

# Biodiversity & Ecosystem Informatics

## Preliminary Report of the

### February 11, 2003, BDEI PI Workshop

Judy Cushing, *The Evergreen State College*

Kate Beard, *University of Maine*

Barbara Eckman, *International Business Machines*

Eric Landis, *Natural Resources Information Management*

John Schnase, *NASA*

Rob Stevenson, *University of Massachusetts, Boston*

Kathleen Bergen, *University of Michigan*

Geoff Henebry, *University of Nebraska*

Jim Clark, *Duke University*

Woody Turner, *NASA*

And other PI's!

# BDEI Workshop I, June 2000

- **National Biological Information Infrastructure – NBII II collect, manage, disseminate, and apply biodiversity data, and address new questions spanning levels of biological organization.**
- **Workshop I objectives:**
  - Produce a BDEI CS/IT research agenda
  - Identify relevant existing R&D
  - Disseminate the agenda to the CS/IT community.
- **Workshop I outcomes:**
  - Report – [www.evergreen.edu/bdei/2001](http://www.evergreen.edu/bdei/2001)
  - NSF Dear Colleague Letter
  - **15 small research-initiation projects**
  - VLDB Panels 2000, 2002

# **BDEI Workshop II, February 2003**

[canopy.evergreen.edu/bdeipi](http://canopy.evergreen.edu/bdeipi)

- **Reports from the 15 research projects**
- **Aim to refine the research agenda from 2001**
  - **Current IT products – assume data integrity, internal consistency, standard reports**
  - **BDEI data**
    - **Inconsistent observations.**
    - **Need to be adaptable to new types of questions.**
    - **Multiple temporal and spatial scales.**
    - **Large quantities of data, much not digital.**
    - **Information (if digital) NOT on interoperable systems.**

# Panelists

- **Summarize findings and agenda of 4 research areas**
  - **Semantic Data Integration -- *Kate Beard-Tisdale***
  - **Spatio Temporal Data and Remote / InSitu Sensing – *Judy***
  - **Modeling and Forecasting – *John Schnase***
  - **Putting it into Practice –**
    - **Citizen Scientists – *Rob Stevenson***
    - **NPS and USFS – *Eric Landis***
- **Connecting to**
  - **BioInformatics Research Community – *Barbara Eckman***
  - **Other Agencies (NASA and USGS) – *John Schnase***
  - **CyberInfrastructure – all!**
- **Discussion**

# Outcomes of this Session

- Connect BDEI to Cyberinfrastructure Initiative
- Help us put a clear message forward
  - Why now?
  - What's new?
  - What's urgent?
  - Who gives a damn if we do?  
...and if we don't?

# Outcomes of this Session (cont)

Term Risk	Short 1-3 yrs	Mid 4-7 yrs	Long 8-10 yrs
Low	Characterize statics of s-t data		
Medium		Characterize dynamics of s-t data	
High			Analytical engines for decision support