## NATIONAL MARINE FISHERIES SERVICE Northeast Fisheries Science Center Fisheries Sampling Branch

# AT-SEA MONITORING PROGRAM ASM RECERTIFICATION II TRAINING WELCOME PACKET

Congratulations on your achievement of admittance to this elite one-day training opportunity of the Atsea Monitoring (ASM) Recertification II Training course. Your entrance attests to your commitment for high data quality and your investment to observing. To honor this commitment by utilizing your working knowledge and competence level we were able to develop and offer this training opportunity.

Enclosed within this Welcome Packet are instructions on the various items and tasks that you must accomplish prior to training. It is your responsibility to have all of these items properly completed before training begins. The Welcome Packet includes the following:

- I. Welcome To Training, Pre-Training Checklist and ASM Recertification II Pilot Training Program Memo
- II. Training Agenda
- III. Course Materials
- IV. Species Identification Review & Study Material
- V. Conflict Resolution Homework Assignment
- VI. Regulatory Compliance Folder Request Form
- VII. FSB Gear Request Form

#### I. WELCOME & PRE-TRAINING CHECKLIST

A crucial component to successfully passing the ASM Recertification II training will be reviewing all materials provided to you prior to the training. You will find a Pre-Training Checklist of those crucial items that you are required to complete to aid you in this task. A copy of the ASM Recertification II Pilot Training Program Memo has also been provided for your reference.

#### II. TRAINING AGENDA

Included you will find the agenda that describes each activity occurring on this one-day training opportunity. Components found on the ASM Recertification II pilot training agenda will provide FSB the opportunity to update the observers on any new protocols, trends in the fisheries, updates to the ASM Program. There will also be a safety review and an opportunity for FSB staff to provide appropriate response to difficult situations that observers have out at sea.

#### III. COURSE MATERIALS

Qualified students will be required to review and study materials prior to the training as there will be no planned lectures for the required study topics during the training session. If students have questions or concerns about material, training, or expectations, they will have access to the training coordinator in the days leading up to the training, Diana Cowan, by either phone or email.

#### NATIONAL MARINE FISHERIES SERVICE

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#### IV. SPECIES IDENTIFICATION REVIEW

This species identification document lists the major fish, marine mammals, sea birds, and sea turtles. This document will give you a review of the commonly encountered species in the North Atlantic. Please bring all species guides with you on the first day of training.

#### V. CONFLICT RESOLUTION HOMEWORK ASSIGNMENT

Part of your job as an observer is being able to communicate with a variety of different people in a clear and professional manner. The ASM Recertification II training encompass a Conflict Resolution III session which will take the observers' already established solutions to help promote and further develop the observer safety culture. Please fill out the enclosed Dispute Resolution assignment prior to training. You will be required to hand this in at 8 am on the morning of training.

#### VI. REGULATORY COMPLIANCE FOLDER REQUEST FORM

This is your opportunity to restock appropriate documents and outreach materials held in your Regulatory Compliance Folders. Please turn in this request form by 8 am on the morning of training.

#### VII. FSB GEAR REQUEST FORM

This is your opportunity to restock FSB issued equipment by completing and turning in this request form by 8 am on the morning of training.

If you have any questions or concerns about this Welcome Packet, please contact:

Diana Cowan Training Coordinator (508) 495-2283 Diana.Cowan@noaa.gov

ITEM/TASK	COMPLETED?					
	•					
Review Training Agenda						
Review all Study Course Material (Printed or on SD Micro Drive):						
Data Collection Overview						
Groundfish Gear Review:						
o Trawl Fishery,						
o Gillnet Fishery,						
<ul> <li>Longline Fishery,</li> </ul>						
o Handline Fishery,						
o Pot Trip Fishery						
Groundfish Haul Log Variables						
Fish Disposition Code						
Catch Estimation Program						
<ul> <li>Catch Estimation Method Review</li> </ul>						
<ul> <li>Catch Estimation Worksheet Review</li> </ul>						
Individual Animal Log:						
Sturgeon & Shark ID						
<ul> <li>Tagged Fish Protocols</li> </ul>						
Length Frequency Log						
Discard Log						
Incidental Take Program: Logs & Protocols						
Review all Fish ID Exam Material:						
Species Identification Review document						
• Fish ID PowerPoint (Printed or on SD Micro Drive):						
Fish ID Manuals and Guides						
Conflict Resolution Homework assignment						
Regulatory Compliance Folder Request Form						
NMFS issued Gear Request Form						
WHAT TO BRING TO TRAINING						

