# John W. Virdin

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# **Summary of Professional Experience**

John Virdin has a total of over twenty years' experience in studying and advising government policies to regulate human use of the oceans, particularly marine conservation policies to reduce poverty throughout the tropics. His focus has been largely on managing fisheries for food and livelihoods, expanding to broader ocean-based economic development policies, coastal adaptation and more recently reducing ocean plastic pollution. He directs the Oceans and Coastal Policy Program at the Nicholas Institute for Environmental Policy Solutions, aiming to connect Duke University's science and ideas to help policy-makers solve ocean sustainability problems. He has collaborated in this effort with the United Nations Food and Agriculture Organization and the United Nations Environment Program, as well as regional organizations such as the Abidjan Convention secretariat, the Organization of Eastern Caribbean States, the Sub-Regional Fisheries Commission of West Africa and the Parties to the Nauru Agreement for tuna fisheries management in the Western Pacific. He co-created and teaches an introductory course for undergraduate students to understand the role of ocean policy in helping solve many of society's most pressing development challenges on land. His work has been published in books, edited volumes and a number of professional journals, including Nature Ecology and Evolution, Ecosystem Services, Environment International, Fish and Fisheries and Marine Policy, as well as contributing to China Dialogue, the Conversation, the Economist Intelligence Unit and the Hill.

Prior to coming to Duke in early 2015, he worked for 12 years at the World Bank, helping the organization increase its funding for ocean conservation and fisheries management to more than \$1 billion. His work led to the development of programs that provided more than \$125 million in funding for improved fisheries management in six West African states and some \$40 million for fisheries and ocean conservation in a number of Pacific Island states. He supported and acted as program manager for the World Bank's Global Partnership for Oceans, a coalition of more than 150 governments, companies, non-governmental organizations, philanthropies and multilateral agencies from 2012 through 2014.

#### Education

Ph.D., Marine Policy, Delaware College of Earth, Ocean and Environment, Newark, DE, 2016 M.E.S., Environmental Studies, Yale School of Forestry and Environmental Studies, New Haven, CT, 1999 B.A., Political Science (cum laude), Wake Forest University, Winston-Salem, NC, 1997

# **Professional Experience**

2015 – Present **Duke University Nicholas Institute for Environmental Policy Solutions**, Durham, NC *Director of the Oceans & Coastal Policy Program* 

Responsible for development and implementation of the Institute's program to connect the University's expertise to help decision-makers sustainably manage ocean resources, with a focus on (i) fisheries and food security, (ii) the blue economy and marine ecosystem

services, (iii) blue carbon and adaptation to climate change, and (iv) oceanic plastic pollution. Selected projects ongoing/completed to date include:

- Small-scale fisheries governance and food security: Co-Principal Investigator in a global assessment of the contributions of small-scale fisheries to sustainable development, together with the United Nations Food and Agriculture Organization and WorldFish Center, to be completed in 2021
- Blue economy policy research in Bangladesh, the Caribbean and United States: Collaboration with the World Bank and Center for the Blue Economy to assess the policy implications of the blue economy concept for the Government of Bangladesh, collaborated with the Organization of Eastern Caribbean States Secretariat and the World Bank on defining the blue economy concept in the Caribbean, and collaborated with the North Carolina Sea Grant Office to measure the ocean economy in the state of North Carolina
- Global coral reef policy analysis: Collaboration with the United Nations Environment Program to analyze the design of international and regional policy instruments to address drivers of change in coral reef ecosystems
- Global plastic pollution policy analysis: Collaboration with the Pew Charitable Trusts to co-lead a research team compiling a global inventory of public policy responses to plastic pollution in the oceans, and analysis of the instruments used by governments in these responses

# 2016 – Present **Duke University Nicholas School of the Environment**, Durham, NC

Adjunct Assistant Professor to the Nicholas School for the Environment

- Co-created and co-teaches a course for undergraduates "Managing the Oceans to Solve Global Problems"
- Advises graduate students on selected topics in applied ocean policy analysis

