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# APO Mail Buoy

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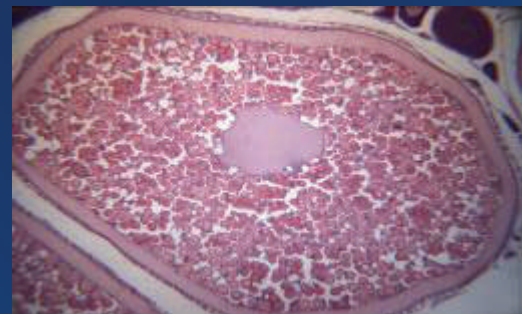
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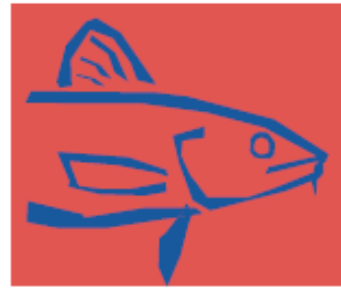
## FROM THE APO

## Editors Note

We hope that you enjoy the new design of the Mail Buoy, created by APO board members Ebol Rojas and Alicia Billings! [Let us know what you think!](#)

The observer biography series has been put on hold this issue due to the recent tragedies in the North Pacific in order to focus on observer safety. If you would like to submit a name for consideration for the next issue, please [contact us](#).

Also, we will release the new [APO website](#) design on September 1, 2008! Check it out!



“If you would like to enter our drawing, you will need to provide your name and complete mailing information on the last page of the survey...”



## APO Feedback Survey - Help Chart the Future for the APO

In order to gather feedback from all current and prospective members of the Association for Professional Observers (APO) on the need, expectations, and desired role of the organization we have initiated the [APO Feedback Survey](#). All topics within this survey correlate to either existing objectives or newly charted goals of the APO. The majority of our members are past or current observers and we hope to receive a great deal of feedback from them. However, this survey is designed so that anyone who has any involvement in the observer profession can respond, and we hope to receive feedback from many of the various observer stakeholders. A study of the results to this survey will be published in a report and will be prepared for presenting at the 6th International Fisheries Observer Conference (IFOC) to be held sometime in late summer/early fall 2009.

We hope to encourage respondents to answer the *Identification Questions* as completely as you can, helping us to gauge the scope of the survey, though all responses will be kept completely confidential. Respondents are certainly welcome to remain anonymous for the survey, however we will ensure the respect and confidentiality of all personal information that you may choose to provide to us. If you have any questions, please contact the APO: [apo@apo-observers.org](mailto:apo@apo-observers.org)

Your valuable feedback will help us to evaluate our current role and help shape a clear path for our future, and we'd like to thank you in advance for your time and consideration into this survey.

# Safety Awareness

This section of the Mail Buoy focuses on building awareness regarding safe practices for observers. If you have any comments or thoughts for future Safety Aware contributions, please [contact us](#).

## F/V Alaska Ranger Catastrophe and USCG Safety Compliance (ACSA)

Dan Troop; Fisheries Observer; U.S. North Pacific

The news that observers covering Bering Sea vessels awoke to on Easter morning was anything but good. One of our contracted vessels, the 203-foot Alaska Ranger of the Fishing Company of Alaska (FCA), sent out a mayday that it was taking on water in the rudder room in the predawn hours of March 23 and before sunrise the crew of 47 abandoned ship as it sank 120 miles west of Dutch Harbor with four lives lost and one missing. The United States Coast Guard (USCG) responded to the call with a rescue helicopter from St. Paul, a C-130 from Kodiak, and the USCG Cutter Munro. In addition, the Alaska Warrior, also owned by FCA, was in the area and helped in the rescue.

In the days that followed, a series of USCG press releases detailed the rescue efforts and the ensuing USCG and NTSB Marine Board of Investigation hearings convened in Dutch Harbor from March 28 through April 3, in Anchorage on April 5, and finally ending in Seattle from April 14 through April 22. The purpose of these hearings, in the words of USCG Captain Michael Rand, one of the board members, was to seek information from a wide range of sources and “to reconstruct the events of the incident and understand the operation and maintenance history of the vessel to allow us to determine what may have happened, how it happened and how we can prevent future incidents.”

Indeed, there are a wide range of issues involved in this catastrophe and observers and anyone interested in what happened (and why it might have happened) should read these press releases and follow the links they include to learn more. To date, the hearings are concluded and it will take some time before the board releases its conclusions. The full series of press releases can be accessed at the [USCG home page](#)<sup>1</sup>. First select Press Releases, then click *more*, then search both USCG [District 17 Anchorage](#)<sup>2</sup> and [District 13 Seattle](#)<sup>3</sup> under keywords *Alaska Ranger*, for the dates ranging from March 23 through April 22.

Specific issues that might be of concern to observers that emerged include the role of the Japanese fishing master on the vessel (in March an argument allegedly occurred between the captain and him about traveling too fast through ice) and allegations of drinking by crew members on both the Alaska Ranger and the Alaska Warrior. But an even perhaps larger concern emerges from testimony and available links in the releases about the existence of the Alternative Compliance Safety Agreement (ACSA) program and the compliance status of the Alaska Ranger and of much of the affected Head and Gut (H&G) fishing industry. Many observers may be unaware of this newly implemented program that affects a large number of covered vessels.

One of those giving testimony concerning this program was USCG Lt. Michael DeLury, a marine inspector and Chief of Inspections. The report of his testimony in the releases includes an informative summary of the reasons for and history of the program and the following is a direct quote from the USCG press release of his testimony:

*“Delury testified that Coast Guard Districts 13 and 17, Sector Seattle, and Sector Anchorage developed the program. It was implemented in 2006. ACSA relates to applying existing vessel safety standards to a class of fish processing vessels. This is a partnership between the U.S. Coast Guard and the fishing industry. Currently, the program involves one regional and fishery specific program developed and implemented in the North Pacific. Numerous “Head and Gut” (H&G) vessels examined during 2003 and 2004 revealed that the causal factors, which contributed to the Arctic Rose and Galaxy vessel losses, were also present throughout that fleet. Major problems with stability, watertight integrity, maintenance, fire loading with inadequate response capabilities, and lack of emergency training were identified. The majority of the H&G fleet, which had been historically regulated as fishing vessels, was actually engaged in fish processing activities. ASCA was developed to exempt these vessels from classification and load line requirements and implement standards providing an equivalent level of safety. This allows the vessels to continue to produce fishery products historically important to the fleet. Numerous hazardous conditions have been identified and corrected through this program, which ultimately would have led to more catastrophic failures and possible loss of*

*“The full series of press releases can be accessed at the [USCG homepage](#).”*



Coast Guard and NTSB members examine survival suits from the F/V Alaska Ranger — Courtesy of USCG

<sup>1</sup>United States Coast Guard website: <http://www.uscg.mil/>

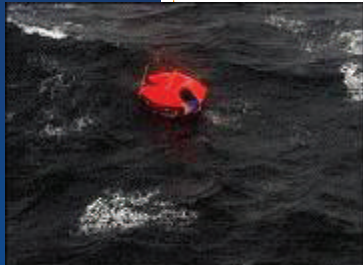
<sup>2</sup>The District 17 Anchorage press releases can be accessed at: <http://www.uscgalaska.com/go/searchresults/780/?q=alaska%20ranger&sd=03/23/2008&ed=04/07/2008&offset=0>

<sup>3</sup>And, District 13 Seattle press releases can be found together at: <http://www.d13publicaffairs.com:80/go/searchresults/21/?q=alaska+ranger&sd=04%2F07%2F2008&ed=05%2F02%2F2008>

# Safety Awareness

## ACSA, continued

vessel or life. Delury said each vessel was handled separately and met various milestones at different times. Sixty-three vessels were identified for inclusion in the program. A compliance date of Jan. 1, 2008, was set for these vessels to be in full compliance with the program's requirements. Delury testified about the contents of the checklist, specific letters and communications between the involved Coast Guard parties and the vessels enrolled in ACSA, and various deadlines that had been set for the program. He testified that the "checklist was lacking." He didn't feel the program or checklist were equivalent to the load line regulations. Some examples are the quality, design and placement of vent heights, handrails, construction materials, and the maintenance and inspection of air receivers."



Life raft from the Alaska Ranger after the survivors were picked up by the coast guard—  
Courtesy of the USCG

In Seattle, Thirteenth Coast Guard District Fishing Vessel Safety Inspector Dan Hardin testified that the Alaska Ranger was not fully compliant with the requirements of the ACSA program at the time of its last inspection. He also stated that extensions beyond the January 1, 2008, deadline would be handled "on a case-by-case basis".

In November, 2007, the Alaska Ranger was in dry dock in Japan where some of the work on its identified problems was completed. Another Thirteenth Coast Guard District Fishing Vessel Safety Inspector, Martin Teachout, performed an inspection on the vessel during that period and found cracks and fractures in the bulkhead and tanks as well as three deficient valves. Repairs were ordered but Teachout stated some of the work had yet to be completed when he left Japan.

On April 10, 2008, in the wake of these events and during the Marine Board of Investigation hearings, the U.S. House of Representatives Subcommittee on Coast Guard and Maritime Transportation met in Washington, D.C.. There, they received a [report](#) on the incident and its investigation for the purpose of examining the sinking of the Alaska Ranger as well as its participation in the ACSA program. They were informed of the reasons for the ACSA program and that the Alaska Ranger was enrolled in ACSA but was not fully compliant by the January 1, 2008 deadline set by the USGS.

Near the end of this report to the House Subcommittee, some important questions that many observers are probably already asking were noted, quoted here in full:

"A number of questions are raised by this casualty that have not yet been answered. For example, what deficiencies on Alaska Ranger were outstanding at the time of the casualty? Was the vessel owner making a good faith effort to bring the vessel into compliance with the ACSA? Was the vessel issued a letter exempting it from the requirements for a "fish processing vessel"—including construction and maintenance in accordance with the "rules" of a recognized classification society and receipt of a "load line"? Are there issues with the Marine Information for Safety and Law Enforcement (MISLE) safety database system as it applies to the ACSA program? Was there full cooperation between District 17 and Sector Anchorage and District 13 and Sector Seattle in the implementation and administrative details of the ACSA program?"

To those questions, observers working in the Bering Sea on the numerous Head and Gut boats might probably add, "Which other H & G vessels were granted exemptions for missing the January 1, 2008 deadline and what specific deficiencies do they have yet to correct?"

That the intent in creating the ACSA program was to improve vessel safety and that it has is indisputable. Many of the vessels in the fleet had extensive hull work done, watertight hatches added, and ballast tanks welded. Let us hope that one of the positive results of the Alaska Ranger tragedy is the completion of the changes intended in the implementation of the ACSA program.

Report on the incident and its investigation for the purpose of examining the sinking of the Alaska Ranger as well as its participation in the ACSA program <http://transportation.house.gov/hearings/hearingDetail.aspx?NewsID=572> and click on Full Summary of Subject Matter for PDF file



Courtesy of USCG

# Safety Awareness

## Safety Tips—Lessons Learned from the North Pacific

Alicia Billings; Web Master/Mail Buoy Editor

Observers are placed in a unique situation in the dynamic of the ocean world. They are not fishermen, yet mentally, they often are put into that role. And being scientists often puts them at odds with the crew. They are data collectors in a collaborative setting. When tragedy strikes a fishing vessel, that distinction no longer matters and a whole new dynamic emerges.

When such a tragedy occurs, it is a time to pause and reflect upon the safety standards and training of the crew. When this tragedy impacts observers directly, that reflection can be used to determine the value of the current safety training, and bring about points to emphasize. It is at this time that this editor of the Mail Buoy would like to express lessons learned from these events as related by those involved. This is not meant to be a “how to” guide for ocean survival, and absolutely nothing replaces education and practice. But I would like to cover several aspects for both new and prior observers to think about at the next safety briefing and bring to their next vessel. Although these tips may not apply to every observer in every program, some hindsight from these North Pacific incidents may increase awareness of potential safety issues.

### Tip #1: Know Your Survival Craft — Life Raft Safety

Hopefully, the life raft craft will never be used as your sole means of shelter. But should the time come to be dependent upon this craft, it is very important to know it well, inside and out.

