

PELAGIC

PRIORITIZING ECOLOGICALLY SIGNIFICANT AND GLOBALLY IMPORTANT AREAS FOR MARINE MAMMAL CONSERVATION: SYNTHESIZING THE BEST AVAILABLE KNOWLEDGE TO INFORM MANAGEMENT AND POLICY

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Marine mammals are charismatic and often viewed as highly valued components of ecosystems, yet a large proportion of species remain poorly known and face a high risk of extinction. With many species completing their life cycles across international boundaries, marine mammal conservation clearly requires a global vision. Global targets for the expansion of existing marine protected areas offer a policy opportunity for the implementation of such a vision, but this requires the accurate identification of priority areas for conservation.

To identify such areas, PELAGIC will compile and standardize the best available data and synthesize these to propose a globally coherent strategy for marine mammal conservation. By bringing together a network of leading experts in spatial conservation planning and in marine mammal monitoring, the project will develop methodologies for the complex integration of data on marine mammal distributions, abundances, migrations, ecology threats and conservation efforts collected using a variety of scientific techniques in different geographic regions. Combined into a coherent framework, these data will be used as a basis for conducting subsequent analyses that will allow the identification of priority sites needing protection to ensure the long-term persistence of global marine mammal diversity.

Focus

*Marine protected areas

Marine protected areas are parts of the ocean where restrictions have been placed on human activities to conserve the natural and/or cultural values of those regions. Whereas 12% of the terrestrial realm are already protected, protection of the world's oceans lags far behind, currently covering only 6% of the territorial seas and 0.5% of the extraterritorial seas. Here, the



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Marine mammals are distributed worldwide and are observed using a variety of monitoring techniques. Not surprisingly, global conservation of this species group requires an international and interdisciplinary approach integrating information across the fields of animal behavior and tracking, species distribution modelling and systematic conservation planning. CESAB will provide a unique opportunity for bringing together a multidisciplinary, international group of some of the world's leading scientists in these fields. The combined knowledge, data and technical expertise will underpin the first global blueprint for the conservation of these emblematic species.

STEPS

- Syntheses of species' occurrence data across geographic regions and monitoring techniques
- Development of global species-specific density indices derived through combining species distribution models with observed abundances
- Integration of all information into a spatially-explicit global blueprint for marine mammal conservation
- Diffusion of project results to managers and the general public concerned with marine mammal conservation

identification of priority sites for the creation of protected areas faces substantial political and ecological challenges, since most of the world's oceans lie beyond national jurisdiction, ecosystem boundaries are very dynamic and many marine species are highly mobile.

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