#### 2012 – 2014 World Bank, Washington, DC

Acting Program Manager for the Global Partnership for Oceans; Senior Natural Resource Management Specialist – Advising on oceans and fisheries governance across the institution's portfolio

- World Bank lending portfolio for oceans: Provided technical guidance as part of a team supporting the World Bank's overall lending portfolio for sustainable oceans, including leading the development of the Pacific Islands Regional Oceanscape Program to provide an estimated \$75 million to 9 Pacific Island Countries, and supporting the expansion of the West Africa Regional Fisheries Program
- Global Partnership for Oceans: Helped develop the conceptual framework for the Global Partnership for Oceans, a coalition of over 150 Governments, companies, civil society organizations, foundations and multilateral agencies formed from 2012 2014 to support countries to reform the institutions governing the use of the ocean under their jurisdiction

# 2004 – 2011 World Bank, Washington, DC

Senior Natural Resource Management Specialist – Developing and supporting investments to strengthen fisheries institutions throughout Africa

West Africa Fisheries Governance Reform: Led the preparation of the conceptual
framework and supervision of the implementation of a \$125 million investment
program in 9 West African countries to help strengthen and reform the institutions
governing the fisheries, including supporting surveillance and enforcement operations

- Senegal Community Fisheries Management: Led the preparation of the conceptual framework and supervision of the implementation a \$9.5 million project to expand a network of support for community institutions managing defined coastal fisheries, as well as supervised investments in the management of coastal parks and protected areas
- Strategic partnership to support fisheries governance reform across Africa: Helped develop and then led the supervision of a 10-year, \$60 million investment fund to support fisheries institutional reforms in Africa, in partnership with the United Nations Food and Agriculture Organization and World Wide Fund for Nature

# Supporting Institutional Development for Marine Conservation

• Guinea-Bissau Network of Coastal Protected Areas: Led the supervision of a \$11.0 million project to create a national network of 5 coastal protected areas, as well as improved economic development for the rural communities living in these areas, and helped to establish a private foundation to fund the protected areas network and develop a business case for sale of 'blue carbon' credits to support the network

# 2001 – 2004 World Bank, Washington, DC

Consultant – Supporting a World Bank strategy to promote fisheries institutional reform

- One of the principal authors of a World Bank Fisheries Approach Paper, which served as the basis for the institution's re-engagement in the fisheries sector.
- Conducted analytical work on the fisheries in Senegal and Guinea-Bissau, to help the Governments develop national strategies for fisheries institutional reform
- Helped prepare a \$75 million investment to support the introduction of community institutions for management of coral reef fisheries in 6 districts in Eastern Indonesia

# 2001 – 2002 **World Resources Institute**, Washington, DC

Fellow, Biological Resources Program; Climate, Energy & Pollution Program

Worked with the Government of Trinidad & Tobago, University of the West Indies
and the Council of Presidents of Environmental NGOs, to develop a project proposal
for the Global Environment Facility to promote institutions for collaborative
management of coastal ecosystems in Trinidad & Tobago, focused on adaptation
responses to climate change

# 2001 – 2002 Coast Alliance, Washington, DC

Consultant, through Yale Center for Coastal & Watershed Systems

• Conducted in-depth economic study funded by the Munson Foundation on the impacts of development on coastal barrier island ecosystems in the United States, including focused site analysis on leeward wetlands and mangroves in Lee County, Florida.