**Know how to get to the life raft from anywhere on the boat.** This includes your stateroom, factory, deck, and wheelhouse. Watch for any new obstructions, and make sure to find alternative routes. It is easy to fall into a routine and follow the same routes. Michele Klodzinski, observer on the Pacific Glacier during the [fire incident](#) that occurred on February 26, 2008, stated that she “had never exited that way, and didn’t know how to get to (her) muster station.” On factory boats, there are many exits from the factory. Pay attention during the vessel walkthrough and familiarize yourself with alternate exits in case the most convenient is no longer an option. Jon McVeigh, West Coast Groundfish Observer Program (WCGOP) debriefer, says to “try and imagine how to get to survival equipment from areas in the vessel you occupy in different vessel orientations as well as in the dark.”



Courtesy of CMI Marine

**Know how to manually deploy a life raft.** Do not assume that someone else does. “The individual standing nearest the raft ... yelled out that he did not know how to manually launch the raft,” Gwen Rains, an observer on the [Alaska Ranger](#) that sank on March 23, 2008. Often, observers are assigned to a life raft with the captain or the mate. Remember that during an emergency, these two usually remain in the wheelhouse until the last possible second, relating status to the Coast Guard or other vessels coming to their aide. When an emergency turns into an abandon ship, it really does not matter whose job it is to deploy the raft. If you need to deploy the raft, it’s a good idea to know how to do it correctly. “Incorrectly installed hydrostatic releases are one of the most common mistakes found on commercial vessel safety gear. Take the time to learn how to properly hook up a hydrostatic release. This can help you easily identify incorrectly installed hydros, and help you learn how to deploy a life raft at the same time,” McVeigh cautions. Some rafts, such as those in the small boat fisheries on the West Coast, do not have a hydrostatic release, or are contained in “suitcases”. During the safety training, make yourself comfortable with all types of life rafts available. One last word from John Lafargue, California Coordinator and safety man for WCGOP. “You should check the safety equipment periodically since things tend to change on boats. Life rafts get moved for painting and repairs then get hooked up wrong afterwards.”

**Pack your own emergency kit.** “A personal survival kit should contain, at minimum, the 4 basic components: Signals, Shelter, Fire and Personal Medications. A personal survival kit should be ON YOUR PERSON AT ALL TIMES. Many times emergencies happen and you only have what is on your person. Make a kit small enough so that you will actually carry it with you. A larger more extensive “comfort kit” or “abandon ship kit” should contain lots more survival aides and can be kept in your survival kit,” McVeigh instructs. Gwen had her emergency kit in with her survival suit, but during the chaos of people donning their own suits, it was lost.

**Protect your equipment.** The environment in a life raft is chaotic. Once inside a life raft, the SOLAS pack is usually the first thing that gets open, and the contents can be strewn about. When a raft full of people who are in the midst of a traumatic event is coupled with the pitching of a craft riding atop the waves, things can get lost floating in the water and vomit. Keeping track of your inventory, while very difficult, is imperative. Protect signals and protect the raft from punctures.

# Safety Awareness

## Safety Tips, cont.

### Tip #2: Know your job and those that can be of use if it were your life danger — Station Bill Assignments

**Know your duty.** Most of the time, since you are not a constant crewmember that can be counted on trip after trip, this is as simple as muster and listen to instructions. Remember that the safety training you receive is probably more extensive than other crew members. Don't get in the way of a successful operation, but if your services can be utilized in any way, they should be. Beth and Melissa, observers on the Alaska Warrior (the ship that helped to rescue many of the Alaska Ranger survivors) put their knowledge of hyperthermia to use by helping the survivors as they were brought on board.



Sample Station Bill - Courtesy of ipub.com

There are a couple of roles that usually are not assigned to a crew member that you can do. During a fire, you can fill the role of the "boundary person". This person creates a visual box around the fire and clears that boundary safely to prohibit the fire from spreading. As important and easy as this sounds, not doing so can make a minor problem much worse. Another way that you can be useful in an emergency is to fill the role of a communicator by relaying information from the emergency to the wheelhouse. When the F/V Alaska Ranger was in trouble, the phone system was malfunctioning, making communication difficult. Lending a hand by passing information can be very useful.

**Know the duties of those around you.** If something happens to someone who is in a crucial role, knowing what their assignments were and either taking them on yourself or passing them off to another could save minutes of crucial time later. Going back to the point above about the duties of those in your raft, Gwen stresses that the mate was too busy to effectively complete his life raft duties. "Among so many other tasks, he was giving orders, continually reassessing the situation, making distress calls, and standing by on the emergency frequency." With all of this to do, it is so important for your own survival to know what is to be done in emergencies.

### Tip #3: Identify Immersion Suit Placement Perils and Best Positions — Pros and Cons of Immersion Suit Placement

**Where to place your survival suit.** Every vessel is different. If you are faced with an emergency while in your stateroom, having your survival suit stowed there is a good idea. If you are in the factory, or the wheelhouse, or the galley, you have to travel back to your room to get your suit. Short of carrying it around with you wherever you go, placing it where you can get to it with minimal movement is important. Yet because several observer programs are now issuing a personal EPIRB, getting the correct suit is key, which means that placing your suit with the vessel stowage is not necessarily the answer. John Lafargue relates this story from the West Coast Groundfish Observer Program, "The observer didn't get his suit, a crewmember did and left the EPIRB transmitting in the wheelhouse sloshing around in water. A signal was never received."



Immersion Suit - Courtesy of crewsaver.co.uk

Many observers put their suit in the wheelhouse. The muster areas on a boat are usually near your assigned life raft. Because rafts must be able to float free, these areas are near the wheelhouse. Since you normally have to muster up there anyway, putting your suit in the wheelhouse may be a good option. It solves the problem of traveling back to your stateroom from other areas in the boat to get your suit. Jon McVeigh offers this advice, "Also make sure you can identify your suit from that of the crew's, colored tape or flagging can help."

As for smaller vessels, use your own discretion. Remember to think about where you are and how you can get to your suit and the raft safely.

# Safety Awareness

## Safety Tips, cont.

### Tip #4: Trust your boat mates — Pay attention to drills and your Safety Training

**Build muscle memory.** Although drills cannot prepare you for everything, there is something to be said for creating a muscle memory. “When it comes down to a moment to either sink or swim, thinking about it can cost minutes that mean your life,” says Gwen. She related that in the moment that she went into the water, she wanted to swim.

**Know everyone’s duty.** Or at the very least, know those who can save your life. Know who is on the fire crew so you can go to them if the need arises. Know who is in charge of taking role for your life raft, who has CPR/ First Aid training and who can operate a crane. If you are on a vessel helping survivors, knowing who can be of assistance to those coming on board can save someone’s life. Melissa relates her experience as they tried to pull the survivors from a life raft aboard the Alaska Warrior. “The crew was trying to figure out how to get the people in the life raft onto the boat.” Several attempts were made at tying the raft to the boat, but the seas continually forced it into the side of the boat. Beth and Melissa realized that the best way to get people on board was the life sling. Taking charge when others are confused about what to do is crucial when time is of the essence.

McVeigh adds one last piece of advice, “**Remember the survival triad, 3 parts that increase your chances of survival in an emergency situation. Equipment, Training, and Attitude. Be positive, find the will to survive, and act like a survivor!**”



## Final Thoughts

Gwen also reported that the painter line broke ahead of schedule. The painter line is the rope designed to maintain contact with the vessel so the raft does not float free in the sea after deployment. During training, this is taught to be a lifeline from the vessel to the raft. It is important to remember that if there are other rafts on the boat, know where they are also.

During times of great stress, the best laid plans often go awry. Being prepared for alternative courses of action is a result of effective safety training. After every traumatic event on the ocean, interviews with the survivors occur in order to investigate and refine safety standards and training. Taking the training seriously can save your life. By living within a **culture of safety**, you can be aware of your surroundings at all times and live another day.

Do not forget to go through the survival steps for every situation. At the first stage of an emergency, usually while still aboard the vessel, go through the steps. If the emergency escalates to a muster situation, go through the steps. If an abandon ship is required, go through the steps. If you find yourself in the water, go through the steps. If you find yourself on a life raft, go through the steps. Panic is a normal response, and training is designed to get over that panic quickly and react accordingly.

## Seven Steps to Survival

- 1. Recognition** – Recognize the severity of the situation by realizing you are in danger
- 2. Inventory** – Assess the situation and decide how you are going to survive. Getting together anything that can save yourself and others who are unable to do so. Buoys used for fishing can become floats to keep you out of the water. Also, inventory materials that can hurt you, such as loose line or knives that can puncture life rafts.
- 3. Shelter** – Your best shelter is the boat. But if that is no longer an option, donning your survival suit and getting into a life raft is critical.
- 4. Signals** – By making yourself **bigger, brighter or different** from your surroundings greatly increases your chances of being rescued. This can be ANYTHING that attracts attention to those looking for you, including lights, flares, EPIRBs, radios or bright colors. Remember that anything in 3's is an international sign of danger.
- 5. Water** – You can only live without water for a few days. You also become dehydrated more quickly if you are seasick.
- 6. Food** – You can go without food for several days. Don't eat food if you don't have water. Remember that it takes water to digest food. Also, having good signals can call attention to you way before the need for food sets in.
- 7. Play** – Anything that keeps you occupied can increase your chances of survival. It creates a feeling of worthiness and will to continue. Since rescue from a life raft can be hours away, assigning people tasks can alleviate feeling of panic by passing away the time.

# International Spectrum

## US National Observer Program (NOP) Projects

*Teresa Turk and Samantha Brooke; NOAA Fisheries; Washington, D.C., U.S.A.*

### ICCAT Transshipment Observer Program

In 2007, the International Commission for the Conservation of Atlantic Tunas (ICCAT) developed a new observer program to monitor the transshipment of Atlantic tuna. ICCAT, headquartered in Madrid, Spain, is responsible for providing internationally coordinated research on and developing regulatory recommendations for the conservation of tuna and tuna-like species in the Atlantic Ocean and adjacent seas. Staff from the NOP aided the ICCAT secretariat in drafting a request for proposals consistent with the US observer programs best practices, assisted in designing the program, and reviewed the contract and memorandum of understanding (MOUT) agreement between contractor and the transshipment vessel.



The ICCAT observer program for transshipment vessels began operations in May 2007. The program is funded by the participating nationalities that transship product, which are China, Korea, Philippines, Japan and Chinese Taipei. Consistent with recent discussions and international developments, ICCAT is currently coordinating with the other four existing tuna Regional Fisheries Management Organizations with a view to expanding this new observer program to all tuna transshipment operations throughout the world.

### Joint U.S. - Ghana Observer Training

The National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA/NMFS) in collaboration with the Ministry of Fisheries-Ghana (MFG) conducted a ten day joint U.S. - Ghana marine observer training in Tema, Ghana on board the HSV2 Swift from March 31 to April 11, 2008.

The observer training provided a very broad suite of information on current U.S. and Ghana observer program policies including, international and national marine resource legislation, fisheries enforcement activities, IUU fishing, research surveys in West Africa and status of West African fish stocks. The course also included the identification and recording of marine species such as fish, marine mammals, sea turtles and seabirds; the collection of tissue samples from these animals; safety at sea; practice getting in and out of the life raft; communication equipment and vessel protocol. The class also had the opportunity to tour the Tema fish market, talk to several inshore and canoe fishermen at landing sites, and participate in a familiarization trip with the U.S. Navy around Tema harbor.



*Students/Staff from the Ministry of Fisheries-Ghana in front of the U.S. Navy HSV2 Swift in Tema, Ghana*

Thirty six students officially participated in the course: seven graduate students from the University of Ghana Department of Oceanography, one fisheries scientist from Sierra Leone, and the remaining students from the MFG. All students had a very good understanding of marine fisheries policies and at least one year of experience working in the fisheries field. In addition to the students, several guests attended sections of the training. These guests included: Jessica Hjerpe Olausson from FAO; Andy Agyekumhene and George Baffour from the Conservation Society, and Alfred Tetebo, Director of Fisheries, (MFG), and Dr. F.K.E Nunoo from the University of Ghana.

The training was coordinated by Teresa Turk, NOAA/NMFS, Office of International Affairs and Papa Yaw Atobrah, MFG, Monitoring Control and Surveillance. The instructors were Dr. Manjula Tiwari, NOAA/NMFS, Southwest Fisheries Science Center, John LaFargue, NOAA/NMFS, Northwest Fisheries Science Center; Kate Wynne, University of Alaska SeaGrant, and Daniel Ofori-Adu, MFG, MCS.

The HSV2 Swift provided significant logistical and other critical support for the instructors and students. Facilities onboard including berthing and meals for the US instructors and a fully equipped class room (computers, projector, supplies, coffee, and water). Students were provided daily roundtrip transportation to the ship from Tema and onboard lunch throughout the workshop. The ship's crew graciously hosted both trainees and dignitaries, providing ship tours and accommodating workshop ceremonies.

