United States Department of the Interior
Bureau of Land Management

Finding of No Significant Impact
Environmental Assessment
DOI-BLM-UT-Y020-2014-009 EA

August, 2014

East Canyon Paleontological Excavation

Location: East Canyon; T.31S, R24E

Applicant/Address: Dr. John Foster
Museum of Moab
118 East Center Street
Moab, Utah 84532

Monticello Field Office
P.O. Box 7
Monticello, Utah 84535
Phone: 435-587-1500
Fax: 435-587-1518

BLM

FINDING OF NO SIGNIFICANT IMPACT

Environmental Assessment
East Canyon Paleontological Excavation
DOI-BLM-UT-Y020-2014-009 EA

Based on the analysis of potential environmental impacts contained in the East Canyon Paleontological Excavation environmental assessment (referenced), and considering the significance criteria in 40 CFR 1508.27, I have determined that the East Canyon Paleontological Excavation will not have a significant effect on the human environment [other than those already analyzed in existing NEPA documents]. An environmental impact statement is therefore not required.

Donald K. Hoffheins
Field Manager

8/14/2014
Date

United States Department of the Interior
Bureau of Land Management

Decision Record
Environmental Assessment
DOI-BLM-UT-Y0202-2014-009-EA

August, 2014

East Canyon Paleontological Excavation

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DECISION RECORD
Environmental Assessment
DOI-BLM-UT-Y020-2014-009 EA
East Canyon Paleontological Excavation

It is my decision to authorize Dr. John Foster, Paleontologist, with the Museum of Moab to conduct a paleontological excavation as analyzed under the Proposed Action (Alternative A) in the Environmental Assessment (EA). The decision for this project is based on:

Authorities: The authority for this decision is contained in the Federal Land Policy and Management Act of 1976 as amended and the Paleontological Resources Protection Act of 2009

Compliance and Monitoring: The excavation would be monitored by a Bureau of Land Management (BLM) archaeologist for compliance. If the quarry were found to be causing adverse impact on resources, the quarry would be closed, or additional timing restrictions would be put in place.

Terms / Conditions / Stipulations: The standard terms of conditions that are applied to all paleontological excavations would be included on this permit.

PLAN CONFORMANCE AND CONSISTENCY:

The proposed action and alternatives have been reviewed and found to be in conformance with the 2008 Monticello Resource Management Plan. Specifically, the plan states:

Goals and Objectives (pg. 86):

- …protect paleontological resources from surface-disturbing activities and to promote the scientific, educational, and recreational uses of fossils.

Resource Management Plan Decisions (Page 86-87):

PAL-4
"Vertebrate fossils may be collected only under a permit issued by the authorized officer to qualified individuals."

PAL-6
"Fossils collected under a permit remain the property of the federal government and must be placed in a suitable repository (such as a museum or university) identified at the time of permit issuance."

PAL-9
"Where scientifically noteworthy fossils are threatened by natural hazards or unauthorized collection, the BLM will work with permittees and other partners to salvage specimens and reduce future threats to resources at risk."

Alternatives Considered: The EA considered two alternatives: Proposed Action and the No Action Alternative. The Proposed Action entails the excavation of a sauropod called *Dystrophaeus viaemalae*, and any other associated fossils. This specimen was first discovered 1859 by J. S. Newberry and is the first dinosaur discovered in Utah and in the American West. The excavation would be up to 6 square meters across (about 64.5 square feet), and 3-4 square meters (about 32 to 43 square feet) into the slope. The matrix at this locality varies in hardness and would require mostly hand tools to excavate, though some specimens in harder rock would require the use of a gas-powered rock saw, zip guns, and a gas or electric jackhammer. All equipment would be carried in and out on foot. The excavation would employ traditional collection techniques, using burlap and plaster to protect specimens for removal and transport. All specimens would be carried out manually on foot (using a stretcher or similar means).

The No Action alternative would have resulted in the denial of the proposed excavation which would leave the fossil material in place and exposed to the environment. This would result in further deterioration of the fossils through erosion.

No other alternatives were analyzed in this EA because there were not any issues to drive a third alternative. The issues raised could be addressed through analysis of the two alternatives.

Rationale for Decision: The No Action alternative was not selected because it would put paleontological resources in danger of further erosion. The Proposed Action was selected because it is in conformance with the Monticello RMP and only disturbs a small area which will be backfilled with material removed from the excavation. The impacts associated with the project are considered minimal and predictable.

