## Engaging the Domain Expert: Is It just a Dream?

Alison Specht

CEntre for the Synthesis and Analysis of Biodiversity (CESAB), Aix-en-Provence,
France
alison.specht@fondationbiodiversite.fr

## **Abstract**

Much of the work of creating open data repositories, and of enabling the sharing and discovery of their contents, is conducted by informatics specialists on behalf of the communities that they serve. Some, such as the genomics, remote sensing and medical communities, have a good record of participation in data sharing, custodianship, discovery and re-use, and are familiar with the procedures involved. Ecological scientists, especially those engaged in experimental and observational studies where the data are gathered personally, not through automatized means, are not so participative.

Ecological scientists are, for a start, very possessive of their data; they are collected through their own blood, sweat, and tears. They know well the value of long-term observations and experiments in order to make scientific decisions about change (extinctions, rarity and so on), and are among the first to support their need, but they are reluctant to share their own data. In addition, the big questions that face ecological scientists demand that they work across disciplines as well as collaborate within their own community. The rates of data sharing and re-use by ecologists are among the lowest in the sciences, whereas data loss is comparatively high. Why? How can we improve this situation?

I will discuss the particular challenges of dragging ecologists into the open data world. I will comment on the steps in the research data lifecycle where the requirements of participation are particularly distracting for ecologists. I will describe an initiative that has been developed to enable domain specialists to take control of their terminological understanding in a manner that facilitates the assembly of heterogeneous data sets, and at the same time prepares them for open delivery of their compiled data. I suggest that through this process, they will better understand the requirements for data sharing and custodianship, and will be more likely to participate in all facets of the open data world, improving the availability of long-term data sets!

## Biography

Alison Specht is an environmental scientist with interest in facilitating transdisciplinary, convergent research between scientists, policy-makers and managers to improve environmental outcomes, and in improving data management and preservation of archival data for effective long-term monitoring.

From 2009 to 2014 she was the director of the Australian Centre for Ecological Analysis and Synthesis (www.aceas.org.au), a facility of the Terrestrial Ecosystem Research Network (www.tern.org.au), the first synthesis centre in the Southern Hemisphere. Since September 2015 she has been Director of CESAB, the CEntre for the Synthesis and Analysis of Biodiversity in France (cesab.org). She is a core partner of the International Synthesis Consortium (synthesis-consortium.org). She has been a member of the DataONE (www.dataone.org) Usability and Assessment Working Group since its inception in 2010.