#### Winter 2000/01 World Conservation Network (IUCN), Washington, DC

Consultant, Marine Program – Coastal Adaptation Responses to Climate Change

 Created Coastal Adaptation Partnership, a network of coastal ecosystem scientists collaborating to promote responses to climate change in coastal communities

# October, 2000 World Wide Fund for Nature, Washington, DC

Consultant, Sustainable Commerce Program – Focused on Fishing Subsidies

Conducted a study on the nature of government subsidies to the global fishing industry

# 2000 World Bank, Washington, DC

Consultant – Reviewing Community Institutions for Fisheries Management in the Pacific

 Assisted in drafting the Pacific Islands Regional Economic Report, co-authored the Coastal Management chapter assessing potential models to strengthen institutions for community management of coastal fisheries

# Summer 1999 World Bank, Washington, DC

Summer Internship – Coastal Fisheries Management

• Thesis work and research on institutions for community management of coastal fisheries in the Pacific – New Caledonia, Fiji, and New Zealand

# Spring 1999 Environmental Law Clinic, Yale University, New Haven, CT

Consultant, IUCN Marine Program – International Fisheries Access Agreements

 Collaboration with small research team to examine international fishing access agreements between the European Union and West Africa, with respect to World Trade Organization subsidies violations

# Winter 1999 World Bank, Washington, DC

Consultant, Rural Development Department – Supported a Global Fisheries Partnership

 Assistance in designing the proposal for a Forum for Sustainable Fisheries -- a global coalition of public/private donors, NGOs, and client countries to improve fisheries management

# Summer 1998 World Bank, Washington, DC

Summer Internship, Rural Development Department – Global Fisheries Management

• Extensive work in the creation of the Forum for Sustainable Fisheries

#### **Peer-Reviewed Publications**

2020 Schmaltz, E., Melvin, E.C., Diana, Z., Gunady, E.F., Rittshof, D., Somarelli, J.A., **Virdin, J**. and M. M. Dunphy-Daly. 2020. Plastic pollution solutions: emerging technologies to prevent and collect marine plastic pollution. *Environment International* 144 (2020): 106067

- Cisneros-Montemayor, A., Ota, Y., Bailey, M., Hicks, C.C., Khan, A.S., Rogers, A., Sumaila, U.R., **Virdin, J.** and K.K. He. 2020. Changing the narrative on fisheries subsidies reform: enabling transitions to achieve SDG 14.6 and beyond. *Marine Policy* 117 (2020): <a href="https://doi.org/10.1016/j.marpol.2020.103970">https://doi.org/10.1016/j.marpol.2020.103970</a>
- Belhabib, D., Cheung, W.W.L., Kroodsma, D., Lam, V.W.Y., Underwood, P.J. and J. Virdin. 2020. Catching industrial fishing incursions into inshore waters of Africa from space. *Fish and Fisheries* 21(2): 379-392
- Patil, P., **Virdin, J.**, Colgan, C.S., Hussain, M.G., Failler, P. and T. Vegh. 2019. Initial measures of the economic activity linked to Bangladesh's ocean space, and implications for the country's blue economy policy objectives. *Journal of Ocean and Coastal Economics* 6 (2): <a href="https://doi.org/10.15351/2373-8456.1119">https://doi.org/10.15351/2373-8456.1119</a>; cross-published in *Journal of Indian Ocean Rim Studies* 3(1): 1-13
- Virdin, J., Kobayashi, M., Akester, S., Vegh, T. and S. Cunningham. 2019. West Africa's coastal bottom trawl fishery: initial examination of a trade in fishing services. *Marine Policy* 100 (2019): 288-297