The public was notified of this action on the Environmental Bulletin Board on March 17, 2014. No persons have contacted the BLM in response to this notice. A public comment period was not offered because very little interest in the proposal has been expressed.

Protest/Appeal Language:

If unsatisfied with the outcome of this decision you may file a formal appeal to the Interior Board of Land Appeals (IBLA) by following the procedures in 43 CFR Part 4, Subpart E. When the Authorized Officer finds that suspension of the decision in accordance with 43 CFR 4.21(a) would cause harmful effects to paleontological resources, the Authorized Officer shall apply to the Board for a determination that the decision being appealed, or pertinent parts of the decision, shall stand in full force and effect during the appeal period in the public interest.

Within 30 days of the decision, a notice of appeal must be filed in the office of the authorized officer at Monticello Field Office, P.O. Box 7, Monticello, UT 84535. If a statement of reasons for the appeal is not included with the notice, it must be filed with the Interior Board of Land Appeals, Office of Hearings and Appeals, U.S. Department of the Interior, 801 North Quincy Street, Suite 300, Arlington, Virginia, 22203 within 30 days after the notice of appeal is filed with the Authorized Officer.

If you wish to file a petition for stay pursuant to 43 CFR Part 4.21 (b), the petition for stay should accompany your notice of appeal and shall show sufficient justification based on the following standards:

1. The relative harm to the parties if the stay is granted or denied,
2. The likelihood of the appellant's success on the merits,
3. The likelihood of irreparable harm to the appellant or resources if the stay is not granted,
4. Whether the public interest favors granting the stay.

Donald K. Hoffheins, Field Manager

Date 8/14/2014

United States Department of the Interior
Bureau of Land Management

Environmental Assessment
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East Canyon Paleontological Excavation
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East Canyon Paleontological Excavation
DOI-BLM-UT-Y020-2014-009 EA

CHAPTER 1
INTRODUCTION AND NEED FOR THE PROPOSED ACTION

INTRODUCTION

Dr. John Foster of the Museum of Moab (MOM) proposes to excavate important fossil materials from a location in the East Canyon area of the Monticello Field Office. Access to the site is by foot. The fossils would be removed through the use of hand tools, and gas-powered tools that can be hand-carried into the site. Any jacketed material would be hand carried out on foot.

PURPOSE AND NEED FOR THE PROPOSED ACTION

The need for the action is established by the Bureau of Land Management's (BLM's) responsibility under the Paleontological Resources Preservation Act of 2009 to respond to a request for a permit to collect paleontological resources.

The BLM's purpose is to consider a paleontological permit based on the qualification of the applicant, the ability to further paleontological knowledge or public education, conformance with the Monticello RMP, and preventing impacts to other natural and cultural resources.

CONFORMANCE WITH BLM LAND USE PLAN(S)

The 2008 Monticello Resource Management Plan supports the scientific collection of vertebrate fossils:

Goals and Objectives (pg. 86):

- …protect paleontological resources from surface-disturbing activities and to promote the scientific, educational, and recreational uses of fossils.

Resource Management Plan Decisions (Page 86-87):

PAL-4

"Vertebrate fossils may be collected only under a permit issued by the authorized officer to qualified individuals."

PAL-6

"Fossils collected under a permit remain the property of the federal government and must be placed in a suitable repository (such as a museum or university) identified at the time of permit issuance."

PAL-9

"Where scientifically noteworthy fossils are threatened by natural hazards or unauthorized collection, the BLM will work with permittees and other partners to salvage specimens and reduce future threats to resources at risk."

RELATIONSHIP TO STATUTES, REGULATIONS, OR OTHER PLANS

This environmental assessment (EA) was prepared in conformance with the National Environmental Policy Act (NEPA) and with all applicable regulations and policies subsequently implemented, including Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), BLM National Environmental Policy Act Handbook H-1790-1, and U.S. Department of the Interior Department Manual 516, Environmental Quality.

A number of federal, state, and local governmental agencies may have authority over a paleontological excavation project and are listed in Table 1-1.

