



RESOURCES

Exploring Sustainable Seafood

Seafood Farming: Not Just for Salt Water

SPEAKERS

Carole Engle, PhD*

Engle-Stone Aquatic\$ LLC, Adjunct Faculty, VA Seafood AREC, Virginia Tech University

Gary Fornshell*

Extension Professor Emeritus University of Idaho, Aquaculture Results LLC

**See attached for bio.*

KEY TERMS AND CONCEPTS

Freshwater Aquaculture in the U.S.

- US Aquaculture Society Video Library.
See:
 - Baitfish Story
 - Catfish Story
 - Trout Story
 - Crawfish Story
 - US Aquaculture Now and Beyond
 - Economic Opportunities
 - Aquaculture and the Environment
 - Regulatory Reform in Support of Growth of US Aquaculture

Aquaculture for Conservation

- A Swimming Recovery (University of Idaho, 2020)
- Conservation Aquaculture: Shifting the Narrative and Paradigm of Aquaculture's Role in Resource Management (Froehlich et al, 2017)

Economics and Regulation of Freshwater Aquaculture

- Virginia Agricultural Research and Extension Centers (VA AREC)
See:
 - Regulatory Costs for US Baitfish and Sportfish
 - Regulatory Costs for US Salmonid Farms
 - Regulatory Costs for Pacific Coast Shellfish
 - Why has US Aquaculture Struggled Economically?
 - Impacts of COVID-19 on US Aquaculture



SPEAKER BIOS

Carole Engle, PhD

Dr. Carole Engle is an aquaculture economist with more than 40 years of research, extension, and teaching experience, devoted entirely to the economics and marketing of aquaculture. In the U.S., Engle has worked on various economics and marketing topics related to catfish, trout, shellfish (both coasts), hybrid striped bass, baitfish, sportfish, tilapia, and seaweed aquaculture and for production systems that include ponds, raceways, aquaponics, RAS, and various types of both suspended and bottom culture methods for shellfish. Engle is immediate past Editor-in-Chief of the scientific journal, Aquaculture Economics & Management, and immediate past-President of the International Association of Aquaculture Economics & Management. Engle has also served as past-President of the U.S. Aquaculture Society and is the immediate past-Executive Editor of the Journal of the World Aquaculture Society. Publications include: 5 books (including the 2019 printing of Aquaculture Businesses as well as Aquaculture Economics and Financing, and the 2017 2nd edition of the Aquaculture Marketing Handbook), 133 refereed journal articles, 18 editorials, 17 magazine columns, 49 book chapters & monographs, 20 proceedings articles, and 114 extension fact sheets/popular articles. Grants and contracts total 86 different externally funded awards with total grant funding received of \$19.4 million. Engle has been honored with the Distinguished Service Award from the U.S. Aquaculture Society, the McCraren Award from the National Aquaculture Association (three times), Researcher of the Year from the Catfish Farmers of America and Distinguished Service Award from the Catfish Farmers of Arkansas (twice).

Gary Fornshell

Gary Fornshell is a retired University of Idaho Extension Aquaculture Educator with 28 years of extension experience, devoted primarily to the production of trout in flow-through aquaculture production systems. Prior to his career with the University of Idaho, he managed the Mississippi State University aquaculture research facility in Starkville, received a Master of Aquaculture degree from Auburn University and was a Peace Corps volunteer. With more than 37 years of aquaculture experience, Fornshell has worked with trout, sturgeon, tilapia, catfish, burbot, hybrid striped bass, Asian carp, freshwater shrimp and crawfish and with flow-through, pond and RAS production systems. Fornshell is known for his work related to aquaculture discharge permitting, best management practices for improved effluent water quality, coldwater aquaculture course, and seafood education. Fornshell served as past-President of the U.S. Trout Farmers Association and past-President of the U.S. Aquaculture Society, served on the Board of Directors, Western Regional Aquaculture Center and currently serves as an advisor to the Board of Directors, U.S. Trout Farmers Association. Fornshell has been honored with the Distinguished Service Award from the U.S. Aquaculture Society, Clark and Mimi White Distinguished Service Award from the U.S. Trout Farmers Association, Ugliest Trout Farmer Award from the USTFA, Golden Sturgeon Award from the Idaho Aquaculture Association and University of Idaho Faculty Outreach in Excellence Award.