# Taylor Witkin

tmwitkin@colby.edu 4000 Mayflower Hill Waterville, ME 04901-8840 (978) 618-5302

#### **EDUCATION**

## Colby College - Class of 2014

Waterville, ME

Major: Environmental Science; Marine Science concentration

## Relevant Course work

Freshman – ES118: Environment and Society, GE141: Earth and the Environment, MA121: Single Variable Calculus

Sophomore – ES352: Ecological Field Study (Belize), ES342: Marine Conservation and Policy, ES271: Introduction to Ecology, BI164: Cellular Basis of Life, BI164: Evolution and Diversity, EC133: Principles of Microeconomics, EC231: Natural Resource Economics. CH11a/b: General Chemistry (Brandeis University).

*Junior* – ES343: Environmental Change; GE397: Geologic Environments in the Marine Realm; ES358: Ecological Field Study (Moorea); MA212: Intro to Statistical Methods; ES352: Advanced and Applied Ecology; ES346: Global Food Policy

Senior – Environmental Policy Capstone: The State of Sustainable Fisheries in Maine; Honors Thesis: The Role of Underutilized Seafood in New England's Seafood System

#### RESEARCH EXPERIENCE

#### Fisheries and Socio-economics Intern

NOAA Pacific Islands Fisheries Science Center

Honolulu, HI

With the Human Dimensions Research Program researched social and economic issues within the small-boat fisheries in Hawaii and Guam. Assisted with an effort to improve catch and effort data to aid in stock assessments in Hawaii's fisheries. Analyzed interviews of fishermen for an assessment of the resilience of fishing communities in Hawaii. Created a literature review, which was published internally, analyzing the definitions of subsistence fishing from several regions around the world and how they correspond to the definition in Hawaii. Using surveys of fishermen from Hawaii and the Mariana Islands, conducted a meta-analysis to define and differentiate fishing labels within the fishery. I identified and compared patterns in fishing practices, catch uses, and perceptions of commercial and non-commercial fishing. Summer 2013.

#### Research Assistant – Environmental Studies

Colby College Waterville, ME

Researched the environmental and ecological sustainability of Community Supported Fisheries in North America. These environmental impacts include carbon footprint, targeted species and total catch amounts, gear types used and their affects on ecosystems, and response to fishing regulations by CSF fishers. We compared these data to fish sales in local grocery stores to identify the differences between CSFs and larger scale, non-local fisheries. September 2012 – August 2013.

## **Biological Science Technician**

James. J Howard Marine Sciences Laboratory

Sandy Hook, NJ

Worked for 10 weeks as a NOAA Northeast Fisheries Science Center Intern in the Life History and Recruitment Group of the Coastal Ecology Branch. Researched the potential effects of climate change on summer and winter flounder populations. Supported ongoing laboratory experiments and analyses. Implemented and maintained lab experiments on the effects of water temperature and non-genetic maternal characteristics on early life stages of summer flounder, including growth, development, and survival. Collected and summarized data from digital imaging of embryonic and larval fish. Summer 2011.

## Flats Ecology Intern

Cape Eleuthera Institute Eleuthera, Bahamas

As a member of the Flats Ecology and Conservation team, researched how climate change can affect economically important marine species (Queen and Milk conch, lobster, checkered puffer fish, school master snapper, blue crab). Ran static respirometry experiments, species collection, animal husbandry, water quality monitoring, data management and analysis, and trained new interns. Organized and managed weekly work schedules. Taught younger students about climate change research. Created a scientific poster: Effects of Ocean Acidification on Oxygen Consumption (MO<sub>2</sub>) of Queen and Milk Conch. Summer 2010.

#### **PUBLISHED WORKS**

Witkin, Taylor, "Bath, Maine: A City of Ships" (2012). *Historical Ecology Atlas of New England*. Paper 3. http://digitalcommons.colby.edu/heane/3

## ARTICLES UNDER REVIEW

Colby Domestic Environmental Policy Group. 2013. *State of Maine's Environment 2013: Sustainable Seafood Systems*. Waterville, Maine: Colby College Environmental Studies Program

McClenachan, L., Neal, B.P., Al-Abdulrazzak, D., Witkin, T., Fisher, K., Kittinger, J.N. 2013. Do Community Supported Fisheries (CSFs) Improve Fisheries Sustainability? Fisheries Research.

## ENVIRONMENTAL WORK

#### Volunteer

Cape Eleuthera Institute Lionfish Survey

Eleuthera, Bahamas

Through a series of dives (SCUBA), performed surveys of patch reefs to evaluate the effect of removing lionfish from invaded reefs on the recovery of native Bahamian reef-fish populations. Summer 2010.

REEF British Virgin Islands and Bahamas Contributed to reef clean-ups and fish and coral counts using SCUBA. Summers of 2006, 2007, 2009.

Venture Crew

New England

Member of an outdoor-leadership group. Planned, organized, and participated in hikes, camping trips, sea kayak trips, and rock climbing trips. 2007 – 2010.

## **SKILLS & INTERESTS**

## Language

Proficient in spoken and written French

## Software

Microsoft Excel, STATA, JMP 7, SPSS, Delta Graph, Abode Acrobat X Pro

# Certifications

PADI Rescue Diver, BasicPlus CPR, AED, and First Aid

## Interests

SCUBA, free diving, kayaking, Ultimate Frisbee, sailing, hiking, alpine skiing, cycling, rock climbing, travel.