

Title: The Use of Visual Media with Data in Bio-logging

Organizers: Randall Davis, Texas A&M University

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Relevance of the workshop to Bio-logging 4

Observing the behavior of animals at sea, especially deep diving species, is difficult because light does not penetrate far in water. Visual media (digital video and images) will play an increasingly important role in bio-logging as the technology becomes smaller and low power. Instruments that combine visual media with data from sensors (e.g., depth, swim speed, ambient temperature, conductivity) provide a powerful tool for understanding animal behavior (e.g., foraging behavior and hunting techniques) in the context of the immediate environment.

Need within the bio-logging community for the workshop

In comparison with time-depth recorders and satellite-linked recorders, the use of visual media in bio-logging is relatively new. The development of this technology will benefit from workshops where researchers and engineers can share ideas and successful designs.

Workshops objective, intended outcomes and outputs

We anticipate that this workshop will be attended by individuals and their collaborators from the three groups most active in the use of visual media in bio-logging: Texas A&M University (PI Randall Davis), National Geographic (PI Greg Marshall) and University of Tokyo (PI Katsufumi Sato). The tentative plan is to have a series of short presentations on recent research and engineering advances. This will be followed by a round table discussion of current engineering challenges and emerging technologies. A short report of the discussion and recommendations will be prepared for the attendees.