

# THE POLES AND DEEP SEAS

PROTECTING THE UNKNOWN REALMS OF EARTH



The cryosphere and deep sea cover the majority of Earth's surface and help make the planet habitable. But polar and deep-sea ecosystems are remote and largely inaccessible. Despite advances in observational capacities, scientific knowledge on the evolution, distribution, dynamics, and functioning of these ecosystems is still meager. We lack ecological baselines and have not yet defined what indicators to use to assess polar and ocean health. Nevertheless, the human footprint manifests itself in rapid glacial and sea ice melt, pollution, and destructive use of resources in the most remote areas on Earth. Considering the speed of environmental changes, clear conservation targets are needed to prevent irreversible shifts and losses. In this presentation, Professor Antje Boetius summarizes recent observations of change in polar and deep-sea ecosystems, and discusses strategies and rationales for including the unknown realms of Earth in sustainable development goals.

**JULY 30, 2019**

3:00PM Public Presentation | Reception to Follow

**Robert Paine Scripps Forum for Science,  
Society and the Environment**

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