi ponds and fountains all over the US. We're looking for one or two people to assist with various projects we are about to start. The position(s) are full time and permanent if you're what we're looking for. We need people with biology backgrounds who are familiar with general construction techniques including PVC plumbing and electrical work, and who have experience with aquaria (fresh or salt) and/or fish culture. Please fax or mail resumes and cover letters to:

AES
attn: Reaves Morris
4542 Ruffner St. Suite 340
San Diego, CA 92111
fax: 619-279-7803

SONGBIRD COUNTS IN THE WENATCHEE NATIONAL FOREST

The Wenatchee Forestry Sciences Lab anticipates hiring one person to carry out songbird counts and vegetation sampling for a riparian research project in the east Cascades of the Wenatchee National Forest. Candidates for the position must be able to identify western birds by sight and especially sound. The work will require hiking in difficult terrain and early mornings. The salary level is GS-5, and the work will begin ASAP and continue through the summer.

Interested candidates should contact:

Dorsey Burger edburger/r6pnw_wenatchee@fs.fed.us or 509/662-4315) for more information and application procedures.

PUMPIN' EM' OUT LIKE GUPPIES IN TEXAS

Simaron Fresh Water Fish, an intensive tilapia production facility in Texas, is looking for two interns for the summer. Housing is provided and pay begins at \$800/mon and may go up to \$1000/mon. It's a great opportunity to get your "feet wet" in commercial aquaculture and a good resume builder. For more details call (409) 826-3554 ask for Robert Schmid.

RESEARCH ASSOCIATE / TECHNICIAN, UNIVERSITY OF GEORGIA, ATHENS, GA

Start date: July 1, 1999. My laboratory conducts research in evolutionary and ecological genetics in plants, particularly natural populations of Arabidopsis species. Major responsibilities will include isolating and analyzing DNA, conducting crosses, assisting in field experiments and generally maintaining and supervising the laboratory.

Qualifications: Bachelor's in Biology or related field with 1 or more undergraduate or graduate courses in genetics, and some research experience. Experience with PCR and molecular biology protocols is desired but not necessary. Salary will be commensurate with experience. I would prefer to hire a recently graduated undergraduate who is interested in working in an academic setting for at least a year before starting graduate school.

The working conditions, intellectual atmosphere, and facilities in Genetics at Georgia are excellent. Athens is a lovely and inexpensive place in which to live with all of the advantages of and culture of a 200 year-old university town. You may wish to look at the Department of Genetics' web site at: www.genetics.uga.edu.

Application deadline is June 1, 1999, or until a suitable candidate is found. For more information, please contact me by e-mail at: rmaurici@uga.edu Interested persons should send by mail or by e-mail a letter of application, a CV and the name, phone number and e-mail address of 2 references to:

Rodney Mauricio, Department of Genetics, Life Sciences Building, University of Georgia, Athens, GA 30602-7223

COOK INLET MARINE MAMMAL OBSERVERS

The latest news on the Cook Inlet Marine Mammal Observer contracts is that they will begin around mid-June. The contractor has not been selected yet.

The **Oceanic Institute** in Hawaii has 7 openings in the following areas: Aquatic/Feed Microbiologist; Fisheries Biologist/Ecologist; Shrimp Nutritionist; Larval Physiologist-Finfish; Reproductive Physiologist-Finfish; Computer Modeler/Specialist; Research Associate-Fisheries. More details are available on the Oceanic Institute web site at: <http://www.oceanicinstitute.org> . Click on Employment.

Extension Watershed Management Faculty Member POSITION ANNOUNCEMENT#018-837

RANK: Assistant Professor

TENURE: Annual, Tenure Track

POSITION AVAILABLE: Immediately

APPLICATION DEADLINE: June 11, 1999 or until position is filled

LOCATION: Curry County (Gold Beach) Serving Coos and Curry Counties

DESCRIPTION OF RESPONSIBILITIES: 1. Provide leadership for design, delivery, and evaluation of Extension educational programs for private and public natural resource managers. Encourage and explain/demonstrate the application of research based knowledge for improving coastal watersheds that will benefit salmonid populations and habitat, water quality, water conservation, and ecosystem health. 2. The Extension program will require coordination, cooperation, and networking with landowners and other private citizens, relevant agencies, organizations, i.e., watershed councils and Soil and Water Conservation Districts through educational programs that address natural resource issues, and watershed management strategies on public and private land. 3. Assist in the formation, maintenance, and improvement of voluntary, community-based decision making, through educational programming. Assist citizens in developing action plans, watershed assessments, and watershed enhancement projects. 4. Make significant contributions as a "team player" with other faculty, clientele and volunteers.