### **Manuals and Reference Materials:**

- Observer Program Manual
- Biological Sampling Manual
- Regulatory Compliance Folder
- On-deck Reference Guides
- All Marine Mammal, Fish, Sea Shore, Sea Bird and Sea Turtle ID Guides
- Calculator
- Pen/Pencil

# **Electronic Gear**

- Charged Tablet and accessories
- Charged Digital Camera

Fisheries Sampling Branch

# ITEM/TASK

**COMPLETED?** 



# **Gear Certification Program:**

FSB recommends that all observers bring <u>all gear every time</u> they come to Tech Park. The only exception is when gear has been checked within the previous 2 weeks, in which case the observer is not required to bring it again.

#### Timelines:

- Every 90 days: electronics, calipers, spring scales, marel scales
- Every 6 months: safety gear, incidental take gear

In the case where an observer cannot bring all gear (*e.g.*, traveling long distances), a list is provided of what gear has expired (i.e. has not met FSB timelines) and <u>must</u> be brought. However, it's in everyone's best interest to bring in all gear.

A Gear Certification Program gear list will be emailed to the Provider 1 week prior to training for each of their observers attending the training. Observers are responsible to bring these items which are due for certification in on the morning of Day 1 of training.



UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL MARINE FISHERIES SERVICE Northeast Fisheries Science Center 166 Water Street Woods Hole, MA 02543-1026

August 7, 2014

MEMORANDUM FOR:

A.I.S., Inc.,

East West Technical Services, Fathoms Research LLC, and

**MRAG Americas** 

At-Sea Monitor Program Providers & Observers

FROM:

Amy S. Martins

Branch Chief, Fisheries Sampling Branch (FSB)

SUBJECT:

ASM Recertification II Pilot Training Program

This memo outlines the newly developed At-sea Monitor (ASM) Recertification II Pilot Training Program option for current, certified ASM observers, who have been recertified at least once before. This program is designed to provide qualified ASM observers an opportunity to recertify via a one-day training in lieu of the current three-day ASM Recertification training.

ASM Recertification II will run as a one-day, stand alone training, that will be scheduled two times each year for qualified candidates. The first ASM Recertification II Training will be in November 2014. During the training candidates will be evaluated with examinations based on comparable materials found within the current ASM Recertification Training Program. A fully operational ASM Recertification II Training Program has been scheduled for 2015.

#### **Qualified Candidates**

Individuals considered for the ASM Recertification II must meet the following criteria by 30 days prior to the start of a scheduled training:

- Prior successful completion of at least one three-day ASM Recertification Training
- Currently not on an absence (Leave of Absence included)
- Actively working in the capacity of an either a NEFOP or ASM observer taking groundfish trips for a total of 20 groundfish sea days over the 6 months prior to the ASM Recertification II training (see additional information below)
- Maintain good data quality and are in good standing per FSB staff
- Achieved an average 85% compliance of the correct identification for the Species Verification Program in two consecutive, complete quarters prior to the ASM Recertification II training

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#### **Scheduling Guidelines**

Candidate qualification reviews will be conducted 30 days prior to an ASM Recertification II training opportunity. The NEFOP and ASM groundfish sea day count and data quality evaluation will be assessed from six months (180 days) leading up to this 30 days.

FSB will solicit providers with the ASM Recertification II training opportunity 45 days prior to the training. Potentially qualified candidates will be identified by FSB staff 30 days prior to the training. The provider will submit a potential roster at 14 days prior to training and a final list of candidates 7 days prior to training. A class size range will maintain a minimum of four students to a maximum of twenty students per ASM Recertification II training class.