- Drakou, E.G., **Virdin, J.** and L. Pendleton. 2018. Mapping the global distribution of locally-generated marine ecosystem services: the case of the West and Central Pacific Ocean tuna fisheries. *Ecosystem Services* 31 (2018): 278-288
- Bell, J.D., Cisneros-Montemayor, A., Hanich, Q., Johnson, J.E., Lehodey, P., Moore, B.R., Pratchett, M.S., Reygondeau, G., Senina, I., **Virdin, J.** and C.C.C. Wabnitz. 2017. Adaptations to maintain the contributions of small-scale fisheries to food security in the Pacific Islands. *Marine Policy* 88 (2018): 303-314
- Golden, J.S., **Virdin, J.**, Nowacek, D., Halpin, P., Bennear, L. and P.G. Patil. 2017. Making sure the blue economy is green. *Nature Ecology and Evolution* 1, 0017 (2017). <a href="https://doi.org/10.1038/s41559-016-0017">https://doi.org/10.1038/s41559-016-0017</a>
- Sander, K., Lee, J., Hickey, V., Mosoti, V., **Virdin, J**., and W. Macgrath. 2013. Conceptualizing maritime environmental and natural resources law enforcement the case of illegal fishing. *Environmental Development*. http://dx.doi.org/10.1016/j.envdev.2013.08.00
- **Virdin, J.** 2000. Co-Management of Coastal Resources in Fiji. *Coastal Management Journal* 28 (4) 325 337.
- **Virdin, J.** 2000. Coastal Management Institutions in Samoa. *Tropical Resources Institute Journal* 19: 18 20.

#### **Book Chapters and Sections**

- Patil, P., Virdin, J. and C. Colgan. 2020. The blue economy as a global initiative. Clegg et al. (eds). *The Caribbean Blue Economy*. Routledge, New York, US.
- Franz, N., Basurto, X., Beveridge, M., Dabbadie, L., De Young, C., Ellenbroek, A., Gentile, A., Lovatelli, A., Reantaso, M., Siar, S., Viparthi, K., Virdin, J., Watanabe, H. and L. Westlund. 2018. Small-scale fisheries and aquaculture, Part 3. In FAO. 2018. The State of World Fisheries and Aquaculture Meeting the Sustainable Development Goals. FAO. Rome.
- Virdin, J. 2016. Box 1.C.5. Harnessing the Riches of Pacific Tuna Fisheries. In World Bank. Reducing Vulnerabilities. World Bank East Asia and Pacific Update October 2016. World Bank. Washington, D.C.
- World Resources Institute. 2006. World Resources 2005. Lead writer chapter 2 focus on coastal fishing communities, "Ecosystems and Livelihoods of the Poor." World Resources Institute. Washington, D.C.

# White Papers, Policy Briefs and other Discussion Papers

Aqorau, T., K. Azmi, E. Havice, S. Kaye, S. Kininmonth, M. Mataika, S. McTee, A. Morrison, L. Olsen, M. Soboil, S. Suamalie, S. Taufa, A. Thomas-Smyth, and J. Virdin. 2020. Assessing the Potential for Transferability of Access Rights to Enhance Sustainability in Large Pacific Tropical Fisheries. NI Report 20-09. Durham, NC: Duke University. <a href="https://nicholasinstitute.duke.edu/sites/default/files/publications/Assessing-the-Potential-for-Transferability-of-Access-Rights-to-Enhance-Sustainability-in-Large-Pacific-Tropical-Fisheries.pdf">https://nicholasinstitute.duke.edu/sites/default/files/publications/Assessing-the-Potential-for-Transferability-of-Access-Rights-to-Enhance-Sustainability-in-Large-Pacific-Tropical-Fisheries.pdf</a>