EDUCATION AND EXPERIENCE : A. REQUIRED-- 1. Master's degree required in disciplines such as watershed science, agricultural sciences, fisheries science, forest sciences, natural resource management, or related fields. Evidence of knowledge in one or more of the following: fish or aquatic biology, water quality, soil and water conservation, ecosystem management, and agricultural production. 2. A demonstrated ability to integrate and apply knowledge from these disciplines to watershed restoration and management. 3. Ability to conduct fieldwork in remote locations on rough terrain inaccessible by vehicles. B. DESIRED-- 1. Balanced and diverse experience in several of the subject matter areas listed in the first education and experience requirement above. 2. Knowledge of Extension education and applied research methodology. 3. Experience in design, delivery and evaluation of educational programs for clientele. 4. A demonstrated ability to productively interact with private landowners, interested citizens, and stakeholders of watershed enhancement including natural resource users (forestry, agriculture, fisheries, etc.). 5. Successful experience in bringing diverse interest groups and people together for constructive dialogue leading to fruitful collaboration. 6. Evidence of strong written, verbal and interpersonal communication skills such as listening; team building; and conflict resolution are desired. The ability to organize, lead, follow, work independently and make constructive judgments with a minimum of supervision. 7. Experience in the use of personal computers for data and word processing, creating educational presentations and electronic communications. EMPLOYMENT STATUS, SALARY, AND FRINGE BENEFITS: Extension staff receive appointment to an appropriate Oregon State University department with faculty rank and privileges. Promotion and tenure will require evidence of Extension teaching and peer-level scholarly accomplishment. Beginning salary will be commensurate with professional qualifications. Benefits include state retirement; health, life and dental insurance group plans; annual and sick leave.

APPLICATION PROCEDURES: In responding to this announcement, please refer to the position announcement number. For full consideration, all materials must be received by June 11, 1999. A complete file consists of:

1. Resume or vita of education and professional experience.
2. Copies of transcripts of all college and university work.
3. At least three letters of reference. These letters should be sent directly to the Personnel Unit from the writer.
4. A written narrative describing how your experience, qualifications and interests have prepared you for this position.

APPLY TO: Extension Service Operations Center Personnel Unit, Oregon State University
108 Ballard Extension Hall, Corvallis, OR 97331-3602; Phone: 541-737-3991 Fax: 541-737-4095
e-mail: margaret.phillpott@orst.edu

Jobs working with seabirds

<http://www.umassd.edu/public/people/kamaral/thesis/plasticsarticle.html>

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).

The APO bulletin board/discussion group is active again. Visit us at: <http://www.dejanews.com/~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.washington.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.

May 13-16 Maritime Week takes place on the downtown Seattle waterfront.

May 18, 5:30-8 pm. Women's Fisheries Network General Meeting at Ray's Boathouse, 6049 Seaview Ave NW. The program is titled, "Changes in the American Fisheries act: An Update." FMI call WFN at 789-1987. (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. Non-members are welcome. Attendance and membership is not limited to women.)

October 7 - 11, 1999 Seventh International Conference on Artificial Reefs and Related Aquatic Habitats, San Remo, Italy. Detailed information on the Conference can be found in the web site: www.soc.soton.ac.uk/SUDO/DEPT/7CARAH/7carah.html

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

OPENERS & MEETINGS

May 11-12 Marine Reserves Committee, Pac. Fish. Mgt. Council, Portland, OR. FMI call 503-326-6352

June 1 GOA pollock opens

June 7-11 North Pacific Fisheries Mgt. Council, Kodiak, AK. FMI call 907-271-2809

June 7-11 West Coast Groundfish Mgt. Team meeting, NMFS, Seattle, WA. Rm 2079, Bldg. 4

June 21-25 Pacific Fish. Mgt Council Mtg, Portland, OR

July 4 GOA rockfish/flats (halibut bycatch released)
BSAI flats (halibut bycatch released)

Sept 1 BSAI fixed gear cod (pots)

Sept 15 BSAI fixed gear (pot & longline)

Oct 11-16 North Pacific Fisheries Mgt. Council, Seattle, WA.

Briefing/Training Schedule

<i>Date</i>	<i>Type</i>	<i>Location</i>
5/10	GF 3-wk	Anch.
5/11	GF 4-day	Seattle
5/11	GF 1-day	Anch.
5/17	GF MS-CDQ	Anch.
5/24	GF 1-day	Anch.
5/25	GF 1-day	Seattle
5/25	GF 4-day	Anch
6/7	GF-3-wk	Anch.
6/8	GF 1-day	Seattle
6/14-25	Scallop	Anch
6/15	GF 1-day	Seattle
6/21	GF MS-CDQ	Seattle
6/21-25	Crab (priors)	Anch
6/28	GF 4-day	Anch.
6/28	GF 1-day	Seattle
7/6	GF 3-wk	Anch.
7/5	GF 3-wk	Seattle
7/6	GF 1-day	Seattle
7/15	GF 1-day	Anch.
7/19	GF MS-CDQ	Anch.
7/19	GF 1-day	Seattle
7/20	GF 4-day	Seattle
7/26	GF 1-day	Anch.
7/27	GF 1-day	Seattle
7/27	GF 4-day	Anch.

