



## Society of Vertebrate Paleontology

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**Subject:** Comments from the Society of Vertebrate Paleontology on BLM’s document pertaining to the proposed oil and gas lease sales within the boundaries of the Bears Ears National Monument

To U.S. Bureau of Land Management,

This letter expresses the view of the Society of Vertebrate Paleontology (SVP: <http://vertpaleo.org>) on BLM’s new document for public comments titled “Utah State Office Evaluation of March and December 2018 Oil and Gas Lease Sales Environmental Assessment” ([https://eplanning.blm.gov/public\\_projects/2024989/200562193/20084843/250091025/Analysis%20of%20the%20March%20and%20December%202018%20Oil%20&%20Gas%20Lease%20Sales%20EA.pdf](https://eplanning.blm.gov/public_projects/2024989/200562193/20084843/250091025/Analysis%20of%20the%20March%20and%20December%202018%20Oil%20&%20Gas%20Lease%20Sales%20EA.pdf); i.e., DOI-BLM-UT-0000-2023-0006-EA – DRAFT), that has the potential to impact scientifically important and unique paleontological resources on federal lands in southeastern Utah, near the Bears Ears National Monument (**BENM**). With about 2,000 members, SVP is a non-profit international scientific organization consisting of researchers, educators, students, and enthusiasts, to advance the science of vertebrate palaeontology and to support and encourage the discovery, preservation, and protection of vertebrate fossils, fossil sites, and their geological and paleontological contexts. Thus, SVP is an important stakeholder in U.S. federal lands, including in southeastern Utah, where a number of SVP members have active research, either in the field or in collaboration on specimens repositied in public collections.

The areas in question for potential oil and gas lease sales have numerous fossiliferous exposures of the Jurassic-aged Morrison and Cretaceous-aged Cedar Mountain formations as well as rock units that are late Paleozoic in age. In fact, as the document correctly identifies, “Most of the leases contain areas with very high potential for paleontological resources” with the Potential Fossil Yield Classification (**PFYC**) rating of “5”, which is the highest rating possible in the classification scheme, indicating that those areas are exceptionally important paleontological sites (Section 3.3.8; page 27). It is also worth pointing out that the leaning areas also contain substantial acreages where PFYC ratings are unknown as shown in Table 3-3 (pages 27–28) of the document, meaning that more thorough paleontological surveys and inventories are needed for those areas if any leasing sales were to be considered. For these reasons, SVP strongly prefers “Alternative C”, i.e. “No leasing alternative” as proposed in Section 2.4 of the document.

We are encouraged by the lease notice “UT-LN-72: High Potential Paleontological Resources” which the document states on page B-14:

“The lessee/operator is given notice that lands in this lease have been identified as having high potential for paleontological resources. Planned projects should be consistent with BLM Manual and Handbook H8270-1, Chapter III (A) and III (B) to avoid areas where significant fossils are known or predicted to occur or to provide for other mitigation of possible adverse effects (RX, NF, ESR). Modifications to the Surface Use Plan of Operations may be required in order to protect paleontological resources from surface disturbing activities in accordance with Section 6 of the lease terms and 43 CFR 3101.1-2.”

While “Alternative C” is the most preferred option for SVP, we must note that an elaborate plan for best practices for oil and gas explorations at paleontologically sensitive sites must be in place if Alternative A or B were to be selected. On this note, SVP proposed a Paleontological Resource Management Plan in relation to BENM which was submitted to BLM in March of 2018 that described critical infrastructural support necessary to adequately manage, preserve, and protect paleontological resources on BLM-managed lands (<https://vertpaleo.org/wp-content/uploads/2021/01/SVP-Response-Letter-BENM-Final.pdf>). Appendix 1 below shows an excerpt from that proposed management plan specifically pertaining to energy and mineral activities, including oil and gas explorations, with some updates and modifications. SVP hopes BLM will adopt the suggested best practices in Appendix 1, not only for BENM but also for the areas identified in “Utah State Office Evaluation of March and December 2018 Oil and Gas Lease Sales Environmental Assessment,” in consultation with the bureau’s own monument paleontologists and other paleontology staff in the region should Alternative A or B be chosen.

