

## **Reconceptualizing Ecosystem Complexity: A New Emphasis**

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Theme: Contrasting approaches and tools – Successes and failures in marine and coastal resource management

### *Abstract:*

Socio-ecological systems in coastal areas are locally connected and globally linked through movements of commodities and capital. This complexity perpetually undermines the best efforts of managers to understand and control these systems. Ecosystem-based management, integrated management and marine spatial planning are frequently cited as tools through which to better cope with the uncertainties inherent in the management enterprise, but these too have been plagued by a tendency to focus primarily on local dynamics and ignore broader structural forces and connections that link people and places together. We posit that a more thorough understanding of ecosystem dynamics requires a broadening of both spatial and temporal scale. Using the case study of Placentia Bay, a rapidly industrializing bay on the south coast of the island of Newfoundland which has been targeted for integrated management, we illustrate how the emphasis on the broader social and economic forces which have shaped coastal ecosystems and livelihoods can help to broaden our understanding of ecosystem complexity and open new avenues of inquiry.