- 2020 Karasik, R., Vegh, T., Diana, Z., Bering, J., Caldas, J., Pickle, A., Rittschof, D. and J. Virdin. 2020. 20 Years of Government Responses to the Global Plastic Pollution Problem: The Plastics Policy Inventory. NI X 20-05. Durham, NC: Duke University. <a href="https://nicholasinstitute.duke.edu/publications/20-years-government-responses-global-plastic-pollution-problem">https://nicholasinstitute.duke.edu/publications/20-years-government-responses-global-plastic-pollution-problem</a>
- Karasik, R., Pickle, A., Roady, S.A., Vegh, T. and J. Virdin. 2019. Analysis of Policies related to the Protection of Coral Reefs-Analysis of global and regional policy instruments and governance mechanisms related to the protection and sustainable management of coral reefs. United Nations Environment Programme. Nairobi, Kenya. <a href="https://www.unenvironment.org/resources/report/analysis-policies-related-protection-coral-reefs">https://www.unenvironment.org/resources/report/analysis-policies-related-protection-coral-reefs</a>
- Lui, H., Mimikakis, J., Ling, C., Han, Y., Virdin, J., Kritzer, J. and F. Sun. 2018. *Living Marine Resources and Biodiversity*. Task Team 2 Report to the Special Policy Study on Global Ocean Governance and Ecological Civilization. The China Council for International Cooperation on Environment and Development (CCICED). <a href="http://www.cciced.net/cciceden/POLICY/rr/prr/2018/201812/P020181214103808962287">http://www.cciced.net/cciceden/POLICY/rr/prr/2018/201812/P020181214103808962287</a>
- Bennett, A., Patil, P., Kleisner, K., Rader, D., Virdin, J., and X. Basurto. 2018. 
  Contribution of Fisheries to Food and Nutrition Security: Current Knowledge, Policy, and Research. NI Report 18-02. Durham, NC: Duke University, 
  https://nicholasinstitute.duke.edu/sites/default/files/publications/contribution\_of\_fisheries\_
  to\_food\_and\_nutrition\_security\_0.pdf
- 2018 Environmental Defense Fund and Nicholas Institute for Environmental Policy Solutions at Duke University. 2018. *Financing fisheries reform: Blended capital approaches in support of sustainable wild-capture fisheries*. Environmental Defense Fund. Co-Authors: Klaas de Vos, Timothy Fitzgerald, Phoebe Higgins, Jake Hiller, Namrita Kapur and John Virdin. <a href="http://www.edf.org/blendedcapital">http://www.edf.org/blendedcapital</a>
- FAO. 2017. Workshop on improving our knowledge on small-scale fisheries: data needs and methodologies. Workshop proceedings, 27–29 June 2017, Rome, Italy. FAO Fisheries and Aquaculture Proceedings No. 55. Rome, Italy. Co-authors: Xavier Basurto, Nicole Franz, David Mills, John Virdin and Lena Westlund. <a href="http://www.fao.org/3/a-i8134e.pdf">http://www.fao.org/3/a-i8134e.pdf</a>. Last accessed 1/30/2018
- 2017 Basurto, X., Virdin, J., Smith, H. and R. Juskus. 2017. *Strengthening Governance of Small-Scale Fisheries: An Initial Assessment of the Theory and Practice*. Oak Foundation: <a href="https://www.oakfnd.org/environment">www.oakfnd.org/environment</a>. Last accessed: 1/29/2018
- Kraemer, R.A. et al. 2017. Sustainable Ocean Economy, Innovation and Growth: A G20 Initiative for the 7<sup>th</sup> Largest Economy in the World. G20 Insights Platform of the T20 Engagement Group. <a href="http://www.g20-insights.org/policy-briefs/sustainable-ocean-economy-innovation-growth-g20-initiative-7th-largest-economy-world/">http://www.g20-insights.org/policy-briefs/sustainable-ocean-economy-innovation-growth-g20-initiative-7th-largest-economy-world/</a>, last accessed: 5/2/2017
- 2017 Harrison, J., Pickle, A., Vegh, T. and J. Virdin. 2017. *North Carolina's Ocean Economy:* A First Assessment and Transitioning to a Blue Economy. North Carolina Sea Grant and

Duke University Nicholas Institute of Environmental Policy Solutions. Raleigh, North Carolina.

