

ENVS 40.01 – Community-Based Natural Resource Management I – Fisheries

Timetable title: CBNRM I: Fisheries

Distributive: INT or SOC

Professor: Michael Cox

Introduction

In this component of the DSP we will explore the ecological, economic, and culture dimensions of fisheries along the New England coast. New England fisheries have some of the best known wild-caught species, including some that have sustained themselves (lobster), and others that have been greatly depleted (cod). We will take a community-based approach to the study of these systems, trying to understand how local folks are influenced by larger-scale forces as they attempt to use and manage their resources.

Required text: Required text: Berkes, F. 2015. *Coasts for People: Interdisciplinary Approaches to Coastal and Marine Resource Management*. Routledge.

All readings below are from the textbook.

Schedule

Week 1: Fisheries as social-ecological systems

During the first week we will discuss two competing views of fisheries and natural resource governance: one that emphasizes technocratic and highly formalized solutions, and another that views fisheries as complex social-ecological systems subject to multiple ways of knowing. We will discuss the goal of resilience that has developed as a challenge to the traditional, command-and-control paradigm of natural resource management, and consider how a more holistic approach could be implemented.

Reading:

Chapter 2, Natural resources and management: emerging views

Chapter 3, Social-ecological systems

Chapter 4, Resilience: health of social-ecological systems

Week 2: Co-management and the commons

During the second week we will analyze fisheries as shared commons, and consider multiple dominant governance modalities that have been implemented to manage the fisheries

commons. These include community-based management and co-management, private property rights, adaptive management, and marine protected areas. In addition to these broad modalities, we will discuss governance principles that should be kept in mind when they are put into practice.

Reading:

Chapter 5, Can commons be managed?

Chapter 6, Comanagement: searching for multilevel solutions

Chapter 7, Coastal zone: reconciling multiple uses

Chapter 8, Conserving biodiversity, MPAs and stewardship

Week 3: Livelihoods, knowledge and bridging gaps

In the third and final week of the course we will adopt a fishers' point of view. To do so we will consider the constituents and determinants of fisher livelihoods, as well as the local and traditional knowledge that fishers can often bring to bear to manage their systems. We will conclude our discussion by considering how we can bridge the gaps between different types of knowledge to sustain an interdisciplinary approach to fisheries governance.

Reading:

Chapter 9: Coastal livelihoods: resources and development

Chapter 10: Local and traditional knowledge; bridging with science

Chapter 11: Social-ecological system-based management

Chapter 12: An interdisciplinary science for the coast

Assignments and grading

Social-ecological systems log. Two formal entries, each worth 50%.

Each student will keep entries in their "SES log", in which they will analyze the local systems we engage with, using a shared framework based on the readings from the book. Two "formal" entries will need to be made in your log, containing both textual and diagrammatic components that we will discuss. Additionally, you should be keeping notes in shorter informal entries throughout the program. I will be looking for these shorter entries in addition to the formal entries when I read your logs.

Each formal entry should be around 2,000 words. As a part of this assignment, each student will meet with me once I have read your first log entry, about through the course, to discuss their thoughts and conclusions. You will have an opportunity to make changes to your first formal entry with a possible change to your score for this entry. In evaluating your second entry I will keep in mind my comments on your first entry, and be looking for how you have addressed these comments.

Course policies and principles

Academic Integrity

This course is conducted under the principles of the Dartmouth College Academic Honor Principle. I encourage you to review the Honor Principle.

<https://students.dartmouth.edu/community-standards/policy/academic-honor-principle>

You are also responsible for the information concerning plagiarism found in Sources and Citations at Dartmouth <https://writing-speech.dartmouth.edu/learning/materials/sources-and-citations-dartmouth>

Religious Observances

Some students may wish to take part in religious observances that occur during this academic term. If you have a religious observance that conflicts with your participation in the course, please meet with me before the end of the first week of the term to discuss appropriate accommodations.

Student Accessibility and Accommodations

Students requesting disability-related accommodations and services for this course are encouraged to schedule a meeting with me as early in the term as possible. This conversation will help to establish what supports are built into my course. In order for accommodations to be authorized, students are required to consult with Student Accessibility Services (SAS; [Getting Started with SAS webpage](#); student.accessibility.services@dartmouth.edu; 603-646-9900) and to request an accommodation email be sent to me. We will then work together with SAS if accommodations need to be modified based on the learning environment. If students have questions about whether they are eligible for accommodations, they should contact the SAS office. All inquiries and discussions will remain confidential.

Mental Health and Wellness

The academic environment on an off-campus program is challenging, our terms are intensive, and classes are not the only demanding part of your life. There are a number of resources available to you on campus to support your wellness, including your undergraduate dean (<https://students.dartmouth.edu/undergraduate-deans/>), Counseling and Human Development (<https://students.dartmouth.edu/health-service/counseling/about>), and the Student Wellness Center (<https://students.dartmouth.edu/wellness-center/>). I encourage you to use these resources to take care of yourself throughout the term, and to come speak to me if you experience any difficulties.

Title IX

At Dartmouth, we value integrity, responsibility, and respect for the rights and interests of others, all central to our Principles of Community. We are dedicated to establishing and maintaining a safe and inclusive campus where all have equal access to the educational and employment opportunities Dartmouth offers. We strive to promote an environment of sexual respect, safety, and well-being. In its policies and standards, Dartmouth demonstrates unequivocally that sexual assault, gender-based harassment, domestic violence, dating violence, and stalking are not tolerated in our community.

The Sexual Respect Website (<https://sexual-respect.dartmouth.edu>) at Dartmouth provides a wealth of information on your rights with regard to sexual respect and resources that are available to all in our community.

Please note that, as a faculty member, I am obligated to share disclosures regarding conduct under Title IX with Dartmouth's Title IX Coordinator. Confidential resources are also available, and include licensed medical or counseling professionals (e.g., a licensed psychologist), staff members of organizations recognized as rape crisis centers under state law (such as WISE), and ordained clergy (see https://dartgo.org/titleix_resources).

Should you have any questions, please feel free to contact Dartmouth's Title IX Coordinator or the Deputy Title IX Coordinator for the Guarini School. Their contact information can be found on the sexual respect website at: <https://sexual-respect.dartmouth.edu>.

Diversity & Inclusion

I would like to create a learning environment for my students that supports a diversity of thoughts, perspectives and experiences, and honors your identities (including race, gender, class, sexuality, religion, ability, etc.) To help accomplish this:

If you have a name and/or set of pronouns that differ from those that appear in your official college records, please let me know.

If you feel like your performance in the class is being impacted by your experiences outside of class, please don't hesitate to come and talk with me. I want to be a resource for you. Remember that you can also submit anonymous feedback (which will lead to me making a general announcement to the class, if necessary to address your concerns). If you prefer to speak with someone outside of the course, the Associate Dean of the College for Diversity Programs is an excellent resource.

I (like many people) am still in the process of learning about diverse perspectives and identities. If something was said in class (by anyone) that made you feel uncomfortable, please talk to me about it. (Again, anonymous feedback is always an option.)

As a participant in course discussions, you should also strive to honor the diversity of your classmates.

Socioeconomic Differences and Financial Difficulty

If you encounter financial challenges related to this class, please let me know.