WEBSITES OF INTEREST...

Seabird Bycatch

<http://www.dpie.gov.au/resources.energy/fisheries/fishfacts/ff10.html>

http://www.grida.no/caff/tr1_itr1.htm

<http://www.fao.org/WAICENT/FAOINFO/FISHERY/faocons/faocons.htm>

http://www.anca.gov.au/plants/threaten/plans/threat_abatement_plans/catch_of_seabirds_by_longline_fishing/index.htm

<http://www.isofish.org.au/backg/seabirdsandfishing.htm>

<http://www.iphc.washington.edu/PAGES/NewsReleases/1998/seabirds.htm>

<http://www.pond.net/~fish1ifr/bycatch1.htm>

Consultation on Management of Fishing Capacity, Shark Fisheries and Incidental Catch of Seabirds in Longline Fisheries

<http://www.fao.org/WAICENT/FAOINFO/FISHERY/faocons/faocons.htm>

Seabirds in Alaska (U.S. Fish and Wildlife Service)

<http://www.r7.fws.gov/mbm/seabirt.html>

Marine Mammals, Seabirds and Pollution

<http://www.ulg.ac.be/fmv/patho/marine2.htm>

Prospectus for the School of Marine Affairs, University of Washington

<http://www.sma.washington.edu/prospectus.html>

Convention for Biological Diversity

<http://sedac.ciesin.org/pidb/register/reg-170.rrr.html>

Australia's Threat Abatement Plan: The incidental catch (or by-catch) of seabirds during oceanic longline fishing

http://www.biodiversity.environment.gov.au/plants/threaten/plans/threat_abatement_plans/catch_of_seabirds_by_longline_fishing/index.htm

BOOK REVIEW:

Mark Kurlansky's **Cod: A biography of the fish that changed the world** (Walker, 1988) is a captivating account of how the seemingly limitless multitudes cod, particularly those of the Grand Banks and Newfoundland- helped shape the history of the Western civilization. Because salted cod dried well and was unlikely to spoil, it opened new trade horizons and brought both vast economic growth and unforeseen consequences. In time, as Kurlansky deftly notes, much of the New England Cod catch went to the West Indies, where it provided cheap, salt- rich protein for individuals working the sugar plantations: In the 1780's, when the newly created United States of America was barred from trade with The British West Indies, 1500 people in Jamaica died of starvation.

Michael Berril's **The Plundered Seas** (Sierra Club, 1988), provides a comprehensive, fact-filled backdrop to the history of the overfishing of the oceans – a story of unending greed, self-interest, and shortsightedness. Although the text has definite academic overtones, his account of how increasingly efficient fishing techniques disguised diminishing stocks is compelling. In detailing the history and uncertain futures of tuna and salmon, as well as cod, Berril tries to be evenhanded: He acknowledges that commercial fisherman will fish until there is not more fish. But he also asks what happens if a generation of fishermen is lost because of moratorium and closures: Who will be left to watch the seas if the fish recover? The oil companies?

If you'd like to purchase any of these books, remember if you buy from Amazon.com via APO's website, the APO gets a percentage of the sale. See the APO website FMI.

INTERESTED IN WRITING/PUBLISHING THE MAIL BUO? 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, Bill Karp, Teresa Turk, Irene Dorang, Jim Gill 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)

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The following are included in email version only.

INTERNATIONAL FISHERIES ISSUES & NEWS

Nations Agree to Reduce Overcapacity in Fishing Fleets (From Sea Web—April 1999)

The world's major fishing nations have agreed to move toward reducing overcapacity in the global fishing fleet.

Frequently described as a situation in which "too many vessels are chasing too few fish," overcapacity is largely the result of countries continuing to subsidize the building of more, bigger vessels instead of scaling back to ease the pressure on fish stocks. A recent report by the World Wildlife Fund estimated that thirteen of the world's largest fishing fleets have a fleet capacity that is two and a half times greater than necessary to ensure a sustainable catch. The report estimated that those fishing nations need to reduce the size of their fishing fleets by two-thirds.

At the biannual meeting of the Fisheries Committee of the United Nations Food and Agriculture Organization (FAO) in Rome in February, FAO member nations agreed to develop national plans to address fleet capacity and to control the size of distant-water fishing fleets, preferably by 2003 and no later than 2005. The action plan is the first international agreement committing member states to determine whether their national fishing fleets are too big, and to develop plans for reducing those which are.

Governments attending the meeting also agreed an International Plan of Action on Shark Conservation and Management that requires them to develop national plans for effective conservation and management of shark fisheries by 2001. In addition, they adopted a global action plan on seabird bycatch in longline fisheries, which calls on fishing nations to develop conservation measures to reduce the mortality of seabirds and eliminate the killing of endangered species such as albatrosses.

