Best practices when using Plinian Core to share species level information

clear experiences,
best practices,
and a standard work flow
….so the Plinian core standard can be taken up by the global GBIF community

Introduction

This document aims to provide some guidance in the planning and publication of species pages much in-line with the vision of E. O. Wilson ("a page devoted to each species on Earth"), but with a different twist: instead of focusing on a unified platform, Plinian Core aims to be a component in producing multiple species catalogues developed under specific constraints to serve specific purposes, with a plus for facilitating consistent aggregation and re-utilization of information.

Recommended practices when approaching species Information

- Use consistent information, and comparable descriptions throughout all species; use only expert knowledge to generate the information
- Generate a unique URL for each species page
- Use dynamic rather static information
- Allow an easy way to retrieve information through the use of atomized and structured fields
- Use controlled vocabularies to describe both traits and species
- Include metadata and standard licenses

http://www.gbif.es/videos/video_detall.php?IDVideo=331

Facilitate aggregation through the use of consensus classification. Depending on the context, the following options are suggested:
- Use reliable and consensus sources as the basis for species catalogs
- When current knowledge advise to use a new or modified classification, to provide references to some consensus classifications to allow for consistent information mapping and aggregation

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Data architecture consideration when building species catalogues (semantic web, identifiers, etc.)

- Use semantic web components to connects datato achieve self integrating systems:
  - Web accessible
  - Triple storage
  - Resource Description Framework
- Use unique concept identifiers/unique object identifiers
- Use of life Science identifiers, LSID (we still are not using them within Plinian Core, but we plan to do it in the future
- Use of controlled vocabularies (URI)
- Codify contents in XML
- Express definitions and relationships through XSD
- Should be based in a common conceptual framework (in our case, Plinian Core)
- Aiming for domain ontologies to enhance interoperability; although approaches based on weak semantics seems more feasible at this time

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Species information data flows: case scenarios and tools

- Species information
- API
  - .doc files
  - Darwin Core
  - Relational database
- IPT (Darwin core archives manager) that contain TXT (data), ML (metadata), SVS (mapping) to publish species pages
  - Webpages to visualize information

http://www.gbif.es/ficheros/TallerEspecies2015/MAGRAMASpeciesDataBase.zip

More information on best practices for using PliC:
http://www.gbif.es/formaciondetalles.php?IDForm=141