

Development of Incentives for Data Sharing in Ecology, Evolution, and Organismal Biology

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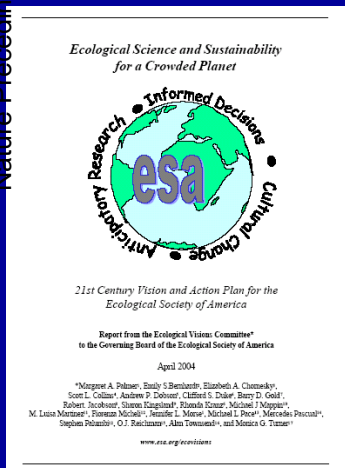
**Ecological Society of America
Annual Meeting
August 7, 2009**

Background

ESA Ecological Visions Report, April 2004

ESA should “promote the standardization of data collection, data documentation, and data sharing.”

esa.org/ecovisions



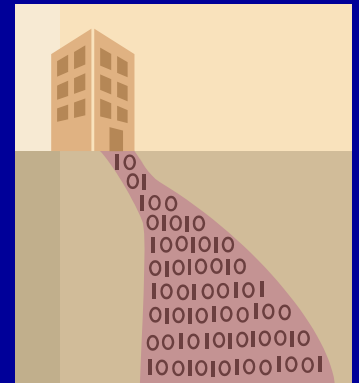
ESA Data Sharing Workshops

- Society Summit, September 2004
 - Data Registries, July 2006
 - Data Centers, December 2007
 - Obstacles to Data Sharing, May 2007
 - Incentives for Data Sharing, February 2009
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- 22 professional societies and 33 other organizations involved in one or more workshops

Incentives for Data Sharing

Goal

Identify incentives and recommend steps to overcome barriers to productive sharing of scientific information from the perspective of funders, researchers, and publishers.





Key Questions for Funders

- What are you doing to encourage data sharing by grantees?
- What might your organization be willing to do to encourage data sharing?
- How might your organization's goals be enhanced by incentives or mandates for data sharing?



Key Questions for Researchers

- To what extent are you involved in data sharing now?
- What kinds of incentives would encourage you to share data more often or more openly?
- What is your perception of current incentives or requirements for data sharing?

General Recommendations

- Make it easy
- Pay for it
- Give credit
- Add value
- Make it universal

Make it easy



- Make metadata entry simple and efficient
- Develop tools for automated harvesting of metadata
- Establish common standards
- Design data collection plans with sharing in mind

Pay for it

- Create and sustain data archives
- Provide additional funds for data sharing in project grants



Give credit



- Make archived datasets citable
- Include data sharing and archiving in hiring and promotion evaluations
- Monitor frequency of use and citation of shared data

Add value



- Provide online analytical tools with data archives
- Emphasize accessibility and security of archived data
- Create data sharing communities



Make it universal



- Develop common policies among publishers
- Develop common policies among funders
- Expand training, especially among students

The Role of the Individual

“...technology and infrastructure are not the ultimate limiting factors for data sharing — the individual scientist is.”

- C. Duke, *Frontiers*
October 2006



Workshop Participants

Mike Bowers
Susan Cameron
Chris Greer
P. Bryan Heidorn
Charlotte Gray Hudson
Wayne Litaker
Martha Maiden
Corrie Mauldin
Peter McCartney
Chris Mentzel
William Michener
Pedro Morales

Thomas Moritz
Rachel Muir
Greg Reams
Rhett Rebold
Jim Reichman
David Schindel
Elizabeth Sellers
Brian Wee
Michael Whitlock
Aleta Wiley
Bruce Wilson

Support

National Science Foundation

- DEB-0424702, An Ecology, Evolution, and Organismal Biology Societies Summit Meeting
- DEB-0533052, Joint Working Group on Data Sharing and Archiving
- National Center for Ecological Analysis and Synthesis (host to Data Centers Workshop)
- National Evolutionary Synthesis Center (host to Obstacles to Data Sharing Workshop)

Additional Information

- Data sharing resources at esa.org/science_resources/resources_tools.php
- Workshop reports at esa.org/science_resources/datasharing.php



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