Table 1-1: Regulatory Authorities and Guidance

Federal Authorities and Responsibilities	
Cultural Resources	
BLM Native American Trust Resource Policies (303 DM 2 and 512 DM 2); BLM H-8120-1 – General Procedural Guidance for Native American Consultation; BLM Manual 8120, Tribal Consultation under Cultural Resources; EO 13175 Consultation and Coordination with Indian Tribal Governments (65 FR 67249, November 2000); EO 13007 Indian Sacred Sites (61 FR 26671, May 1996); American Indian Religious Freedom Act of 1978 (PL 95-341; 42 USC 1996)	Native American consultation regarding possibly affected traditional cultural properties.
Archaeological and Historic Data Preservation Act of 1974 (PL. 86-253, as amended by PL 93291; 16 USC 469); Archaeological Resources Protection Act of 1979 (PL. 96-95; 16 USC. 470aa-mm); National Historic Preservation Act of 1966, Section 106, (PL 89-665; 16 USC. 407(f) and 36 CFR Part 800)	Requirement for cultural resource inventories to determine the presence of cultural resources and protection of sites discovered during project operations.
Native American Graves Protection and Repatriation Act of 1990 (PL 101-601)	Procedures to be followed in the event of discovery of human remains.
Paleontological Resources	
Paleontological Resources Preservation Act of 2009	Requirement for paleontological resource inventories to determine the presence of fossil resources and protection of sites discovered during project operations.
Land Management and Use	
Federal Land Policy and Management Act of 1976, Section 201(a) (PL 94-579; 43 USC 1701 et seq.)	Management of federal lands under principles of multiple use and sustained yield while protecting environmental resources.
National Environmental Policy Act of 1969 (PL 91-190; 42 USC 4321); 40 CFR Parts 1500-1508 CEQ implementation of NEPA; BLM Handbook H-1790-1; U.S. Department of the Interior Department Manual 516, Environmental Quality	Evaluation of impacts to environmental resources that may result from a proposed action prior to its implementation.
State of Utah Authorities and Responsibilities	
Cultural Resources	
Section 106 of National Historic Preservation Act of 1966, as amended (16 U.S.C. 470 et seq.) and Advisory Council Regulations on the Protection of Historic and Cultural Properties, as amended (36 CFR. Part 800)	Utah State Historic Preservation Office consultation on cultural resource survey, evaluation, and mitigation.

CHAPTER 2
DESCRIPTION OF ALTERNATIVES

INTRODUCTION

This EA focuses on the Proposed Action and No Action alternatives. The Proposed Action alternative presents the proposal to excavate fossil material and the No Action alternative is considered and analyzed to provide a baseline for comparison of the impacts of the proposed action.

PROPOSED ACTION

The East Canyon site is a vertebrate fossil locality stratigraphically located in the lower Tidwell Member of the Upper Jurassic Morrison Formation (~160 million years ago) located in San Juan County, Utah. These fossils would be professionally prepared and would be curated at the Natural History Museum of Utah (UMNH), which is an approved BLM repository. The Museum of Moab and UMNH share certain goals with the BLM including protection, research, and interpretation of paleontological resources.

The proposed excavation is in a historically known vertebrate fossil locality, the first dinosaur discovered in Utah and in the American West, which was found in 1859 by J. S. Newberry (Sop Canyon Quadrangle T31S, R24E). The original material collected is housed at the National Museum of Natural History in Washington D.C. The sauropod *Dystrophaeus viaemalae*, and any other associated fossils, would be collected. The actual locality of the site was unknown, until the site was relocated in 1989 by Moab naturalist Fran Barnes. Some surface bone fragments were collected at that time by then Utah State Paleontologist Dr. Dave Gillette, under his then existing surface collection permit, which allows for the collection of fossils without an excavation permit from the surface, restricted to a 1 meter^2. These specimens are now in the collections of the UMNH. An Environmental Assessment was conducted in 1996 (UT-069-96-016), and a decision on the EA was signed on May 17, 1996. The decision authorized similarly proposed work to be done by Dr. Gillette. The excavation was never begun, and the Museum of Moab, along with several partners, including Dr. Gillette, propose to collect more of the specimen in order to find diagnostic elements that can help them further identify exactly what kind of sauropod *Dystrophaeus* is. A site visit on June 19, 2014, found several bones eroding out of the site, and they are at risk for continued erosion.

The excavation would be up to 6 square meters across (about 64.5 square feet), and 3-4 square meters (about 32 to 43 square feet) into the slope. Other in situ associated vertebrate remains may be collected from the site. Back dirt and rock would be stockpiled off to the side of the excavation for use in quarry reclamation at the end of the project. The specimens appear to be preserved in good condition, and would contribute to the knowledge of sauropod evolution in North America. The location of this site is on a steep slope above a ledge of Entrada Sandstone which means that excavation of the fossil material is time-critical as erosiôn would continue to weather and destroy the fossils. The proposed work would start in mid-August of 2014 and would be ongoing until the resources within the currently defined area are excavated.

