



**Syllabus**  
**Cycles – Past and Present**

Teacher Enhancement Course

Friday, June 19, 2009

8 AM – 4:30 PM

**Fee: \$70 (plus \$30 for ½ CSM credit)**

Register for both courses for \$120 per person, plus \$30/course for ½ CSM credit

**Course Description:** Cycles can occur over a variety of time periods - from a few years to millennia. Experience change over time with Denver Museum of Nature and Science curators who will lead us through their investigations. See how dung beetle populations alter with the reintroduction of bison at the Plains Center's West Bijou site. Examine a world famous exposure of the K-T boundary and learn about the extinction of the dinosaurs and how mammals survived and then flourished.

**Course Goal:** Enhance your understanding about the interrelationships of Earth's many cycles. Examine beetles, reintroduction of bison and their affects on the prairie. Appreciate how research moves an idea of a meteorite impact at the end of dinosaur era to a largely accepted fact. Examine the evidence first hand.

**Course Objectives:**

Participants will be able to:

- Understand through inquiry the life cycles of dung beetles.
- Recognize the significance of major extinctions.
- Participate in actual research.
- Investigate ways to study insect life cycles.
- Collect fossil plants from the first forests following the KT extinction.

**Course Schedule**

Morning –

Welcome and introductions.

Travel to West Bijou with changing land use discussion.

Beetle research: DMNS curator, Frank Krell

Collection and discussion about the beetle population change related to reintroduction of bison.

Lunch –Bird Migration discussion, observation and activities.

Afternoon-

Paleontology research: DMNS curator, Ian Miller

Fossil collection above and below the K/T boundary, examination of climate clues from 65 million years ago and lecture at the K/T boundary.

Wrap up and review

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