Publication, Intellectual Property, and Data
R.K. Peet

My Background

Scholarly publication & intellectual property

- Editor-in-Chief: Ecology and Ecological Monographs. 1995-2000
- Co-Founder, Co-Chief Editor/Consulting Editor: Journal of Vegetation Science. 1990-2006
- Creator, Ecological Archives. 1996-2000
- Member, Publications Committee: Ecological Society of America. 1995-2007
- Member, Publications Committee: AIBS. 2006-2007
- Member, Publication Committee: International Association for Vegetation Science. 2000-2007
- Member, *Ad hoc* Committee on Publications: Ecological Society of America. 2006-2007
- Member/Chair UNC-CH Copyright Committee (and related committees). 1997-2006
- Chair, Administrative Board of the Library, UNC-CH. 2004-2007

Data sharing, archives, and repositories

- PI, VegBank project, Ecological Society of American and Vegetation Subcommittee of the US Federal Geographic Data Committee. 2000-2007
- Member, Joint Working Group on Data Sharing and Archiving (Coordinated by ESA, sponsored by NSF). 2006-2007
- Participant, Science Environment for Ecological Knowledge. $15M NSF-ITR project
- Steering Committee, UNC Digital Curation / Institutional Repository Initiative. 2005-2007

Recommended Reading

http://www.unc.edu/scholcomdig/whitepapers/peet.pdf

1 -- Scholarly Communication

- Functions: Certification, Validation, Awareness, Archiving
- Digital publication: The new standard
- The culture of disciplines: books, journals, proceedings, preprint archives, data
- Layered publications: details, methods, appendices, data
- Finding information
- The library 'crisis'
- Economic models: Open access, Professional Societies, ForProfits, PayPerView
- Selecting a publisher

2 -- Intellectual property

What

- Copyright
  - Form of expression, but not ideas or facts (cf patents)
  - No © required
  - Data?
- Copyright rights
  - the right to reproduce the work,
  - the right to prepare derivative works based on it,

    - the right to distribute it (or copies of it),
    - the right to perform it publicly,
    - the right to display it publicly, and
    - the right to perform publicly a sound recording by means of digital transmission.
- Patent vs copyright vs both (software, sculptural works, designs, plant varieties, algorithms)

Ownership (http://www.northcarolina.edu/content.php/legal/copyright/PrimerOnCopyrightOwnership.htm)

- Types of works
    - Tradition of faculty & student ownership
    - Work-for-hire (or exceptional use of resources))
    - Research contracts
    - Distance learning
- Publication contracts & licenses
    - The economic models
    - Unbundling of rights
    - SPARC amendment: http://new.arl.org/sparc/author/addendum.html
    - Creative Commons: http://creativecommons.org/
    - Free Software Foundation: http://www.gnu.org/licenses/
    -

Use (http://www.northcarolina.edu/content.php/legal/copyright/PrimerOnCopyrightUse.htm)

- Fair-use
    - The purpose and character of the use, including whether the use is of a commercial nature or is for nonprofit educational purposes;
    - The nature of the copyrighted work;
    - The amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
    - The effect of the use upon the potential market for or value of the copyrighted work
- Special cases
    - Classroom
    - Nonverbal works
    - Distance education

3 -- Data Sharing & Archiving

History and current initiatives

- *Ecological Archives*
- ESA standards
- Member, Joint Working Group on Data Sharing and Archiving
- Federal mandates
- SEEK and the Semantic web
- Emerging best practices, policies, and professional ethics

Standards

- Why?
- Metadata
- Schemas (e.g. EML, TDWG)
- Guids: publications, taxa, observations, places
- Data registries

R***oles and responsibilities***

- Professional societies

    - Set standards
        - Data content and exchange format
        - Data archiving and access (discrete, well-circumscribed elements)
    - Assure quality control (peer review)
- Digital respositories and libraries
    - Archive and provide access to publications and data
    - Institutional responsibilities to granting agencies. Driven by lawyers and paid for by overhead
    - Potential security for databases
- Granting agencies
    - Set requirements for data archiving and sharing, but perhaps delegate implementation to societies
    - Pay for archiving and publication, directly or through overhead
- Data centers
    - Maintain a portfolio of critical, discipline-specific database systems
    - Maintain key infrastructure content
        - Digital identifiers
        - Common objects (e.g. taxa, publications)
        - Data registries
- Publishers
    - Require that specific types of data be archived (e.g., GenBank, VegBank)
    - Imbed deep links as a form of citation for standard elements such as taxon concepts and data elements
    - Provide archives for and links to supporting documentation
- Government agencies
    - Formulate federal standards and policies (in context of disciplinary standards).
    - Mandate and implement federal standards (e.g., FGDC standards)
    - Assure critical infrastructure exists