Conodont biostratigraphy of the Crystal Peak Dolomite, Ibex, UT—student experience in actual research

Notes for the instructor

Course instructors: Ben Dattilo and Raymond Gildner IPFW. External instructor: James F. Miller, Missouri State University

Challenges of duplicating this activity:

The fact that this project involves the execution of a current research problem means that the activity cannot be precisely reproduced in the future. Nevertheless, this is an example of how a real research project can be meaningfully incorporated into an undergraduate field course. Despite all of the "help" this part of the research probably took longer to accomplish than it would have otherwise taken, but the sense of reality gave the students a natural sense of the importance of conducting the research properly.

Description of Activity

In preparation for this field activity, students were provided with houndouts showing the stratigraphy and biostratigraphy of the Ibex region by James Miller, one of the researchers who specializes in Conodont stratigraphy of the region.

With this introduction, students were presented at the outcrop section. Students took turns using Jacob staff to measure the strata, drafting a stratigraphic section and describing the strata in a field notebook, recording the stratigraphic horizons of previously-collected samples, and collecting samples.

The fact that this was a real research project elicited a high level of enthusiasm from the students.

Background Materials

The following materials were useful for conducting this particular activity:

- Stratigraphic column showing the Ordovician section of the Ibex area. Best source: Geologic History of Utah, 2009, by Lehi Hintze and Bart Kowallis. Brigham Young University Special Publication 9.