

**SUMMARY OF INTERNATIONAL ACTIVITIES RELATED TO REDUCTION OF BYCATCH  
OF SEA TURTLES IN LONGLINE FISHERIES** (last updated December 19, 2005)

Description of Activity	Location of Activity Country and Ocean (if applicable)	Lead FMC	Contact Person
<b>A. Technology Transfer (Training and Outreach)</b>			
A.1 A Workshop was held in conjunction with the Sea Turtle Symposium in San Jose, Costa Rica on February 28, 2004. Focus was on providing information on safe release to participants from nations with longline fleets.	Potential to reach multiple longlining nations	SEFSC	John Mitchell Charlie Bergmann
A.2 A workshop was held in Panama City, FL during March 2004 to provide instruction to domestic vessels in the Gulf on the use of de-hookers and line cutters.	U.S. Gulf	SEFSC	John Watson
A.3 Laminated cards with sea turtle ID and handling guidelines and the safe handling video developed by the SEFSC are being provided to numerous countries as requested. These materials were used in training sessions held in Ecuador in collaboration with IATTC and WWF in March 2004. Safe handling video and guidelines have been translated into Spanish and Vietnamese.	Pacific Atlantic	SEFSC PIFSC	Sheryan Epperly Yonat Swimmer
A.4 Staff followed up on requests for technical information and materials that have been received from Mexico, Israel, and Australia.	Pacific Atlantic	SEFSC PIFSC	All involved staff
A.5 SEFSC staff conducted longline mitigation training and workshops in Peru, June 1-12, 2004 in cooperation with IATTC (Martin Hall).	Peru	SEFSC	Charlie Bergmann

<p>A.6 As a follow up to the workshop held at the Sea Turtle Symposium in Costa Rica, a workshop on the use of dehookers, safe handling and release techniques was held with the crew of the Marviva, the Coast Guard, INCOPECA, sport fishers and NGOs in Golfito, CR in July 2004. The focus was on the sportfishing community, but workshops are planned for early 2005 to target shark and mahi longline fleets.</p>	<p>Costa Rica</p>	<p>SEFSC</p>	<p>Charlie Bergmann</p>
<p>A.7 Workshops were held to help domestic fishers comply with the recent HMS BiOp. Workshops covered results from the NED, safe handling, gear removal and release. Workshops were held in Dulac, LA, Larose, LA, and Panama City, FL in July 2004. An enforcement workshop was also held at the USCG training facility in New Orleans on August 11. Workshops were held in Pompano Beach, FL, Ft. Pierce, FL, Charleston, SC, and Wanchese, NC in August and in Barnegat Light, NJ and East Setauket, NY in September 2004. Similar workshops were held by PIRO for Hawaii-based longline fishermen in September 2004 and will be held quarterly thereafter.</p>	<p>U.S. Gulf and Atlantic U.S. Hawaii</p>	<p>SEFSC PIRO</p>	<p>Charlie Bergmann Charles Karnella</p>
<p>A.8 As a follow up to the workshop held at the Sea Turtle Symposium in Costa Rica in 2004, dehookers are being tested on Uruguayan vessels. In response to a March 22, 2004 email from Martin Laporta (Uruguayan fisheries observer), a Careful Handling and Release Kit has been provided for field testing.</p>	<p>Uruguay</p>	<p>SEFSC</p>	<p>John Watson</p>
<p>A.9 In August 2004 a workshop was held in Panama on conducting circle hook experiments similar to Ecuador and on the use of dehookers and safe handling and release techniques.</p>	<p>Panama</p>	<p>SEFSC</p>	<p>Charlie Bergmann</p>

