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Notes & News: Ocean governance and industry - Ocean carbon storage - Fishers' view of climate change - Ocean extinction event - EBM approaches - EBM Toolbox

World Ocean Council provides overview of ocean governance and policy for industry

The World Ocean Council has released the first comprehensive review of international ocean governance and policy for the global ocean business community. The "International Ocean Governance: Policy Brief" is designed to provide the business community with information on key ocean policy processes and developments, guidance in evaluating the risks and opportunities associated with these developments, and assistance in determining which ocean policy processes merit industry involvement. The brief is at <http://bit.ly/WOCoceangovernance>

New IUCN report explains ocean carbon storage and implications for policy-making

The processes by which oceans store atmospheric carbon hold fundamental implications for future climate change, ocean acidification, and human welfare. A new IUCN report "The Significance and Management of Natural Carbon Stores in the Open Ocean" describes how atmospheric carbon is captured, stored and mobilized in the ocean, and provides an overview of the significance and value of major ocean carbon pools and sinks. The report aims to promote integration of these systems and processes into ocean decision-making at all scales. The full report and a summary are at <https://portals.iucn.org/library/node/44905>

Report on fishers' views of a changing ocean

A new report details a survey of nearly 600 commercial fishermen in the northeastern US about their experiences with and views on climate change. The survey was conducted in 2014 with fishermen active in the New England groundfishery and Maine and Massachusetts lobster fisheries. Roughly two-thirds of those interviewed believe climate change may leave them "unable to profit" and ultimately "forced out" of their fishery. In each fishery, at least 40% of those surveyed reported they are catching new fish species in areas where those species have not traditionally been found. The report is at <http://bit.ly/fishingandclimate>

Study: Major ocean extinction event may be imminent but is avoidable

A new study in *Science* magazine states that human effects on marine animals are increasing, and that these effects are contributing to a profound decrease in abundance of marine fauna, both large and small. Furthermore, climate change is likely to accelerate this "defaunation" of the oceans. In comparing the marine and terrestrial defaunation experiences, the authors conclude that this may be the prelude to a major extinction period, similar to that observed on land during the Industrial Revolution of the 1800s. Slowing ocean defaunation will require creating protected areas and carefully managing other ocean spaces, say the authors. The full results of the study are available for purchase at www.sciencemag.org/content/347/6219/1255641

Summary of EBM approaches of Australia, Norway, and Canada

A new book *Governance of Marine Fisheries and Biodiversity Conservation: Interaction and Co-evolution* contains a chapter summarizing the approaches taken by Australia, Norway and Canada for the ecosystem-based management of marine fisheries and biodiversity. Aspects covered include EBM legislation and policy, convergence between fisheries and biodiversity management, methods to address and prioritize issues for ecosystem-based fisheries management, and integrated cross-sectoral management. This book chapter is available for purchase at <http://bit.ly/fisheriesgovernance>

Editor's note: The goal of our regular EBM Toolbox feature is to promote awareness of tools for facilitating EBM.

THE EBM TOOLBOX: Tools for marine protected areas

By Sarah Carr

The OpenChannels Team was on the scene at the World Parks Congress in Sydney in November 2014 and provided insights on some new marine conservation tools featured at the Congress. (For the complete blog on what went down Down Under, see <https://www.openchannels.org/chat/wpc-2014>.)

- **Global Fishing Watch** (<http://globalfishingwatch.org>): a prototype interactive web tool that enables users to visualize the global fishing fleet in space and time.
- **Map of Life** (<http://mol.org>): a searchable map that assembles and integrates diverse sources of data (such as range maps and occurrence points) about species distributions and their dynamics over time.

- **Biodiversity Indicators Dashboard** (www.natureserve.org/conservation-tools/projects/biodiversity-indicators-dashboard): a web dashboard currently being developed for the Tropical Andes, the African Great Lakes, and the Mekong to document and visualize data on key biodiversity indicators.
- **Open Data Kit** (<https://opendatakit.org>): a free, open-source set of tools to build data collection forms or surveys, collect data on mobile devices and send to servers, aggregate collected data, and extract data in useful formats.
- **SMART** (Spatial Monitoring and Reporting Tool; www.smartconservationtools.org) is a software tool and suite of best practices for measuring, evaluating and improving the monitoring and enforcement of protected areas.

Note: Sarah Carr is coordinator for the EBM Tools Network. Learn more about EBM tools and the EBM Tools Network at www.ebmtools.org

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