Contact: David Schorr, WWF-US: (202) 778 9662

LAWSUIT FILED TO HALT KILLING OF ENDANGERED SEA TURTLES BY LONGLINE FISHERY IN HAWAII

HONOLULU, HI-The Center for Marine Conservation and the Sea Turtle Restoration Project of Turtle Island Restoration Network, represented by Earthjustice Legal Defense Fund, filed a lawsuit today in the federal district court for the district of Hawai'i to stop the ongoing killing of endangered sea turtles by Hawai'i's longline fishery. The defendants include the National Marine Fisheries Service (NMFS), which is responsible for conserving ocean resources and managing the fisheries.

Over one hundred vessels in the waters near Hawai'i fish with lines twenty or thirty miles long and carrying up to 2,000 baited hooks. Most of these "longliners" came to Hawai'i within the last decade, after stocks of swordfish in the Atlantic were depleted by overfishing. They may be fishing for swordfish or tuna, but they hook any fish or animals -- including turtles, sea birds, and marine mammals -- that go for the bait or happen to get in the way. Hundreds of sea turtles, including leatherbacks, loggerheads, and olive ridleys, are snagged by Hawai'i's longline fleet every year. Many of them drown soon after swallowing the hooks. Others die weeks or months later from starvation or internal injuries, or are strangled by the monofilament lines.

"Longlining is doing to the sea turtles what driftnetting did to the dolphins. If the Pacific longline fleets are not brought under control, leatherback sea turtles may soon go the way of the dinosaurs," said Peter Fugazzotto, Associate Director of the Sea Turtle Restoration Project.

Tim Eichenberg, program counsel for plaintiff Center for Marine Conservation, commented: "Leatherback and other sea turtle species are on the brink of extinction. Although the Center for Marine Conservation has urged the government for years to reduce sea turtle mortalities in the longline fishery, no meaningful action has been taken. In fact, the government

has allowed an increase in the number of hooks in the longline fishery, and has authorized an increase the number of sea turtles caught by the fishery. This lawsuit may be the last chance to save an ancient and unique species from extinction."

Sea turtle populations around the world have been dropping drastically as a result of hunting and fishing. For example, the number of leatherbacks nesting annually at main nesting sites in Costa Rica, Malaysia, and Mexico have dropped by over 90 percent, and this unique animal may soon be extinct. One year ago, NMFS issued its Leatherback Recovery Plan, which says that the killing of these turtles by commercial fisheries must be eliminated for the leatherbacks to recover. Yet NMFS, which has been aware of this problem for more than fifteen years, has failed, time and again, to require the fishery to take any measures to stop -- or even reduce --the killing. Instead, it has routinely issued "Biological Opinions" and "Incidental Take Statements" under the Endangered Species Act, in which it continually increases the number of turtles it authorizes to be caught, while their populations continue to drop dramatically.

The suit alleges that the defendants have been violating the Endangered Species Act by failing to take action to conserve the turtles, as well as the National Environmental Policy Act by failing to prepare a proper Environmental Impact Statement. The suit seeks to compel preparation of a proper biological opinion, an EIS thoroughly analyzing the fishery's impacts on turtles and all other aspects of the environment and discussing alternatives, and appropriate injunctive relief until defendants are in full compliance with the laws.

Earthjustice Legal Defense Fund managing attorney Paul Achitoff, who is representing the plaintiffs, observed: "Turtles have been living in the sea since the days of the dinosaurs. We will not stand by and watch them be driven into extinction -- and the law does not allow NMFS to just stand by and watch, either."

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Citizens and Governments Build New Alliances to Protect Oceans, But Problems Remain: Worldwatch Institute
From Sea Web—April 1999

A "growing wave" of citizen groups, businesses, and governments is "mobilizing to save the oceans before human activities destroy them." This according to a new report from the Washington, D.C.-based Worldwatch Institute.

The report, *Safeguarding the Health of Oceans* by Anne Platt McGinn, cites a wide variety of marine conservation initiatives around the world, such as:

- Unilever, which controls 20 per cent of the whitefish market in Europe and the U.S., agreeing to buy only fish caught and produced in an environmentally sustainable manner;
- Volunteers in the Philippines, Thailand, India, and Ecuador replanting mangrove areas to repair earlier damage from shrimp farming;
- Citizens in northern Sulawesi clearing coral reefs of harmful invasive species.

However, McGinn argues, "We need to devote far greater resources to protecting oceans." A tax of just one-tenth of one per cent on industrial and recreational activities would generate \$500 million a year, more than 5 times the annual budgets of the International Maritime Organization (IMO) and the Fisheries Department of the UN Food and Agriculture Organization (FAO).

Pointing to the wide range of products and services derived from ocean and coastal ecosystems, McGinn argues that "Bad news for oceans is bad news for the economy and ultimately for humanity, too." And, despite signs of progress, many obstacles remain to be overcome: the marine conservation community is fragmented; bans on destructive activities are routinely ignored; too many regulatory organizations have a development-first mindset; and enforcement and oversight are ineffective, if not lacking. The United Nations General Assembly "spends just one day a year covering issues that affect more than half the planet."

