



## Summary of Scientific and Statistical Committee Membership

May 2023

Below is a list of current Mid-Atlantic Council SSC membership, their affiliation, and area(s) of expertise. To review a short bio on each member, click on the applicant's name in the table or use the bookmarks on the left hand side of the pdf (only available in Firefox or Adobe Reader/Acrobat).

Name	Affiliation	Expertise
<a href="#">Dr. Paul Rago</a> (Chairman)	NMFS Northeast Fisheries Science Center, Population Dynamics Branch (retired)	Stock assessment methods and modeling, survey design and cooperative research
<a href="#">Dr. Michael Wilberg</a> (Vice-Chairman)	University of Maryland Center for Environmental Science, Chesapeake Biological Laboratory	Population dynamics, stock assessments, management strategy evaluation, fisheries management
<a href="#">Dr. John Boreman</a>	National Marine Fisheries Service (retired)	Fisheries ecology, science and management, anadromous fish, habitat
<a href="#">Dr. Geret DePiper</a>	NMFS Northeast Fisheries Science Center, Social Science Branch	Economics, ecosystem science, socioeconomic trade-offs
<a href="#">Dr. Gavin Fay</a>	University of Massachusetts Dartmouth's School of Marine Science and Technology	Stock assessments, ecosystem science, and management strategy evaluation
<a href="#">Dr. Michael Frisk</a>	Stony Brook University, School of Atmospheric and Marine Sciences	Population dynamics, fisheries ecology, elasmobranch and teleost species
<a href="#">Dr. Wendy Gabriel</a>	NMFS Northeast Fisheries Science Center, Populations and Ecosystems Monitoring and Analysis Division (retired)	Statistics, fishery-independent survey and gear design, stock assessments
<a href="#">Dr. Sarah Gaichas</a>	NMFS Northeast Fisheries Science Center, Ecosystem Dynamics and Assessment Branch	Ecosystem modeling, integrated ecosystem assessment, management strategy evaluation
<a href="#">Dr. Mark Holliday</a>	NMFS Office of Policy (retired)	Economics, survey design and statistics, collaborative research, fisheries policy
<a href="#">Dr. Jorge Holzer</a>	University of Maryland, Dept of Agricultural and Resource Economics	Economics, allocation, recreational fisheries, multispecies fisheries
<a href="#">Dr. Edward Houde</a>	University of Maryland Center for Environmental Science, Chesapeake Biological Laboratory (retired)	Fisheries ecology, forage species, early life history, ecosystem science
<a href="#">Dr. Olaf Jensen</a>	University of Wisconsin-Madison, Department of Integrative Biology	Stock assessments and modeling, ecosystem and climate science, fisheries management

<a href="#">Dr. Yan Jiao</a>	Virginia Polytechnical Institute and State University (Virginia Tech), Department of Fish and Wildlife Conservation	Population dynamics, stock assessments and modeling, statistical computing
<a href="#">Dr. Cynthia Jones</a>	Old Dominion University, Ocean, Earth and Atmospheric Sciences	Statistics, recreational data collection programs, age and growth, stock assessments
<a href="#">Dr. Robert Latour</a>	Virginia Institute of Marine Sciences, College of William and Mary	Quantitative fisheries ecology, ecosystem science, predator-prey relationships, population dynamics
<a href="#">Dr. Tom Miller</a>	University of Maryland Center for Environmental Science, Chesapeake Biological Laboratory	Fisheries ecology, early life history, population dynamics, experimental design
<a href="#">Dr. Brian Rothschild</a>	University of Massachusetts Dartmouth's School of Marine Science and Technology	Stock assessments, fisheries science and ecology, population dynamics and modeling
<a href="#">Dr. Andrew Scheld</a>	Department of Fisheries Science, Virginia Institute of Marine Sciences, College of William and Mary	Economics, fisheries science, recreational fisheries, gear interactions, offshore wind
<a href="#">Dr. David Secor</a>	University of Maryland Center for Environmental Science, Chesapeake Biological Laboratory	Fisheries ecology and migration, age and growth, ecosystem and climate science, offshore wind
<a href="#">Dr. Alexei Sharov</a>	Maryland Department of Natural Resources, Fisheries Service	Stock assessments, survey design, ecosystem and multi-species science