Closing remarks for the training session were delivered by the Minister of Fisheries, Gladys Asmah, Captain Charles Rock, commander of the HSV2 Swift, Teresa Turk and Papa Yaw Atobrah. Several students shared their experience and remarked on the successful training and collaboration between the two nations. All agreed this training served as the first step in our collective efforts to continue to work together for improved fisheries management through better data collection and enforcement.



*Students practicing entering a life raft during a safety training session with NOAA staff member John LaFargue*

*Photo credits: Teresa Turk.*

# International Spectrum

## Strengthening Standards of Quality: the CCAMLR Scheme

*Ebol Rojas; Fisheries Observer/APO Board; Mexico*



The Scheme of International Scientific Observation of the [Commission for the Conservation of Antarctic Marine Living Resources](#) (CCAMLR) was adopted in the CCAMLR-XI meeting (in 1992) and amended in CCAMLR-XVI (see CCAMLR, 2005). CCAMLR has identified two types of fisheries observers, known as scientific observers, who collect the information required in the fisheries managed by CCAMLR. The first type, "national observers," are nationals of the Member Country of the Commission designating them to operate on board a fishing vessel of the same country, and conduct themselves in accordance with national regulations and standards. The second type, "international observers," are observers operating in accordance with a Memorandum of Understanding (MOU) signed between the

receiving Member Country whose vessel is fishing and the designating Member Country who is providing the observer.

CCAMLR conservation measures require all fishing vessels operating in the Convention Area to carry on board at least one international observer during all fishing activities within the fishing season. One additional scientific observer, either a national observer or an international observer, should also be carried where possible. In certain exploratory fisheries for Patagonian toothfish (*Dissostichus eleginoides*), the vessel must carry at least two observers of which one must be an international observer (CCAMLR, 2005). In the Krill (*Euphausia superba*) fishery, only the presence of an observer on board in the area 58.4.2 (CCAMLR, 2007) is mandatory.

Important changes at the international level have happened since the promulgation of the International Scientific Observation of CCAMLR in the year 1992, fundamentally at a political level. Those changes occurred in fisheries with the development of new technologies for the extraction of resources, fisheries management, and at the level of observer training, including new developments and innovations in programs of fisheries observation.

As an example of the fishing effort in the Antarctic area, important increases were observed in both the longline and trawl fisheries targeting *Dissostichus spp.* There was a growth from 47,738 hooks in the 1995-96 season to 99,810 hooks in the 2004-2005 season, while the trawling effort, measured in hours, increased from 13,539 to 34,978 hours during the same two seasons. That is an increase of the effort of 109.08% for longline gear and 158.35% for trawl gear. To these indicators should be added the beginning of operations in the area 88 in Ross Sea, appearing the first statistics from the season 1997/98.

As it is detailed at the last meeting of CCAMLR, scientific observers were assigned in all the ships that fished in the Area of the Convention according to the System of International Scientific Observation of the CCAMLR. For the season 2006/07, 56 observed trips were made; 50 in the Toothfish and Icthyofisheries (40 longliners, 9 trawlers, and a pot ship) and 6 ships in the krill fishery. Important advances are seen in the last few years, especially in the efficiency of by-catch reported, the result of accumulated years of investigation and observer feedback that remain deployed in the area. For example, consider that for the 1995-96 season, total catch includes 13 species, while the reported total catch for the 2005-06 season includes 126 different groups, with the increase in the reported number of invertebrates standing out (CCAMLR, 2006).

One normative of the CCAMLR implies premature closings of Small-Scale Management Units (SSMU) when just reaching the corresponding Total Allowable Catch (TAC) for species of the by-catch. It determines obligatory area changes when capturing more than a ton of non target species, and changes in the space of operative time when capturing birds in the Area 88. This means that the period of observation on deck it is very important for estimations of by-catch, because the estimate of Catch Per Unit Effort (CPUE) and the observation of discard would not be evident if the observer was only in the factory of the ship taking biological samples. It is seen again and again that the specific requirements of the governments and CCAMLR overlap in the tasks for the observations and samplings haul by haul, yet many times the established minimum number of individuals of these requirements for each trip is so big that it doesn't allow the observer to have the required minimum time of observation on deck. We should keep in mind that in the case of Toothfish the observer should measure, weigh and take both the sex and maturity of fishes that can average of over 20 kgs (Rojas, 2005). This fact was touched upon in the last meeting of CCAMLR in 2007 on the part of the Scientific Committee after an explanation was asked for, indicating that the percentage of hooks observed in several ships that participated in the longline fisheries in the 2006-07 season were less than the minimum 20% recommendation. It was sometimes 0% of observed hooks (CCAMLR, 2007a).

In this case it should be noted that the low rate of observation of the by-catch is due to the lack of the observer's professional sense, of time to make the commended tasks, of advice for the exercise of its functions, or sense of handling of priorities.

It is evident that the range of tasks given to the observers since 1992 has increased significantly. From the results, an improvement in the techniques of gathering the data is shown to lead to an increase of 979% in biological diversity reported in the period of only ten seasons. However, the optimization of the use of the observer's time on board is a very important factor for the concretion of the objectives of the CCAMLR, due to the bias that can be introduced into the assessments models. For the case of the increased technology in the trawling industry, important innovations since the 2004-05 season such as the introduction of the system of continuous pumping in the krill fishery, and the intentions of introducing a trawling system with paired ships (CCAMLR, 2007a), has increased the effort and distribution of the time of observation. Because the ship trawls for several days, with several hauls a day, the estimation of incidental catches and mortality of marine mammals and interactions with sea birds are important points.

### Possible solutions:

In general terms, CCAMLR is an example of interdisciplinary management of resources. Although the Convention is not only a Regional Fisheries Management Organization (RFMO), we should understand that the decisions in CCAMLR are made with a consensus, but the

# International Spectrum

## CCAMLR, cont.

growing changes introduced to the fishing systems, the requirements of data collection, and the organizational requirements for the management of observers' programs, make necessary to introduce some changes in an urgent way to the system of observers from the CCAMLR to different levels.

**Figure 1: New scheme suggested for the organization of the system of International Scientific Observation in CCAMLR.**

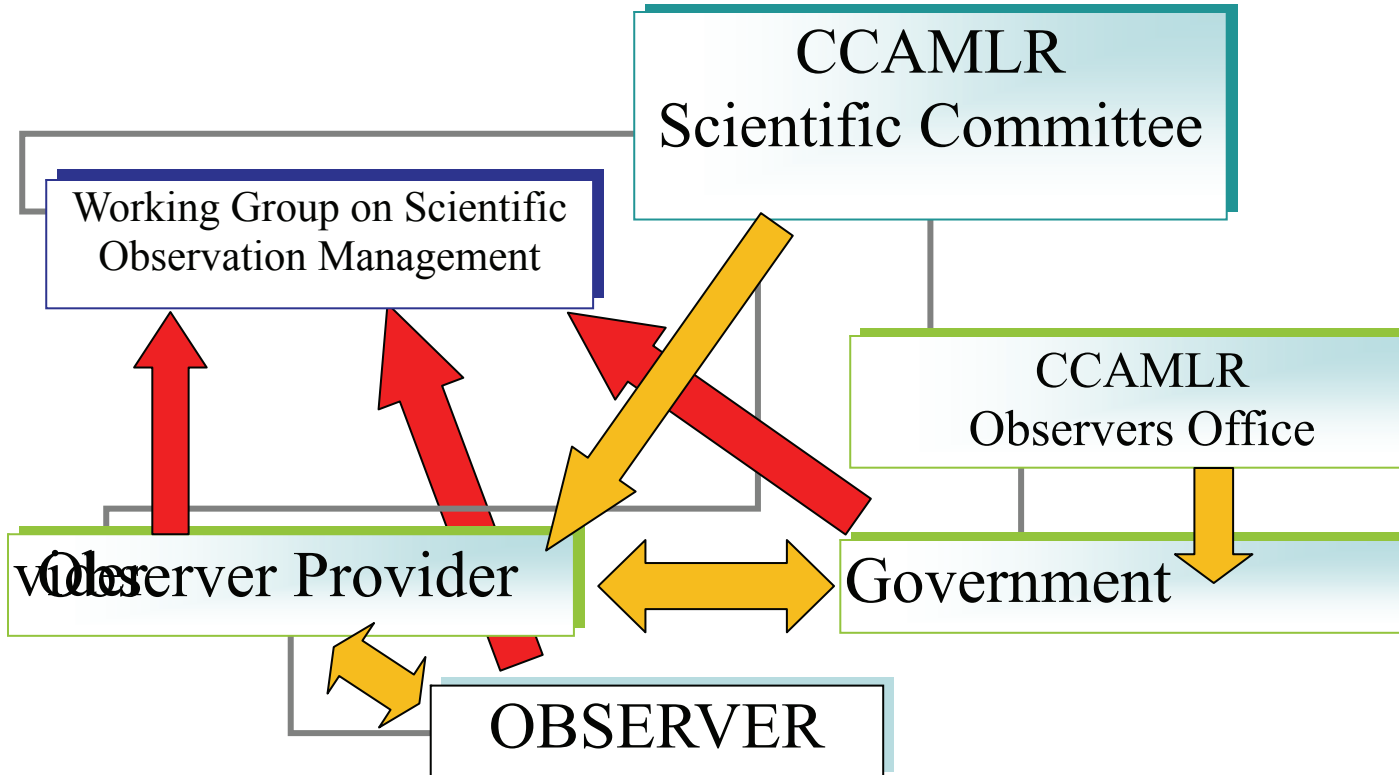


Figure 1. The structure suggested for CCAMLR. The yellow arrows indicate possible flow of coordination. The red arrows indicate the feedback flow required for the maintenance and improvement of the system.

The possible inclusion of a Work Group that understands observer programs will allow the centralization of the discussion of the requirements that arise during the fishing season and to overturn the suggestions outlined to the Scientific Committee. The changes in the organization of a system of fishing observation should be attacked at different administration levels. According to the modern techniques of management of observers' programs, there are different levels of decision in the same administration level (Davies & Reynolds, 2002). We will analyze the minimum required at technical level, and suggest the introduction of improvements in 4 aspects relative to management and technological support.

**1) Global management of the program:** At level of management of the observer program, it would be important to put into operation the creation of an Office of Observers that works inside the Commission yet depending on the Scientific Committee. It would be responsible for, among other things, the study of possible improvements in the techniques of observers' training, coordination with the national technical Coordinators, and the development and upgrade of manuals (Ferdinand et al, 2004), identification sheets, and forms (or e-forms). A task to study would be the validation and certification of observers to an international level and the strengthening of its deployments through Suppliers recognized by CCAMLR (private companies or governments). This way, it is verified that the training and certification is standard. Up to now, the certifications obey the criteria of each country. The Office of Observers of CCAMLR would be the one in charge of coordinating with the countries and the suppliers the specific requirements of the Commission for each fishery and transferring the basic requirements of the Scientific Committee and the different work groups.

**2) Rules of performance evaluation:** The evaluation of rules on code of conduct and scenarios of conflict of interest is an important point to study. It would be important to point out the rules clearly about code of conduct, conflict of interest, and the certification and decertification processes. This will allow the managers to distinguish among punishable facts, and also verify a standard of productivity required for the concretion of the evaluations on the part of the CCAMLR. This will also allow evaluations of the efficiency of the observers. Also the legislation should be revised to determine scenarios of harassment on the part of crew toward the observers and measures to punish those situations.

**3) Introduction of new technologies:** To revise and study the introduction of new technologies that will allow an increase in the productivity in the observer's work. An example is the use of electronic measuring boards and systems of tablet PCs or hand-helds that allow for quickly tak-

# International Spectrum

## CCAMLR, cont.

ing more data and reducing sampling errors. Up to now, the cost of these has made it difficult to implant the use of them (MRAG, 2004). There are interesting experiences in the USA, Australia and Canada on employment of electronic observer logbooks, inclusive for the data acquisition in real time (Chouinard, 2007) (Auld, et al, 2007) (Patten, 2007) (Kupcha, et al 2007). It would be important to evaluate costs and levels of implementation to improve the system of taking of data in sensitive fisheries, where the estimate of the by-catch is so important. Improving the number of biological samples/time can also occur with the use of technology. There can be integrated systems that allow an observer to identify the species more quickly, especially invertebrates. The employment of electronic observer's notebook, integrated with real time GPS and data acquisition should be an object of study to verify that it could improve the system used at the moment.