Access to the agenda, study materials, and resources will be provided to the candidate two weeks prior to the training session by either a FSB password protected Website or by mail, TBD. Qualified students will be required to review and study materials prior to the training as there will be no planned lectures for the required study topics during the training session. If students have questions or concerns about material, training, or expectations they will have access to the training coordinator, Diana Cowan, Diana.Cowan@noaa.gov, 508-495-2283 during normal business hours.

#### Observer Evaluation

ASM Recertification II examinations are based on lectures and exams of the current three-day ASM Recertification Training Program. Two exams will be held during the ASM Recertification II training:

- Fish Identification Exam (Closed Book)
- ASM Recertification Exam

During the ASM Recertification II training, if the student receives a grade lower than an 85% on either of the Fish Identification exam or overall Final Grade, the student will no longer be able to work in the capacity of an ASM observer, until the next available standard three-day ASM Recertification training in which they will be required to attend.

All provider questions should be directed to the Groundfish Lead, Katherine McArdle, Katherine.McArdle@noaa.gov, 508-495-2377.

Attachments:

FSB Training and Program Standards: Performance Standards excerpt from Pg. 2 A sample ASM Recertification II Agenda

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# Northeast Fisheries Observer Program, Industry Funded Scallop Observer Program, and At- Sea Monitoring Program Training and Program Standard: Performance Section (rev. 06/04/14) Excerpt Pg. 2

#### Performance

To successfully pass any FSB training program the trainee must:

1. Receive an overall grade of at least 85%. Grading will be calculated using the following breakdown:

	NEFOP (Core)	NEFOP & ASM Specialized	ASM (Core)	ASM Recertification	ASM Recertification II	IFS (Core)	IFS Specialized	Safety II
Fish ID Exams: Open Book and Closed Book Practical	30%	NA	30%	30%	30%	30%	NA	NA
Incidental Take ID Exam	15%	NA	15%			15%	NA	NA
C F ()	Exam 1: 15%	000/	30%		65%	30%	90%	NA
Course Exam(s)	Exam 2: 15%	90%	30%			3076	3070	NA
Safety Written Exam	10%	NA	10%	NA	NA	10%	NA	95%
Homework and Quizzes	10%	5%	10%	10%	NA	10%	5%	NA
Performance, Attitude, and Participation	5%	5%	5%	5%	5%	5%	5%	5%

- 2. Receive an individual minimum score on the following exams:
  - Incidental Take ID Exam: ≥85%
  - Safety Exam & Practical
    - o Part 1: Safety Written Exam: ≥85%
    - o Part 2: Safety Practical: Pass
  - Fish ID Exam:
    - o Open Book Practical: ≥80%
    - o Closed Book Practical: ≥80%
    - Combined Open Book & Closed Book Average: ≥85%

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# ASM Recertification II Pilot Training Sample Agenda