# Mid-Atlantic Council Scientific and Statistical Committee (SSC)

## Current Membership Short Bios

2023

### Dr. Paul Rago (Chairman)

*Chief, Population Dynamics Branch, NMFS Northeast Fisheries Science Center (Retired)*

**SSC member since 2016**

**Bio:** Dr. Rago led over 40 fishery scientists to assess the status of finfish and shellfish stocks in the Northeast US. His stock assessment experience includes nearly all the stocks in the Northeast US and several in other countries. Research interests include quantitative analyses of populations, graphical methods for exploratory data analysis, experimental estimation of gear efficiency, design of bycatch monitoring programs, and cooperative research programs with industry. With the U.S. Fish and Wildlife Service (1978-1992) Rago served as research coordinator of the Emergency Striped Bass Study and a variety of Atlantic salmon studies.

### Dr. Michael Wilberg (Vice-Chairman)

*Professor, University of Maryland Center for Environmental Science, Chesapeake Biological Laboratory*

**SSC member since 2008**

**Bio:** Dr. Wilberg joined the staff at CBL in 2006 as an assistant professor. His research interests include population dynamics and fisheries management of a range of fish and shellfish species, including oysters, blue crabs, American eel, paddlefish, and summer flounder; application, development, and evaluation of stock assessment methods; fisheries population dynamics; decision analysis; statistical estimation and modeling in ecology; ecosystem-based management. He teaches graduate courses in fisheries science and management and advanced population dynamics and assessment.

### Dr. John Boreman

*National Marine Fisheries Service (Retired)*

**SSC member since 2008**

**Bio:** Dr. Boreman has a distinguished career as a federal fisheries scientist with both NOAA and the U.S. Fish and Wildlife Service. He served as Director of the NMFS Office of Science and Technology, the Science and Research Director of the NMFS Northeast Fisheries Science Center (NEFSC), the Director of the NEFSC Cooperative Marine Education and Research Program and adjunct professor of fisheries at the University of Massachusetts. He is also an AFS-certified fisheries scientist. Research interests focused on freshwater and anadromous fish, particularly how their populations are affected by power plant operations and studied coastal migratory and anadromous fish, notably striped bass restoration efforts in the Northeastern U.S. In recognition of his professional activities, Dr. Boreman has received

numerous awards including: the Department of Commerce's Bronze Medal, the Agency Employee of the Year, the Council's Ricks E. Savage award, and the American Fisheries Society Oscar E. Sette Award.

## Dr. Geret DePiper

*Research Economist, Social Sciences Branch, NMFS Northeast Fisheries Science Center*

**SSC member since 2020**

**Bio:** Dr. DePiper's primary research interests focus on coupled bioeconomic models to assist in the development of ecosystem based management, behavioral models to assess historical and likely future responses to changes in fisheries management, and statistical models of fishing location to better understand how and where people fish. Dr. DePiper serves on ten regional, national, and international working groups developing capacity to integrate economics into marine management decision-making, particularly with respect to ecosystem-based management. He currently serves on NOAA's Integrated Ecosystem Assessment Steering Committee and Chairs the SSC's Economic Work Group.

## Dr. Gavin Fay

*Assistant Professor, University of Massachusetts Dartmouth, School for Marine Science and Technology*

**SSC member since 2020**

**Bio:** Dr. Fay joined the faculty at University of Massachusetts Dartmouth's School for Marine Science and Technology (SMAST) in 2014. His research group focuses on developing and testing quantitative modeling tools used for assessment and management of living marine resources, with emphasis on considering the performance of management methods given an ecosystem and socio-ecological system perspective. Areas of research interest include statistical modeling, fisheries assessment and management strategy evaluation, and ecosystem-based fisheries management (EBFM). Previously he worked as a postdoctoral researcher at NOAA Northeast Fisheries Science Center in Woods Hole and at CSIRO Oceans and Atmosphere in Hobart, Australia. He currently serves on the New England Fishery Management Council's Ecosystem-Based Fisheries Management Plan Development Team. Teaching activity at UMass Dartmouth includes courses in biological statistics, fisheries population modeling, data science, science communication, and EBFM.