A.10	In August 2004 a workshop was held in Guatemala on conducting circle hook experiments similar to Ecuador and on the use of dehookers, safe handling and release techniques.	Guatemala	SEFSC SWFSC	Charlie Bergmann Chris Boggs
A.11	In October 2004 SWFSC staff followed up on a training workshop held in 2003 in cooperation with IMARPE for fisheries observers, by working with Peruvian researchers to initiate circle hook implementation and experiments in the artisanal mahi and shark fisheries.	Peru	SWFSC	Peter Dutton
A.12	The PIFSC has been involved in training Korean and Japanese representatives to train their own fisheries observers in protocols utilized by NMFS observers.	Korean and Japanese fleets	PIRO	Charles Karnella
A.13	The PIRO is following up on requests for safe handling workshops from the Federated States of Micronesia, Papua New Guinea and the Marshall Islands.	FSM, PNG, Marshall Islands	PIRO	Charles Karnella
A.14	At the Annual ICCAT meeting in New Orleans Nov 15-21 NMFS staff conducted a workshop on experimental results and the use of circle hooks; the use of dehookers; and safe handling and release techniques.	Atlantic	SEFSC	Charlie Bergmann
A.15	In November 2004 a workshop was conducted at the meeting of the Gulf and Caribbean Fisheries Institute in St. Petersburg, Fl.	Atlantic/Caribbean	SEFSC	Charlie Bergmann
A.16	In response to a September 23, 2004 email received by R. Lent, SEFSC staff provided information on circle hook producers to Julia Hsiang-Wen Huang, a specialist with the Taiwanese Fisheries Agency.	Taiwan	SEFSC	Charlie Bergmann
A.17	At the FAO Technical Consultation held in Bangkok Nov-Dec 2004 staff handed out over 100 copies of the SEFSC and PIC safe turtle handling and release protocols and received many request for copies of the videos.	Potential to reach multiple longlining nations	SEFSC PIFSC	John Watson Chris Boggs

A.18	At the FAO Technical Consultation held in Bangkok Nov-Dec 2004 there was a request from Elisabeth McLellan of WWF International (Australia) for the Atlantic longline research experimental design, data sheets, and instructions to assist in planning experiments in countries interested in evaluating circle hooks. There was also a request for a sample of 18/0 circle hooks for evaluation by an Australian fisher (see F6 below).	Australia	SEFSC	John Watson
A.19	In a letter received via fax, as a follow up to the Bangkok FAO meeting, Malcolm Sarmiento of the Philippines Dept. of Agr/Bureau of Fisheries and Aquatic Resources requested assistance with circle hook experiments. Representatives participated in the Technical Assistance Workshop (see A 23 and B. 17).	Philippines	PIFSC	Chris Boggs
A.20	A safe turtle handling and release certification training workshop was held for 46 pelagic longline fishers in Orlando, Florida on April 8th, 2005.	U.S. Atlantic and Gulf	SEFSC	Charlie Bergmann
A.21	Workshops were conducted in 2005 for the pelagic longline fishery, shark bottom longline and reef fish fishers in: Galveston and Brownsville, TX; Venice and New Orleans, LA; Orlando, Ft. Lauderdale, Jacksonville, Panama City, Pensacola, St. Petersburg, Madeira Beach, Key West, Cape Canaveral and Port Isabel, FL; Charleston, SC; Manteo, NC; Atlantic City, NJ; and Falls Church, VA. The workshops included presentations on results of longline sea turtle mitigation research and requirements of regulations, provided technical assistance in adopting mitigation regulations (hook and bait requirements) and training on the use of safe handling and release gear. The voluntary use of circle hooks was promoted for shark and reef fishers. Additional domestic workshops will be conducted in 2006.	U.S. Atlantic and Gulf	SEFSC	Charlie Bergmann

A. 22	In 2005 presentations on pelagic longline technology research results were made at the Bluewater Fisherman's Association meeting in Miami, FL and at the Gulf of Mexico Fisheries Council meeting in Baton Rouge, LA.	Atlantic and Gulf	SEFSC	John Watson
A. 23	The SEFSC continued to develop and training, enforcement and educational materials that were translated into multiple languages and widely distributed in domestic and foreign technology transfer and training workshops.	Global	SEFSC	John Watson Sheryan Epperly
A. 24	The first Technical Assistance Workshop on Sea Turtle Bycatch Reduction Experiments in Longline Fisheries was held April 11-12, 2005 in Honolulu. The workshop was held to provide technical assistance for participants from the FAO Technical Consultation to design programs for the development and testing of turtle bycatch reducing technology appropriate to the longline fisheries of participating nations.	Australia, Indonesia, Malaysia, Mexico, Philippine Islands (National Delegations) Italy, New Caledonia, Papua New Guinea, Spain, Solomon Islands, U.S. and Vietnam (Participated)	PIFSC SEFSC	Chris Boggs John Watson
A. 25	As a follow up to the Fisheries Bilateral held with Iceland in July 2005, information was provided on longline mitigation research results, safe handling and release tools and techniques. To date there have been no follow up inquiries from Iceland.	Iceland	SEFSC	John Watson
A. 26	As funding permits longline technology transfer training workshops will be held in Australia, South Africa, Taiwan and Morocco in 2006.	Australia, South Africa, Taiwan and Morocco	SEFSC	Charlie Bergmann
A. 27	A dehooking demonstration will be presented at the Longline Take Reduction Team Meeting in Miami, FL in January 2006.	Atlantic	SEFSC	Charlie Bergmann
A. 28	PIFSC is currently working on an agreement between the longline industry in Brazil, a regional NGO and a European fish importer to initiate a longline observer program with industry funding.	Brazil	PIFSC	Yonat Swimmer