TIME DAY 1	PRESENTATION/ACTIVITY	FACILITATOR 2014	DESCRIPTION Took Porks Training Poors				
DATI	Reg. Compliance and Gear Request	2014	Tech Park: Training Room				
HOMEWORK	Form						
	Welcome to Training Manual Check-In	Training Staff	Students bring in to the training room <u>all</u> mandatory gear and material listed on first page of the agenda. Training staff will check all required manuals for presence, in good working condition, and the most current revision.				
0800	Gear Check-In Gear Certification Program: Gear Drop Off	Debra Duarte	Certifiable gear will be dropped off by students in warehouse. Gear Certification Staff: Calipers and Scales. Safety Staff: PFD's, Survival Suits, and PLB's. Incidental Take Staff: Marine Mammal Kits. Electronic Gear (IT) Staff: Toughbooks/iPAQs/Tablets and digital cameras.				
0810	Recertification Training Standards & Training Objectives	Diana Cowan	General housekeeping and emergency procedures. Recertification Program Standards.				
0840	Updates to the ASM Program	KB McArdle	Updates within the Groundfish Fisheries; Sectors; Sector Monitoring.  Provide feedback to observers about specific data quality, common errors, and trends to advise the group on important issues.				
0915	Session 1: Recertification Exam Fish Identification Exam Exam requires a minimum of 85%	Proctor/Training Staff	Fish ID Exam <u>Closed Book</u> : No materials may be used for this portion of the exam.				
1015	Session 2: ASM Recertification Exam Written and Practical Exam  All fisheries & protocols All logs & tabs	Proctor/Training Staff	ASM Recertification Exam  Open Book: Observers will be able to utilize all materials provided before and during training to complete this exam The exam will include: multiple choice, true/false, short answer, and fill in blank.				
1315	St. Revision - Applications	LUNCH	( (30 min)				
1345	Regulatory Compliance Program & Incident Report Review	Sara Weeks	Regulatory Compliance program review; inform new protocols and review any issues. Review how to report appropriate issues that may occur on an individual trip with the Incident Report.				
1400	Conflict Resolution III	Kit Van Meter	Students are presented with situations that have occurred while performing job duties. Advanced conflict scenarios are covered in lecture and role playing. Support: Sara Weeks and Mike Tork				
1500	Lessons Learned	Sara Weeks Katherine McArdle	Feedback to students about current industry issues and the FSB response to these issues for observers.				
1545	Certified Gear Review	Debra Duarte Gear Staff	Return certified gear, provide feedback on results and students sign the Gear Certification Program checklist.				
	Updates to the Safety Program	Mike Tork	Provide feedback on Safety Gear results and any notices for safety protocols.				
1600	Exam Reviews	Diana Cowan Fish ID Exam Staff	Review exam results				
1645	Conclusion of Training	Staff	Issue Letters of Introduction. Issue requested gear and paper logs.				

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# Northeast Fisheries Science Center (NEFSC) Fisheries Sampling Branch (FSB) At-sea Monitoring Program

Recertification II Pilot Training Agenda 2015 (rev. 03/30/15)

To properly prepare for this training, observers should review all issued materials and complete all assignments.

Note: The FSB Training Standards, *Participation Grade*, will be affected for observers who are not properly prepared!

#### WELCOME PACKET

#### WHAT TO HAVE COMPLETED PRIOR TO TRAINING

Section II & III: Review all Course Material and Species Identification Material

Section V: Conflict Resolution Homework Assignment

Section VI: Regulatory Compliance Folder Request Form

Section VII: NMFS issued Gear Request Form

#### **MANUALS & GEAR LIST**

#### WHAT TO BRING TO TRAINING: DAY 1 AT 8AM

#### **Manuals and Reference Materials:**

- Observer Program Manual
- Biological Sampling Manual
- Regulatory Compliance Folder
- On-deck Reference Guides
- All Marine Mammal, Fish, Sea Bird, Sea Shore, and Sea Turtle ID Guides
- Calculator
- Pen/Pencil

#### **Gear Certification Program:**

FSB recommends that all observers bring <u>all gear every time</u> they come to Tech Park. The only exception is when gear has been checked within the previous 2 weeks, in which case the observer is not required to bring it again.

Training Contact: Diana Cowan (508)495-2283

#### Observers are required to bring all of the following items to be TURNED IN:

Electronic Gear: Night/Weekend Electronic Support: 508-367-8256. All trips must be uploaded prior to training.

