THIS WEEK IN BI 102

PORTFOLIO #2 IS DUE MONDAY FEB. 9 BY 5:00 P.M., 131 WNGR

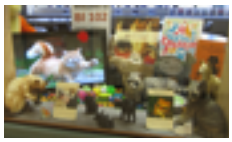
TUESDAY LECTURE

Extinctions
Explore links between genetic diversity and species extinctions.

THURSDAY LECTURE

Coevolution
Species developing over time together, and impacts on biodiversity.

RECITATION



Mammals and Coevolution
Key transitions in mammalian evolution.

LABORATORY

Islands and Introduced Species
Island speciation and extinction linked to introduced species.

ON-LINE READINGS

Reciprocal Altruism; Vertebrate Evolution
Remarkable animal behaviors; Origins of vertebrates.

Work Ahead for Thursday's Lecture

Read "Reciprocal Altruism" and answer the following questions.

Explain what is occurring when two organisms carry out **reciprocal altruism.**

From the readings, provide examples of organisms that demonstrate reciprocal altruism.

How can this behavior positively impact fitness?

Coevolution
Two or more species can impact each other's fitness (survival and reproduction)

Work Ahead On-Line Readings

Read "Vertebrate Evolution"" and answer the following questions.

All vertebrates have _____.

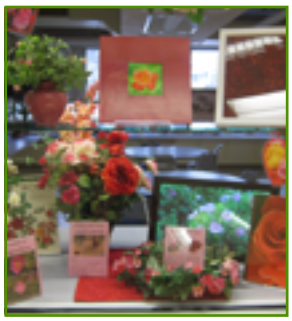
List the progression of vertebrates as they appear in the fossil record (oldest to newest, see green box on next page).

For each vertebrate group describe a few key features that distinguish them from the other groups.

Work Ahead for Recitation

In the activity manual, read over *Mammals and Coevolution* to answer these questions.

Diapsids and synapsids were introduced last week in recitation (p. 89). From this week's recitation (p. 109) Diapsids include _____, _____, and _____. Synapsids include _____ and _____.



Happy Valentine's Day (Saturday Feb. 14)

The difference between a phylogenetic tree (commonly seen in textbooks) and a cladogram has been discussed in class. Both show ancestral relationships, which one is more of a hypothesis? _____

Work Ahead for Laboratory

In the activity manual, read over *Islands and Introduced Species* to answer these questions.

From Part II of the activity (p. 114+), what are the four types of data used to determine relatedness of the Canary Island Lizards (the four underlined headings)?

Define each of these species terms (p. 117 and 119):

Introduced:

Invasive:

Endangered:

Threatened:

Study Hint:
The second exam covers weeks 4, 5, and 6. Often it is hard to recall material learned during the hectic middle of the term, start studying week 4 material now.

Exam #2 is next Monday, Feb. 16, 7:00 - 7:50 p.m.

Bring your photo ID, #2 pencil, and eraser. Room assignments are posted at the course website.

Vertebrate Progression

Fish (Jawless, Armored, Cartilaginous, Bony)

Amphibians

Reptiles

Birds

Mammals