## Dr. Michael Frisk

*Professor, Stony Brook University, School of Atmospheric and Marine Sciences*

**SSC member since 2010**

**Bio:** Dr. Frisk's research focuses on the interaction of population dynamics, ecology and life history evolution in fishes in the general areas of applied ecosystem and population modeling, basic ecological questions and meta-analyses. He is developing a length-based statistical catch-at-age model for winter skate in the western Atlantic and a multi-species model of Delaware Bay using Ecopath and Ecosim. Knowledge of a species' basic vital rates and ecology is essential for development of population models and management. For example, Dr. Frisk has estimated growth, age, fecundity and maturation for little

skate and winter skate in the western Atlantic. Lastly, meta-analyses use previously published data to develop mathematical and statistical trends of related species to gain insight into the ecology, evolution and management of animal taxa. In this vein, Frisk's current research focuses on developing meta-analyses for elasmobranchs and teleost species.

## Dr. Wendy Gabriel

*Chief, Populations and Ecosystems Monitoring and Analysis Division, NMFS Northeast Fisheries Science Center (Retired)*

**SSC member since 2000**

**Bio:** After two years on the faculty of the Department of Forestry and Wildlife, UMass Amherst, Dr. Gabriel moved to the Population Dynamics Branch as a statistician. In that capacity, she has worked on assessments of bluefin tuna, Antarctic notothenids and icefish, and Kemp's Ridley sea turtles as well as summer flounder, winter flounder, yellowtail flounder, and scup. Her research has included groundfish community structure, technological interactions, and biological reference points (including spawning stock biomass per recruit analysis). She has worked on a number of international stock assessment and methodology working groups with the Commission for the Conservation of Antarctic Living Marine Resources, and the International Commission for the Exploration of the Sea; and was the US representative to the former ICES Advisory Committee on Fishery Management. She then led the new Fisheries and Ecosystems Monitoring and Analysis Division through the modernization of fishery-independent survey data collection processes and gear instrumentation; and the expansion of the fisheries observer program to meet new court-ordered and regulatory requirements.

## Dr. Sarah Gaichas

*Research Fishery Biologist, Ecosystem Dynamics and Assessment Branch, NMFS Northeast Fisheries Science Center*

**SSC member since 2014**

**Bio:** Dr. Gaichas primary research is on integrated ecosystem assessment, management strategy evaluation, and ecosystem modeling and she has been active in ecosystem reporting and management strategy evaluation for both the Mid-Atlantic and New England Fishery Management Councils. Her duties include developing, testing, and using ecosystem data, indicators, and models in natural resource management, and simulation testing management strategies (including analytical tools) that address the needs of diverse ecosystem users. Sarah previously worked at the NMFS Alaska Fisheries Science Center in Seattle, WA from 1997-2011 as an observer program analyst, a stock assessment scientist, and an ecosystem modeler.

## Dr. Mark Holliday

*Director, NMFS Office of Policy (Retired)*

**SSC member since 2000**

**Bio:** Dr. Holliday spent 34 years working for the National Marine Fisheries Service, entering as a survey statistician, progressing to Chief of the Fisheries Statistics and Economics Division in the Office of Science and Technology, and after a transition year as the Agency's Chief Financial Officer, spent the last 10 years of his career as the NMFS Director of Policy until retiring in 2014. His accomplishments include building a nation-wide fishery economics and social science work force and research capacity throughout the agency. Dr. Holliday's experience and expertise covers a broad expanse of scientific and policy issues associated with data collection design, execution and dissemination, confidentiality, electronic reporting, collaborative fishing industry research, observers, fisheries management, and fisheries economics and social science. In addition, he worked on budgets and legislation with Congress and have served as an advisor/representative of the agency to other federal, state and interstate organizations and international science organizations. His graduate education research focused on Atlantic bluefin tuna food habits (thesis) and limited entry fishery management policy options for the New England groundfish fishery (dissertation).