Concludes McGinn: "We have to increase public awareness and participation if we are going to mobilize the broad constituencies that can protect oceans locally, nationally, and interationally."

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Importers Express Fears About Sea-Bass Collapse(Reprinted from the Seabird Bycatch Project Listserver)

March 26- Chilean sea bass is enjoying record demand and high prices, but a number of importers see the fish stock on the verge of collapse. "It's going the way of the pompano, the way of the swordfish" says Jean-Sebastien Gros, president of the Chilean Seafood Exchange, a Florida based importer. "This is a worldwide diminishing resource."

Joel Knox, president of Inland Seafood Co. in Atlanta, says "I have seen the fish, in the eight years we have been selling it, go down from 20 to 30 pounds on the average to 10 to 12 pounds, which leads me to believe we are overfishing the resource."

Sea bass, also known as Patagonian toothfish, is a slow growing, long lived fish, found in the Southern Ocean. As the value of the fish has risen, a number of illegal high-seas longline vessels have targeted the species. During the 1996-1997 season, the New Zealand government estimates that \$300 million of sea bass was illegally harvested.

One environmental group, The Antarctica Project, based Washington DC., estimates that total poaching was around 100,000 tons in 1996-97, but that since then the fishery has begun to crash, and that in 1997-98, about 40,000 tons were taken illegally.

Restaurant demand for the fish shows no signs of abating, with prices at a nine year high. 4-6 Kg. H & G fish are now selling at around \$4.00 lb. To the first wholesalers. The long term outlook for toothfish is clouded by the fact that effective management will require the cooperation and resources of all the governments with interests in the Southern Ocean, and that is always hard to obtain. However, South Africa, New Zealand, and France all have improved their policing of their fishing grounds. Chile has not had a problem with poachers in recent years, as they have a strong fishery management regime. Used by permission, source NYT news service.

Anchorage Daily News Sunday Magazine
March 14, 1999

Flight of the Albatross: Battling back from near extinction, giant birds clash with Alaska fishing fleet By Doug Schneider

The short-tailed albatross flew in low, its wings spread nearly 8 feet from tip to tip, as it glided over the North Pacific. A huge, lumbering bird on land, in the air the albatross is one of nature's most-perfect gliders. So effortless is its flight that it seems to gain lift from ocean swells themselves. Skipping from crest to crest, its golden head cranes side to side as it searches for flying fish and squid. At the sight of easy prey, it swoops in to snatch a meal.

Once numbering in the millions, short-tailed albatrosses have been a rare sight in the vast North Pacific since the early 1930s, when feather harvesters finished slaughtering them on their nesting sites in Japan. Thanks to conservation efforts, short-tails are making a comeback. Ironically, however, the resurgence of this still highly endangered seabird could threaten some of Alaska's commercial fishermen, who sometimes catch albatrosses on their baited hooks.

Like other seabirds, the short-tail has a habit of looking for a free lunch around fishing vessels. If the vessel is a longliner -- boats that set out miles of baited hooks to catch halibut, cod and other groundfish -- there's a chance that an albatross will try to swipe the bait as the lines are dropped overboard. Sometimes a bird hooks itself, then drowns as the weighted line carries it to the ocean floor. Longliners are nervous about what accidental catches of short-tailed albatrosses could do to their fishery.

"Our industry could be shut down over it," says Thorn Smith, executive director of the Seattle-based North Pacific Longline Association, which represents some 35 large freezer-longline vessels that fish the Bering Sea and the Gulf of Alaska.

During each of the last five years, according to the U.S. Fish and Wildlife Service, fishermen in Alaska accidentally caught an average of 14,000 seabirds. Most were gulls, northern fulmars and shearwaters, whose populations are healthy. More than 1,300 a year were the more-numerous Laysan and black-footed albatrosses. But scientists, environmentalists and

fishermen are especially concerned about the short-tailed albatross. "There are only about 1,000 left in the world," says Kim Rivera, seabird coordinator with the National Marine Fisheries Service. "That makes them one of the most endangered seabirds."

Regulations under the federal Endangered Species Act stipulate that no more than four short-tails can be killed every two years by longliners fishing Alaska waters, a number based roughly on the historical catch. Exceed it, and Alaska's \$645 million longline fishing industry could either be closed or sharply curtailed.

"I will not say that closing the fishery is going to happen," Rivera says. "(But) it could happen. That is a possibility within the law

"We hope never to reach that point, both for what it would mean for the fishery and for the albatross. There would be a lot of unhappy people."

Six months ago, the industry was alarmed when longliners caught what federal fishery observers first thought were three short-tailed albatrosses. Although the fisheries service later ruled one of the Where once there were millions

The short-tailed albatross, *Phoebastria albatrus*, is also known as the coastal albatross, the golden gooney and Steller's albatross (named for naturalist Georg Wilhelm Steller). It is commonly called a short-tail.