**4) Security:** Resolution 23/XXIII of CCAMLR urges members to take measures with regard to Safety on board vessels fishing in the Convention Area through, *inter alia*, appropriate survival training and the maintenance of appropriate equipment and clothing to promote the safety of all those on board vessels fishing in the Convention Area. Should this resolution become mandatory, some developing countries might not have the capacity to enforce it. It would be important to determine whether the mandatory inspection of security/safety equipment prior to departure is being completed on the part of the observer. The determination of the equipment necessary to the observer's security/safety to complete the trip is also important. It should be obligatory at all levels for observers that are deployed in the area of the CCAMLR, or under a technical recommendation of the Commission to the Countries which deploy observers.

### Final considerations

It is important to highlight that through the years, the CCAMLR has conducted important work in the conservation of the Antarctic ecosystem. It is reference for many RFMOs. The changes that have happened since the implementation in 1992 of the system of scientific observation make it necessary for the Commission to adapt to those changes and in the immediate future, offering tools to its system of scientific observation that allow them to obtain a quick answer when it is necessary.

Although each country manages its systems of observers independently and with its own criteria, it is important to understand that when deploying in the CCAMLR area they should all work like one. It is not enough to only standardize the system of collection of data. It is also necessary to offer tools to the observers and coordinators to optimize the time of deployment in high seas, to increase the security of the observers while they are in the CCAMLR area, to determine the rules of certification, decertification, conflict of interest and conduct norms clearly. It is impossible to understand how it has been determined that observers' are working below the required standards and that a normative standard to correct the problems don't exist.

The adoption of technologies that will allow for improvement in the process of identification, sampling, and notification of the data to the Commission also should improve the efficiency of the whole system of observers in its group.

In the last meeting of the Commission, it was stated that the Scientific Committee has decided to form a work group to determine observers priorities, improvements in the notification of the observer data and other aspects of the System of International Scientific Observation, inviting among others, observers and technical coordinators (CCAMLR, 2007a). It would be important not only for the formation of that work group to be properly represented, but also for its permanency as an advisory organ of the Scientific Committee with regard to fishing observation.

### Bibliography:

- Auld, S., G. A. Begg, B. Wallner, R. Stanley, L. Kranz. 2007. Real time data entry: Electronic data capture. In: McVea, T.A and Kennelly, S.J. (ed.), 2007. Proceedings of the 5th International Fisheries Observer Conference – 15 – 18 May 2007, Victoria, British Columbia, Canada. NSW Department of Primary Industries, Cronulla Fisheries Research Centre of Excellence, Cronulla, Australia, 412 pp. ISBN 978 0 7347 1861 7.
- CCAMLR. 2005. Basic documents. CCAMLR, Hobart, Australia.
- CCAMLR. 2007. CM 51-03 (2007). Precautionary catch limitation on *Euphausia superba* in Statistical Division 58.4.2. CCAMLR, Hobart, Australia.
- CCAMLR. 2006. Statistical Bulletin, Vol. 18 (1996–2005). CCAMLR, Hobart, Australia.
- CCAMLR. 2007a. Informe de la XXVI Reunión de la Comisión, 22 octubre – 2 noviembre de 2007. CAMLR. Hobart, Australia. ISSN 1031 – 8828.
- Chouinard, J. 2007. Observer Trip Information System (OTIS): A tool for just-in-time in-season fishery monitoring. In: McVea, T.A and Kennelly, S.J. (ed.), 2007. Proceedings of the 5th International Fisheries Observer Conference – 15 – 18 May 2007, Victoria, British Columbia, Canada. NSW Department of Primary Industries, Cronulla Fisheries Research Centre of Excellence, Cronulla, Australia, 412 pp. ISBN 978 0 7347 1861 7.
- Davies SL, Reynolds JE (ed.). 2002. Guidelines for developing an at-sea fishery observer program. FAO Fisheries Technical Paper Nr. 414. FAO Roma, 2002. 116p.
- Dietrich, K., V.R. Cornish, K.S. Rivera, T.A. Conant. 2007. Best Practices for the Collection of Longline Data to Facilitate Research and Analysis to Reduce Bycatch of Protected Species: Report of a workshop held at the International Fisheries Observer Conference, Sydney, Australia, Nov. 8, 2004. U.S. Dep. Comm., NOAA Technical Memorandum NMFS-OPR-35; 88 p.
- Ferdinand, J., S. Leach, J. Miles, L. Thompson. 2004. Preparing an observer program manual. NOAA Fisheries, North Pacific Groundfish Observer Program, Alaska Fisheries Science Centre, Seattle, USA. In: McVea, T.A. and Kennelly, S.J. (ed.), 2005. Proceedings of the 4th International Fisheries Observer Conference – Sydney, Australia, 8 – 11 November 2004. NSW Department of Primary Industries, Cronulla Fisheries Research Centre of Excellence, Cronulla, Australia. ISBN 1 9208 12 20 2. 230pp
- MRAG. 2004. Fisheries Monitoring Technologies. Technical Report to the North Pacific Fishery Management Council, Portland, Oregon
- Patten, Bruce. 2007. Automated receipt and importing of remote data into a central database. In: McVea, T.A and Kennelly, S.J. (ed.), 2007. Proceedings of the 5th International Fisheries Observer Conference – 15 – 18 May 2007, Victoria, British Columbia, Canada. NSW Department of Primary Industries, Cronulla Fisheries Research Centre of Excellence, Cronulla, Australia, 412 pp. ISBN 978 0 7347 1861 7.
- Rojas, E. 2005. Informe del Observador Científico a bordo del B/P de registro Uruguayo "Paloma V". Diciembre, 2004 – Marzo, 2005. Pesca exploratoria de *Dissostichus mawsoni*, CCRVMA Sub Area Estadística 88.1 Mar de Ross. DINARA., Montevideo.
- Kupcha, E., O. Jackson, H. McBride, B. North. 2007. Observer at-sea data collection project. In: McVea, T.A and Kennelly, S.J. (ed.), 2007. Proceedings of the 5th International Fisheries Observer Conference – 15 – 18 May 2007, Victoria, British Columbia, Canada. NSW Department of Primary Industries, Cronulla Fisheries Research Centre of Excellence, Cronulla, Australia, 412 pp. ISBN 978 0 7347 1861 7.

# Observer Professionalism

*This section of the Mail Buoy focuses on the professional livelihood of observers, from employment parameters and standards to professional development opportunities. If you would like to share with us an important aspect of observer professionalism, please [contact us](#).*

## 2008 Observer Professionalism Working Group Report

*Keith Davis; Mail Buoy Editor; North Pacific*

**\*\*\* The following introduction to the [2008 OPWG Report](#) is comprised almost entirely of direct excerpts from the report and includes some additional editorial remarks by Keith Davis.**

At-sea fisheries-dependent information is critical for the responsible management and conservation of living marine resources, and marine resource management regimes worldwide utilize observer programs for coordinating the observers who collect the at-sea field data necessary for achieving program-specific fisheries-dependent management objectives.

The Food and Agriculture Organization (FAO) of the United Nations reports, "There is a direct relationship between the professionalism and morale of observers and the quality of the data they collect," and the integrity of an observer program is directly linked to the professional ethics of its observers. The level of confidence and respect for an observer program that fisheries scientists, managers, policy makers, or any of those who utilize observer data have is dependent upon a program's reliability at producing quality data outputs. Consequently, it is in the best interest of many of the stakeholders to attract, mold, and maintain a corps of highly knowledgeable and skilled observers.

The OPWG was established in June 2006 by the International Fisheries Observer Conference (IFOC) Steering Committee along with two other work groups that have focused on Observer Safety and Observer Training.

The **OPWG Mission** is to investigate, categorize, and prioritize the international working knowledge of observer employment practices in order to outline principles that may foster the proficient professional development of fisheries observers, while working to ensure and strengthen the scientific and technical integrity of the fisheries observer profession and observer programs.

The primary tools utilized thus far in OPWG investigations have been: 1. response to the 2007 OPWG survey, 2. response to the 2007 World Fisheries Trust (WFT) Gender Equity questionnaire, 3. discussions during the OPWG break-out session and during the closing session at the 2007 5<sup>th</sup> IFOC held in Victoria, British Columbia, and 4. further research and discussions by OPWG members beyond the 5<sup>th</sup> IFOC. The OPWG survey was kept open for approximately five months following the 5<sup>th</sup> IFOC and was closed as soon as the 5<sup>th</sup> IFOC proceedings were published in October 2007.

The 2008 Observer Professionalism Working Group Report, exhibiting all of the Group's work to date, has now been published and can be found at the following link: [http://apo-observers.org/docs/IFOC\\_OPWG\\_Report\\_2008.pdf](http://apo-observers.org/docs/IFOC_OPWG_Report_2008.pdf). The report details: the group's background and foundation, all investigations made thus far, a complete analysis of OPWG findings, a list of all OPWG Recommendations, and an outlook into the future proceedings of the OPWG. Though the complete report is 87 pages and may take some time to digest, the executive summary can be scanned in 5-10 minutes and includes a direct link to the OPWG Recommendations, summarized in the annex of the report.

In the group's continued efforts leading up to the 6<sup>th</sup> conference in the IFOC (now the International Fisheries Observer and Monitoring Conference- IFOMC) series, the OPWG will be conducting focused interviews that work to dig deeper into certain priority observer professionalism areas. If you have any feedback on the past and future work of the OPWG, please contact one of the OPWG co-chairs, Keith Davis [blegend@yahoo.com](mailto:blegend@yahoo.com) or Glenn Quelch [glenn.quelch@yahoo.co.uk](mailto:glenn.quelch@yahoo.co.uk). The Observer Professionalism Working Group would also like to take this opportunity to thank all of those who have taken the time to share their perspectives via the OPWG survey, the WFT Questionnaire, and during the 5<sup>th</sup> IFOC proceedings- the work of the OPWG would not be possible without your help.

# Observer Professionalism

## Observer Harassment Cases in the IATTC

*Ebol Rojas; Fisheries Observer/ APO Board; Mexico*

\*\*\*The following is a list of harassment cases involving observers working for the international Dolphin Conservation Program extracted from the [IATTC website](#).

### DOCUMENT IRP-44-11b

#### SUMMARY OF PENDING SPECIAL CASES MONITORED BY THE IRP

##### General

Cases of observer interference that involve an attempt to bribe the observer, or a threat of bodily harm to the observer, are automatically classified as special cases. The Secretariat has noted that some of those cases have been resolved in favor of the vessel without an interview of the observer. While the cases referred to the governments by the IRP include a report by an observer, the Secretariat suggests that the investigation of such cases should include direct testimony from observers.

Several of the cases included in this document have been “deemed confirmed” pursuant to Annex IV.III.4 of the AIDCP. This provision is relevant only for DML adjustments, and the Secretariat does not believe that a special case should be considered resolved by the application of this provision. Accordingly, such cases will continue to be included as pending in the reports prepared for the Panel.

##### CASE 38-01. AIDCP vessel

Identified by the 38th Meeting of the IRP, February 2005; forwarded to the Party by the Secretariat, 18 April 2005.

Trip 2004-462: The observer reported that on the day he first boarded the vessel, the fishing captain asked him how much money he wanted in order to help him by falsifying his data, which the observer emphatically stated that he would not do. After a set during the trip, the fishing captain asked the observer if he had recorded explosive use during the set, which the observer confirmed. The fishing captain asked him to remove the report of explosive use, and said that he could make a monetary arrangement for the observer in port. The observer refused.

This fishing captain was also the fishing captain during trips 2002-654 and 2002-756 of Vessel 'F', Case 32-01.

On 14 June 2006, the Party advised the Secretariat that the case is under investigation; as of 28 May 2008 there has been no further response from the Party.

##### CASE 39-01. AIDCP vessel

Identified by the 39th Meeting of the IRP, June 2005; forwarded to the Party by the Secretariat, 11 August 2005.

Trip 2005-096: The observer reported that, prior to the vessel's departure, the fishing captain and the vessel owner asked him not to report sets on dolphins as the vessel did not have a DML. The observer refused, and during the trip he was subjected to daily harassment by one particular crewman.

On 17 October 2005, the Party informed the Secretariat that this case is under investigation.

As of 28 May 2008 there has been no further response from the Party.

##### CASE 41-01. AIDCP vessel

Identified by the 41st Meeting of the IRP, June 2006; forwarded to the Party by the Secretariat, 23 August 2006.

