# LTSER Data Management Workshop Report

Bryan Milstead, Inigo San Gil, and Andrea Previtali Monday, December 08, 2014

# Introduction:

As part of the All Scientist of the Americas meeting (http://www.ltser-chile.cl/ilter-meeting-2014/) a data management workshop was held on December 3rd, 2014 in Valdivia Chile. The main purpose of the workshop was to intiatiate a conversation among participants on how to better manage long-term ecological data. The workshop began with a presentation of the Drupal Ecological Information Management System (DEIMS), a content management systems designed to facilitate the stewardship and documentation of ecological datasets. This was followed by a question and answer period where participants discussed the challenges they face. We ended the workshop by collecting a set of recommendations from the participants.

# Participants:

The workshop was organized by:

name	country	email
Andrea Previtali	Argentina	andrea.previtali@gmail.com
Bryan Milstead	USA	Milstead.bryan@epa.gov
David Blankman	Israel	dblankman1@gmail.com
Inigo San Gil	USA	isangil@lternet.edu
Kristin Vanderbilt	USA	vanderbi@sevilleta.unm.edu

#### The following people attended:

name	country	email
Alejandra I. Domic	Chile	alejandradomic@gmail.com
Álvaro G. Gutiérrez	Chile	bosqueciencia@gmail.com
Aurora Gaxiola	Chile	
Eva Dettweiler-Robinson	USA	evadr@unm.edu
Francisco Bonet	España	fjbonet@gmail.com
Gerardo Gutiérrez Orellana	Chile	gerajocker@hotmail.com
José D. Carriquiry	Mexico	carriquiry@uabc.edu.mx
José Luis Cortés Bugueño	Chile	jluiscortesbug@gmail.com
Julio Gutiérrez	Chile	jgutierr@userena.cl
Luis Eduardo Calderon Aguilera	Mexico	leca@cicese.mx
Margarida Santos?Reis	Portugal	mmreis@fc.ul.pt
Maria del Pilar Fernandez Murillo	Chile	mfernandez@userena.cl

name	country	email
Mauricio Cotera	Mexico	Mauricio_cotera@yahoo.com
Miguel Luna	Mexico	lluna.miguel@inifap.gob.mx
Ondina Angelica Riquelme Bugueño	Chile	oriquelme@userena.cl
Petr Znachor	Czech Republic	znachy@gmail.com
Priscila Molina Pérez	Chile	priscila.molina@wwf.cl
Rocio Sanhueza C.	Chile	rosancab@gmail.com
Simon Castillo	Chile	scb.139@gmail.com

Additional People to include on the mailing list for the workshop:

name	country	email
Aaron Ellison	USA	aellison@fas.harvard.edu
Juan Armesto	Chile	jarmesto@bio.puc.cl
Juan Ignacio Mauricio Isla Cortes		jimic12@yahoo.es
Ricardo Rossi	Chile	rozzi@unt.edu

#### Links

Below we provide links to information on basic information management topics of interest to the participants. This is not a complete list. Please feel free to suggest additional materials and topics to include. Formatting Data in Spreadsheets: Much of the data entry done by the ILTSER sites is being done with spreadsheets such as Excel. Spreadsheets can be useful but also can lead to large problems if the data are not formatted correctly. The following sites provide information on how to make sure the data are formatted correctly: \* http://vita.had.co.nz/papers/tidy-data.pdf Training & Best Practices: Much of the data entry done by the ILTSER sites is being done with spreadsheets such as Excel. Spreadsheets can be useful but also can lead to large problems if the data are not formatted correctly. The following sites provide information on how to make sure the data are formatted correctly: \* Tid

- Portals
  - http://databib.org/
  - http://www.re3data.org/
  - https://www.datacite.org/
  - http://oad.simmons.edu/oadwiki/Data repositories
  - http://www.nature.com/sdata/data-policies/repositories
  - http://blogs.plos.org/tech/how-to-find-an-appropriate-research-data-repository/
  - http://figshare.com/
- gitHub
- DataOne: https://www.dataone.org/
- Data Sharing Policy
- Training & Best Practices
- ILTER DM
- DIEMS:

- https://www.drupal.org/project/deims
- https://github.com/lter/deims

# Messages

- Need Simple Guides to Data Management Best Practices
- Need to Start Now
- Need to Develop a Culture of Data Sharing
- Need Training
- Need Funding to hire data managers
- It is expensive to do it right
- $\bullet\,$  Need a representative from the Americas on the ILTER data management committee

# Conclusions

- More training-starting at a basic level
- Need to coordinate efforts
- Develop infrastructure