Native to Japan, the bird roams the Pacific Ocean as far north as the Bering Sea and southeast Alaska waters each summer in search of squid, shrimp, and flying fish. With a body more than 3 feet long, short-tails are the largest of the three albatross species in the Northern Hemisphere. They are also among the most beautiful. "There's no mistaking these birds," says Kevin O'Leary, a longliner from Kodiak. "Their beaks in proportion to the size of their heads are much larger than in other albatrosses. In fact, when short-tails mature they are 50 percent larger than other albatrosses. Once you've seen one, with that bright pink beak, you just don't mistake them. They are very distinctive animals."

As youngsters, short-tails aren't much different from other birds. Covered in fluffy down, they look innocent, vulnerable. But adult short-tails are a bird of a different feather -- some 15,000 snow-white feathers, to be exact. And perched atop their regal frame is a golden head tipped by a bright pink bill.

The short-tail's problems began more than a hundred years ago in Japan. A worldwide Industrial Revolution was about to shift into high gear, and Japan was in danger of being left behind, says Rick Steiner, a marine advisory agent at the University of Alaska Fairbanks, who has conducted research on the albatross' history. With few natural resources, Japan needed something to capture the world's attention. The short-tailed albatross was it.

A symbol of virtue and happiness to the Japanese, this beautiful and graceful seabird would help a nation come of age, with marketers selling the bird's luxurious feathers for use in quilts, pillows, mattresses and as adornments in women's hats. And in so doing, the species would be nearly wiped from the planet.

Just before the killing began, nearly 2 million short-tailed albatrosses wandered the Pacific. A juvenile will spend four years -- sometimes as many as 10 years -- at sea before returning to its birthplace on land to breed and raise its young. For most short-tails, that meant going to Torishima Island, about 370 miles south of Tokyo. A rugged, lonely place battered by high winds, Torishima is also an active volcano.

Steiner visited Torishima Island in 1997 and reported that when Japanese explorer Tetsu Hattori passed that way a hundred years earlier, short-tails were so numerous on the island that "at a distance, they might be mistaken for fallen snow."

But by then, word of the bird's abundance had reached the western World. In an article he wrote for International Wildlife magazine, Steiner recounted how Japanese fisherman John Manjiro was briefly stranded on Torishima. Picked up by an American whaling ship, Manjiro was brought to the United States. By then he realized the riches that could be made by selling the bird's luxurious feathers. In 1887, 13 men arrived on Torishima Island to begin a slaughter that would last 50 years.

So bountiful was the harvest that shipments of albatross feathers were measured in tons. In 1899, some 39 tons of feathers left the island, roughly the equivalent of 260,000 albatrosses, Steiner said. Within three years, nearly 8 million short-tails would be killed.

Not only birds died on Torishima. In 1902, the island's unstable volcano erupted, burying all 125 workers who slept in a makeshift village built on the island's steep sides. But the village was soon rebuilt and the slaughter continued. By 1932, only a few thousand birds remained. In November of that year, the Japanese government designated the island a sanctuary. Angry at losing their livelihoods, villagers bludgeoned more than 3,000 birds. "The Japanese call it 'the last great massacre,'" Steiner says.

Not until the end of World War II did American scientists get their first look at the island, Steiner says. Hoping to see at least a handful of short-tails in 1949, ornithologist Oliver Austin circled the island in vain. Austin reported that the "once fabulous colony of Steller's Albatrosses may be considered to have vanished forever."

A Life's Pursuit

Except for the howling wind, Torishima Island today is eerily silent as Japanese ornithologist Hiroshi Hasegawa kneels in silent remembrance. To Hasegawa, this place is as sacred as any shrine. When he visits, which is about twice a year, he says a short Buddhist prayer and leaves offerings for the dead: sake for the people who perished here, and fish strips to nourish the albatross spirits he believes still soar over the island.

An avid birdwatcher since boyhood, Hasegawa remembers worrying that by the time he grew up, short-tails would be extinct. While a graduate student of zoology at Kyoto University in 1973, he met British ornithologist Lance Tickell, who told him that it was the duty of Japanese ornithologists to save the short-tailed albatross.

"The Japanese in the old days slaughtered the short-tailed albatross and brought it to the brink of extinction," Hasegawa says. "I am Japanese. I am an ornithologist, and it is my responsibility to save the species."

He's lucky to have the chance. Believed to be extinct for two decades, 10 short-tails were spotted in 1951 by meteorologists stationed on the island.

When Hasegawa visited Torishima for the first time 26 years later, the albatross population had rebounded to nearly 200 birds. He thought the species had a good chance for recovery.

"I was expecting to see a sad situation," recalls Hasegawa. "But the birds were active and vigorous, fighting for territories and breeding space. I got the impression that this wasn't so tragic. I dreamed that they would someday become a large breeding colony again." In that first year, Hasegawa stood on the steep volcanic slope and counted 15 new chicks. Then a 28-year-old, he didn't know he would spend the rest of his life among the albatross. Now, at 50, he recalls how on that first day he saw how he could help the birds' struggle for survival.

