

University of Michigan Teaching Innovation Prize

2009 WINNER



PHILIP MYERS
Professor
Ecology and Evolutionary Biology
College of Literature, Science, and the Arts
pmyers@umich.edu

Dr. Myers is accepting this award on behalf of the web team: Roger Espinosa, George Hammond, Tanya Dewey, and Tricia Jones.

Sponsors:

Office of the Provost

Center for Research on Learning and Teaching (CRLT)

University Libraries

Promoting Student Inquiry and Active Learning: Animal Diversity Web (ADW) and Quaardvark

Innovation Description

The ADW database contains thousands of detailed descriptions of species that have been contributed by students from over 40 institutions in North America. A specially designed template allows non-experts to enter data that will be amenable to structured searches. Each section has a place for free text, along with associated keywords and data fields for quantitative summaries. Authors also attach bibliographic citations.

Since 2007 Quaardvark has provided a powerful new way for students to construct queries and download ADW data to explore natural history patterns and test hypotheses. Quaardvark opens up possibilities for active learning in many biological disciplines, including ecology, evolutionary biology, and conservation.

An interdisciplinary partnership between the ADW team and Nancy Songer, a professor in the School of Education, brings authentic science experiences to 4th-6th grade students in Detroit Public Schools.

<http://animaldiversity.ummz.umich.edu/site/index.html>

Comments

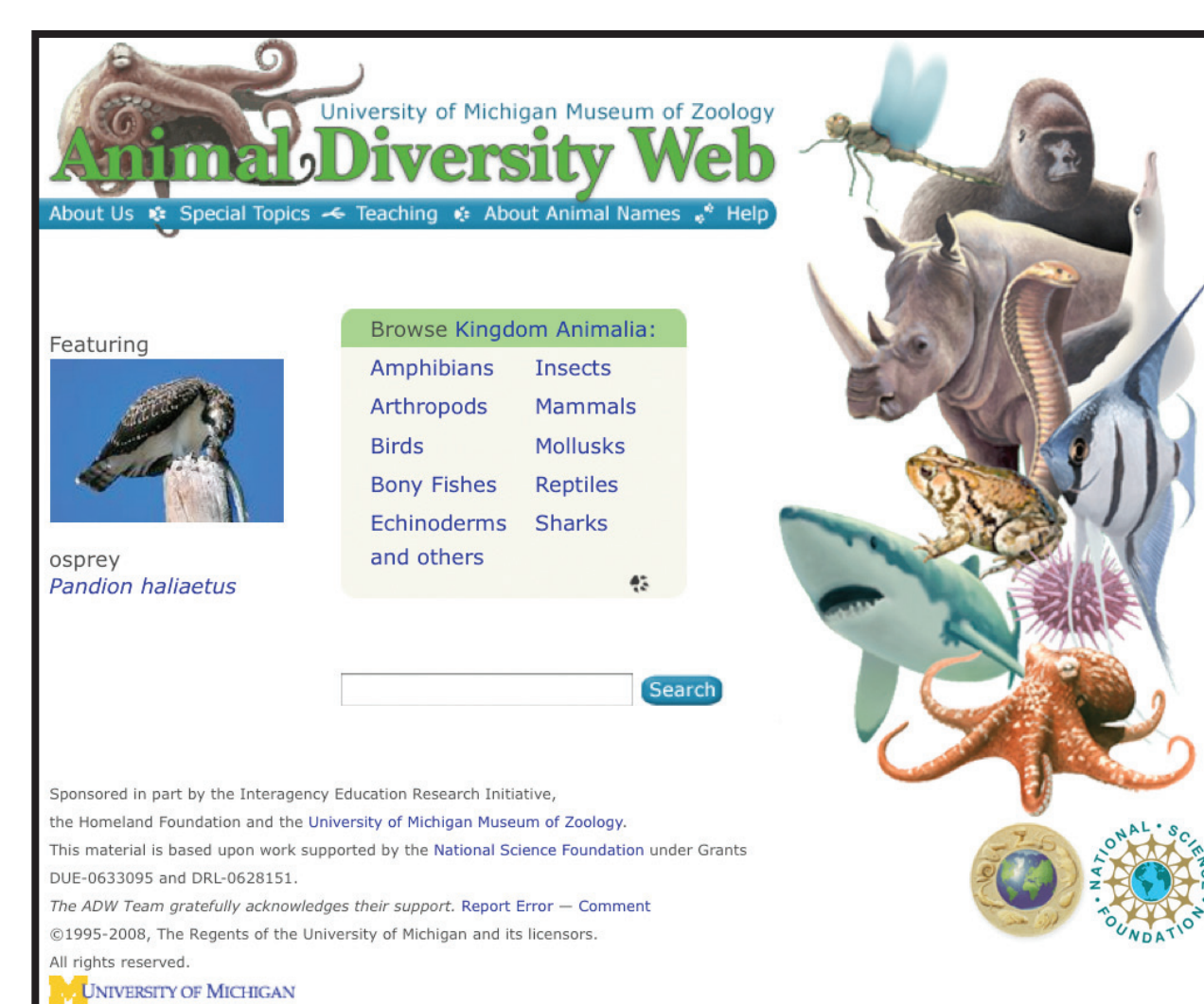
"Faculty found Quaardvark valuable because it exposed students to hypothesis-testing science and data mining. For many students, this was the first time they had tried to answer a research question with raw data."

Professor Link Olson of University of Alaska Fairbanks reported that students say "the experience was altogether different from any other they had at UAF and that they felt like they'd made a substantive contribution to science. Three have even said how valuable it was to be able to link to a writing sample directly from their resume/CV/graduate school application."

"Using relatively up-to-date data made the search more interesting and relevant to everyday life. Interesting to work with real-world data, and that this data was compiled by students gives it a more hands-on, intimate feel."

"The ADW is one of the largest public outreach efforts of the University of Michigan. The site serves over 5 million pages to half a million users monthly."

Examples of Teaching Innovation



Animal Diversity Web homepage



Template for adding content

Species	Class	Primary Diet	IUCN Red List	Mass (kg)	Number of offspring
Alouatta palliata	Mammalia	Omnivore	04	Endangered	0.085
Alouatta palliata	Mammalia	Omnivore	10	Least Concern	7
Alouatta palliata	Mammalia	Herbivore	10	Least Concern	6
Alouatta palliata	Mammalia	Herbivore	10	Least Concern	6
Alouatta palliata	Mammalia	Herbivore	12	Not Evaluated	8.9
Alouatta palliata	Mammalia	Herbivore	12	Not Evaluated	8.9
Alouatta palliata	Mammalia	Herbivore	12	Not Evaluated	8.9
Alouatta palliata	Mammalia	Herbivore	12	Not Evaluated	8.9
Alouatta palliata	Mammalia	Herbivore	12	Not Evaluated	8.9
Alouatta palliata	Mammalia	Herbivore	12	Not Evaluated	8.9

Quaardvark query and results