ELI FENICHEL Yale School of Forestry & Environmental Studies

October 6, 2017 10:30 - 11:45 am A.J. Fletcher Recital Hall "Ecosystem-Based Management and the Wealth of Ecosystems"

Ecosystem-based Management and the Wealth of Ecosystems

Eli Fenichel

Friday, October 6, 2017 10:30 - 11:45 am (ECU TIME / DST) https://zoom.us/j/231114785

Abstract:

Ecosystems store vast quantities of wealth, but difficulties measuring wealth held in ecosystems prevent its inclusion in accounting systems. Ecosystem-based management endeavors to manage ecosystems holistically. However, ecosystem-based management lacks headline indicators to evaluate performance. We unify the inclusive wealth and ecosystem-based management paradigms, allowing apples-to-apples comparisons between the wealth of the ecosystem and other forms of wealth, while providing a headline performance index for evaluating the performance of ecosystem-based management. We project that the Baltic Sea fishery ecosystem yields increasing stores of wealth over the next 50 y under the ecosystem-based management-inspired multispecies maximum sustainable yield management beginning in 2017, whereas the previous single-species management generally results in declining wealth.



BIO:

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Eli Fenichel earned his Ph.D. in Fisheries and Wildlife with a specialization in Resource and Environmental Economics from Michigan State University in 2007. He has 50+ publications with over 1,000 citations focusing broadly in the areas of bioeconomics, coupled humannatural systems and wealth accounting of natural capital. Eli's work has been published in outlets such as Nature, Proceedings of the National Academy of Sciences, Nature Climate Change, Ecological Applications, Journal of Economic Literature & Journal of Economic Dynamics and Control.

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