Jurassic age rocks are abundant in the Monticello Field Office, but the lower Tidwell Member of the Morrison Formation in the region is poorly sampled, with this being the only known dinosaur site in the Tidwell in North America. The fossil record from this period of time is better known in Europe, with fossils being highly significant, recording an important change in the biodiversity. The recovery of additional *Dystrophaeus* remains would enhance our understanding of the resource, fostering more effective management of local fossil resources. The fossils excavated would be protected and interpreted to the public through the efforts of the MOM, Canyonlands Natural History Association (funding agency for project) and the UMNH.

The MOM is proposing the use of hand tools and techniques that are minimally invasive. The matrix at this locality varies in hardness and would require mostly hand tools to excavate, though some specimens in harder rock would require the use of a gas-powered rock saw, zip guns, and a gas or electric jackhammer. The excavation would employ traditional collection techniques, using burlap and plaster to protect specimens for removal and transport. All specimens would be carried out manually on foot (using a stretcher or similar means). Relevant sedimentological data would also be recorded and accurate mapping of all specimens would be conducted using a meter grid system, supplemented with photographic documentation. Materials collected would be prepared in the laboratories at the Natural History Museum of Utah (UMNH) and these specimens would ultimately be reposited into the UMNH collection using standard museum techniques to ensure that the materials are adequately stored and curated. The specimens would be available for display at the MOM once work is complete. Work at this location would allow for protection, research, and interpretation of fossil resources, and the support of a BLM partner organization's mission.

Paleontologists would camp at the base of the cliff, below the quarry, or at a designated campground on BLM or State lands. Solid waste at excavation or camping sites would be collected, bagged, and properly disposed of. Acryloid glue dissolved in acetone would be used for stabilizing fossils. It would be transported in tightly sealed and properly labeled small containers and only minimal quantities would be kept on site. No hazardous waste would be produced.

NO ACTION

The No Action alternative would be to deny Dr. Foster the ability to work at the East Canyon Site. This would mean that the fossils could not be retrieved and they would be in danger of damage by continued erosion.

CHAPTER 3
AFFECTED ENVIRONMENT

INTRODUCTION

The affected environment was considered and analyzed by an interdisciplinary team as documented in the Interdisciplinary Team Checklist. The checklist indicates which resources of concern are either not present in the project area or would not be impacted to a degree that requires detailed analysis. Resources which could be impacted to a level requiring further analysis are described in Chapter 3 and impacts on these resources are analyzed in Chapter 4 below.

Only Paleontology and Cultural Resources would be potentially affected to a degree requiring further analysis.

Paleontology

Fossils are rare and significant within the lower Tidwell Member of the Morrison Formation. The rugged and remote area that this site is located in contains a varied geologic terrain. The paleontological resources of this area are unique.

Cultural Resources and Native American Religious Concerns

A cultural resource may be defined as prehistoric or historic districts, sites, buildings, structures, and objects that represent past human activities. Human occupation of the study area spans the last 10,000 to 12,000 years. The majority of archeological sites found within one mile of the East Canyon project are associated with the Puebloan and Anasazi time periods. These sites date from 1,100 to 800 years old. The cultural sequence represented potentially includes Paleo-Indian, Archaic, Ancestral Puebloan, Paiute and historic European cultures.

Natural processes, including erosion, fire, decay of organic material and destruction by animals native to the area can result in adverse impacts to cultural resources. Over time, these natural processes have the potential to alter or completely destroy an archaeological site. Human activities, intentional or not, can greatly alter the rate at which sites are impacted in both positive and negative ways. Intentional activities, such as vandalism, looting, or improper management of the local environment can increase the rate at which sites are destroyed. However, purposeful and scientifically sound management of surrounding resources can result in improved preservation of these non-renewable resources.

CHAPTER 4
ENVIRONMENTAL IMPACTS

DIRECT AND INDIRECT IMPACTS

PROPOSED ACTION

This section analyzes the impacts of the proposed action to those resources described in the Affected Environment, Section 3, above.