IRP-44-11b – Special cases 2

Trip 2005-627: The observer reported that the fishing captain became angry at him on several occasions for using or accessing vessel equipment without permission. The observer reported that on the last day of the trip the fishing captain approached him with his arm up and his fist clenched while yelling obscenities, but a crewman restrained the fishing captain when he was approximately one meter from the observer.

As of 28 May 2008, there has been no response from the Party.

##### CASE 41-02. AIDCP vessel

Identified by the 41st Meeting of the IRP, June 2006; forwarded to the Party by the Secretariat, 23 August 2006.

Trip 2005-783: The observer reported that during a port stop he and the fishing captain had an argument on the vessel regarding the observer's request to go ashore to make additional copies of his field data forms. According to the observer, the fishing captain used profane language while face-to-face with the observer, and when the observer placed his hand on the fishing captain's chest and asked him to treat him with respect, the fishing captain pushed the observer's hand away and then pushed the observer. A crewman then intervened to separate them.

As of 28 May 2008, there has been no response from the Party.

##### CASE 41-03. AIDCP vessel

Identified by the 41st Meeting of the IRP, June 2006; forwarded to the Party by the Secretariat, 23 August 2006.

Trip 2005-790: The observer reported that the fishing captain did not want him to report discards of dead tuna during sets on floating objects, and for each such set he offered the observer US\$500 to not report those discards to which the observer refused.

As of 28 May 2008, there has been no response from the Party.

# Observer Professionalism

## **CASE 41-04. AIDCP vessel**

Identified by the 41st Meeting of the IRP; June 2006; forwarded to the Party by the Secretariat on 23 August 2006.

Trip 2006-013: The observer reported that one day, while he was in the pilot house, he was approached by the fishing captain and the navigator, who said they wanted to talk to him. After the fishing captain asked him about his work experience, the vessel navigator told him that the vessel has US\$5,000 available for the biologist if he “cooperates” and allows them to use explosives if they go to an area where it is difficult to catch the dolphins. The observer refused and the conversation ended.

On 26 September 2006, the Party advised the Secretariat that this case is under investigation. On 17 October 2007, the Party informed the Secretariat that there was no infraction. Accordingly, this case will be removed from the list of special cases.

## **CASE 43-01. AIDCP vessel**

Identified by the 43rd Meeting of the IRP, June 2007; forwarded to the Party by the Secretariat, 31 July 2007.

Trip 2006-500: The observer reported that the fishing captain approached him on various occasions, asking or proposing that he falsify information; for example, on one occasion he asked him not to report the death of a whale shark during a set, and on another, not to record an apparent night set nor to report as “unknown” the use of explosives. Also, the fishing captain told him that he would be financially rewarded in cash from him and from the vessel owner. The observer was also threatened, being told that he would not get on the company’s vessels if he did not accept what was requested.

On 14 February 2008, the Party informed the Secretariat that there was no infraction. Accordingly, this case will be removed from the list of special cases.

## **CASE 43-02. AIDCP vessel**

Identified by the 43rd Meeting of the IRP, June 2007; forwarded to the Party by the Secretariat, 31 July 2007.

Trip 2006-603: The observer reported that some members of the crew approached him on various occasions to ask him whether they could fish during the closure, and even whether he would allow fishing during the closure in exchange for money, to which he answered that those questions should be put to the fishing captain.

On 17 October 2007, the Party informed the Secretariat that this case is under investigation. As of 28 May 2008, there has been no additional response from the Party.

## **CASE 43-03. AIDCP vessel**

Identified by the 43rd Meeting of the IRP, June 2007; forwarded to the Party by the Secretariat, 31 July 2007.

Trip 2006-729: The observer reported that a member of the crew asked him if he could help them with the dolphins in exchange for money; he said that they had a quantity of money aboard, and that he was in charge of talking to the observers. The observer refused, and noted that the fishing captain’s behavior subsequently changed and became less cordial.

On 21 September 2007, the Party advised the Secretariat that this case is under investigation. On 20 November 2007, the Party advised the Secretariat that there was no infraction. Accordingly, this case will be removed from the list of special cases.

More info also in:

<http://www.iattc.org/PDFFiles2/IRP-4...-responses.pdf>

# Observer Professionalism

## North Pacific Contract Wages and Benefit Yearly Increase Comparison

*Dave Wagenheim; Fisheries Observer/ APO Board; U.S. North Pacific*

\*\*\*The following is a comparison of several years worth of employee contracts for one observer provider in the North Pacific, USA

### Daily Rate of Pay (Based on 30 day months)

Days	Level	2001	2002	2003	2006
0-95	1	\$120	\$125	\$130	\$130
96-215	2	\$140	\$145	\$150	\$153.75
216-335	3	\$150	\$155	\$160	\$164
336-455	4	\$160	\$165	\$170	\$174.25
456-635	5	\$170	\$175	\$180	\$184.50
636+	6	N/A	N/A	N/A	\$192.70

Average increase in pay per year from 2001-2003 (Levels 1-5): 3.24%

In 2005, a level 6 was created, Daily Rate of Pay: \$188.00

There was no change in rate of pay from 2003 until 2006, except for the creation of level 6 in 2005.

There has been no change in pay from 2006 to current (2008)

### Raw Data

Level 1	4% increase from 01 to 02 3.8% increase from 02 to 03
Level 2	3.4% increase from 01 to 02 3.3% increase from 02 to 03
Level 3	3.2% increase from 01 to 02 3.1% increase from 02 to 03
Level 4	3% increase from 01 to 02 2.9% increase from 02 to 03
Level 5	2.9% increase from 01 to 02 2.8% increase from 02 to 03
Level 6	<b>1.32% per year from 03 to 08</b>

6.59% increase from 03 to 08 for Level 5 and 6 observers

### If pay were to increase by the average of 3.24% per year

	2004	2005	2006	2007	2008
Level 1	\$134.21	\$138.56	\$143.05	\$147.68	\$152.46
Level 2	\$154.86	\$159.89	\$165.07	\$170.42	\$175.94
Level 3	\$165.18	\$170.53	\$176.06	\$181.76	\$187.65
Level 4	\$175.51	\$181.20	\$187.07	\$193.13	\$199.39
Level 5	\$185.83	\$191.85	\$198.07	\$204.49	\$211.12
Level 6					\$199.25*

\*Using the average of increase between levels for 2008 (\$ 14.67), the Level 6 rate of pay would be \$225.79

# Observer Professionalism

## **Bonus Pay**

143+ bonus pay within 210 day period.  
 Bonus \$5 per day 2001, 2002  
 Bonus \$7 per day 2003 – 28.6% increase from 02 to 03  
 Bonus \$8 per day 2008 – 12.5% increase from 03 to 08

## **Health and Welfare**

Paid every 30 day period providing proof of health insurance by observer  
 2001 \$75  
 2002 \$80 – 6.25% increase from 01 to 02  
 2003 \$85 – 5.88% increase from 02 to 03  
 2008 \$95 – 10.52% increase from 03 to 08 (**2.10% per year**)

## **Briefing and Debriefing Pay**

Per day excluding weekends and holidays  
 2001 \$70  
 2002 \$75 - 6.67% increase from 01 to 02  
 2003 \$80 – 6.25% increase from 02 to 03  
**2008 \$80 – 0% increase from 03 to 08!!!**

## **Food Per Diem**

Location	2001	2008	Percent Increase
Seattle	\$20	\$25	20% - 6.6% per year
Anchorage	\$25	\$35	29% - 4.14% per year
Dutch Harbor	\$45	\$50	10% - 1.4% per year
Kodiak and Others	\$40	\$50	20% - 6.6% per year

## **Additional Benefits – Money Purchase Pension Plan**

As of 2005, the amount of 1.0% of observers' (Grades 2-6) daily wages are put into the Seafarers Money Purchase Pension Plan.

In 2006, this amount increased to 1.5% of observers; daily wages.

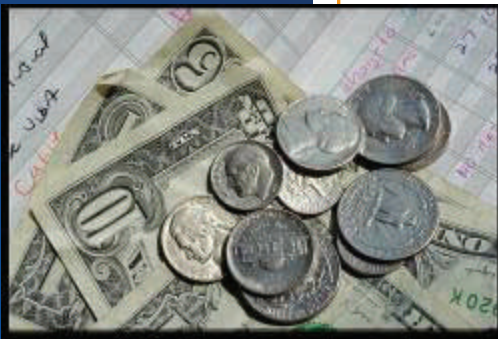
# Observer Professionalism

## May I Have Your Insurance Card Please?

*Mellissia Richards; Fisheries Observer; U.S. North Pacific*

Grace isn't exactly one of my finer qualities. I swear my parents had a standing order at the emergency room while I was growing up. As an adult, I am just as accident-prone as ever. I've had wonderful moments of grace in falling into crab totes, slipping on decks and having my feet fly in the air, hoping and praying that no one saw me in my delightful moments of humiliation. I consider myself pretty lucky in that I am provided with basic worker's comp insurance in case I am seriously injured, but then I thought, what if I get hurt at home? I am up a creek without a paddle.

Right now working as an observer I am able to build my savings account and put money aside for different things like traveling and exploring. But what happens if I get hurt? The medical expenses alone would drain my savings. Plus, I wouldn't be able to observe for a while, and my savings would not be replenished. The next thing that I know, I would be unable to work. I would have medical expenses that I cannot afford. Then unpaid bills would affect my credit and I get trapped with a large amount of debt. The reason: not being provided with adequate insurance during my off time.



Right now observers have coverage through FECA. However, according to APO Comments (Sept. 2002), it does not cover injuries and the observer must "be on a vessel". Thus FECA does not cover injuries that occur while the observer is in transit, working at a processing plant, or involved in a debriefing session. According to the APO Comments, there are even circumstances that can void FECA coverage for an observer on a vessel. According to the Senate Report that accompanies the 1996 MSFCMA reauthorization states that coverage would be provided if the injury occurred while the observer is performing their duties but does not apply if the observer is performing vessel duties. So, if you slice your hand open while helping wash dishes, or fall and get hurt while assisting in an emergency, there is the possibility that you might have to pay for your medical expenses out of your own pocket.

I understand that insurance premiums are increasing on what seems to be a daily basis. I also realize that employing observers is very unpredictable. Many observers don't return after one or two contracts. Observer turnover is high, with approximately 45% of observers completing only a single cruise (2000 MRAG Report). But what about the observers that return for a year, or two years, or even longer? These observers have obviously shown dedication and enjoyment in their work. Why not reward them with health insurance?

If there is an incentive to remain an observer and be rewarded with insurance after a certain time period, as many jobs do today, perhaps more people would continue observing. Training costs would be lower because there would be less turn-around, and the costs of the insurance could take the place of the training costs. Also, couldn't the premiums during our time off be added into our paychecks? An example: the local school district in my hometown accounts for summer insurance during the school year. The payment amount needed for the summer is calculated and withheld during the school year from a series of checks. Couldn't observer companies do a similar thing? I recently signed an intent to return contract giving a time when I would be returning to work. I would be more than willing to pay a little extra out of my next check for my own peace of mind.

Although above only gives a couple of suggestions regarding observer coverage, I hope that this gives observer companies ideas for the future of their employees. We have been doing this job for a long time, and it's time for companies to step up to the plate and help out their observers, especially those with a standing order in the emergency room.

# Observer Data End Use

## Observer Collection of Pollock and Pacific Cod Maturity Data

*Sandi Neidetcher; Fisheries Interaction Team, Alaska Fisheries Science Center, NOAA*

When I was contacted by Mail Buoy staff about submitting an update on the Bering Sea Pacific cod and walleye maturity project, I thought it was a great forum to provide some feedback and express my appreciation to everybody who has collected maturity data. I know the changes in observer sampling methods and data entry made for additional challenges, and that there were a number of problems with the maturity project in particular. I am very grateful for the extra effort made to work through these problems. Observer collected data are so interwoven and essential to Alaska fisheries research and management that this should be acknowledged as much and as often as possible!

