INTERNATIONAL
BIO-LOGGING
SOCIETY

Workshop: A future for a common bio-logging language? Discussions about data standards and interoperability in the bio-logging world

Wednesday 27 Sept 2017, 9:00–17:30
6th International Bio-Logging Science Symposium
Konstanz, Germany

Abstract

A goal of the International Bio-Logging Society is to “standardize data protocols to make the various marine and terrestrial databases interoperable”. Data collected by animal-borne electronic devices follow few norms and standards, in part because they are provided by a large and growing number of device manufacturers and collected for a wide range of purposes. The lack of standard variable names and definitions, file formats and data acquisition and transfer protocols hinders our ability to document, archive and share data and increases the chance of errors in data management, analysis and long term preservation of data. Although sensors differ in design and purpose, most scientifically relevant information can be described using a finite set of variables along with metadata about the sensor, animal, and deployment.

The goal of this Workshop is to discuss the current state of bio-logging data progress towards a more “standardized” bio-logging world, by gathering different initiatives and fostering coordination, for example by the creation of a permanent working group.

The Workshop is divided in two parts: standard formats for the transfer of bio-logged data from sensors to databases; and standards for the interoperability between biologging databases.

We welcome participation from bio-loggers, manufacturers, database operators and data-sharing advocates.

Workshop Programme

Part 0. Introduction: The need for standards in the bio-logging world	
9.00-9.10	Biologging data standardisation and interoperability in the context of the IBLS (Fran Cagnacci)
9.10-9.25	The big picture: Importance of sharing, archiving, and interoperability-current state and gaps (Sarah Davidson)
9.25-9.40	The bio-logging data cycle and where standards fit in (Holger Dettki)
9.40-10.15	Types of interoperability (semantic/structural) & other data standardisation related concepts (Alessandro Oggioni)
10.15-10.30	**Coffee Break**
Part 1. Bio-logging sensor to database standards	
10.30-10.45	Sensor to DB: users' requirements (Holger Dettki)
10.45-11.00	Report of the manufacturer survey. Comments (Ferdinando Urbano)
11.00-11.20	Introduction to OGC's SensorML and O&M: example of a possible solution (Alessandro Oggioni & Holger Dettki)
11.20-11.30	When manufacturers and end users coincide: an example of data flow in marine bio-logging (Bernie McConnell)
11.30-12.30	Other examples from the manufacturing world: Desert star, and others (open call). Open discussion.
12.30-13.30	**Lunch Break**
Part 2. Bio-logging database to database standards	
13.30-13.35	Recap: objectives of the day and achievements of the first part of the workshop (Fran Cagnacci)
13.35-13.45	Recap: types of interoperability (semantic/structural) & other data standardisation related concepts (Alessandro Oggioni)
13.45-14.00	Ideas from biodiversity surveys and database to database interoperability: requirements (Peggy Newman & Holger Dettki)
14.00-14.15	Integration of ZoaTrack and Atlas of Living Australia using Darwin Core (Peggy Newman)
14.15-14.30	OBIS-ENV-DATA (Daphnis De Pooter)
14.30-14.45	Shared marine bio-logging database schema (Xavier Hoenner)
14.45-15.00	Oceanographic In-situ data Interoperability Project (Camrin Braun)
15:00–15:30	**Coffee Break**
Part 3. Wrap up: towards a permanent working group on biologging data standards and int?	
15:30–17:00	Other database interoperability examples (open call). Open discussion.