- 2016 UNEP. 2016. Blue Carbon Financing of Mangrove Conservation in the Abidjan Convention Region: A Feasibility Study. United Nations Environment Program (UNEP), Abidjan Convention Secretariat and GRID-Arendal. Nairobi, Abidjan and Arendal.
- World Bank and Nicholas Institute. 2016. *Tuna Fisheries: Pacific Possible Background Report No. 4*. World Bank. Sydney, Australia.
- 2016 Cicin-Sain, B. et al. 2016. *Towards a Strategic Action Roadmap on Oceans and Climate:* 2016 to 2021. Global Ocean Forum. Washington, D.C.
- Patil, P., Virdin, J., Diez, S.M., Roberts, J. and A. Singh. 2016. *Toward a Blue Economy: A Promise for Sustainable Growth in the Caribbean*. Report No. AUS16344. World Bank. Washington,
  D.C. <a href="http://documents.worldbank.org/curated/en/965641473449861013/main-report">http://documents.worldbank.org/curated/en/965641473449861013/main-report</a>
- World Bank. 2015. *Terra Ranka! A Fresh Start*. Guinea-Bissau Country Economic Memorandum. Report No. 58296-GW. Contributing Author for Fisheries. Washington, DC: World Bank.
- Global Ocean Forum. 2011. Oceans at Rio+20: How well are we doing in meeting the commitments from the 1992 Earth Summit and the 2002 World Summit for Sustainable Development? Summary for Decision Makers. Contributing Author for Sustainable Fisheries and Aquaculture. Global Ocean Forum. Newark, Delaware.
- World Bank. 2009. Environment Matters at the World Bank. Co-Author of chapter: "The Importance of Sub-Saharan Africa's Coastal and Marine Ecosystems," Annual Review July 2007 to June 2008. World Bank. Washington, D.C.
- World Bank. 2005. *Ghana: Managing Large Natural Assets*. Author of chapter on fisheries, Report to the Government of Ghana. World Bank. Washington, D.C.
- World Bank. 2004. *Senegal: Fisheries Sector Strategy*. Co-Author, Report to the Government of Senegal. World Bank. Washington, D.C.
- World Bank. 2004. Saving Fish and Fishers: Toward Sustainable and Equitable Governance of the Global Fishing Sector. Co-Author. World Bank. Washington, D.C.
- World Bank. 2003. Guinea-Bissau: Diagnosis and emergency restructuring plan to enhance the domestic benefits of the fishing sector and its integration in the world economy. Co-Author, Report to the Government of Guinea-Bissau. World Bank. Washington, D.C.
- World Bank. 2003. Eritrea: a fisheries sector strategy for increasing the profitability and the management of the sector. Co-Author, Report to the Government of Eritrea. World Bank. Washington, D.C.
- Virdin, J. Economic Impacts of Development on Coastal Barrier Ecosystems in the United States. Coast Alliance. Washington, D.C.

Virdin, J. 2001. *Hard Facts, Hidden Problems: A Review of Current Data on Fishing Subsidies.* WWF Technical Paper, World Wildlife Fund (WWF). Washington, D.C.

World Bank. 2000. Cities, Seas and Storms: Managing Change in Pacific Island Economies. Co-author focusing on coastal fisheries. Regional Economic Report to the Pacific Islands. World Bank, Washington, D.C.

#### News, Commentary, Blogs

# The Conversation, article

"Local communities play outsized but overlooked role in global fisheries", September 30, 2019 <a href="https://theconversation.com/local-communities-play-outsized-but-overlooked-role-in-global-fisheries-123143">https://theconversation.com/local-communities-play-outsized-but-overlooked-role-in-global-fisheries-123143</a> last accessed: 9/30/2019

#### 2019 **China Dialogue**, ocean blog

"Is foreign trawling benefiting West Africa?", January 11, 2019 <a href="https://chinadialogueocean.net/5984-is-foreign-trawling-benefiting-west-africa/">https://chinadialogueocean.net/5984-is-foreign-trawling-benefiting-west-africa/</a> last accessed: 1/15/2019

# 2018 **Economist World Ocean Initiative**, interview, June 6, 2018

"Voices from World Ocean Summit: An Interview with John Virdin of Duke University" <a href="http://www.woi.economist.com/voices-from-world-ocean-summit-john-virdin/">http://www.woi.economist.com/voices-from-world-ocean-summit-john-virdin/</a>, last accessed: 6/6/2018