<b>B. Gear Experiments (Field)</b>				
B.1	NMFS, in collaboration with WWF, IATTC, and the WPRFMC provided hooks, dehookers, and technical assistance to Ecuador for the testing of non-offset 14/o and 15o circle hooks in the mahi mahi fishery and 10 degree offset 16o and 18o circle hooks in the tuna/shark fisheries. Work began in March 2004. Initial results indicate that the majority of the bycatch is entangled, not hooked. Fewer turtles were caught on circle hooks, with varying degrees of statistical significance, depending on the fishery and size of hook. A report on the first year's results is available.	Ecuador	SEFSC SEFSC PIFSC PIFSC WESPAC	John Watson Charlie Bergmann Chris Boggs Yonat Swimmer Irene Kinan
B.2	As of June 28, 2004 Peru had retrofitted two vessels with 16o and 18o circle hooks and is conducting work similar to Ecuador above. Work has expanded in collaboration with the SWFSC and PIFSC in 2005 to include more vessels.	Peru and Chile	SEFSC SWFSC PIFSC	Charlie Bergmann Peter Dutton Chris Boggs
B.3	1 Caribbean and 4 Gulf vessels will be testing an 18o, non offset circle hook vs the 16o circle hook typically used in the tuna fishery, with standard squid/herring/sardine bait. Evaluations of 18/0 circle hook in the GOM tuna directed fishery have been completed and a report has been submitted.	Gulf/Caribbean	SEFSC	John Watson
B.4	PIFSC staff are working cooperatively with the NGO PRETOMA to test effects of offset on circle hooks and blue bait in the Costa Rican tuna longline fishery.	Costa Rica	PIFSC	Yonat Swimmer
B.5	PIFSC assisted with experimental design for blue dyed bait in the shallow water mahi mahi fishery in Costa Rica. Initial testing in Nov 2003 was unsuccessful, and work has shifted to hook testing.	Costa Rica Brazil	PIFSC	Chris Boggs
B.6	Over the past 2 ½ years satellite tags have been provided to Costa Rican longline observers to investigate post-hooking survival. A total of 10 longline caught and 5 free-swimming turtles were tagged and monitored, with no apparent behavioral differences between the groups. With possible in the re-opened Hawaii swordfish fishery, tagging in Costa Rica is being phased out.	Costa Rica	PIFSC	Yonat Swimmer

B.7	In 2003 circle hooks were provided to approx. 10 swordfish vessels. An 180 circle hook with 10 degree offset will be tested during the 2004 fishing year.	Chile	SWRO SWC	Peter Dutton
B.8	In the fall of 2004 University of Florida researchers tested an 180 10 degree offset circle hook baited with squid versus an 180 circle hook with no offset in the Azorean swordfish longline fishery.	Azores	PIFSC SEFSC OPR	Chris Boggs John Watson Barbara Schroeder
B. 9	A cooperative research project between the Fisheries Research Institute, NOAA Fisheries Service, College of William and Mary, University of California, University of Miami, and Aquatic Release Conservation was initiated in the Gulf of Mexico in April, 2005. The project is designed to investigate bycatch mitigation techniques in the coastal longline fishery in the Gulf of Mexico and Atlantic Ocean. The project will involve six cooperative commercial vessels which will make 200 research sets using hook timers and TDRs to investigate temporal and spatial relationships between target and bycatch species and will test circle hooks and baiting type and techniques to reduce mortality of bycatch species.	Atlantic and Gulf of Mexico	SEFSC	John Watson
B. 10	SEFSC staff are working cooperatively with VIMS to provide circle hooks to Brazil for a billfish bycatch reduction research initiative.	Brazil	SEFSC	John Watson
B. 11	Monitoring of the reopened shallow set fishery in HI using 10 degree offset 180 hooks and fish bait indicated lower than expected turtle bycatch rates. The ITS has not reached as the end of 2005 approaches and target (swordfish) catch rates have been consistent with before the gear change. This success in a different fishery and ocean basin from where the gear was initially tested should help to further expand the use of this gear.	Hawaii	PIFSC	Chris Boggs

