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An International Workshop on Harbor Seal Ecology and Associated Coastal Ecosystem Health

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The harbor seal (*Phoca vitulina*) is among the most ubiquitous marine mammals in the world, ranging along the west and east coasts of the North Pacific and North Atlantic oceans. Harbor seals play an important role in marine ecosystems as upper-level trophic consumers, prey for larger marine mammals and fish, and as subsistence for many human populations. Environmental concerns regarding climate change, contaminants, emerging diseases, fisheries interactions, habitat destruction, and decreasing prey resources all have the potential to negatively impact harbor seal populations. This, coupled with their trophic position, relatively long lifespan, and coastal nature, make them excellent indicators of marine ecosystem health.

Their widespread distribution throughout the northern hemisphere has resulted in a diverse literature base that is scattered throughout the peer-reviewed and gray literature. Additionally, significant data gaps exist for harbor seals in certain regions (e.g. Russia, Japan, Greenland, Iceland). The scattered and diverse literature on harbor seals ensures that students, scholars, and researchers are faced with a daunting challenge when researching recurring or new questions about harbor seals, their role in marine ecosystems, and interactions with humans. We propose a 3-day workshop and subsequent publications of the current state of knowledge on this species. We have invited 24 of the top international scientists that study harbor seals and received confirmation of interest from 18 people representing seven countries. Four research scientists (two from Hubbs-SeaWorld, one from the National Park Service, and one from The Marine Mammal Center) will assist me with convening this workshop somewhere in California. There will be three products from this workshop: (1) a workshop proceedings, (2) a synthesis scientific book, and (3) a non-scientific web-based resource for the public

The consequences of this workshop and publications would be the first worldwide synthesis on this sentinel species, a mechanism to develop collaborations among international scientific partners, incorporation of student research projects with a system-wide perspective, and the impetus to use the public outreach to effect change in resource management policies worldwide. The proceedings and scientific publication will be used to educate scientists and policy makers

regarding this species and coastal environmental health. The publication for the general public of all ages will be designed to inspire understanding of this species and need for environmental stewardship and ecosystem management. Harbor seals can be used as an integrator of nearshore ecosystem function and health, and a conduit for educating the public and resource management agencies. We are seeking funds from a number of organizations to allow us to promote, organize, and host this international workshop, and to allow timely editing and publishing of the proceedings for wide and affordable distribution. We have already received confirmation of support from The Marine Mammal Center and National Marine Fisheries Service. We are seeking additional support from other organizations, including the Marine Mammal Commission, Hubbs-SeaWorld, Packard Foundation, National Park Service, Marine Sanctuaries, and various international organizations. We seek support of a minimum of \$3,000 - \$10,000.