# 2018 **Economist Intelligence Unit**, Insights blog

"Blending capital to fill the ocean's fisheries finance gap", February 6, 2018 <a href="http://www.eiuperspectives.economist.com/sustainability/blending-capital-fill-ocean's-fisheries-finance-gap">http://www.eiuperspectives.economist.com/sustainability/blending-capital-fill-ocean's-fisheries-finance-gap</a>, last accessed: 2/7/2018

# The Hill, Op-Ed, Energy and the Environment

"Transitioning to a 'Blue Economy' can Reshape the Ocean Landscape", November 18, 2016 <a href="http://thehill.com/blogs/pundits-blog/energy-environment/306743-transitioning-to-a-blue-economy-can-reshape-the-ocean">http://thehill.com/blogs/pundits-blog/energy-environment/306743-transitioning-to-a-blue-economy-can-reshape-the-ocean</a>, last accessed: 1/10/2017

#### 2016 **ABC Pacific Beat.** radio interview

"Fisheries reforms could create US\$344 million in extra revenue: World Bank" <a href="http://www.abc.net.au/news/2016-05-12/fisheries-reforms-could-create-us\$344-million-in/7407072">http://www.abc.net.au/news/2016-05-12/fisheries-reforms-could-create-us\$344-million-in/7407072</a>, last accessed: 8/9/2016

# The Hill, Congress Blogs

"We Can End Illegal Fishing in the Ocean", August 31, 2015 <a href="http://thehill.com/blogs/congress-blog/energy-environment/252033-we-can-end-illegal-fishing-in-the-ocean">http://thehill.com/blogs/congress-blog/energy-environment/252033-we-can-end-illegal-fishing-in-the-ocean</a>, last accessed: 11/15/2015

#### 2015 World Bank, Praxis Discussion Series

Praxis Discussion: "Fishing for a Sustainable Future," Panelist <a href="https://www.youtube.com/watch?v=4HSQxMpsqkY&index=3&list=PL6FE8A490B08C">https://www.youtube.com/watch?v=4HSQxMpsqkY&index=3&list=PL6FE8A490B08C</a> <a href="https://www.youtube.com/watch?v=4HSQxMpsqkY&index=3&list=PL6FE8A490B08C</a> <

# 2015 **Economist Intelligence Unit**, Insights blog

Co-Author with Linwood Pendleton, "Is blue growth the beginning or end of a healthier ocean?" March 17, 2015

http://www.economistinsights.com/opinion/blue-growth-beginning-or-end-healthier-ocean, last accessed:1/12/2015

#### 2000 The Environmental Magazine 11 (1)

Buying Back Our Fish, January – February, 2000

#### **Selected Individual Presentations**

2020 **Annual Conference**, National Council for Science and the Environment

Panelist: "Improving Environmental Decision-Making through Boundary Spanning Partnerships," Washington, D.C.

# 2019 Sustainable Ocean Summit, World Ocean Council

Panelist: "Impact Investment, Blended Finance and the Blue Economy," Paris, France.

# The Ocean Conference, United Nations

Panelist for the following side events: "Financing for the Blue Economy in Small Island Developing States" hosted by the Government of Grenada and the Organization for Economic Cooperation and Development; "Adopting the Blue Economy: A viable path to Sustainable Development in Small Island Developing States Combined with Promoting the transition to Blue Growth and Blue Economy in Small Island Developing States and least developed countries" hosted by the Government of Grenada, the Government of the Kingdom of the Netherlands, UN FAO, the Government of Cabo Verde, Ministry of Economy and Employment and The Nature Conservancy; and "The Role of the Oceans in Sustainability: Benefits of Achieving SDG 14 for all Sustainable Development Goals" hosted by the Nippon Foundation Nereus Program, New York, New York.

#### 2017 **Blue Vision Summit**, Blue Frontier

Panelist: "The Blue Economy," Washington, D.C.

# 2017 **North Carolina's Coastal Conference**, North Carolina Sea Grant Office

Presentation: "North Carolina's Ocean Economy," Raleigh, North Carolina.