<p>B. 12 PIFSC is analyzing results from several vessels in the deep-set tuna fishery which is voluntarily trying small (14o–16o) circle hooks with preliminary results indicating no significant differences in target catches compared with vessels using tuna hooks, but with little statistical power. Controlled (same vessel 18/o circle versus tuna hook comparison) testing of offset and non-offset circle hooks is underway by 17 vessels in the tuna fishery, in conjunction with action B. 13 below.</p>	<p>Hawaii</p>	<p>PIFSC</p>	<p>Marti McCracken Chris Boggs Dan Curran</p>
<p>B. 13 PIFSC staff have been consulting with WESTPAC, Blue Ocean Institute and Japan on a cooperative research design to test the efficiency of small and large circle hooks in the Pacific longline fishery. A draft research plan was reviewed in May 2004 and a meeting to refine the draft was held in Honolulu, Sept. 13-17, 2004. Two hook testing research cruises were undertaken by the National Research Institute of Far Seas Research of Japan in 2005, while PIFSC initiated large (18o) circle testing in the Hawaii tuna fleet (B.12 above).</p>	<p>Pacific</p>	<p>PIFSC</p>	<p>Chris Boggs Hiroshi Miname</p>
<p>B. 14 PIFSC is collaborating with Projeto TAMAR and IBAMA to test 18o circle hooks vs. 9o J hooks in commercial and research vessels in the Brazilian swordfish fishery. A preliminary analysis indicates reduced sea turtle bycatch, but also slightly reduced swordfish catches with 18o hooks in this fishery.</p>	<p>Brazil</p>	<p>PIFSC</p>	<p>Yonat Swimmer</p>
<p>B. 15 SEFSC staff held preliminary discussions with Korea and in July 2005 Korean scientists met with PIFSC in HI to obtain circle hooks and dehooking equipment for a research cruise completed in the eastern Pacific in August 2005, where size 15o and 18o circle hooks were compared with tuna hooks in deep-set fishing for bigeye tuna. Preliminary results indicate some reduction of target species CPUE with the larger hooks.</p>	<p>Korea</p>	<p>PIFSC SEFSC</p>	<p>Chris Boggs John Watson</p>



B. 16	Hawaii recreational shore fisherman are testing the removal of barbs from the circle hooks typically used in this fishery in an experiment to determine if catch rates are maintained while mitigating the live release of bycatch (mostly undersize or non-target fish, as well as sea turtles). Preliminary results indicate success which may be exportable to shore fisheries elsewhere.	Hawaii	PIFSC	Bert Kikkawa Chris Boggs
B. 17	PIFSC provided a complete set of longline gangions, hooks and spare gear to equip a research vessel operated by the Philippines Dept. of Agr/Bureau of Fisheries and Aquatic Resources to conduct comparison of longline fishing between tuna hooks and 160 circle hooks. A research cruise complete in March 2005 resulted in slightly reduced fish catch rates with the circle hooks (not statistically significant) and PIFSC has received a proposal for further work.	Philippines	PIFSC	Chris Boggs Paul Shiota
B. 18	PIFSC has agreed to supply some gear and instruments for a continuing study of circle hooks versus J. hooks and tuna hooks being conducted by government fisheries scientists in the Mexican longline fishery.	Mexico	PIFSC SWFSC	Chris Boggs Peter Dutton
B. 19	The Spanish Cetacean Society recently conducted tests substituting fish for squid bait in the Spanish swordfish fishery in the Mediterranean Sea under contract from PIFSC. Preliminary results indicated approximately a 50% reduction in loggerhead bycatch with no reduction in target CPUE.	Spain	PIFSC	Chris Boggs
B. 20	The University of Naples has initiated a test comparing 160 circle hooks to J hooks in the swordfish fishery in the Pelagic Islands (Mediterranean) under contract from PIFSC.	Italy	PIFSC	Chris Boggs
B. 21	In September 2005 based on turtle bycatch data from newly developed observer programs initiated by PIRO contractors in those countries, PIRO and PIFSC contracted with WWF to develop and execute turtle bycatch reduction research in the longline fisheries of Indonesia and Papua New Guinea.	Indonesia and Papua New Guinea	PIRO PIFSC	Ray Clarke Chris Boggs

