

Hudson River Fish in an Ever-changing Ecosystem

Webinar Series February 25 to March 22, 2021 Hudson River Environmental Society and the Hudson River Foundation

Part One: Overview of the Fishes of the Hudson River Estuary and the Connected Waters February 25th 1:30-3:30

- Welcome and Introduction to the Webinar Series (10 min) James Morrison, President Hudson River Environmental Society & Clay Hiles, Executive Director Hudson River Foundation
- Biodiversity of the Hudson River Fish Community (25 min) John Waldman, Ph.D.
- The Charismatic Species & Their Pathways through the Estuary (30 min) *Karin Limburg*, *Ph.D*.
- Ecosystem Change and its Implications for Hudson River Fishes: An Overview (25 min) *Christopher Solomon, Ph.D.*
- Audience Questions (20 minutes)

Part Two: The Drivers of Change – Physical Alterations March 3rd 1:30-3:30

- Intro (5 min) James Morrison, President Hudson River Environmental Society
- Addressing Impacts of Power Generation on Fisheries Sustainability in the Hudson River (25 min). *John Boreman, Ph.D.*
- Morphological Changes to the Hudson River in the Past and Efforts to Reverse the Insult (25 min). *Daniel Miller*
- Barriers to Migration: Stress to Populations and Changing Public Perspective of Obsolete Dams (25 min). *George Jackman*
- Potential Stressors on the Horizon: Power Generation & Transmission, Storm Surge Barriers, and Anchorages. (25 min). Heather Gierloff
- Audience Questions (20 min)

This seminar series has been made possible with the support from the following organizations:





Part Three: The Drivers of Change – Climate and Introduced Species March 8th 1:30-3:30

- Intro (5 min). Clay Hiles, Executive Director Hudson River Foundation
- Ocean Warming and its Effects on Fish Populations in the Northeast United States (20 min.) *Katherine Mills, Ph.D.*
- Climate Effects on Fish Spawning Phenology (20 min). Christopher Nack
- Climate Change Drivers of Aquatic Habitats (SAV, Hudson River Tidal Wetlands, Shallows) (20 min). *Stuart Findlay*, *Ph.D*.
- Pathways to Invasions: The Species, Vectors for Introduction, and Potential Impact:
 - o Through a Glass Darkly: How Invasions of Organisms Other than Fish Might affect Hudson River Fish Communities. (20 min): *David Strayer*, *Ph.D.*
 - Fish Invaders on the Horizon: Status of Round Goby and Other Threats (20 min):
 Scott George
- Audience Questions (15 min)

Part Four: The Drivers of Change – The Science of Harvest March 15th 1:30-3:30

- Intro (5 min) James Morrison, President Hudson River Environmental Society
- Coastal Fisheries and Hudson River Anadromous Species (20 min). *Isaac Wirgin, Ph.D.*
- Managing Hudson River Fish for Commercial Harvest and Recreation (20 min). *Gregg Kenney*
- Impact of Atlantic Ocean Bycatch (20 min). David Secor, Ph.D.
- The Striped Bass Recovery: A Harbinger of the Trade-offs and Challenges of Modern Fisheries Management (20 min). *Olaf Jensen, Ph.D.*
- Incorporating Climate Induced Changes into Fisheries Monitoring, Assessment and Management. (20 min). *Yong Chen, Ph.D.*
- Audience Questions (20 min)

Part Five: Making Sense of it All March 22nd 1:30-3:30

- Intro (5 min). Clay Hiles, Executive Director Hudson River Foundation
- Celebrating Dennis Suszkowski (20 min). Clay Hiles
- What are the critical knowledge gaps and priority research areas? Report out from the invited sessions (10 min each):
 - o Planning Hudson River Fisheries Science *Jonathan Kramer*, *Ph.D.*
 - o Ecosystem Research Perspective Christopher Solomon, Ph.D.
 - o Fisheries Management Perspective. *Gregg Kenney*
 - o Physical Alterations Heather Gierloff
 - o Climate Driven Changes in Fisheries Katherine Mills, Ph.D.
 - o Introduced Species David Strayer, Ph.D.



• Panel Discussion and Open Forum (30 min). *Jonathan Kramer, Ph.D.*

Symposium Speakers and Facilitators

Speakers

John Boreman, Ph.D.

Department of Applied Ecology North Carolina State University, Raleigh, NC

Yong Chen, Ph.D.

School of Marine Science University of Maine, Orono, ME

Stuart Findlay, Ph.D.

Cary Institute of Ecosystem Studies, Millbrook, NY

Scott George

U.S. Geological Survey New York Water Science Center, Troy, NY

Heather Gierloff

Hudson River National Estuarine Research Reserve Department of Environmental Conservation, Staatsburg, NY

George Jackman

Hudson River Riverkeeper, Ossining, NY

Olaf Jensen, Ph.D.

Center for Limnology University of Wisconsin-Madison, Madison, WI

Gregg Kenney

Department of Environmental Conservation, Division of Marine Resources, New Paltz, NY

Karin Limburg, Ph.D.

SUNY College of Environmental Science and Forestry Environmental and Forest Biology, Syracuse, NY

Daniel Miller

Hudson River Estuary Program
Department of Environmental Conservation,
Staatsburg, NY

Katherine Mills, Ph.D.

Gulf of Maine Research Institute Portland, ME

Christopher Nack

SUNY College of Environmental Science and Forestry O'Brien and Gere, a part of Ramboll

David Secor, Ph.D.

Chesapeake Biological Laboratory University of Maryland

Christopher Solomon, Ph.D.

Cary Institute of Ecosystem Studies, Millbrook, NY

David Strayer, Ph.D.

Cary Institute of Ecosystem Studies, Millbrook, NY

John Waldman, Ph.D.

Queens College, CUNY, Queens, NY

Isaac Wirgin, Ph.D.

New York University Grossman School of Medicine, New York, NY

Facilitators

Clay Hiles

Hudson River Foundation, New York, NY

Jonathan Kramer, Ph.D.

National Socio-Environmental Synthesis Center University of Maryland, Annapolis, MD

James Lodge

Hudson River Foundation, New York, NY

James Morrison

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Chuck Nieder

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