**Activity Title: An Introduction to the Animal Diversity Web and Quaardvark**

**Course: BIO 221—Ecology and Field Biology**

**Semester planned for implementation: Spring 2012**

**Instructor: Matthew Wund**

**Brief description of the activity or hypothesis:**

This activity was designed to familiarize students with the information available on the ADW, and with the Quaardvark interface. After briefly demonstrating both websites to the class, I let them explore the ADW for 30 minutes. Following that exercise, we ran a few basic queries together and then they designed and implemented basic queries on their own. The activity successfully laid the foundation for a more in depth, student-driven activity later in the semester.

**How does this activity facilitate student inquiry?:**

Several aspects of this activity were scripted (e.g., a few queries were run as a group), the students had 30 minutes to freely explore the ADW. In addition, they were required to devise and then test their own hypotheses using Quaardvark.

**Terms or concepts important to the activity:**

Some basic biodiversity knowledge was required so that they could effectively explore the ADW, and basic knowledge of how to navigate websites and to use Microsoft Excel to manipulate data were helpful

**Instructions for completing the query and report:**

After I provided a 15 minute overview of the ADW, and demonstrated a few simple queries on Quaardvark, the students spent 30 minutes freely exploring the ADW. The goal of this portion of the activity was to familiarize the students with the information available in the database, and to stimulate their curiosity about biodiversity, sowing the seeds for the hypotheses they would later generate and test. Following their exploration of the ADW, the students all ran an identical query, with me demonstrating the steps on the projector. Finally, the students spent an hour executing queries of their own design, and downloading and analyzing their results, at least at a basic level.

**Analyses on downloadable data, if relevant:**

No students got to the point where they could statistically analyze their data.

**Graphical analyses of results, if relevant:**

Some students did get to the point at which they could graphically analyze their data, either by comparing means, or by making scatterplots to evaluate the relationships among variables of interest.

**Assignment requirements:**

* Follow my demonstrations of the ADW and Quaardvark
* Explore the ADW to become familiar with the types of information available
* Design and execute 1-3 queries, and download resulting data to manipulate it in Excel

**How is student work assessed?:**

Assessment was informal—I floated from group to group to continually monitor their progress and answer their questions. In addition, their ability to quickly engage in a subsequent, more student-driven Quaardvark activity indicated that this introductory activity achieved my goals.

**What existing or potential data sources are available to supplement this activity?**

N/A – we relied solely on the data in the ADW.