B. 22	In January 2006 the SEFSC will meet with Costa Rica on conducting baiting techniques research.	Costa Rica	SEFSC	Charlie Bergmann
B. 23	In February 2006 the SEFSC in cooperation with the IATTC and PIFSC will begin work with longline fishers in Peru and Ecuador to test a new circle hook design modification that effectively increases the width of the hook by using a wire appendage on the back side of the eye. If effective this would allow smaller size circle hooks in the Mahi Mahi fishery which has shown a significant loss of catch with the standard circle hooks tested to date.	Peru and Ecuador	SEFSC PIFSC	Charlie Bergmann Chris Boggs
<b>C. Possible Future Gear Experiments</b>				
C.1	An experiment on reducing entanglement in longlines is needed to address this significant take component in many Latin American fisheries. SEFSC and PIFSC are exploring options for testing stiffer or deeper mainlines in the shallow set fishery in Ecuador or elsewhere.	Ecuador (Likely)	PIFSC SEFSC	Chris Boggs Charlie Bergmann
C.2	Experiments with barbless circle hooks (see B. 16) will be expanded to the Hawaii longline fishery in 2006.	Hawaii	PIFSC	Chris Boggs
C.3	PIFSC is actively continuing to seek platforms throughout Asia for the deployment of archival tags.	Pacific	PIFSC	Yonat Swimmer
C.4	Guatemala has expressed an interest in experimenting with circle hooks in their swordfish fishery. The dorado and shark targeting longline fishery will be supplied with non-offset 14/0 and 15/0 circle hooks for controlled comparison with other hook styles in use, during a week long visit to Guatemala August 14-21, 2004.	Guatemala	PIFSC	Chris Boggs
C.5	At the FAO Technical Consultation a request was received from Uruguay for assistance in setting up experiments to evaluate circle hooks. SEFSC staff will provide guidance and circle hooks for the experiments. 18/0 circle hooks were provided to Uruguay in January 2005 for evaluation on commercial vessels.	Uruguay	SEFSC	Charlie Bergmann

<b>D. Gear Experiments (Laboratory)</b>			
D.1	Continued hook size experiments compared to turtle size were initiated in March 2004 with head started turtles in Galveston. PIFSC is providing funds. Preliminary results were presented at the 2005 Sea Turtle Symposium in Savannah, GA. Experiments will be completed when turtles reach 65-70 cm in spring 2005.	Galveston, TX	SEFSC PIFSC SEFSC Sheryan Epperly Chris Boggs John Watson
D.2	Physiology and behavior experiments (olfactory and visual cues, etc.) are ongoing at PIFSC, Galveston and elsewhere. A meeting to summarize results was held at the 25 <sup>th</sup> Annual Symposium on Sea Turtle Biology and Conservation. A draft Technical Report on these studies is available and was distributed at IFF3 in Japan in July 2005.	HI and various affiliated research institutions	PIFSC Yonat Swimmer
D.3	In collaboration with Projeto TAMAR odor/repellant studies are being conducted with captive and semi-wild turtles that are also monitored for hook expulsion and post-hooking health over time.	Brazil	PIFSC Yonat Swimmer
D.4	A meeting of the Sensory/Mechanical Turtle Longline Group was held in Chapel Hill, NC May 20-21, 2005.	HI and various affiliated research institutions	PIFSC Yonat Swimmer
<b>E. Bi- and Multi-Lateral Efforts</b>			
E.1	Research results from the NED experiments were presented at the IATTC Bycatch Working Group January 2004 Kobe, Japan. The Group examined information on status of sea turtles; identified short and long-term conservation measures; and recommended research areas to address sea turtle interactions in fisheries.	Member Countries: Costa Rica, Japan, Spain, Ecuador, Mexico, United States, El Salvador, Peru, Nicaragua, Vanuatu, France, Panama, Venezuela, Guatemala	SEFSC PIFSC SWR John Watson Chris Boggs Tina Fahy
E.2	The March 2004 Bilateral with Mexico provided an opportunity to follow up on their request for longline technical assistance.	Mexico	SF/HQ Dean Swanson
E.3	NMFS staff participated in the 2 <sup>nd</sup> WPRFMC Western Pacific Sea Turtle Cooperative Research and Management Workshop held in Honolulu, HI May 17-21, 2004.	Pacific	PIFSC PIRO SWFSC Chris Boggs Tina Fahy Peter Dutton