- Charged Tablet and accessories
- Charged Digital Camera and accessories

Training Location: Fisheries Sampling Branch Training Center

Technology Park, 25 Bernard Saint Jean Drive Falmouth MA. 02536

# NATIONAL MARINE FISHERIES SERVICE

Northeast Fisheries Science Center

Fisheries Sampling Branch

TIME	PRESENTATION/ACTIVITY	FACILITATOR	DESCRIPTION
DAY 1			Tech Park: Training Room & Warehouse
HOMEWORK DUE	Dispute Resolution Form, Reg. Comp. Folder, and Gear Request Form		
0800	Welcome to Training Manual Check-In	Training Staff	Students have all gear and material listed on first page of the agenda available in the training room. Training staff will check all required manuals for good working condition and the most current revision.
0000	Gear Certification Program Gear Drop Off	Debra Duarte FSB Staff	Certifiable gear will be dropped off by students in warehouse. <u>Gear Certification Staff</u> : Calipers and Scales. <u>Safety Staff</u> : PFD's, Survival Suits, and PLB's. <u>Incidental Take Staff</u> : Marine Mammal Kits. <u>Electronic Gear (IT) Staff</u> : Tablets and Digital Cameras
0810	Recertification Training Standards & Training Objectives	Diana Cowan	General housekeeping and emergency procedures. Recertification Program Standards. Issue Key Code for Doors
0840	Updates to the ASM Program	Sara Weeks	Updates within the Groundfish Fisheries; Sectors; Sector Monitoring.  Provide feedback to observers about specific data quality, common errors, and trends to advise the group on important issues.
0915	Update to ASM Trawl Fishery: Twin Trawl	Megan Reynolds	Review new fishery using the Memo and Logs
0930	Session 1: Recertification Exam Fish Identification Exam Exam requires a minimum of 85%	Training Staff	Fish ID Exam Closed Book: No materials may be used for this portion of the exam.
1015	Session 2: ASM Recertification Exam Written and Practical Exam All fisheries & protocols All logs & tabs	Training Staff	ASM Recertification Exam  Open Book: Observers will be able to utilize all materials provided before training to complete this exam. The exam will include: multiple choice, true/false, short answer, and fill in blank.
1230	LUNCH	(45 min)	
1315	Regulatory Compliance Program & Incident Report Review	Sara Weeks	Regulatory Compliance program review; inform new protocols and review any issues. Review how to report appropriate issues that may occur on an individual trip with the Incident Report.
1345	Conflict Resolution III	Kit Van Meter	Students are presented with situations that have occurred while performing job duties. Advanced conflict scenarios are covered in lecture and role playing. Support: Sara Weeks and Mike Tork
1500	Lessons Learned	Sara Weeks Mike Tork	Feedback to students about current industry issues and the FSB response to these issues for observers.
1545	Updates to Safety Program	Mike Tork Lauren Carroll	Update students with any new safety measures; protocol or common safety issues to be aware of. Return Gear Certified safety equipment with quick overview.
1600	Certified Gear Review	Debra Duarte Gear Staff	Return certified gear, provide feedback on results and students sign the Gear Certification Program checklist.
1615	Exam Reviews	Diana Cowan Fish ID Exam Staff	Review exam results.
1630	Conclusion of Training	Staff	Issue Letters of Introduction. Issue requested gear and paper logs.

# SPECIES LIST FOR TRAINING

Cetaceans		Pinnepeds	Sea Birds
Northern Right Whale	Fin Whale*	Harbor Seal	Common Loon
Humpback Whale	Sei Whale*	Grey Seal	Red-Throated Loon
Minke Whale	Sperm Whale*	Harp Seal	Greater Shearwater
Pilot Whales	Pilot Whales Blue Whale*		Sooty Shearwater
Risso's Dolphin			Northern Fulmar
Bottlenose Dolphin		Sea Turtles	Northern Gannet
Common Dolphin		Leatherback	Great Black-backed Gull
Atlantic White-sided Dolphin		Loggerhead	Herring Gull
Harbor Porpoise		Green	Thin Billed Murre
*NEFOP/IFS Only		Kemp's Ridley	

