

# **Tagging Through The Stages: Technical and Ecological Challenges in Observing Life Histories through Biologging**

## *Workshop Summary*

### **Organized by:**

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### **Location:**

Wellington Room, Wrest Point Hotel and Conference Centre, Hobart, Tasmania, Australia.

### **Date:**

Wednesday 16 March 2011

### **Time:**

9:00 AM – 4:00 PM

### **Workshop aims:**

This workshop will be associated with the Fourth International Science Symposium on Bio-logging in Hobart, Tasmania, Australia. The use of electronic bio-logging has revolutionized our understanding of animal movements. However, the life histories of marine species have been poorly studied, particularly juvenile stages. This workshop aims to expand the use of bio-logging, through a combination of expertise from tagging scientists and designers, to determine how the use of bio-logging can be expanded to very young life stages. Broad scale environmental change (such as climate change) is likely to impact all life stages of a species and it is therefore important that we gain a better understanding of juvenile movements and behavior, and how this may impact their dispersal and adaptability as adults. Our goal is to assemble a group of early career and established international scientists and tag manufacturers to discuss tag designs and attachment methods that could be used to observe juvenile life stages, whilst minimizing the impacts on the animals. We will also determine the complimentary techniques that need to be developed and integrated within an interdisciplinary framework to scale up bio-logging findings.

### **Program outline:**

We will be hosting a one-day workshop with a morning and early afternoon session consisting of presentations from telemetry scientists and tag designers. This will be followed by a panel-led discussion session to determine the current state and

development of miniaturized tags, prioritize the sensors that are included on small tags in terms of ecological value, and identify how attachment techniques could be adapted and incorporate flexibility for growth for younger life stages.

**Outcomes:**

The outcomes of this workshop will be: a) A special theme section within the peer-reviewed journal Marine Ecology Progress Series on Tagging Through Life Stages, b) A review of miniature tag designs and attachment techniques for marine species, which will be applicable to juvenile life stages, c) Discussion and determination regarding technological developments required to successfully tag younger life stages of different species, and d) In particular, identification of methods for tagging hatchling sea turtles, a period currently known as “The Lost Years” because of the paucity of information on young turtles.

**Applications:**

Attendance at this workshop is free, but space is limited. If you would like to attend, please e-mail George Shillinger ([georges@stanford.edu](mailto:georges@stanford.edu)) and Helen Bailey ([hbailey@umces.edu](mailto:hbailey@umces.edu)). If you would like to give a presentation at this workshop, please e-mail a title and abstract (limit 250 words) that summarizes the work you are planning to present. Please also state if you are interested in contributing a manuscript to the MEPS special theme section. These e-mails should be sent to George Shillinger at ([georges@stanford.edu](mailto:georges@stanford.edu)) and Helen Bailey ([hbailey@umces.edu](mailto:hbailey@umces.edu)).

There may be 2-3 travel grants available for students and early career scientists that would like to give a presentation at the workshop and contribute a manuscript to the MEPS special theme section. If you would like to apply for a travel grant, please include with your abstract a cover letter explaining why you are requesting a travel grant, how you can contribute and benefit from the workshop, and the relevance of your work to bio-logging and young life stages. The deadline for all applications is 15 December 2010.