

## **APPENDIX B**

### **Guidelines for Cave Research**

1. A proposal for each research project must be submitted and approved by the BLM Glenwood Springs Field Office.
2. Approval must be obtained from the BLM Glenwood Springs office before research can proceed, if any of the following are anticipated:
  - a. Collecting of any kind. (see additional guidelines for collecting),
  - b. Disruption of the natural state of the cave,
  - c. Entry to restricted areas or during restricted times. In this case the proposal must state explicitly how the impact of the research on the site will be minimized.
3. A bi-annual summary of research projects must be submitted to the BLM Glenwood Springs office. Any findings or publications from research results will be made available to BLM and provided in a document.
4. No research will be permitted that endangers visitors, biota, or environmental quality, or which does not relate to speleology.
5. Researchers with permission to enter restricted areas, or during restricted times, may only be accompanied by minimum personnel, as determined by BLM, aiding the research.
6. Guidelines for collecting:
  - a. Approval for collecting will be granted only to qualified persons with demonstrable credentials (including prior publication of related research), or by persons under the direct supervision of such authority (i.e. college students, college faculty).
  - b. Sampling should not impair the natural aspect of the cave.
  - c. No more than 5% of any population (e.g., biota) or material (e.g., sediment) should be removed. Exceptions include materials that are not indigenous to the site, and which are in danger of being damaged if left in place, or which must be entirely removed to be studied (e.g., bones).
  - d. No endangered species may be collected, except under extraordinary circumstances. Any doubt as to the status of a species should be clarified in coordination with BLM.
  - e. No in-situ speleothems or macroscopic fossils in bedrock may be collected, except under extraordinary circumstances.
  - f. Bedrock samples should consist of loose fragments whenever possible. No visible scarring of cave walls is permitted.
  - g. No collecting will be permitted simply for display purposes.
  - h. Samples must be located explicitly, both vertically and horizontally, with the aid of surveys or maps, to ensure that collecting is systematic and not haphazard.
  - i. Any remaining samples after the project is complete must be returned to the BLM. Any samples retained by the researcher must be made available for use by other researchers.