## Dr. Jorge Holzer

*Associate Professor, University of Maryland, Department of Agriculture and Resource Economics*

**SSC member since 2020**

**Bio:** Dr. Holzer is an associate professor in the Department of Agricultural and Resource Economics at the University of Maryland, College Park. His research interests are in the fields of natural resource economics, environmental economics and applied microeconomics, with a particular focus on marine resources and the allocation of harvesting rights. His work ranges from the design of market-based mechanisms and conservation auctions to non-market valuation, especially recreational fisheries. He is currently a member of the Chesapeake Bay Program Sustainable Fisheries Goal Implementation Team (GIT), vice-chair and Maryland's state representative to the Atlantic States Marine Fisheries Commission's Committee on Economics and Social Sciences (CESS), member of the International Council for the Exploration of the Sea (ICES) Working Group on Economics, and an affiliate of Maryland Sea Grant. He teaches PhD. Level courses in natural resource economics and applied microeconomics.

## Dr. Edward Houde

*Professor and Vice-President of Education, University of Maryland Center for Environmental Science, Chesapeake Biological Laboratory (Retired)*

**SSC member since 2000**

**Bio:** Dr. Houde has more than 50 years of experiences in fisheries science and ecology, and in management of fisheries resources. Research interests include fisheries science and management, larval fish ecology, and fisheries oceanography. He taught graduate courses in fisheries science and ecology, and mentored numerous graduate students. Dr. Houde served as Director of the National Science Foundation's Biological Oceanography Program from 1983-85. He is the recipient of the Beverton (Fisheries Society of the British Isles), Sette (Am. Fish. Soc., Marine Fisheries Section), and Ahlstrom (Am. Fish. Soc., Early Life History Section) Awards for career achievement, and is a Fellow of the American Association for the Advancement of Science. He has served on numerous committees and panels, including the Ocean Studies Board of the National Research Council, the National Marine Fisheries Service's Ecosystem Principles Advisory Panel, and as Chair of the National Academy of Science's Committee on Marine Protected Areas. Dr. Houde co-chaired the Technical Advisory Panel that developed a Fisheries Ecosystem Plan for Chesapeake Bay. In addition to the SSC, notable appointments to advisory boards include the Independent Science Board for the California Delta Stewardship Council, the Science and Engineering Board for the Louisiana Office of Coastal Protection and Restoration, the Lenfest Foundation Forage Fish Task Force and the Visioning and Strategic Planning Working Group of the Mid-Atlantic Fishery Management Council. Dr. Houde was the U.S. Co-Delegate to the International Council for the Exploration of the Sea.

## Dr. Olaf Jensen

*Associate Professor, University of Wisconsin-Madison Center for Limnology, Department of Integrative Biology*

**SSC member since 2014**

**Bio:** Dr. Jensen joined the Department of Integrative Biology at the University of Wisconsin-Madison in 2020. Prior to joining the University of Wisconsin-Madison, Dr. Jensen was an Assistant Professor in the Department of Marine & Coastal Sciences at Rutgers University. Dr. Jensen's research is focused on fisheries and aquatic ecosystems - including marine, estuarine, and freshwater environments. His lab studies fisheries as an entire social-ecological system including a wild fish or invertebrate population, as well as the fishermen and processors who harvest and sell the fish (in a commercial fishery), and the managers who regulate the fishery to prevent overharvest. His research ranges from field studies of endangered salmonids in Mongolia to meta-analysis of stock assessment data to better understand fish population dynamics. Specific focus areas include: (1) the impacts of climate change on rivers, lakes, and their fish communities, (2) use of chemical biomarkers (stable isotopes and fatty acids) to understand aquatic food webs, and (3) stock assessment and management of fisheries.

