**Lesson Plan**

Utah, Nov 2017

Instructor: Jack Williams, UW-Madison

Audience: Part I: Grad students and faculty, broad mix of interests. Part II: Paleoecology grad students and faculty.

Neotoma Paleoecology Workshop

**Part I: 9am-10:30am General Overview & Neotoma Explorer**

1. Overview & Key Concepts
2. Neotoma Explorer: Searching, finding, exploring data
3. APIs

**Part II: 10:30am-noon. Tilia, R**

1. Tilia: Putting Data into Neotoma: Upload & Validation
2. R: Getting Data out: Large-Scale searches & exports

WALKTHROUGH

**Part I**

1. Presentation
2. Neotoma Explorer walkthrough
3. APIs
   1. get datasets
   2. base tables

**Part II**

1. Tilia
   1. Open Spicer example
   2. Walk through data and metadata tabs
   3. Add a false name (Vitaceaee)
   4. Validate Taxa Names (Variables/Validate Spreadsheet Taxa)
   5. Login as Steward
   6. Validate and Upload
      1. Taxa names
      2. Contacts
      3. Site name
         1. Checks metadata
2. R