# West Africa Regional Fisheries Program conference, Sub-Regional Fisheries Commission

Presentation: "The West Africa Regional Fisheries Program: A Summary of Experiences in Phase One in Cabo Verde, Guinea-Bissau, Liberia, Senegal and Sierra Leone," and "West Africa's Coastal Bottom Trawling Fishery: A Review of Guinea-Bissau, Guinea, Sierra Leone and Liberia," Dakar, Senegal

# 2016 Grenada Blue Growth Investment Conference, Government of Grenada

Presentation: "A Conceptual Framework for the Blue Economy," St. Georges, Grenada

# 2016 American Society of International Law, 110<sup>th</sup> Annual Meeting

Panelist: "Steering Africa's Blue Economy: The Role of International Law and Lessons for Other Maritime Regions", Washington, D.C.

#### 2016 **Pacific Islands Forum Fisheries Agency,** Forum Fisheries Committee

Presentation: "Pacific Possible: Tuna Fisheries," Port Vila, Vanuatu

2016	Caterpillar Executive Leadership Program, Duke Corporate Education Presentation: "The Blue Economy," Duke University
2012	<b>Korea Maritime Institute</b> , Symposium on the Blue Economy Discussant and Presentation: "Lessons from the World Bank's Oceans Portfolio," Seoul, South Korea
2012	<b>Chatham House</b> , Symposium on Combatting Illegal Fishing Presentation: "Lessons from the West Africa Regional Fisheries Program", London, United Kingdom
Service 2018 – Present	China Council for International Cooperation on Environment and Development Special Policy Study on Global Ocean Governance and Ecological Civilization Working Group member
2017 – 2019	Encourage Capital, Pescador Holdings company Sustainability Advisory Board member
2016 – Present	World Food Policy Center, Duke University Steering Committee member
2016	North Carolina Sea Grant Coastal Conference 2017, North Carolina Sea Grant Office Conference Steering Committee member
2016	Blue Economy Challenge, Conservation X Labs Panel reviewer for proposals for Blue Economy Challenge on sustainable aquaculture; <a href="http://theblueeconomychallenge.com/">http://theblueeconomychallenge.com/</a>
2016	<b>BiodivERsA 2015</b> , Secretariat for a network of pan-European research funders Peer Reviewer on call for proposals for understanding and managing biodiversity dynamics in Seascapes; <a href="www.biodiversa.org">www.biodiversa.org</a>
2015	World Bank Peer reviewer for concept notes and reports on fisheries governance reform in the Caribbean, Maldives, Mauritius, Oman, Solomon Islands, and West Africa
2015	<b>Economist Intelligence Unit</b> Member of Research Advisory Group for the Economist World Ocean Summit in 2015
Fellowships and Honors	
2013	World Bank, Vice President's Unit Team Award Recognition of outstanding achievement for the West Africa Regional Fisheries Program
2008	The McCallie School, Chattanooga, TN Alumni Achievement Award
2004	World Bank, Spot Award Spot award for contribution to the Coral Reef Rehabilitation and Management Program (COREMAP II) Preparation team

2004	World Bank, Spot Award Spot award for co-authorship of "Saving Fish and Fishers" a World Bank strategy for reengaging in the fisheries sector
1999	Teaching Fellow, Hydrogeology, Yale School of Forestry & Environmental Studies
1999	Teaching Fellow, Molecular & Cellular Developmental Biology, Yale University
1996	Pi Sigma Alpha member National Political Science Honor Society

# **Country Experience**

Cape Verde, Eritrea, Federated States of Micronesia, Fiji, Gambia, Ghana, Grenada, Guinea, Guinea, Bissau, Indonesia, Kiribati, Liberia, Marshall Islands, Mauritania, Nigeria, Oman, Saint Lucia, Senegal, Sierra Leone, Solomon Islands, Tonga, Trinidad & Tobago, Tuvalu