## Dr. Yan Jiao

*Professor, Virginia Polytechnic Institute and State University (Virginia Tech), Department of Fish and Wildlife Conservation*

**SSC member since 2008**

**Bio:** Dr. Jiao joined Virginia Tech as an assistant professor in 2005. Her research interests are to unravel the complex dynamics that govern fish populations and the sustainable management of aquatic resources. Dr. Jiao's research areas of expertise include population dynamics and stock assessment, demographic analysis, risk analysis, decision analysis and adaptive management in fisheries, fisheries ecology, and statistical computing. Her lab works on developing and evaluating models given data availability and life history types to assess fish stocks, investigate population dynamics, and predict the impacts of environmental changes and alternative management strategies on fisheries. Her recent research focus includes spatial-temporal dynamics and its modeling in fisheries, climate-driven Bayesian nonstationary population dynamics modeling, and quantification of species interaction.

## Dr. Cynthia Jones

*Professor and Eminent Scholar of Ocean, Earth and Atmospheric Sciences, Old Dominion University*

**SSC member since 2000**

**Bio:** Dr. Jones is the Director of the Center for Quantitative Fisheries Ecology at Old Dominion. Research has covered fish from the Arctic through the temperate regions to the Antarctic. Studies include: demography based on age evaluation, stock assessment, environmental effects on habitat, otolith chemistry for assess movement and migration, recreational angler surveys, simulation modeling and quantitative statistics. Dr. Jones has won numerous national research awards and authored two papers selected as Best Paper by the American Fisheries Society.

## Dr. Robert Latour

*Professor of Marine Science, Virginia Institute of Marine Sciences*

**SSC member since 2008**

**Bio:** Dr. Latour joined the VIMS faculty as a research assistant professor in 2001. Research interests include quantitative fisheries ecology with particular emphasis on predator-prey interactions and ecosystem-based approaches to fisheries management. Population dynamics modeling and stock assessment of exploited marine resources. Dr. Latour directs a large research group dedicated to the collection and analysis of fisheries-independent data for species inhabiting the Chesapeake Bay and mid-Atlantic Bight in support of traditional and ecosystem approaches to fisheries management.



## Dr. Thomas Miller

*Professor and Director, University of Maryland Center for Environmental Science, Chesapeake Biological Laboratory*

**SSC member since 2002**

**Bio:** Dr. Miller was initially appointed to the CBL faculty in 1994 and became director in 2011. During his career, he has been a leader in the development of approaches to manage several Chesapeake Bay species, including crabs and striped bass, combining laboratory, field and modeling approaches to address questions of interest to society. Most recently, his research has focused on both the effects of ocean acidification on blue crab, recruitment issues in menhaden and striped bass and stakeholder involvement in recreational fisheries. His work has been funded by a diverse array of agencies including NSF, NOAA, EPA, Maryland Sea Grant and the Gordon and Betty Moore Foundation. He is a Governor's Appointee to the Patuxent River Commission, and the Board of the Chesapeake Bay Trust. Dr. Miller previously served on the Maryland Task Force on Ocean Acidification. He has been the recipient of the President's Award for the Application of Science at UMCES and received the 2015 USM Regents' Faculty Award for Public Service, the highest honor that the Board bestows to recognize exemplary faculty achievement. Dr. Miller is a two-time recipient of the Graduate Education Award for excellence in teaching from the Marine Estuarine Environmental Sciences program at the University of Maryland.

## Dr. Brian Rothschild

*Charter Professor of Marine Science and founding Dean of UMass Dartmouth's School for Marine Science and Technology*