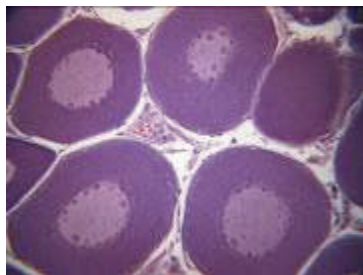
2007 Pacific cod collections		
Collection project	no. samplers	no. samples
Observer visual maturity	60	14,000
Observer ovary tissue specimens	10	400
Mirror sampling	5	100

I spent the month of February onboard the R/V Oscar Dyson for an acoustics pollock survey in the western Aleutians. For a few days before and after the cruise I was fortunate to sample with observers at the processing plants in Dutch Harbor and, as always, I learned a ton! Not only did I see new occurrences with maturity, but I was able to see the project through the eyes of each observer. Maturity data, subjective by nature, depends on how individuals interpret the keys. Working side-by-side with samplers allows me to evaluate the key descriptions, project instructions, and any assumptions I might have about these data collections. This, along with direct discussions with observers and the project questionnaire have been invaluable in developing this project.

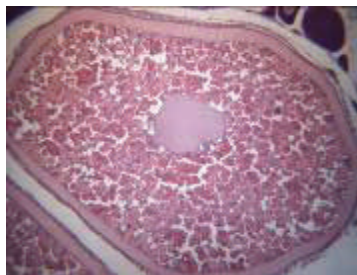
For those who haven't read through the literature that I included in the project packets, the following paragraph is a brief overview of the project followed by an update and some results. I am currently focusing on cod and the pollock work will likely begin over the next year.

Knowledge of spawning processes provides valuable insight into human- and climate-effects on marine fish populations. Pacific cod is an important species in Alaska, economically and ecologically, but little is known of its spawning dynamics. There are two objectives for this research: 1) validation of a visual maturity key through histological comparison, and 2) identify, and assess the variability, of spatial and temporal patterns of cod spawning in the Bering Sea. The location and timing of cod spawning will be determined by creating monthly maps of cod maturity stage. The benefit of our mapping of cod spawning locations will be an increased understanding of the spatial connectivity of Pacific cod spawning aggregations. We are investigating spatial variability in Pacific cod maturity schedules in three ways: 1) by analyzing the 2002-2005 maturity specimens collected during research cruises, 2) by mapping observer visual maturity data collected between 2005 and 2008, and 3) using observer collected ovary specimens and mirror sampling to evaluate error associated with the use of the visual key. The broad spatial coverage of the observer collections will allow for an assessment of spatial differences in cod maturity schedules within the Bering Sea. Identifying whether these differences occur is the first step to understanding the potential for climate-driven shifts in fish distribution to impact cod life history.

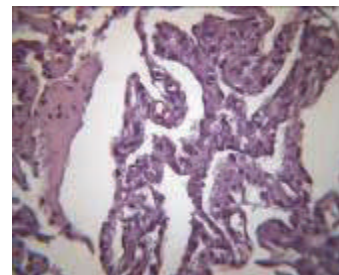
Gonad tissue samples collected in 2004 and 2005 were processed and assigned a histological stage to be compared to the visual stage assigned by scientists in the field. The images below show the three major structures seen microscopically and used to evaluate the histological maturity stage. The 2007 observer ovary samples are currently being processed and these data will be used to assess the variability in observer assigned visual maturity stages.



a) Paronuclear (immature)



b) Vitellogenesis (yolk production)

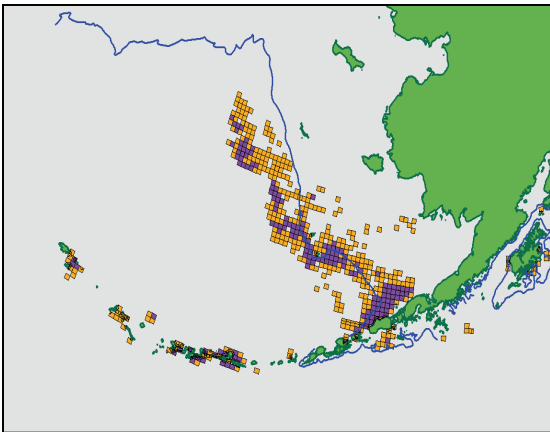


c) Post-Ovulatory Follicles (spent)

# Observer Data End Use

## Maturity Data, cont.

The importance of this research is demonstrated by the large number of investigators who proposed future projects incorporating observer collected maturity data. In the most recent NPRB call for proposals, researchers from NMFS proposed projects including population structure, assessing natal origins, and movement modeling for Pacific cod. The Pacific cod spawning maps will also complement recently funded research by Dr. Lorenzo Ciannelli as part of the Bering Sea Integrated Ecosystem Research Program (BSIERP). The BSIERP focuses on understanding trophic level interactions and an improved understanding of the effects of climate change on the Bering Sea ecosystem. Researchers plan to estimate spatial and temporal distribution of top predators, including Pacific cod; to use larval catches in modeling population density changes associated with environmental conditions; and to link oceanographic data with egg dispersal and drift models. Because Pacific cod eggs are semi-demersal, they do not occur in the nets of zooplankton surveys. This limits the knowledge of Pacific cod egg distribution and their potential spawning sites. Identification of spawning locations through the use of my visual maturity key would provide an alternative source for this information.



The map includes FMA Observer collected maturity data from 2004-2007. The data are binned 20X20 nm blocks with the blue blocks representing areas where spawning occurred and the yellow blocks representing areas where maturity was assessed, but spawning was not observed

Further development of the Pacific cod visual maturity key will not only broaden its application as a tool for assessing the spatial and temporal patterns of spawning, but also provide a means for identifying location and time critical for Pacific cod. This work will be useful in determining what physiological or environmental indicators trigger maturation and spawning. Incorporating environmental variability is important because changes in temperature regimes and current patterns associated with climate changes may affect the timing and location of spawning aggregations and reproductive success.

# Observer Data End Use

## Observer Data Use Reference List New Additions

The APO maintains a reference list of papers that utilize observer data (click Observer Data on the left side bar on our website). Recent additions to observer data bibliography include:

### General

- Bache, S. J. 2003. Bycatch mitigation tools: selecting fisheries, setting limits, and modifying gear. *Ocean Coast. Mgt.* 46:103-125.
- Bull, L. S. 2007. Reducing seabird bycatch in longline, trawl and gillnet fisheries. *Fish and Fisheries* 8:31-56.
- Lumsden, S. E., T. F. Hourigan, A. W. Bruckner, and G. Dorr, (eds.). 2007. *The State of Deep Coral Ecosystems of the United States*. NOAA Technical Memorandum CRCP-3, Silver Spring MD.
- MRAG Americas, Inc. 2004. Fisheries Monitoring Technologies. Second draft (electronic) A Project Report Submitted to North Pacific Fishery Management Council, Anchorage, AK.
- Myrick, A. C., Jr. 1986. Procedures for sampling dolphins: A handbook for shipboard observers. NOAA Tech. Memo. NMFS-SWFSC-62.
- Young, N. M., and S. Iudicello. 2007. An evaluation of the most significant threats to cetaceans, the affected species and the geographic areas of high risk, and the recommended actions from various independent institutions. NOAA Technical Memorandum NMFS-OPR-36.

### North Pacific

- Angliss, R. P., D. P. DeMaster, and A. L. Lopez. 2001. Alaska marine mammal stock assessments, 2001. NOAA Tech. Memo. NMFS-AFSC-124.
- Angliss, R. P., and K. L. Lodge. 2002. Alaska marine mammal stock assessments, 2002. NOAA Tech. Memo. NMFS-AFSC-133.
- Angliss, R. P., and K.L. Lodge. 2004. Alaska marine mammal stock assessments, 2003. NOAA Tech. Memo. NMFS-AFSC-144.
- Angliss, R. P., and R. B. Outlaw. 2005. Alaska marine mammal stock assessments, 2005. NOAA Tech. Memo. NMFS-AFSC-161.
- Angliss, R. P., and R. B. Outlaw. 2006. Alaska marine mammal stock assessments, 2006. NOAA Tech. Memo. NMFS-AFSC-168.
- Angliss, R. P., and R. B. Outlaw. 2008. Alaska marine mammal stock assessments, 2007. NOAA Tech. Memo. NMFS-AFSC-180.
- Balazs, G. H., S. G. Pooley, and S. K. K. Murakawa. 1995. Guidelines for handling marine turtles hooked or entangled in the Hawaii longline fishery: Results of an expert workshop held in Honolulu, Hawaii March 15-17, 1995. NOAA Tech. Memo. NMFS-SWFSC-222.
- Barlow, J., J. R. Brownell, D. P. DeMaster, K. A. Forney, M. S. Lowry, S. Osmek, T. Ragen, R. R. Reeves, and R. J. Small. 1995. Pacific Marine Mammal Stock Assessments. NOAA Tech. Memo. NMFS-SWFSC-219.
- Barlow, J., K. A. Forney, P. S. Hill, R. Brownell, J. V. Carretta, D. P. DeMaster, Julian, M. S. Lowry, T. Ragen, and Reeves. 1997. U.S. Pacific Marine Mammal Stock Assessments: 1996. NOAA Tech. Memo. NMFS-SWFSC-248.
- Barlow, J., P. S. Hill, K. A. Forney, and D. P. DeMaster. 1998. U.S. Pacific Marine Mammal Stock Assessments: 1998. NOAA Tech. Memo. NMFS-SWFSC-258.
- Bass, C., and A. Clemens. 2005. Annual Report on Seabird Interactions and Mitigation Efforts in the Hawaii-based Longline Fishery for Calendar Year 2004. Administrative Report AR-PIR-04-05, NMFS, Pacific Islands Region, Honolulu, Hawaii.
- Bull, L. S. 2007. Reducing seabird bycatch in longline, trawl and gillnet fisheries. *Fish and Fisheries* 8:31-56.
- Cameron, G. 1999. Report on the effect of acoustic warning devices (pingers) on cetacean and pinniped bycatch in the California drift gillnet fishery. SWFSC Admin. Rep., La Jolla, LJ-99-08C.
- Cameron, G., and K. A. Forney. 2000. Preliminary estimates of cetacean mortality in California/Oregon gillnet fisheries for 1999. International Whaling Commission, Scientific Committee Paper SC/52/O24. NMFS. 1993. Observed and estimated take of seabirds in Alaskan and North Pacific West Coast groundfish fisheries, 1989 - 1993. Unpublished report.
- Carretta, J. V., J. Barlow, K. A. Forney, M. M. Muto, and J. Baker. 2001. U.S. Pacific Marine Mammal Stock Assessments: 2001. NOAA Tech. Memo. NMFS-SWFSC-317.
- Carretta, J. V. 2002. Preliminary estimates of cetacean mortality in gillnet fisheries for 2001. International Whaling Commission, Scientific Committee Paper SC/54/SM12, NMFS, SWFSC.
- Carretta, J. V., M. M. Muto, J. Barlow, J. Baker, K. A. Forney, and M. S. Lowry. 2002. U.S. Pacific Marine Mammal Stock Assessments: 2002. NOAA Tech. Memo. NMFS-SWFSC-346.
- Carretta, J. V., K. A. Forney, M. M. Muto, J. Barlow, J. Baker, and M. Lowry. 2003. U.S. Pacific Marine Mammal Stock Assessments: 2003. NOAA Tech. Memo. NMFS-SWFSC-358.
- Carretta, J. V., and S. J. Chivers. 2003. Preliminary estimates of marine mammal mortality and biological sampling of cetaceans in California gillnet fisheries for 2002. International Whaling Commission, Scientific Committee Paper SC/55/SM3, NMFS, SWFSC.
- Carretta, J. V., and S. J. Chivers. 2004. Preliminary estimates of marine mammal mortality and biological sampling of cetaceans in California gillnet fisheries for 2003. International Whaling Commission, Scientific Committee Paper SC/56/SM1, NMFS, SWFSC.
- Carretta, J. V., S. J. Chivers, and K. Danil. 2005. Preliminary estimates of marine mammal bycatch, mortality and biological sampling of cetaceans in California gillnet fisheries for 2004. Administrative Report LJ-05-10, National Marine Fisheries Ser-

