# Discussion 3 Maximizing scientific impact

- Metadata quality
- Tools and incentives to facilitate archiving
- Crowd-sourcing approaches
- Assessment of quality and fitness for use



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## Metadata quality

- What vocabularies are available and appropriate?
  - E.g. Dublin, Darwin and Audubon cores
- How do we divide metadata between media object and media subject?
- What are effective practices for connecting metadata to media objects?
- Consider Audubon Core vocabulary for biodiversity media
  - http://terms.tdwg.org/wiki/Audubon Core Term List
  - AC describes the characteristics of a media object



#### **Audubon Core Terms**

- Vocabularies (example terms)
  - Management: identifier, type, title, modified
  - Attribution: rights, logo, credit, license logo
  - Agents: creator, provider
  - Content coverage: description, caption, physical setting
  - Geography: location shown, latitude, city
  - Temporal coverage: temporal, creation date,
  - Taxonomic coverage: scientific name, taxon coverage
  - Resource creation: digitization date, capture device
  - Related Resources: associated specimen, associated observation
  - Service Access point (for each version): URI, format



#### Tools and incentives to facilitate archiving

- DataONE website
  - Metadata tools
  - Data Management Planning
- Dryad repository for published data
  - Tools and how-tos
- What are the effective practices?
  - Storage
  - Retrieval
  - Archiving
  - Discovery
  - Embedded metadata



### Assessment of quality and fitness for use

- What are the use cases?
- What are the minimal data standards for each use case?
- What tools are available to evaluate data standards and fitness
  - E.g. what do Vertnet and GBIF do with data cleaning?
- How can data cleaning results be incorporated in collection databases?



## **Crowd-sourcing approaches**

- What can crowds do?
  - List of use cases
- What crowd-sourcing tools are appropriate for each use case?
  - E.g. NotesFromNature is used for transcribing labels