Paleontological resources are nonrenewable and irreplaceable once destroyed. Because of the ongoing scientific importance of the monument, SVP is concerned with any further lease sales for mining activities that may harm its paleontological resources. Questions concerning our letter and comments should be addressed to any one of us or Drs. M. Allison Stegner and Kenshu Shimada (SVP’s Government Affairs Committee) at [svp@vertpaleo.org](mailto:svp@vertpaleo.org). Thank you for the opportunity to comment.

Yours sincerely,

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# Appendix 1

## ENERGY AND MINERAL ACTIVITIES

Paleontological resources are non-renewable and can often occur in intermittent concentrations. Damage to scientifically important paleontological sites from energy and mineral exploration and extraction operations must be avoided. The areas that are included within the boundaries of BENM are rich with scientifically important paleontological sites, many of which have not yet been studied. The Paleontological Resources Preservation Act (PRPA) of 2009 does not protect sites or paleontological resources from destruction in cases where leases for mineral extraction have been granted. BENM includes broad exposures of geological units that are especially rich in scientifically important paleontological resources and are known to contain commercially viable mineral resources: the Chinle Formation (which contains commercially viable uranium deposits), the Cutler Group (which often forms the surficial rock layer where oil and gas wells are installed, and is closely associated with the uranium-rich Chinle Formation in many parts of the former BENM), and the Morrison Formation (which contains commercially viable uranium deposits).

Destruction of scientifically important paleontological sites or fossils by mineral extraction activities shall not be permitted within BENM at least until a mitigation strategy has been adopted if such activities are permitted. This provision is especially important for the exploitation of non-paleontological resources where mining activities inevitably impact or even destroy resources above and below the target resource. Mitigation should consist of preliminary surveying and collecting of whatever paleontological resources can be identified prior to the beginning of mineral extraction work; on-site survey and collection during extraction; and salvage collection after extraction. Fossils collected by mitigation activities should be processed and deposited in an appropriate public-trust repository. Under permits issued by BLM (or a relevant Federal agency if not on BLM-administered Federal lands), mitigation activities shall be conducted only by qualified organizations and by individuals with a strong background in paleontology. Costs shall be borne by the industry contractor. Paleontological information shall be collected by extractive industries during exploration, sampling, and extraction, and shall be deposited at BLM headquarters and evaluated for potential mitigation.

### **A. Prior to Commercial Energy and Mineral Activities**

Preliminary mitigation surveys should cover the entire proposed area of disturbance, including proposed access roads, parking, spoil banks, and other infrastructure. Adequate time, normally at least one field season, should be allowed for each survey. The duration shall be extended (1) if inclement weather conditions prevent conducting an adequate survey during that field season, (2) if the proposed area is excessively large for the crew size to complete an adequate paleontological resource survey in one field season, or (3) if a large-scale excavation of paleontological resources by paleontologists prior to the proposed mining activity is required. Energy or mineral mining operations shall not begin until the chief monument manager or authorized officer carefully reviews and accepts recommendations made by the senior monument paleontologist based on the results of the paleontological resource survey.

### **B. During Commercial Energy and Mineral Activities**

In cases where extraction activities are being conducted in areas with high potential for yielding paleontological resources as determined by the preliminary survey, periodic inspections by a professional paleontologist should be conducted to ensure scientifically important paleontological

resources are not inadvertently destroyed or unlawfully extracted. These inspections should include newly disturbed areas and their spoil banks. Mining workers during operation must immediately report to the designated monument paleontologist should they encounter any paleontological resources that are suspected of having scientific importance. If the discovery is determined to be scientifically important, the paleontologist shall immediately report to the senior paleontologist who will then request the chief monument manager or authorized officer to request an emergency excavation to collect the paleontological resources in question.

### **C. Individual Mineral Activities**

Casual mineral collection could easily extend to fossils in the minds of collectors. Individuals with rights to collect minerals may only do so within the limits of PRPA, which applies to all Federal lands and which explicitly excludes paleontological resources from the definition of minerals. Individuals should immediately report to one of the monument paleontologists any paleontological resources they suspect of having scientific importance.

### **D. Authority**

The monument senior paleontologist should determine who would serve to direct a paleontological resource survey should a mining proposal be submitted for an area of Federal lands, including BENM. The senior paleontologist shall directly report to the chief monument manager.