# Fish and Invertebrate Species

Gadids       Flounders       Herrings and       Armored Sea Robin         Atlantic Cod       American Plaice Flounder       Mackerels       Atlantic Hagfish         Cusk       Atlantic Halibut       Alewife       Atlantic Sturgeon         Haddock       Fourspot Flounder       American Shad       Atlantic Wolffish         Longfin Hake       Greenland Halibut       Atlantic Herring       Beardfish         Offshore Hake       Summer Flounder       Atlantic Mackerel       Black Sea Bass         Pollock       Windowpane Flounder       Atlantic Menhaden       Black belly Rosefish         Red Hake       Winter Flounder       Blueback Herring       Bluefish         Silver Hake       Witch Flounder       Hickory Shad       Buckler Dory         Spotted Hake       Yellowtail Flounder       Hickory Shad       Butterfish         White Hake       Yellowtail Flounder       Hickory Shad       Butterfish         Spotted Hake       Yellowtail Flounder       Hickory Shad       Cunner         Skates       Crustaceans       Squids       Cunner         Skates       Crustaceans       Squids       Cunner         Barndoor Skate       Lady Crab       Hickory Shad       Longhorn Sculpin         Little Skate       Red		•		Other Species
Cusk       Atlantic Halibut       Alewife       Atlantic Sturgeon         Haddock       Fourspot Flounder       American Shad       Atlantic Wolffish         Longfin Hake       Greenland Halibut       Atlantic Herring       Beardfish         Offshore Hake       Summer Flounder       Atlantic Mackerel       Black Sea Bass         Pollock       Windowpane Flounder       Atlantic Menhaden       Blackbelly Rosefish         Red Hake       Winter Flounder       Blueback Herring       Bluefish         Silver Hake       Witch Flounder       Hickory Shad       Buckler Dory         Spotted Hake       Yellowtail Flounder       Buckler Dory         Spatter Flake       Yellowtail Flounder       Conger Eel         Skates       Crustaceans       Squids       Cunner         Barndoor Skate       Blue Crab       Atlantic Long-fin Squid       Longhorn Sculpin         Little Skate       Red Deepse	Gadids	Flounders	Herrings and	Armored Sea Robin
Haddock       Fourspot Flounder       American Shad       Atlantic Wolffish         Longfin Hake       Greenland Halibut       Atlantic Herring       Beardfish         Offshore Hake       Summer Flounder       Atlantic Mackerel       Black Sea Bass         Pollock       Windowpane Flounder       Atlantic Menhaden       Blackbelly Rosefish         Red Hake       Winter Flounder       Blueback Herring       Bluefish         Silver Hake       Witch Flounder       Hickory Shad       Buckler Dory         Spotted Hake       Yellowtail Flounder       Butkerfish         White Hake       Yellowtail Flounder       Butkerfish         Chain Dogfish       Conger Eel         Skates       Crustaceans       Squids       Cunner         Barndoor Skate       Blue Crab       Atlantic Long-fin Squid       Fawn Cusk-Eel         Clearnose Skate       Jonah Crab       Short-fin Squid       Longhorn Sculpin         Little Skate       Red Deepsea Crab       Monkfish         Smooth Skate       Rec Crab       Northern Sea Robin         Thorny Skate       Spider Crab (group)       Ocean Pout         Winter Skate       Redfish (Sebastes sp.)         Scup       Sea Raven         Short-Nose Sturgeon	Atlantic Cod	American Plaice Flounder	Mackerels	Atlantic Hagfish