# Observer Data End Use

## Observer Data Use Reference List New Additions, cont.

- vice, Southwest Fisheries Science Center. Radtke, H. D., and S. W. Davis. 1998. Economic effects to Oregon's coastal economy from improved utilization of marine fish resources. Prepared for the Oregon Coastal Management Association.
- Carretta, J. V., K. A. Forney, M. M. Muto, J. Barlow, J. Baker, B. Hanson, and M. S. Lowry. 2006. U.S. Pacific Marine Mammal Stock Assessments: 2005. NOAA Tech. Memo. NMFS-SWFSC-388.
- Carretta, J. V., K. A. Forney, M. M. Muto, J. Barlow, J. Baker, B. Hanson, and M. S. Lowry. 2005. U.S. Pacific Marine Mammal Stock Assessments: 2004. NOAA Tech. Memo. NMFS-SWFSC-375.
- Carretta, J. V., K. A. Forney, M. M. Muto, J. Barlow, J. Baker, B. Hanson, and M. S. Lowry. 2007. U.S. Pacific Marine Mammal Stock Assessments: 2006. NOAA Tech. Memo. NMFS-SWFSC-398.
- Carretta, J. V., K. A. Forney, M. S. Lowry, J. Barlow, J. Baker, B. Hanson, and M. M. Muto. 2007. U.S. Pacific Marine Mammal Stock Assessments: 2007. NOAA Tech. Memo. NMFS-SWFSC-414.
- Clemens, A. 2006. Annual Report on Seabird Interactions and Mitigation Efforts in the Hawaii-based Longline Fishery for Calendar Year 2005. Administrative Report AR-PIR-05-06, NMFS, Pacific Islands Region, Honolulu, Hawaii.
- Edwards, E. F. 1989. Using tuna-vessel observer data to detect trends in abundance of dolphin populations: History and research to date (1988). NOAA Tech. Memo. NMFS-SWFSC-122.
- Ferrero, R. C., D. P. DeMaster, P. S. Hill, M. M. Muto, and A. L. Lopez. 2000. Alaska marine mammal stock assessments, 2000. NOAA Tech. Memo. NMFS-AFSC-119.
- Forney, K. A., M. M. Muto, and J. D. Baker. 1999. U.S. Pacific Marine Mammal Stock Assessments: 1999. NOAA Tech. Memo. NMFS-SWFSC-282.
- Forney, K. A. 2000. Monitoring marine mammal and seabird bycatch in the Monterey area set gillnet fishery. in J. Carless, editor. Ecosystem observations for the Monterey Bay National Marine Sanctuary 1999. Monterey Bay Nat. Mar. Sanct., 299 Foam Street, Monterey, CA 93940.
- Forney, K. A., J. Barlow, M. M. Muto, M. S. Lowry, J. D. Baker, G. Cameron, Mobley, C. Stinchcomb, and J. V. Carretta. 2000. U.S. Pacific Marine Mammal Stock Assessments: 2000. NOAA Tech. Memo. NMFS-SWFSC-300.
- Forney, K. A., S. R. Benson, and G. Cameron. 2001. Central California effort and bycatch of sensitive species, 1990-98. Pages 141-160 in E. F. Melvin and J. K. Parrish, editors. Seabird Bycatch: Trends, Roadblocks and Solutions. University of Alaska Sea Grant, Fairbanks, AK.
- Forney, K. A., J. V. Carretta, and D. Petersen. 2003. Observer programs to assess marine mammal mortality in U.S. West Coast fisheries. American Fisheries Society Annual Meeting 133.
- Forney, K. A. 2004. Estimates of cetacean mortality and injury in two U.S. Pacific longline fisheries, 1994-2002. Administrative Report LJ-04-07, National Marine Fisheries Service, Southwest Fisheries Science Center.
- Sampson, D. B. 2002. Final Report to the Oregon Trawl Commission on Analysis of Data from the At-Sea Data Collection Project. Oregon State University.
- Forney, K. A., and D. R. Kobayashi. 2007. Updated estimates of mortality and injury of cetaceans in the Hawaii-based longline fishery, 1994-2005. NOAA Tech. Memo. NMFS-SWFSC-412.
- Hill, P. S., D. P. DeMaster, and R. J. Small. 1997. Alaska marine mammal stock assessments, 1996. NOAA Tech. Memo. NMFS-AFSC-78.
- Hill, P. S., and D. P. DeMaster. 1998. Alaska marine mammal stock assessments, 1998. NOAA Tech. Memo. NMFS-AFSC-97.
- Hill, P. S., and D. P. DeMaster. 1999. Alaska marine mammal stock assessments, 1999. NOAA Tech. Memo. NMFS-AFSC-110.
- Jackson, A. 1989. Summary of the 1987 U.S. tuna/dolphin observer data. NOAA Tech. Memo. NMFS-SWFSC-136.
- Kobayashi, D. R., and J. J. Polovina. 2005. Evaluation of time-area closures to reduce incidental sea turtle take in the Hawaii-based longline fishery: generalized additive model (GAM) development and retrospective examination. NOAA Technical Memorandum NMFS-PIFSC-4.
- Larntz, K., and R. Garrott. 1993. Analysis of 1991 bycatch of selected mammal species in the North Pacific neon squid driftnet fishery. Final contract report prepared for the NMFS.
- Larntz, K., and R. Garrott. 1996. Analysis of bycatch of selected species of marine birds and mammals captured in the North Pacific flying squid fishery during 1989, 1990 and 1991 seasons. Submitted to U.S. Dept. of Commerce, NMFS, Seattle, WA. 146p.:688pp.
- Loughlin, T. R., and R. L. DeLong. 1983. Incidental catch of sea lions during the 1982 and 1983 walleye pollock joint venture fishery in Shelikof Strait, Alaska. NWAFC Processed Rep. 83-15.
- Loughlin, T. R., L. Consiglieri, R. L. DeLong, and A. T. Actor. 1983. Incidental catch of marine mammals by foreign fishing vessels, 1978-1981. Marine Fisheries Review 45:44-49.
- Loughlin, T. R., and R. Nelson, Jr. 1986. Incidental mortality of northern sea lions in Shelikof Strait, Alaska. Marine Mammal Sci. 2:14-33.
- Manly, B. F. J. 2006. Incidental catch and interactions of marine mammals and birds in the Cook Inlet salmon driftnet and setnet fisheries, 1999-2000. Unpublished report, Western Ecosystems Technology, Inc., Cheyenne, WY.
- Manly, B. F. J. 2007. Incidental catch and interactions of marine mammals and birds in the Kodiak Island set gillnet fishery, 2002 and 2005. Unpublished report, Western Ecosystems Technology, Inc., Cheyenne, WY.

# Observer Data End Use

## Observer Data Use Reference List New Additions, cont.

- Melvin, E. F., J. K. Parrish, and L. L. Conquest. 1999. Novel tools to reduce seabird bycatch in coastal gillnet fisheries. *Conserv. Biol.* **13**:1386-1397.
- Miller, T. J. 2005. Estimation of Catch Parameters from a Fishery Observer Program with Multiple Objectives. Ph.D. dissertation University of Washington, Seattle, WA.
- Oliver, C. W., and E. F. Edwards. 1990. Effects of including mortality estimates categorized as either injured or of undetermined status. NOAA Tech. Memo. NMFS-SWFSC-138.
- Perez, M. A. 2006. Analysis of marine mammal bycatch data from the trawl, longline, and pot groundfish fisheries of Alaska, 1998-2004, defined by geographic area, gear type, and catch target groundfish species. NOAA Tech. Memo. NMFS-AFSC-167, U.S. Dep. Commer.
- Small, R. J., and D. P. DeMaster. 1995. Alaska marine mammal stock assessments, 1995. NOAA Tech. Memo. NMFS-AFSC-57.
- Stone, R. P., and S. K. Shotwell. 2007. State of deep coral ecosystems in the Alaska region: Gulf of Alaska, Bering Sea and the Aleutian Islands. Pages 65-108 in S. E. Lumsden, T. F. Hourigan, A. W. Bruckner, and G. Dorr, editors. *The State of Deep Coral Ecosystems of the United States*, NOAA Technical Memorandum CRCP-3, Silver Spring MD.

### South Pacific

- Baird, S., and D. Thompson. 2002. Seabirds and the hoki (*Macruronus novaezelandiae*) trawl fishery: a review of current knowledge. NIWA Client Report No. WGL2002/5, National Institute of Water & Atmospheric Research Ltd.
- Baker, G. B., M. C. Double, R. Gales, G. N. Tuck, C. L. Abbott, P. G. Ryan, S. L. Petersen, C. J. R. Robertson, and R. Alderman. 2007. A global assessment of the impact of fisheries-related mortality on shy and white-capped albatrosses: Conservation implications. *Biol. Cons.* **137**:319-333.
- Bull, L. S. 2007. Reducing seabird bycatch in longline, trawl and gillnet fisheries. *Fish and Fisheries* **8**:31-56.
- SPC (Secretariat of the Pacific Community). 2006. Scientific Data Available to the Western and Central Pacific Fisheries Commission. Report submitted to the Western and Central Pacific Fisheries Commission, 2nd Scientific Committee Meeting, Manila, Philippines, SC2-ST-IP-2, Oceanic Fisheries Programme, Secretariat of the Pacific Community.

### North Atlantic

- Allen, M., D. Kilpatrick, M. Armstrong, R. Briggs, G. Course, and N. Perez. 2002. Multistage cluster sampling design and optimal sample sizes for estimation of fish discards from commercial trawlers. *Fisheries Research* **55**:11-24.
- Baremore, I. E., J. K. Carlson, L. D. Hollensead, and D. M. Bethea. 2007. Catch and bycatch in U.S. southeast gillnet fisheries, 2007. NOAA Tech. Memo. NMFS-SEFSC-565.
- Baum, J. K., R. A. Myers, D. G. Kehler, B. Worm, S. J. Harley, and P. A. Doherty. 2003. Collapse and conservation of shark populations in the northwest Atlantic. *Science* **299**:389-392.
- Belden, D. L. 2007. Estimates of cetacean and pinniped bycatch in the 2005 northeast sink gillnet and mid-Atlantic coastal gillnet fisheries. National Marine Fisheries Service, Northeast Fisheries Science Center Reference Document 07-08.
- Belden, D. L., C. D. Orphades, M. C. Rossman, and D. L. Palka. 2006. Estimates of cetacean and seal bycatch in the 2004 northeast sink gillnet and mid-Atlantic coastal gillnet fisheries. National Marine Fisheries Service, Northeast Fisheries Science Center Reference Document 06-13.
- Bisack, K. D. 2003. Estimates of marine mammal bycatch in northeast (New England) multispecies sink gillnet fishery in 1996. National Marine Fisheries Service, Northeast Fisheries Science Center Reference Document 03-18.
- Blaylock, R. A., J. H. W. Hain, L. J. Hansen, D. L. Palka, and G. T. Waring. 1995. U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments. NOAA Tech. Memo. NMFS-SEFSC-363.
- Carlson, J. K., and I. E. Baremore. 2004. Directed shark gillnet fishery: Catch and bycatch, 2003. Sustainable Fisheries Division Contribution PCB-03/07, NMFS, SEFSC, Panama City, FL.
- Carlson, J. K., D. M. Bethea, and I. E. Baremore. 2005. Directed shark gillnet fishery: Catch and bycatch, 2004. Sustainable Fisheries Division Contribution PCB-05/01, NMFS, SEFSC, Panama City, FL.
- Carlson, J. K., and I. E. Baremore. 2007. Catch and bycatch in the shark gillnet fishery, 2005-2006. NOAA Tech. Memo. NMFS-SEFSC-552.
- Diamond, S. L. 2004. Bycatch quotas in the Gulf of Mexico shrimp trawl fishery: can they work? *Reviews in Fish Biology and Fisheries* **14**:207-237.
- Epperly, S. P., J. Braun, A. J. Chester, F. A. Cross, J. V. Merriner, and P. A. Tester. 1995. Winter distribution of sea turtles in the vicinity of Cape Hatteras and their interactions with the summer flounder trawl fishery. *Bull. Mar. Sci.* **56**:547-568.
- Epperly, S. P., J. Braun-McNeill, and P. M. Richards. 2007. Trends in catch rates of sea turtles in North Carolina, USA. *Endangered Species Research* **3**:283-293.
- Fairfield-Walsh, C., and L. P. Garrison. 2007. Estimated bycatch of marine mammals and turtles in the U.S. Atlantic pelagic longline fleet during 2006. NOAA Technical Memorandum NMFS-SEFSC-560.
- Forsell, D. J. 1999. Mortality of migratory waterbirds in Mid-Atlantic coastal anchored gillnets during March and April, 1998. Special Fish and Wildlife Status Report. Annapolis, Maryland: Chesapeake Bay Field Office, Fish and Wildlife Service, U.S.

