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!

Cushing; DGO Biodiversity & Ecosystem Informatics Panel, May 2003
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:
  – NSF Dear Colleague Letter
  – 15 small research-initiation projects
  – VLDB Panels 2000, 2002
• 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)

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<tr>
<th>Term Risk</th>
<th>Short 1-3 yrs</th>
<th>Mid 4-7 yrs</th>
<th>Long 8-10 yrs</th>
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<td>High</td>
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<td>Analytical engines for decision support</td>
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