Longfin Hake       Greenland Halibut       Atlantic Herring       Beardfish         Offshore Hake       Summer Flounder       Atlantic Mackerel       Black Sea Bass         Pollock       Windowpane Flounder       Atlantic Menhaden       Blackbelly Rosefish         Red Hake       Winter Flounder       Blueback Herring       Bluefish         Silver Hake       Witch Flounder       Hickory Shad       Buckler Dory         Spotted Hake       Yellowtail Flounder       Butterfish         White Hake       Yellowtail Flounder       Butterfish         White Hake       Yellowtail Flounder       Butterfish         Skates       Crustaceans       Squids       Conner         Skates       Crustaceans       Squids       Cunner         Barndoor Skate       Blue Crab       Atlantic Long-fin Squid       Fawn Cusk-Eel         Clearnose Skate       Jonah Crab       Short-fin Squid       Longhorn Sculpin         Little Skate       Red Deepsea Crab       Monkfish         Rosette Skate       Red Deepsea Crab       Northern Sea Robin         Thorny Skate       Spider Crab (group)       Qean Pout         Winter Skate       Sea Raven         Scup       Sea Raven         Short-Nose Sturgeon	Cusk	Atlantic Halibut	Alewife	Atlantic Sturgeon
Offshore HakeSummer FlounderAtlantic MackerelBlack Sea BassPollockWindowpane FlounderAtlantic MenhadenBlackbelly RosefishRed HakeWinter FlounderBlueback HerringBluefishSilver HakeWitch FlounderHickory ShadBuckler DorySpotted HakeYellowtail FlounderButterfishWhite HakeChain DogfishWhite HakeConger EelSkatesCrustaceansSquidsCunnerBarndoor SkateBlue CrabAtlantic Long-fin SquidFawn Cusk-EelClearnose SkateJonah CrabShort-fin SquidLonghorn SculpinLittle SkateLady CrabLumpfishRosette SkateRed Deepsea CrabMonkfishSmooth SkateRock CrabNorthern Sea RobinThorny SkateSpider Crab (group)Ocean PoutWinter SkateRedfish (Sebastes sp.)ScupSea RavenShort-Nose SturgeonRecommended Resource Sites:Smooth Dogfishnmfs marine mammals: http://www.nmfs.noaa.gov/pr/species/turtles/Striped Bassaudubon birds: http://birds.audubon.org/birdidStriped Sea Robin	Haddock	Fourspot Flounder	American Shad	Atlantic Wolffish
Pollock       Windowpane Flounder       Atlantic Menhaden       Blackbelly Rosefish         Red Hake       Winter Flounder       Blueback Herring       Bluefish         Silver Hake       Witch Flounder       Hickory Shad       Buckler Dory         Spotted Hake       Yellowtail Flounder       Butterfish         White Hake       Yellowtail Flounder       Butterfish         White Hake       Yellowtail Flounder       Butterfish         White Hake       Yellowtail Flounder       Butterfish         Chain Dogfish       Conger Eel         Skates       Crustaceans       Squids       Cunner         Barndoor Skate       Blue Crab       Atlantic Long-fin Squid       Fawn Cusk-Eel         Clearnose Skate       Jonah Crab       Short-fin Squid       Longhorn Sculpin         Little Skate       Red Deepsea Crab       Monkfish         Smooth Skate       Rock Crab       Northern Sea Robin         Thorny Skate       Spider Crab (group)       Redfish (Sebastes sp.)         Scup       Sea Raven         Scup       Sea Raven         Short-Nose Sturgeon         Recommended Resource Sites:       Smooth Dogfish         nmfs turtles: http://www.nmfs.noaa.gov/pr/species/turtles/       Striped Bass	Longfin Hake	Greenland Halibut	Atlantic Herring	Beardfish
Red Hake Winter Flounder Blueback Herring Bluefish Silver Hake Witch Flounder Hickory Shad Buckler Dory Spotted Hake Yellowtail Flounder Butterfish White Hake Yellowtail Flounder Chain Dogfish White Hake Frustaceans Squids Cunner Barndoor Skate Blue Crab Atlantic Long-fin Squid Fawn Cusk-Eel Clearnose Skate Jonah Crab Short-fin Squid Longhorn Sculpin Little Skate Lady Crab Lumpfish Rosette Skate Red Deepsea Crab Monkfish Smooth Skate Rock Crab Northern Sea Robin Thorny Skate Spider Crab (group) Cean Pout Winter Skate Spider Crab (group) Sea Raven Scup Scup Sea Raven Short-Nose Sturgeon Recommended Resource Sites: Smooth Dogfish nmfs marine mammals: http://www.nmfs.noaa.gov/pr/species/mammals/ nmfs turtles: http://www.nmfs.noaa.gov/pr/species/turtles/ Sutriped Sea Robin	Offshore Hake	Summer Flounder	Atlantic Mackerel	Black Sea Bass