"(Torishima Island) was all very steep, with loose soil and very little grass in which to build nests," Hasegawa says.

Because of the poor conditions, eggs laid on the steep slopes rolled downhill and broke. In 1981 and 1982, Hasegawa and the Environment Agency of Japan replanted large clumps of native grasses into the hillside. The next year, the number of successfully hatched eggs rose from 33 percent to 51 percent. Beginning in 1984, nearly 50 chicks were fledging each year on the island.

But there have been setbacks, too. A landslide in 1987 buried many chicks and eggs. Hasegawa and the Environment Agency responded by building small dikes and channels to divert rain and landslides away from the colony. But more than a few small ditches would be needed if the seabirds were to come back from the brink of extinction. He needed to get them to nest in a better location.

The other side of the volcano, with gentler slopes and better vegetation, was ideal. But for unknown reasons, short-tails had not nested there for years. Hasegawa decided to try and lure them back.

Just before some 200 breeding pair of albatrosses were due to arrive in 1992, Hasegawa and the Yamashina Institute for Ornithology set up a sound system on the new site that would be the envy of most college freshmen. Then, like a goose hunter in a Nebraska cornfield, Hasegawa scattered life-size short-tail decoys along the slope in standing, resting and in courtship displays. As the birds arrived at their usual nesting site, they heard mating calls from the far side of the island. At first, only one bird investigated. Then others flew over to see what the ruckus was about. But in the first three years of the experiment, no birds nested at the new site. Hasegawa thought his effort had failed.

But finally, in November 1995, one pair of short-tails nested at the new site and hatched a single chick the next spring. In the years since, at least one pair have returned each year to the new site. It's not a great success, Hasegawa acknowledges, but he expects the chicks born there to return, a trend he hopes will build upon itself.

"If the first chick is still alive, it will come back this year," says Hasegawa, a note of optimism evident in his voice. "I would like to see it come back. That will be an exciting moment. It has yellow band number 000. I look forward to seeing him or her." Thanks to Hasegawa, albatross numbers have increased to about 1,000 birds on Torishima. Another breeding colony of 150 short-tails nest on the nearby Senkaku Islands. This winter, adults stood vigil over 213 eggs, which hatched in January. Next month, Japan's short-tailed albatrosses will head back to waters off Alaska, where they face an uncertain fate.

Conflicts with Fishermen

Short-tails don't share a long history with Alaska fishermen. Since 1983, just seven of the birds have been killed in Alaska waters, according to the fisheries service.

But as more short-tails reclaim the skies over the North Pacific, it's inevitable they'll clash with humans more frequently. In 1995, they encountered Smith of the North Pacific Longline Association. He had never heard of a short-tailed albatross, but within a year, they would be all he could think about.

Smith represents a group of freezer longliners -- ships nearly 200 feet long -- that both catch fish and process them. About 35 of those vessels operate in the Bering Sea and Gulf of Alaska, and they account for most interactions between fishermen and the short-tailed albatross, Smith said.

When these big boats set their gear, baited hooks descend as much as 20 feet from the deck to the sea, giving birds time to dive on them. And because of the sheer size of the boats, birds can see and smell them from far away.

Before joining the longline association, Smith did a five-year stint as an attorney with the National Marine Fisheries Service. He was well acquainted with the Endangered Species Act, and although he hadn't heard of the short-tailed albatross, he knew all about the spotted owl, the desert tortoise and the snail darter.

"It became apparent to me that if we didn't solve this problem, we were going to get shut down," Smith says. "So I told my board of directors, 'Look, we've got a problem here.'"

Then he went to work. Smith researched what other nations were doing to reduce seabirds killed by the longline fishery, and he came across a treaty pertaining to Antarctic waters that requires fishermen to take several steps to reduce their seabird catch. Then he met with industry leaders to craft a set of regulations.

"We came up with something that gives (Alaska) fishermen the flexibility to choose which techniques would be most effective for them," he says.

With little debate, the North Pacific Fishery Management Council passed the measure in time for the 1997 season. Halibut longliners were required to use the methods the next year. All together, nearly 3,000 longliners must use the bird-avoidance techniques.

Under the regulations, longliners must:

Use fast-sinking hooks. Discharge fish waste away from baited hooks. Release seabirds alive if possible.

Longliners then must choose to abide by at least one of the following:

Set their gear at night. Tow a buoy or streamers called a "tori line" over the gear. (Tori is the Japanese word for bird; the erratic action of the buoy bouncing on the water or streamers waving in the wind is believed to scare birds away.) Use a device called a lining tube that shields baited hooks as they descend to the water. Of course, there are advantages to asking for restrictions before they are thrust upon you, Smith acknowledges. One is you get to have a say about those regulations. It also helps public credibility to be seen trying to do the right thing, he said.

