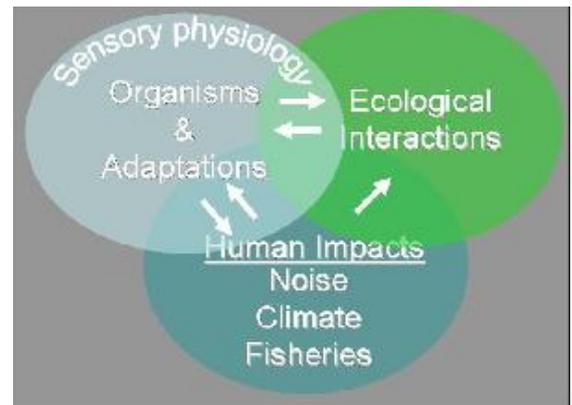


# T. Aran Mooney: The Sensory Ecology and Bioacoustics Lab

## An Introduction to Our Lab's Research

### Research Interests

Welcome to the Sensory Ecology and Bioacoustics Lab website! Our research is in the sensory biology of animals, primarily marine organisms. Specifically I am interested in how these animals detect the world around them, what they detect (i.e., what's important to the organism), and how these animals then relate to their environment (e.g., predator detection, prey localization, habitat identification, and conspecific communication). Our work is integrative in techniques and comparative in its research subjects. Our research involves dolphins, false killer whales, belugas, finless porpoise, Risso's dolphin, squid, cuttlefish, coral reef fish, temperate fish, brown bears, polar bears, coral reef assemblages, and temperate soundscapes to name a few. Much of our work addresses bioacoustic related questions, but we certainly not limited to that modality. Some of this work stems from examining the potential influences of increasing human-produced noise in the marine environment or other stressors such as ocean acidification or fisheries bycatch. But our primary interests originate in examining the relationship of sensory physiology/sensory anatomy to animal behavior and ecological relationships. We have also addressed communication, bioacoustic tagging, and the sending-receiving of underwater acoustic signals using passive acoustic monitoring devices.



[Enlarge Image](#)

The Lab organization. We typically start with questions and measurements of the organism and place them in the results in the context of ecological interactions and anthropogenic impacts. Our work as a bioacoustics focus.

Check out our research updates on our Blog:

### [Sensory Ecology](#)

Read about our research expeditions and travels!

### News and Updates !

- We just published a new paper! It's a 'listen' to [cusk eel sounds on Horseshoe Shoal](#), here in Nantucket Sound, off of Cape Cod.



[Enlarge Image](#)

Aran Mooney on a research cruise in Icelandic waters.

Vol. 24: 201–210, 2016 doi: 10.3354/ab009650	AQUATIC BIOLOGY Aquat Biol	Published online February 22
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### Temporal trends in cusk eel sound production at a proposed US wind farm site

T. Aran Mooney<sup>1,\*</sup>, Maxwell B. Kaplan<sup>1</sup>, Annamaria Izz<sup>1,2</sup>, Luca Lamon<sup>1,3</sup>, Laela Saylgh<sup>1</sup>

- Check out two new papers by Max on our coral reef soundscape work in the US Virgin Islands. One pairs community composition with the acoustic soundscape of the area (and reefs of varying quality). The other addresses the occurrence of boat noise in the area.

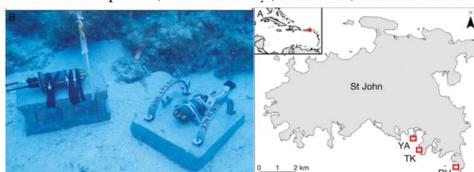


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*Loligo pealeii* (Tom Kleindinst)

### Coral reef species assemblages are associated with ambient soundscapes

Maxwell B. Kaplan<sup>1,2,\*</sup>, T. Aran Mooney<sup>1</sup>, Jim Partan<sup>3</sup>, Andrew R. Solow<sup>4</sup>



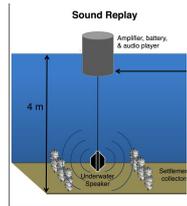
Ambient noise and temporal patterns of boat activity in the US Virgin Islands National Park

Maxwell B. Kaplan<sup>a,b,\*</sup>, T. Aran Mooney<sup>a</sup>



[Enlarge Image](#)

- Ashlee Lillis, a new Postdoc joined our Lab a month ago. Very exciting. And she just had a [new paper published: the first field evidence that soundscape cues may attract the larval settlers of a reef-building estuarine invertebrate.](#)



Spotted dolphins riding our wake

#### Related Files

» [Mooney's CV Feb 2012](#)

- We have two new articles coming out. The first is a paper on [hearing pathways in Risso's dolphins](#), work that was conducted with Darlene Ketten and collaborators in Taiwan. This was published in May, 2015 in the [Journal of Comparative Physiology, A](#).

J Comp Physiol A  
DOI 10.1007/s00359-015-1011-x

ORIGINAL PAPER

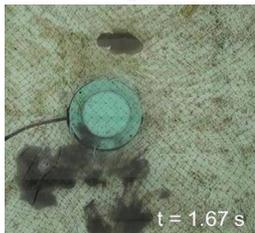
#### Hearing abilities and sound reception of broadband sounds in an adult Risso's dolphin (*Grampus griseus*)

T. Aran Mooney<sup>1</sup> · Wei-Cheng Yang<sup>2</sup> · Hsin-Yi Yu<sup>3</sup> · Darlene R. Ketten<sup>1,4</sup> · I-Fan Jen<sup>5</sup>



- The second is a paper in press, which describes our new ITAG, an behavior and eco-sensor designed specifically for soft-bodied invertebrates like squid and jellyfish. This work will be published in [Animal Biotelemetry](#).

The Journal of **Experimental Biology** Graded behavioral responses and habituation to sound in the common cuttlefish *Sepia officinalis*  
Julia E. Samson<sup>1,2</sup>, T. Aran Mooney<sup>1,3,4</sup>, Sander W. S. Gussekloo<sup>2</sup> and Roger T. Hanlon<sup>3</sup>



- Check out the [new video on our squid and ocean acidification research](#) by Oceanus magazine.



- Aran Mooney was recently featured on [NPR's Living On Earth segment, discussing sounds in the sea.](#)

## Contact Information

Biology Department  
Woods Hole Oceanographic Institution  
266 Woods Hole Rd  
Marine Reserach Facility - MS#50  
Woods Hole, MA, 02543  
amooney at whoi.edu  
(508) 289-3714 phone  
(508) 457-2089 fax  
(508) 289-3260 lab

## Education

2008 - Ph.D. in [Zoology](#) (with a Marine Biology emphasis) - [University of Hawaii at Manoa](#)  
2003 - M.S. in Zoology - University of Hawaii at Manoa  
2000 - B.S. in [Biology](#) (with Spanish minor) - [University of New Hampshire](#)

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Mail: Woods Hole Oceanographic Institution, 266 Woods Hole Road, Woods Hole, MA 02543, USA.  
E-Contact: [info@whoi.edu](mailto:info@whoi.edu); press relations: [media@whoi.edu](mailto:media@whoi.edu), tel. (508) 457-2000  
Problems or questions about the site, please contact [webdev@whoi.edu](mailto:webdev@whoi.edu)