Silver Hake Witch Flounder Hickory Shad Buckler Dory Spotted Hake Yellowtail Flounder Hickory Shad Butterfish White Hake Yellowtail Flounder Chain Dogfish White Hake Crab Chustaceans Squids Cunner Barndoor Skate Blue Crab Atlantic Long-fin Squid Fawn Cusk-Eel Clearnose Skate Jonah Crab Short-fin Squid Longhorn Sculpin Little Skate Lady Crab Lumpfish Rosette Skate Red Deepsea Crab Monkfish Smooth Skate Rock Crab Northern Sea Robin Thorny Skate Spider Crab (group) Cocean Pout Winter Skate Spider Crab (group) Sculp Winter Skate Sea Raven Short-Nose Sturgeon Recommended Resource Sites: Smooth Dogfish nmfs marine mammals: http://www.nmfs.noaa.gov/pr/species/mammals/ nmfs turtles: http://www.nmfs.noaa.gov/pr/species/turtles/ audubon birds: http://birds.audubon.org/birdid Striped Sea Robin	Pollock	Windowpane Flounder	Atlantic Menhaden	Blackbelly Rosefish
Spotted Hake Yellowtail Flounder Chain Dogfish Conger Eel  Skates Crustaceans Squids Cunner  Barndoor Skate Blue Crab Atlantic Long-fin Squid Fawn Cusk-Eel Clearnose Skate Jonah Crab Short-fin Squid Longhorn Sculpin Little Skate Lady Crab Lumpfish Rosette Skate Red Deepsea Crab Monkfish Smooth Skate Rock Crab Northern Sea Robin Thorny Skate Spider Crab (group) Ocean Pout Winter Skate Spider Crab (group) Redfish (Sebastes sp.) Scup Sea Raven Short-Nose Sturgeon Recommended Resource Sites: Smooth Dogfish  mmfs marine mammals: http://www.nmfs.noaa.gov/pr/species/mammals/ nmfs turtles: http://www.nmfs.noaa.gov/pr/species/turtles/ audubon birds: http://birds.audubon.org/birdid Striped Sea Robin	Red Hake	Winter Flounder	Blueback Herring	Bluefish
White Hake  Crustaceans  Squids  Cunner  Barndoor Skate  Blue Crab  Atlantic Long-fin Squid  Fawn Cusk-Eel  Clearnose Skate  Jonah Crab  Short-fin Squid  Longhorn Sculpin  Little Skate  Lady Crab  Rosette Skate  Red Deepsea Crab  Smooth Skate  Rock Crab  Thorny Skate  Spider Crab (group)  Winter Skate  Recommended Resource Sites:  Recommended Resource Sites:  Smooth Dogfish  Smooth Dogfish  Short-Nose Sturgeon  Recommended Resource Sites:  Smooth Dogfish  Spiny Dogfish  Striped Bass  audubon birds: http://www.nmfs.noaa.gov/pr/species/turtles/  audubon birds: http://birds.audubon.org/birdid  Striped Sea Robin	Silver Hake	Witch Flounder	Hickory Shad	Buckler Dory
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#### AT-SEA MONITORING PROGRAM RECERTIFICATION II

#### CONFLICT RESOLUTION III

As an experienced observer you have been part of ongoing changes in your working situation. In Conflict Resolution III we will consider trends in the New England fishing industry that influence conflict situations and triggers. We will discuss these trends in terms for dealing with potential conflicts. When reflecting upon these potential trends focus on the interaction with the fishermen from the initial phone call setting up the trip to disembarking the vessel.

This is a two part exercise. In part 1 you will identify conflict trends for the next 10 years. In part 2, completed during class, you will rate them and discuss the implications of these trends in the session.

# Part 1.

Please list ten or more trends that you have observed and believe will continue for the next 10 years within the fishing industry & observer work environment that have an influence on possible disputes situations observers' experience.

Please send in advance of class to <a href="mailto:kitvanm@post.harvard.edu">kitvanm@post.harvard.edu</a> or submit by 8am day 1 of training

#### Following are five examples:

- 1. There has been an increase in regulations concerning #s of fish that can be caught.
- 2. Fishermen are more accepting in allowing the taking of pictures.
- 3. Alcohol use onboard has remained about the same.
- 4. There is an increase in prescription drug use onboard.

5.	5. Observer duties have increased.									