Interactive Identification Keys

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Objective:

In "Hexacorallians of the World," a database of sea anemones that concentrates on taxonomy, nomenclature, and geographic distribution, there are no identification keys. I have made print keys interactive for the families of sea anemones as a part of this database.

How many kinds of sea anemones are there in the world?

- 47 Families (containing 1037 valid species)
- The first step in making an interactive identification key specific to my data is deciding what program to use and the taxa and character information to be entered into a grid. I have chosen Pollyclave for my key so it can be compatible with other keys that are linked to the database.

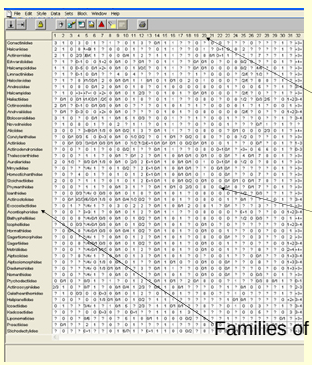
Pollyclave

An identification key program that:

- Interprets data
- Formats data into an identification key
- Allows images of taxa, characters, and their states to be seen along with the key

Nexus Grid Format

- A spreadsheet data editor that it easy to fully include data with both text and pictures, and to have lengthy descriptive character and character state names.
- Once information is entered into this grid format, it is saved and loaded into Pollyclave.



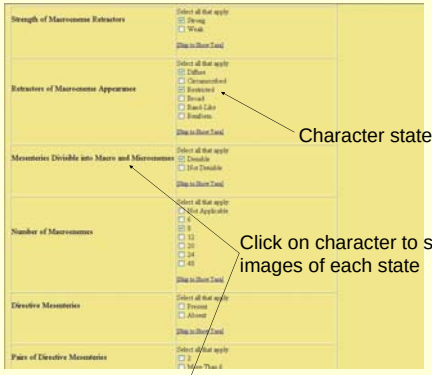
Identification Key

Photo by Meg Daly

How can the family of this sea anemone be identified using the key?

- **Step 1: Choose the characters**

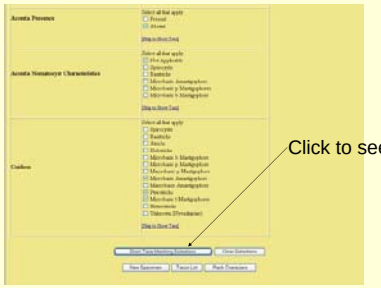
The user is presented with a character list from which he or she can choose each state. The user then checks each box for those that apply to this anemone (illustrated below).



- These character images allow the user to see each state in order to make the selection easier.

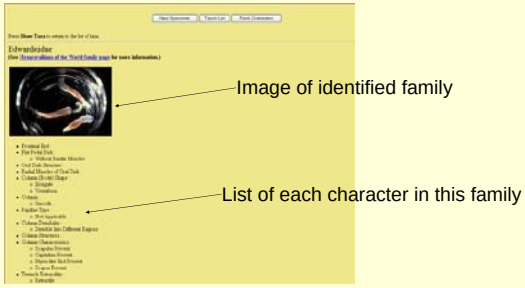
- **Step 2: Show taxa**

After all characters have been entered, the user clicks on "Show Taxa Matching Selections" and will be presented with a list of possible taxa.



- **Step 3: Identify specimen at family level**

Success!! Only one taxon matched the entered characteristics. Identification is complete. This anemone is a part of the family Edwardsiidae.



Conclusion:

My first identification key of the Order Actiniaria can now be found on the internet at http://eusmilia.geology.uiowa.edu/cgi-bin/actiniaria/polyclav?../pollyclave/actiniaria/*http://eusmilia.geology.uiowa.edu/.

Acknowledgments:

- Dr. Daphne Fautin, Suman Kansakar, Bryan Tangney, Matt Kost, Matt Shipley
- NMITA, Dr. Ann Budd, John Dawson from The University of Iowa
- NSF grant DEB-99-78106 to Dr. Daphne Fautin as part of the PEET (Partnership to Enhance Expertise in Taxonomy) program for funding this project
- Census of Marine Life (Sloan Foundation) for funding this project
- KUUB Research Support Fund for travel to The University of Iowa