

SERIOUS INJURY TECHNICAL WORKSHOP
September 10-12, 2007
Seattle, WA

MEETING OBJECTIVES

- 1) Review information obtained since 1997 workshop
 - a. Types and frequencies of observed injuries
 - b. Evidence of survival of marine mammals sustaining such injuries
- 2) Discuss the use of, and needed changes to, existing guidance in making serious injury determinations
 - a. Identify when information is insufficient to determine the severity of the injury
 - b. Identify data needs for making serious injury determinations
 - c. Review existing data sources for making serious injury determinations, and identify constraints
- 3) Discuss potential implications of the workshop

DAY 1, MONDAY, SEPTEMBER 10, 2007 (8:30 AM-5:30 PM)
Review and Discuss Existing Processes for Making Serious Injury Determinations
Register through <https://reefshark.nmfs.noaa.gov/pr/siw/>

8:00 AM **Late Registration**

8:30 AM **Welcome, Introductions, and Getting Organized**

- Welcome and opening (Doug DeMaster- Director, AKFSC)
- Participant introductions (CONCUR, Inc.)
- Objectives of the workshop (Tom Eagle, NMFS Headquarters)
- Process for the workshop (CONCUR, Inc.)
 - Ground rules
 - Agenda overview

9:00 AM **Review of Existing Guidelines to Distinguish Serious from Non-Serious Injuries (1997 workshop report)** (Robyn Angliss- AKFSC)

9:15 AM **Evaluate Current Data and Determination Systems** (*Session Chair: Tim Cole*)

Current Data Sources

- National Observer Program (Amy Van Atten, NER Observer Program)
- Health and Stranding Program (Teri Rowles, HQ MMHSRP)

9:45 AM **Current Determination Systems**

- Baleen whale serious injury determinations in the Atlantic and Gulf of Mexico (Tim Cole- NEFSC)
- Small cetacean serious injury determinations in the Atlantic and Gulf of Mexico (Lance Garrison- SEFSC)

10:25 AM **BREAK**

-
- 10:40 AM**
- Serious injury determinations in Hawaii (Karin Forney- SWFSC, and Bud Antonelis- PISFC)
 - Cetacean serious injury determinations off the U.S. Western Contiguous Coast (Karin Forney- SWFSC)
 - Large whale and pinniped serious injury determinations in Alaska (Robyn Angliss- AKFSC)
 - Large whale disentanglement systems (David Mattila- NOS, Humpback Whale National Marine Sanctuary)
- 12:00 PM** Synthesis
- Synthesis of regional case studies (Tim Cole- NEFSC)
 - Non-NMFS evaluation of serious injury determination processes: White Paper of the AK Scientific Review Group (Kate Wynne- AK SRG)
 - Introduction to breakout group session (Melissa Andersen- NMFS Headquarters)
- 12:50 PM** **LUNCH (On Your Own)**
- 2:15 PM** **Facilitated Breakout Group Discussion on the Evaluation of Current Data and Serious Injury Determination Systems**
Breakout group structure and questions TBD
- 4:15 PM** Breakout group leaders and reporters summarize breakout group discussions
- 4:30 PM** Breakout groups present summary statements
- 5:30 PM** **ADJOURN DAY 1**
- 6:30-9:00 PM** *Please join fellow workshop participants at “forty-two”, a unique wine bar in the lobby of the Watertown Hotel.*

DAY 2, TUESDAY, SEPTEMBER 11, 2007 (8:30 AM-6:00 PM)
Review and Discuss New Information from Survival Evaluations and the Pathobiology of Injuries

- 8:30 AM** **Overview: Questions from Day 1 and Review Day 2 Agenda**
- 8:45 AM** **Overview of New Information on Survival of Injured Marine Mammals**
Large Whales (*Session Chair: Tom Eagle*)
- Survival of injured North Atlantic right whales based on photo-id data and longitudinal tracking (Richard Pace- NEFSC)
 - Survival of injured humpback whales, and other large whales, in the Atlantic and Pacific (Jooke Robbins- Center for Coastal Studies; John Calambokidis- Cascadia Research; Jan Straley- University of Alaska)
 - 1) Scar-based insight into entanglement and serious injury (Jooke Robbins)
 - 2) Case studies of injuries and survival along the U.S. west coast (John Calambokidis)
 - 3) Case studies of injuries and survival in Southeast Alaska (Jan Straley)
 - 4) Statistical analysis of survival (Jooke Robbins)
- 9:50 AM** **BREAK**
- 10:05 AM** Facilitated Discussion on Large Whales
- 11:05 AM** Small Cetaceans and Manatees (*Session Chair: Karin Forney*)
- Fishery interactions in small cetaceans in the mid-Atlantic (Aleta Hohn- SEFSC)
 - Bottlenose dolphins in Sarasota Bay, FL (Randy Wells- Chicago Zoological Society/Mote Marine Lab)
 - Limited information on interaction outcomes for Pacific false killer whales (Karin Forney to present Baird *et al.* scarring study and other photos)
 - Injuries and outcomes in manatees (Alex Costidis- FL Fish & Wildlife Conservation Commission)
- 12:35 PM** **LUNCH (On Your Own)**
- 1:45 PM** Facilitated Discussion on Small Cetaceans and Manatees
- 2:45 PM** **Pathobiology of Injuries** (*Session Chair: Teri Rowles*)
- Injuries observed in pinnipeds (CA sea lions, Northern Fur seals, and monk seals) (Frances Gulland- The Marine Mammal Center, Sausalito, CA)
 - Predicting lethality from vessel and gear trauma in North Atlantic right whales (Michael Moore- Woods Hole Oceanographic Inst.)
- 3:35 PM** **BREAK**
- 3:50 PM** ➤ Categories and consequences of injuries (Stephen Raverty- Animal Health Centre, British Columbia, and David Rotstein- University of Tennessee)
- Forensic approaches to data collection (Ken Goddard-USFWS National Fish and Wildlife Forensics Lab)
- 5:00 PM** Facilitated Discussion on the Pathobiology of Injuries
- 6:00 PM** **ADJOURN DAY 2**

DAY 3, WEDNESDAY, SEPTEMBER 12, 2007 (9:00 AM-5:00 PM)
Breakout Groups Sessions

9:00 AM Overview: Questions from Day 2 and Review Day 3 Agenda

- Outline breakout group sessions (CONCUR, Inc.)
 - Group composition (TBD)
 - Questions for discussion (TBD)

9:30 AM Breakouts Group Activity

Session One

Group 1: Longitudinal/survival rates from a modeling perspective

Group 2: Categorization of injuries and pathological consequences: Gear-related injuries (i.e., entanglements, hookings, and ingestions)

Group 3: Categorization of injuries and pathological consequences: Sharp, blunt force, and penetrating injuries

11:30 AM Breakout group leaders and reporters summarize breakout group discussions

11:45 AM Breakout groups present summary statements

12:30 PM LUNCH (On Your Own)

1:45 PM Session Two

Group 1: Large cetaceans

Group 2: Small cetaceans

Group 3: Pinnipeds and other species

3:45 PM Breakout group leaders and reporters summarize breakout group discussions

4:00 PM Breakout groups present summary statement/ Plenary Discussion

5:00 PM ADJOURN DAY 3