**SSC member since 2008**

**Bio:** Prior to joining UMass, Dr. Rothschild held professorships at the University of Maryland and the University of Washington. He has had faculty or visiting scientist affiliations with the University of Hawaii, Cornell University, Scripps Institution of Oceanography, Rosensteil School of Marine and Atmospheric Science, University of Miami, Institut fur Meereskunde, University of Kiel, Woods Hole Oceanographic Institution, and Harvard University. He has served as Senior Policy Advisor to the Administrator of NOAA. He managed NOAA's implementation of the Fisheries Conservation and Management Act of 1976. He has consulted for the governments of the United Kingdom, Korea, Egypt, Peru, France, and the Republic of Ireland on various aspects of oceanography and fishery management. His research has contributed to the fundamental understanding of fish stock recruitment. In 2003, Dr. Rothschild received the American Institute of Fishery Research Biologists Outstanding Achievement Award. In 2007 he received the NOAA Sustainability Fisheries Leadership Award. In 2011, Dr. Rothschild received the Oscar Elton Sette Award, which is given to an individual who has sustained excellence in marine fishery biology through research, teaching, and administration. In 2012, Dr. Rothschild received the Man of the Year Award from the Prince Henry Society of Massachusetts and the Highliner Lifetime Achievement Award from National Fisherman magazine. He was appointed as the 2015 Hjort Scholar at the Institute of Marine Research in Norway.

## Dr. Andrew Scheld

*Associate Professor, Department of Fisheries Science, Virginia Institute of Marine Sciences*

**SSC member since 2023**

**Bio:** Dr. Scheld's research uses econometric, statistical, and simulation modeling approaches to investigate fisher decision-making and behavior in recreational and commercial fisheries, the economic effects of rights-based fisheries management, ocean use-conflict and spatial management, and the economic costs of marine debris and derelict fishing gear. He collects primary data to inform model development through interviews, focus groups, participatory processes, and stated preference surveys. Dr. Scheld is a member of the Committee on Economics and Social Sciences of the Atlantic States Marine Fisheries Commission, a research advisor to the Responsible Offshore Science Alliance, and a science advisor to the Coastal Virginia Offshore Wind project. He teaches graduate courses in fisheries science and management, marine policy, and marine resource economics.

## Dr. David Secor

*Regents Professor, University of Maryland Center for Environmental Science, Chesapeake Biological Laboratory*

**SSC member since 2010**

**Bio:** Dr. Secor and his group study marine fish migration — research questions that are responsive to fisheries stewardship, threatened species, ecosystem management, and offshore wind development. This research occurs at large regional scales and employs pioneering approaches in animal biotelemetry and hard-part chemistry. Much of their work engages commercial and recreational fishers. In 2010, the University System of Maryland conferred the Regents Award for contributions to international Atlantic bluefin tuna science and management. In 2015, Johns Hopkins published his book *Migration Ecology of Marine Fishes*, the first on the topic in 50 years. Dr. Secor has participated in numerous international, national, regional, and state advisory bodies, mostly concerning fisheries stewardship, threatened species, and ecosystem management. In these roles, he has helped derive water quality standards for Chesapeake Bay fishes, successfully petitioned NOAA to designate the Nanticoke River as critical sturgeon habitat, provided key science in managing trans-boundary stocks of striped bass, bluefin tuna and Atlantic mackerel; and supplied guidance on the impacts of offshore wind development on fishery resources.

## Dr. Alexei Sharov

*Program Chief, Stock Assessment and Analysis Program, Maryland Department of Natural Resources, Fisheries and Boating Services*

**SSC member since 2020**

**Bio:** Dr. Sharov is the head of Stock Assessment and Analysis Program, Fisheries and Boating Service, Maryland Department of Natural Resources. He is responsible for the quantitative evaluation of Chesapeake Bay and Atlantic coast fishery resources and management advice. Dr. Sharov received his Master's and Ph. D degrees from the Lomonosov's Moscow State University, Moscow, Russia. He has

more than 30 years of experience in fish stock assessment and fishery management, having worked in the past for the Russian Institute of Marine Fisheries and Oceanography (VINRO), University of Maryland and University of Massachusetts, Maryland Department of Natural Resources. He serves as member of a number of Technical and Stock Assessment Committees of the Atlantic States Marine Fisheries Commission. Dr. Sharov served as an independent expert or reviewer for multiple US agencies, including NOAA Northeast and Southeast Fisheries Science Centers, US/Canada Transboundary Assessment Committee, Fish and Wildlife Service. He also provided scientific advice for Food and Agriculture Organization (FAO), Convention on International Trade in Endangered Species (CITES) and Marine Stewardship Council (MSC).