E.4	Research results from the NED and Pacific longline gear experiments were presented at the World Fishery Congress, May 2-6, 2004 in Vancouver, BC, Canada.	Global	PIFSC SEFSC	Yonat Swimmer John Watson
E.5	An MOU has been developed between the SWFSC and IMARPE (Peru) to collaborate on sea turtle/fisheries research.	Peru	SWFSC	Peter Dutton
E.6	In June, 2004 the PIFSC hosted a representative of the Pacific Fisheries Section of the Deep Sea Fisheries Division of the Taiwanese Fisheries Agency. He participated in a WPFMC sea turtle workshop and a fisheries observer workshop held at the PIRO.	Taiwan	PIFSC	Yonat Swimmer
E.7	NMFS staff gave a presentation promoting cooperative research and the use of circle hooks at a Symposium on Bycatch Reduction hosted by NFRDI in Korea, June 7-11, 2004.	Pacific	PIFSC	Chris Boggs
E.8	The EU Fisheries Bilateral in Brussels, June 30-July 1, 2004 provided an opportunity to highlight sea turtle longline issues.	EU	HQ	Dean Swanson
E.9	The Fisheries Bilateral with Iceland in Reykjavik July 27-28, 2004 provided an opportunity to highlight sea turtle longline issues.	Iceland	HQ	Dean Swanson
E.10	The Fisheries Bilateral with Canada in Washington July 22, 2004 provided an opportunity to continue to engage Canada in sea turtle longline issues.	Canada	HQ	Dean Swanson
E.11	The Fisheries Bilateral with Chile in Juneau July 27-29, 2004 provided a forum to call attention to the cooperative circle hook research that is underway and to discuss possible expansion of that program.	Chile	SF/HQ SWFSC	Dean Swanson

E.12	The ISC (Interim Scientific Committee for Tuna and Tuna-like Species in the North Pacific) has agreed to establish a working group to address sea turtle bycatch issues. The first meeting of this working group will be held in conjunction with the next ISC plenary in La Jolla, CA in March 2006 and will include solicitation for collaborators for additional longline gear testing with PIFSC.	Member States: Canada, Chinese Taipei, Japan, Korea, Mexico, People's Republic China, United States	SF/HQ PIFSC	Dean Swanson Chris Boggs
E.13	An FAO Technical Consultation on the issue of sea turtle interactions with fishing gear was held November 29 - December 3, 2004 in Bangkok, Thailand.	Global	SF/HQ	Dean Swanson
E.14	The 4 <sup>th</sup> International Fisheries Observer Conference was held Nov 8-11, 2004 in Sydney, Australia. There was a NOAA Fisheries sponsored workshop prior to the Conference that focused on standardizing longline observer data collection and sampling protocols.	Global	ST/HQ	Therese Conant
E.15	NMFS staff gave a presentation promoting cooperative research and the use of circle hooks at a Symposium on Bycatch Reduction hosted by NFRDI in Korea, June 7-11, 2004.	Pacific	PIFSC	Chris Boggs
E.16	A meeting on longline fishing turtle bycatch mitigation field trials was hosted by NOAA, IATTC and WWF at the 25 <sup>th</sup> Annual Symposium on Sea Turtle Biology and Conservation held in Savannah, GA in February 2005.	Global	PIFSC	Yonat Swimmer
E.17	An MOU has been developed between NMFS and WWFUS to enhance recovery and conservation in the Pacific.	Pacific	PR/HQ	Barbara Schroeder
E.18	An agency meeting with Vietnam held in March 2005 provided an opportunity to highlight sea turtle longline issues. In September 2005 PIRO and PIFSC contracted with WWF to conduct interviews, review opportunities and develop a plan for turtle bycatch observation and mitigation research in collaboration with the government of Vietnam.	Vietnam	PR/HQ PIRO	Dean Swanson Ray Clarke

