



The  
SeaDoc  
Society

# Research Update Spring 2006

## A Marine Ecosystem Health Program



Dear SeaDoc Society Supporter,

The Pacific Northwest has 26 species of rockfish that are truly “magnificent,” the translation of their Greek name *Sebastes*. Unlike many other fish they give birth to live young, some species can live to be over 100 years old, most have venom glands at the base of their fin spines, and—they just *look* cool! Unfortunately for them, they also taste great and are relatively easy to catch. Due to overharvest, many rockfish species are in decline in Puget Sound and the spawning biomass (their reproductive potential) of some species has dropped 90% since the 1980s.

Changing fishing regulations, alone, isn't going to recover rockfish populations. We need to use as many techniques as possible to improve the health of their ecosystem. An instructive situation is in the Chesapeake Bay where striped bass populations (also called rockfish, but not really a *Sebastes* species) were overfished. Strict harvest controls helped recover populations and today kids and their parents enjoy catching striped bass again. It's cause for celebration, except that a serious bacterial disease called mycobacteriosis is now spreading through the striped bass population. Scientists think that stress from poor water quality or low forage fish availability are to blame. Fishing regulations aren't the only solution; they are one of many actions that will help the striped bass and the Chesapeake Bay ecosystem.

In the Puget Sound Georgia Basin area, the SeaDoc Society has been investigating the role of setting aside protected areas as nursery grounds for our rockfish species. We know that larger, older fish produce more young. Theoretically, large fish living in protected areas will reproduce and send young rockfish out to other areas. Recent SeaDoc-funded research bears out this theory. At an artificial reef at Point Heyer in Puget Sound, Dr. Lorenz Hauser and colleagues used genetic markers to identify the babies of adult brown rockfish living on the reef. Results of tracking showed that while some young rockfish will stay where they're born, others do move off to occupy other habitats. The implication is that under the right circumstances, protected areas can serve as a nursery ground for the recruitment of fish in non-protected areas. Testing theories is a critical step in using new tools to help recover fish populations and your support is improving ecosystem health for rockfish and other species. More information on Dr. Hauser's research and other SeaDoc Society sponsored research is available at [www.seadocsociety.org](http://www.seadocsociety.org).

With thanks,

Kirsten Gilardi

Joe Gaydos

P.S.: We're thrilled that the SeaDoc Society has been invited to serve on the Science Working Group for the Washington Governor's Puget Sound Partnership. This will help ensure best available science is incorporated in the Governor's plan to restore Puget Sound by 2020. For more information see [www.pugetsoundpartnership.org](http://www.pugetsoundpartnership.org).

### UC DAVIS OFFICE EXECUTIVE DIRECTOR

Kirsten Gilardi  
Wildlife Health Center  
One Shields Ave.  
University of California  
Davis, CA 95616  
(530) 752-4896  
(530) 752-3318 fax  
[kvgilardi@ucdavis.edu](mailto:kvgilardi@ucdavis.edu)

### ORCAS ISLAND OFFICE REGIONAL DIRECTOR

Joe Gaydos  
1016 Deerharbor Rd.  
Eastsound, WA 98245  
(360) 376-3910  
(360) 376-3909 fax  
[jkgaydos@ucdavis.edu](mailto:jkgaydos@ucdavis.edu)

### PUGET SOUND OFFICE DIRECTOR OF DEVELOPMENT & COMMUNICATIONS

Anne Stoltz  
3213 West Wheeler Street, Ste. 225  
Seattle, WA 98199  
(206) 281-9987  
(206) 283-0797 fax  
[awstoltz@ucdavis.edu](mailto:awstoltz@ucdavis.edu)

[WWW.SEADOC SOCIETY.ORG](http://WWW.SEADOC SOCIETY.ORG)