

SIOB 296 : BYCATCH: PROBLEMS AND SOLUTIONS Spring 2022

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2 PM to 2:50 PM Tuesdays and Thursdays
Location: Vaughn Hall 100, SIO Campus (but all Zoom seminars)
Grade options: Letter, P/F
Office hours: By appointment

Please note: syllabus may have schedule changes based on speaker commitments

Schedule

Class 1 – March 29th

Introduction: fisheries in an evolutionary context
Brice Semmens and Martin Hall, Scripps Oceanography

Class 2 – March 31st

Review of major fishing gear types
Brice Semmens and Martin Hall, Scripps Oceanography

Class 3 – April 5th

Interactions: fisheries and ecosystems
Brice Semmens, Scripps Oceanography

Class 4 – April 7th

Bycatches on Fish Aggregating Devices (FADs)
Gala Moreno, International Seafood Sustainability Foundation

Class 5 – April 12th

Adoption of Bycatch Reduction Devices
Kiki Jenkins, School for the Future of Innovation in Society - Arizona State Univ.

Class 6 - April 14th

Seabirds and longlines
Ed Melvin, School of Aquatic and Fishery Sciences - Univ. of Washington

Class 7 – April 19th

Assessing population-level impacts of bycatch: the leatherback case study
Bryan Wallace, Ecolibrium Inc.

Class 8 – April 21st

A decision support tool for integrated fisheries bycatch management: Criteria for
bycatch management strategy evaluation
Eric Gilman, The Safina Center and Herriot-Watt Univ.

Class 9 – April 26th

Veterinarian's role in improving survival
Mariluz Parga, SUBMON

Class 10 – April 28th

Interactions between pinnipeds and fisheries: the Baltic grey seal case
Petri Suuronen, Natural Resources Institute - Finland

Class 11 – May 3th

Habitat models and their use in bycatch mitigation
Nerea Lezama-Ochoa, Univ. of California - Santa Cruz and NOAA SWFSC

Class 12 - May 5th

Population models to prioritize bycatch mitigation options
Selina Heppell, Dept. Wildlife, Fisheries and Conservation Sciences - OSU

Class 13 – May 10th

Economics and bycatch: incentives
Dale Squires, Southwest Fisheries Science Center – NOAA

Class 14 – May 12th

Managing bycatch with spatial closures
Dan Ovando, School of Aquatic and Fishery Sciences - Univ. of Washington

Class 15 – May 17th

Dynamic ocean management
Elliott Hazen, NOAA Southwest Fisheries Science Center

Class 16 – May 19th

The tuna-dolphin case: lessons from early bycatch battles
Martin Hall, Scripps Oceanography - Visiting Scholar and redCID

Class 18 – May 24th

The role of light in bycatch mitigation
Noelle Yochum, Fisheries and Conservation Biology, Alaska Fisheries Science Center

Class 17 – May 26th

Developing solar-powered gillnet illumination to reduce marine megafauna bycatch
Jesse Senko, College of Global Futures - Arizona State Univ.

Class 19 – May 31st

Working with fishers
Martin Hall, Scripps Oceanography - Visiting Scholar and redCID

Class 20 – June 2nd

Review
Brice Semmens, Scripps Oceanography

Goals

- Train researchers to develop effective programs to reduce bycatch
- Give the students a foundation that encourages future careers in the field
- Encourage the systematic exploration of solutions to problems
- Develop awareness of the need to learn to communicate effectively with individuals and communities to achieve conservation goals
- Become familiar with the tool sets, combining incentives, technology, etc. to change the behavior of fishers and fishing communities/industries

Advice

Do all the readings prior to the class on the subject, if there are any. Your ability to digest and apply concepts introduced during class will greatly benefit from careful reading of the assigned texts.

Grading

- 20% - Participation (attendance and meaningful contributions to discussion)
- 80% - Final project paper and presentation on a specific Bycatch topic/issue