# Observer Data End Use

## Observer Data Use Reference List New Additions, cont.

- Department of the Interior.
- Garrison, L. P. 2003. Protected species interactions with the directed shark gillnet fishery of Florida and Georgia from 1999-2002. Unpublished report, National Marine Fisheries Service, Southeast Fisheries Science Center.
- Garrison, L. P. 2004. Estimated bycatch of marine mammals and turtles in the U.S. Atlantic pelagic longline fleet during 2004. NOAA Technical Memorandum NMFS-SEFSC-531.
- Garrison, L. P. 2007. Interactions between marine mammals and pelagic longline fishing gear in the U.S. Atlantic Ocean between 1992 and 2004. Fisheries Bulletin **105**:408-417.
- Hata, D. N. 2006. Incidental captures of seabirds in the U.S. Atlantic pelagic longline fishery, 1986-2005. Report to NOAA Fisheries Service Southeast Fisheries Science Center, Miami FL.
- Murray, K. T. 2004. Bycatch of sea turtles in the Mid-Atlantic sea scallop (*Placopecten magellanicus*) dredge fishery during 2003. US Dep. Commer., Northeast Fish. Sci. Cent. Ref. Doc. 04-11.
- Murray, K. T. 2005. Total bycatch estimate of loggerhead turtles (*Caretta caretta*) in the 2004 Atlantic sea scallop (*Placopecten magellanicus*) dredge US Dep. Commer., Northeast Fish. Sci. Cent. Ref. Doc. 05-12.
- Murray, K. T. 2007. Estimated bycatch of loggerhead sea turtles (*Caretta caretta*) in U.S. Mid-Atlantic scallop trawl gear, 2004-2005, and in scallop dredge gear, 2005. US Dep. Commer., Northeast Fish. Sci. Cent. Ref. Doc. 07-04.
- Myers, R. A., J. K. Baum, T. D. Shepherd, S. P. Powers, and C. H. Peterson. 2007. Cascading Effects of the Loss of Apex Predatory Sharks from a Coastal Ocean Science **315**:1846 -1850.
- Richards, P. M. 2007. Estimated Takes of Protected Species in the Commercial Directed Shark Bottom Longline Fishery 2003, 2004, and 2005. National Marine Fisheries Service, Southeast Fisheries Science Center Contribution PRD-06/07-08.
- Richards, P. M. 2007. Estimated Takes of Protected Species in the Commercial Directed Shark Bottom Longline Fishery 2006. National Marine Fisheries Service, Southeast Fisheries Science Center Contribution PRD-07/08-05.
- Rossman, M. C., and R. L. Merrick. 1999. Harbor porpoise bycatch in the Northeast multiple species sink gillnet fishery and the Mid-Atlantic coastal gillnet fishery in 1998 and during January-May 1999. National Marine Fisheries Service, Northeast Fisheries Science Center Reference Document 99-17.
- Rossman, M. C. 2007. Allocating observer sea days to bottom trawl and gillnet fisheries in the Northeast and Mid-Atlantic regions to monitor and estimate incidental bycatch of marine mammals. National Marine Fisheries Service, Northeast Fisheries Science Center Reference Document 07-19.
- Soczek, M. L. 2006. An analysis of seabird bycatch in New England commercial fisheries. M.S. thesis. Antioch University New England, Keene, New Hampshire, USA.
- Trent, L., D. E. Parshley, and J. K. Carlson. 1997. Catch and bycatch in the shark drift gillnet fishery off Georgia and east Florida. Marine Fisheries Review **59**:19-28.
- Waring, G. T., D. L. Palka, K. D. Mullin, J. H. W. Hain, L. J. Hansen, and K. D. Bisack. 1997. U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments. NOAA Tech. Memo. NMFS-NE-114.
- Waring, G. T., D. L. Palka, P. J. Clapham, S. Swartz, M. C. Rossman, T. V. N. Cole, K. D. Bisack, and L. J. Hansen. 1999. U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments - 1998. NOAA Tech. Memo. NMFS-NE-116.
- Waring, G. T., D. L. Palka, P. J. Clapham, S. Swartz, M. C. Rossman, T. V. N. Cole, L. J. Hansen, K. D. Bisack, K. D. Mullin, R. S. Wells, D. K. Odell, and N. B. Barros. 1999. U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments - 1999. NOAA Tech. Memo. NMFS-NE-153.
- Waring, G. T., J. M. Quintal, and S. Swartz. 2000. U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments - 2000. NOAA Tech. Memo. NMFS-NE-162.
- Waring, G. T., J. M. Quintal, and S. Swartz. 2001. U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments - 2001. NOAA Tech. Memo. NMFS-NE-168.
- Waring, G. T., J. M. Quintal, and C. P. Fairfield. 2002. U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments - 2002. NOAA Tech. Memo. NMFS-NE-169.
- Waring, G. T., R. M. Pace, J. M. Quintal, C. P. Fairfield, and K. Maze-Foley. 2004. U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments - 2003. NOAA Tech. Memo. NMFS-NE-182.
- Waring, G. T., E. Josephson, C. P. Fairfield, and K. Maze-Foley. 2006. U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments - 2005. NOAA Tech. Memo. NMFS-NE-194.
- Waring, G. T., E. Josephson, C. P. Fairfield, and K. Maze-Foley. 2007. U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments - 2006. NOAA Tech. Memo. NMFS-NE-201.
- Waring, G. T., E. Josephson, C. P. Fairfield-Walsh, and K. Maze-Foley (eds.). 2008. U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments - 2007. NOAA Tech. Memo. NMFS-NE-205.

### South Atlantic

- Baker, G. B., M. C. Double, R. Gales, G. N. Tuck, C. L. Abbott, P. G. Ryan, S. L. Petersen, C. J. R. Robertson, and R. Alderman. 2007. A global assessment of the impact of fisheries-related mortality on shy and white-capped albatrosses: Conservation implications. Biol. Cons. **137**:319-333.

# Observer Data End Use

## Observer Data Use Reference List New Additions, cont.

Bull, L. S. 2007. Reducing seabird bycatch in longline, trawl and gillnet fisheries. *Fish and Fisheries* 8:31-56.

### Indian Ocean

Baker, G. B., M. C. Double, R. Gales, G. N. Tuck, C. L. Abbott, P. G. Ryan, S. L. Petersen, C. J. R. Robertson, and R. Alderman. 2007. A global assessment of the impact of fisheries-related mortality on shy and white-capped albatrosses: Conservation implications. *Biol. Cons.* 137:319-333.

### Southern Ocean

Agnew, D.J., T.M. Daw, G.M. Pilling and M.G. Purves. 2001. Fishing for toothfish using pots: results of trials undertaken around South Georgia, March–May 2000. *CCAMLR Science*, 8: 93–105.

Agnew, D.J., G.P. Kirkwood, J. Pearce and J. Clark. 2006. Investigation of bias in the mark–recapture estimate of toothfish population size at South Georgia. *CCAMLR Science*, 13: 47–63.

Agnew, D.J., J. Moir Clark, P.A. McCarthy, M. Unwin, M. Ward, L. Jones, G. Breedts, S. Du Plessis, J. Van Heerden and G. Moreno. 2006. A study of Patagonian toothfish (*Dissostichus eleginoides*) post-tagging survivorship in Subarea 48.3. *CCAMLR Science*, 13: 279–289

Ashford, J.R., Duhamel, G. & Purves, M.G. 1998. A protocol for randomised sampling of longlines in the Southern Ocean fishery for *Dissostichus eleginoides*: system of international scientific observation, CCAMLR. CCAMLR-WG-FSA 98/60

Bull, L. S. 2007. Reducing seabird bycatch in longline, trawl and gillnet fisheries. *Fish and Fisheries* 8:31-56.

Fenaughty, J.M. 2006. Geographical differences in the condition, reproductive development, sex ratio and length distribution of Antarctic toothfish (*Dissostichus mawsoni*) from the Ross Sea, Antarctica (CCAMLR Subarea 88.1). *CCAMLR Science*, 13: 27–45.

Kawaguchi, S., S. Nicol, K. Taki and M. Naganobu. 2006. Fishing ground selection in the Antarctic krill fishery: trends in patterns across years, seasons and nations. *CCAMLR Science*, 13: 117–141.

Pilling, G.M., Purves, M.G., Daw, T.M. & Xavier, J.C. 2001. The stomach contents of Patagonian toothfish (*Dissostichus eleginoides*) around South Georgia (South Atlantic). *Journal of Fish Biology* 59: 1370 - 1384.

Pin, O.D., Rojas, E. Application of the Mammals and Birds Excluding Device (MBED) in the patagonian toothfish (*Dissostichus eleginoides*) longline fishery of the Southwestern Atlantic. Population Biology Department. Antarctic Resources Area. DINARA.

Purves, M.G., Agnew, D.J., Moreno, G., Daw, T.M., Yau, C. & Pilling, G.M. 2003. Distribution, demography and discard mortality of crabs caught as bycatch in an experimental pot fishery for toothfish in the South Atlantic. *Fishery Bulletin* 101/4.

Roche, C., C. Guinet, N. Gasco and G. Duhamel. 2007. Marine mammals and demersal longline fishery interactions in Crozet and Kerguelen Exclusive Economic Zones: an assessment of depredation levels. *CCAMLR Science*, 14: 67–82.

Xavier, J.C., Rodhouse, P.G., Purves, M.G., Daw, T.M., Arata, J. and Pilling, G.M. 2002. Distribution of cephalopods recorded in the diet of the Patagonian toothfish (*Dissostichus eleginoides*) around South Georgia. *Polar Biology* 25: 323 - 330.

If you know of additional literature, please send us an email ([apo@apo-observers.org](mailto:apo@apo-observers.org)) and we'll be sure to add the citation to the list. An electronic copy would be useful as well. Thanks & keep up the hard work our there!

## Letters and Corrections

### Correction: Observer Coverage in CCAMLR Antarctic Krill Fishery

You may recall an article in the Winter 2008 Mail Buoy entitled “Observers Now 100% Mandatory in CCAMLR Antarctic Krill fisheries.” The following statement is printed in that article: “...CCAMLR has enacted a conservation measure to have mandatory 100% observer coverage for all krill fishing in its management areas”, This should read as follows: “... CCAMLR has enacted a conservation measure to have mandatory 100% coverage for all krill fishing in Area 58.4.2.”

For a full draft of CCAMLR Conservation Measure 51-03 (2007) go to the [CCAMLR website](#). You may also read more on [ObserverNet](#).

If there is an article in this Mail Buoy that needs a correction or clarification, please [let us know!](#)

This section is here for you to give back to the Mail Buoy!

Think of this as a “Letter to the Editor” section. If there is anything that you would like us to know, or something that you would like to say, submit your words to us at [apo@apo-observers.net](mailto:apo@apo-observers.net)!

## Creative Corner

**\*\*\*Contributions to this section aim to exhibit the creative side of observers. Don't forget that the APO is creating the EYES ON THE SEAS, an effort to bring observer stories to the rest of the world...**

### The Limerick Series: "Off-the-Wall"

*Brad Justin; Observer/APO Board Member; North Pacific USA*

Sometimes when alone on the sea  
I enjoy eating pastries with tea  
But sometimes I feel  
I need a big meal  
Like a chicken, a cow, or a tree

### The Limerick Series: "Toilet Humor"

*Brad Justin; Observer/APO Board Member; North Pacific USA*

I went out on deck in a storm  
And beheld a most hideous form  
A 90 foot wave  
It scared me so grave  
That suddenly my trousers felt warm!

## Creative Corner

\*\*\*Contributions to this section aim to exhibit the creative side of observers. Don't forget that the APO is creating the **EYES ON THE SEAS**, an effort to bring observer stories to the rest of the world...

### Hawaiian Roach Politics

*Lynn Russel; Observer; U.S. North Pacific*

I met a roach the other night that said it once knew you a long long time ago. She told me to tell you hello and best wishes.

If you remember, back in the days when the Hawai'i observer program was green and crisp you two spent many a night in your bunk shooting stories and jokes back and forth and became quite chum buddies. She being an English speaking roach was very excited to have someone finally to talk to. The stories have been very entertaining like the time she almost got eaten because she was taking a bath in the fish head soup but you knocked the bowl out of Tono's hand just in time!, and the time she negotiated with the bedbugs after they declared war on the entire crew and did such a good job instead of biting you they spent the night massaging you with oil and combing your body hair.

# Important Contacts and Websites

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## ***Links:***

**ObserverNet (on-line observer forum)**

[www.observernet.org](http://www.observernet.org)

**National Observer Program**

[www.st.nmfs.gov/st4/nop](http://www.st.nmfs.gov/st4/nop)

**International Observer Conferences**

[www.fisheriesobserverconference.com](http://www.fisheriesobserverconference.com)

**AMSEA (Marine Safety Instruction)**

[www.amsea.org](http://www.amsea.org)