"We're doing everything we can to mitigate the impacts because it is obviously the right thing to do," says O'Leary, who's also a member of the North Pacific Fishery Management Council. "We've got millions of dollars invested so we have to be responsible players to stay in business."

The effect of the regulations on the 1999 fishery won't be known for months, but conservationists say the restrictions are too easy to circumvent and the protections are insufficient. "Alaska took the (Antarctic) regulations and modified them, and in every case the regulations were weakened," says Gerald Winegrad of the American Bird Conservancy. "The North Pacific Fishery Management Council rejected each one of the conservation community's suggestions and essentially adopted each one of the fishermen's commendations."

Winegrad and others argue that Alaska longliners should be required to use all the preventative measures rather than selecting just one. Still, the new regulations seemed to work, at least for a while. No short-tailed albatrosses were reported caught in 1997, the first year they were in effect. However, thousands of other seabirds were hooked and killed.

'Scared to Death'

Then, late last September, a federal fisheries observer working in the Bering Sea reported that a short-tailed albatross had been caught. Fishermen and wildlife officials were concerned, but not overly worried. After all, fishermen hadn't caught any short-tails in 1997, and four more birds would have to be killed before federal officials would decide whether to close the fishery.

But tensions rose a week later when another Bering Sea vessel, the Deep Pacific, caught one -- possibly two -- short-tails. With three months left in the fall season, it suddenly seemed possible fishermen might reach the limit.

"We were trucking along, thinking that this is working just fine, and then all of a sudden we catch two, possibly three, short-tails," Smith says. "It scared the pants off us."

On the job just 15 months, Janell Majewski was the federal fisheries observer aboard the Deep Pacific. For her, it was an uncomfortable position.

"I'm not going to lie. I'm scared to death," said Majewski in a National Marine Fisheries Service memo. "I know that Jeff (the vessel's captain) will make sure no personal harm comes to me, but I can't even imagine how horrible everything is going to be if the season is shut down due to my report."

In the days leading up to the incident, Majewski reported that as many as a dozen short-tails followed the boat. While the lines of the Deep Pacific's hooks were weighted to sink quickly, the vessel's bird buoy was being towed several feet to one side as the gear was hauled to the surface.

In her report, Majewski said she positively identified one of the birds as a short-tailed albatross before it fell from the line and sank. That night, a second bird was snagged on the line. It, too, fell into the water before it could be retrieved. Of this second bird's identity, Majewski was less certain.

"This all happened at night. All I was able to see was a large bird with a white body and whitish neck. I cannot conclusively say that it was a short-tailed albatross. It could have been a Laysan. I would call this an 'unidentified albatross,'" Majewski said in her report.

Back at the National Marine Fisheries Service, Rivera and officials from the U.S. Fish and Wildlife Service discussed Majewski's reports. Because the bird was not retrieved and Majewski could not be sure of its identity, officials decided there wasn't enough evidence to conclusively say that the second bird was a short-tailed albatross.

While the fisheries service maintains the fishery was never close to being shut down, fishermen were nonetheless relieved. The official short-tail count would stand at two, far fewer than the five birds needed to consider closing the fishery. Nevertheless, it was clear that seabird avoidance methods needed to be reconsidered.

"We're back to the drawing board," Smith says.

To scientists, the fact that fishermen were still catching short-tails wasn't surprising.

'One of the options fishermen have is to just drag a stick or a buoy behind the boat," says Craig Harrison, a Washington, D.C., environmental attorney who once worked as a seabird biologist with the U.S. Fish and Wildlife Service. He now represents the Pacific Seabird Group, an organization of seabird scientists.

"To the council and NMFS, that would constitute a bird-avoidance device," he says. But Harrison doubts the effectiveness of such measures. "I don't think anyone really believes (buoy dragging) has anything to do with seabird avoidance. That's a bone of contention with us."

In fact, according to the fisheries service, while 74 percent of fishermen towed a buoy behind their vessels to scare the birds away, fewer than 2 percent deployed their gear underwater within tubing. Those tubes, called lining tubes, are expensive at about \$35,000 apiece, but are considered among the most effective seabird deterrents available.

Harrison believes the regulations should go further.

"(The North Pacific Fishery Management Council should) weed out of that list the stuff that doesn't work and require -- not just suggest or encourage -- that more than one technique be used," he says.

Harrison may get his wish. A federal study of avoidance techniques is set to begin this summer. But other problems remain, not the least of which is the possibility that Torishima Island -- an active volcano -- could erupt at any time. If that happened during the nesting season, the result would be disastrous.

Other difficulties may be easier to resolve. Chief among them is a gap in the observer coverage in the longline fleet. All freezer longliners have observers aboard, but fewer than 30 percent of the smaller longliners carry observers. And none of the nearly 1,800 vessels in the longline halibut fleet carry observers.

Ann Rappoport, a seabird biologist with the U.S. Fish and Wildlife Service, says she'd like to see better observer coverage. "That's something we're working on," Rappoport says.

the Workplace By John Smith