E. 19	The FAO COFI meeting was held in March 2005 in Rome, Italy providing an opportunity to discuss longline bycatch issues.	Global	HQ	Dean Swanson
E.20	IFF3 was held in Yokahama, Japan July 25-28, 2005 and included presentations on SEFSC and PIFSC research results on sea turtle bycatch reduction, handling and release methods.	Global	WPRFMC SEFSC PIFSC	WPRFMC John Watson Yonat Swimmer
E. 21	Fisheries Bilaterals were held with Canada in Ottawa on July 29, 2005 and with Mexico in La Jolla, CA in October, 2005, providing an opportunity to continue to engage Canada and Mexico in sea turtle longline issues.	Canada and Mexico	HQ	Dean Swanson
E. 22	The Brazil Common Agenda Meeting held in WA DC Sept. 29-30, 2005 provided an opportunity to review the results of ongoing cooperative research with Brazil and identify areas for future cooperation and provide support for the development and implementation of the Brazilian National Plan to Reduce Incidental Catch of Sea Turtles in fisheries.	Brazil	HQ PIFSC	Alexis Gutierrez Yonat Swimmer
E. 23	The inaugural meeting of the new Western and Central Pacific Fishery Commission held in Pohnpei in December 2005 considered a U.S. proposal for reduction of sea turtle bycatch in longline fisheries. The proposal included an appendix by PIFSC summarizing recent research results.	Pacific	PIRO PIFSC	Ray Clarke Bob Skillman
E. 24	The U.S./Canada/Mexico Trilateral meeting will be held in San Diego, May16-20, 2006. A Marine Table is being developed for that meeting and this may provide a forum for further addressing longline bycatch issues.	Canada and Mexico	HQ	Alexis Gutierrez
<b>F. Non U.S. Activities</b>				
F.1	Workshops on mitigation research, de-hooking, line cutting, handling techniques and data collection have been conducted with 41 fishers in Queensland and Western Australia. More workshops are planned. A handling video has been produced and distributed (see also F. 6).	Queensland and Western Australia, Australia	n/a	Carolyn Robins

F.2	Workshops with Columbian fishers on handling techniques and the use of circle hooks were conducted in July 2004. By 2005, IATTC and WWF were developing or operating turtle bycatch education and mitigation research programs in every Pacific coastal nation in Latin American.	Columbia	n/a	Martin Hall(IATTC) with WWF Columbia and WWF throughout Latin America
F.3	A cable response to State 118401 contained information on longline effort out of Durban and the east coast of S. Africa as well as proposed mitigation measures, including dropper lines that are 2 meters longer than the depth of the buoy line and the potential use of non-stainless circle hooks.	South Africa	n/a	Jill Derderian
F.4	The National Research Institute of Far Seas Fisheries (NRIFSF) has tested non-offset 160 circle hooks in comparison to tuna hooks and found no difference in the rate of bycatch, and a substantial reduction in deep hooking with the circle hooks. Work is underway in collaboration with PIFSC (B13)	Japan	n/a	Hideki Nakano Hiroshi Miname
F.5	With input from the SEFSC, the Organization for the Promotion of Responsible Tuna Fisheries (OPRT) in Tokyo Japan has developed pamphlets and a poster on sea turtle mitigation measures that will be distributed to Japanese fishers.	Japan	n/a	Yuichiro Harada
F. 6	Experiments with circle hooks were undertaken in the Australia longline fishery in 2005 and further testing is planned in 2006. A preliminary report on the results is available.	Australia	n/a	Carolyn Robins