



Diego Valderrama, PhD

Assistant Professor (Term), Department of Environmental Science and Policy

Education

PhD, Environmental and Natural Resource Economics, University of Rhode Island

Key Interests

Sustainable Fisheries | Sustainable Aquaculture | Marine Conservation | Economic Management | Social Science | Natural Resources | Coastal Communities

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SELECT PUBLICATIONS

- › Valderrama, D., & Fields, K. H. (2016). Flawed evidence supporting the Metabolic Theory of Ecology may undermine goals of ecosystem-based fishery management: the case of invasive Indo-Pacific lionfish in the western Atlantic. *ICES J. Mar. Sci.*, 74(5), 1256-1267.
- › Valderrama, D., et al. (2016). Economic assessment of hatchery production of *Argopecten nucleus* spat to support the development of scallop aquaculture in the wider Caribbean. *Aquaculture Reports*, 4, 169-177.
- › Valderrama, D., et al. (2015). The economics of *Kappaphycus* seaweed cultivation in developing countries: a comparative analysis of farming systems. *Aquacult. Econ. Manag.*, 19(2), 251-277.

Research Focus

The major goal of my research program is to improve the environmental and economic management of living marine resources through the application of methods derived from economic and social science. My work is largely interdisciplinary and draws from disciplines as varied as marine biology, fish ecology, and natural resource economics. I have examined the environmental and economic performance of a number of fisheries in the U.S and Latin America (Atlantic sea scallops, salmon, shrimp). In addition, I have investigated the production and environmental economics of a broad range of aquaculture species (shrimp, tilapia, catfish, hybrid striped bass, scallops, seaweed) and culture systems around the world. My research has also attempted to measure the potential of aquaculture to improve the socio-economic conditions of coastal communities affected by declining fisheries in developing countries. The accomplishment of marine conservation objectives through the development of sustainable aquaculture industries is another long-standing research interest.

Current Projects

- Ecological management of lionfish invasion in the Caribbean Sea.
- Sustainable management of queen conch fisheries in the Caribbean Sea.
- Development of Aquaculture Performance Indicators to assess sustainability of the global aquaculture industry.
- Sustainable shellfish aquaculture enterprises as an economic alternative for artisanal fishing communities in the Wider Caribbean.