Paleontology

The collection and documentation of this fossil material is critical to preserving the scientific information that it offers, and protecting the loss of this resource to continued erosion. The collection of the fossils at the East Canyon Site for scientific research as proposed would help to expand upon our knowledge of this poorly understood sauropod dinosaur, as well as expand upon our understanding of sauropod radiation in North America. The specimen found at this location is the holotype, for this species represents the only known specimen of this type of dinosaur. The fossil at this location also represents the only dinosaur of this age in North America. New scientific data on the global geographic distribution and diversity of sauropod dinosaurs would be documented after the material has been properly curated, prepared and studied. Publications derived from this research, as well as display of the material in an appropriate setting, would provide interpretive and educational opportunities for visitors or in-school programs.

Cultural Resources and Native American Religious Concerns

An assessment of impacts on cultural resources would be made in accordance with the Section 106 of the National Historic Preservation Act (NHPA) and implementing regulations 36 CFR 800 prior to the undertaking. The assessment would determine the nature and extent of effects on cultural resources anticipated from implementing the proposed action.

Significant cultural resources include those resources that are listed, or are eligible for listing, in the NRHP. The criteria for evaluating the significance of cultural resources are set forth in 36 CFR 60.4. These criteria are designated in the four-tier letter code system (A, B, C, and D), presented below. Significance as it relates to American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association.

- Criterion A – are associated with events that have made a significant contribution to the broad patterns of our history;
- Criterion B – are associated with the lives of persons significant in our past;
- Criterion C – embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; possess high artistic values; or represent a significant and distinguishable entity whose components may lack individual distinction;

- Criterion D – has yielded, or may be likely to yield, information important in prehistory or history.

Historic properties can be affected by actions that alter in any way the attributes that qualify the resources for inclusion in the National Register. Adverse effects can result when the integrity of a resource's significant characteristics is diminished. Consideration would be given both to the effects anticipated at the same time and place of the undertaking and to those potentially occurring indirectly at a later time and distance from the resource.

Mitigation measures include placement of an interpretative sign in the general vicinity of the quarry site, at least two public lectures in the local communities, and submittal of a final report to the BLM and the State Historic Preservation Office (SHPO). All mitigation components would be completed within two years of the completion of the undertaking. Because the Proposed Action would result in No Effect or No Adverse Effect to historic properties, additional mitigation of adverse effects is not required.

NO ACTION

Paleontology

Under the No-Action Alternative, delays would be caused in collecting these important specimens and logistical problems for researchers. This might ultimately result in non-collection of resources and their loss due to erosion. A loss of scientific information would occur under the No-Action Alternative, and there would not be associated excavation disturbances from researchers, although based on regional history, disturbance from vandalism or theft could occur.

Cultural Resources and Native American Religious Concerns

The No Action alternative would not contribute to the direct impacts of identified archaeological resources, because no physical disturbance would occur, thus resulting in No Effect to historic properties.

No additional mitigation measures have been identified other than those incorporated as part of the Proposed Action. Because the Proposed Action and the No Action alternatives would result in No Effect or No Adverse Effect to historic properties, additional mitigation of adverse effects is not required.

CUMULATIVE IMPACTS

Cumulative impacts are those impacts resulting from the incremental impact of an action when added to other past, present, or reasonably foreseeable actions regardless of what agency or person undertakes such other actions. There is no development foreseen in the project area. It has been determined that cumulative impacts to resources would be negligible as a result of the proposed action because impacts of the proposed action itself are negligible.

CHAPTER 5
PERSONS, GROUPS, AND AGENCIES CONSULTED

During the preparation of this project, the public was notified of the proposed action by posting on the ENBB on March 17, 2014. No persons have contacted the BLM in response to this notice. A public comment period was not offered because very little interest in the proposal has been expressed.

Table 5.1. List of Persons, Agencies and Organizations Consulted

Name	Purpose & Authorities for Consultation or Coordination	Findings & Conclusions
Utah State Historic Preservation Office (SHPO)	Consultation for undertakings, as required by the National Historic Preservation Act (NHPA) (16 USC 470)	BLM initiated consultation with SHPO by a letter dated July 29, 2014.
Utah's San Juan County Historical Commission	Consultation for an undertaking related to a historic event in San Juan County, Utah	BLM initiated consultation with the commission in person and by e-mail dated July 16, 2014.
Old Spanish Trail Association	Consultation for an undertaking related to a historic event along the Old Spanish Trial in San Juan County, Utah	BLM initiated consultation with the association by e-mail dated July 16 and 23, 2014.

List of Preparers

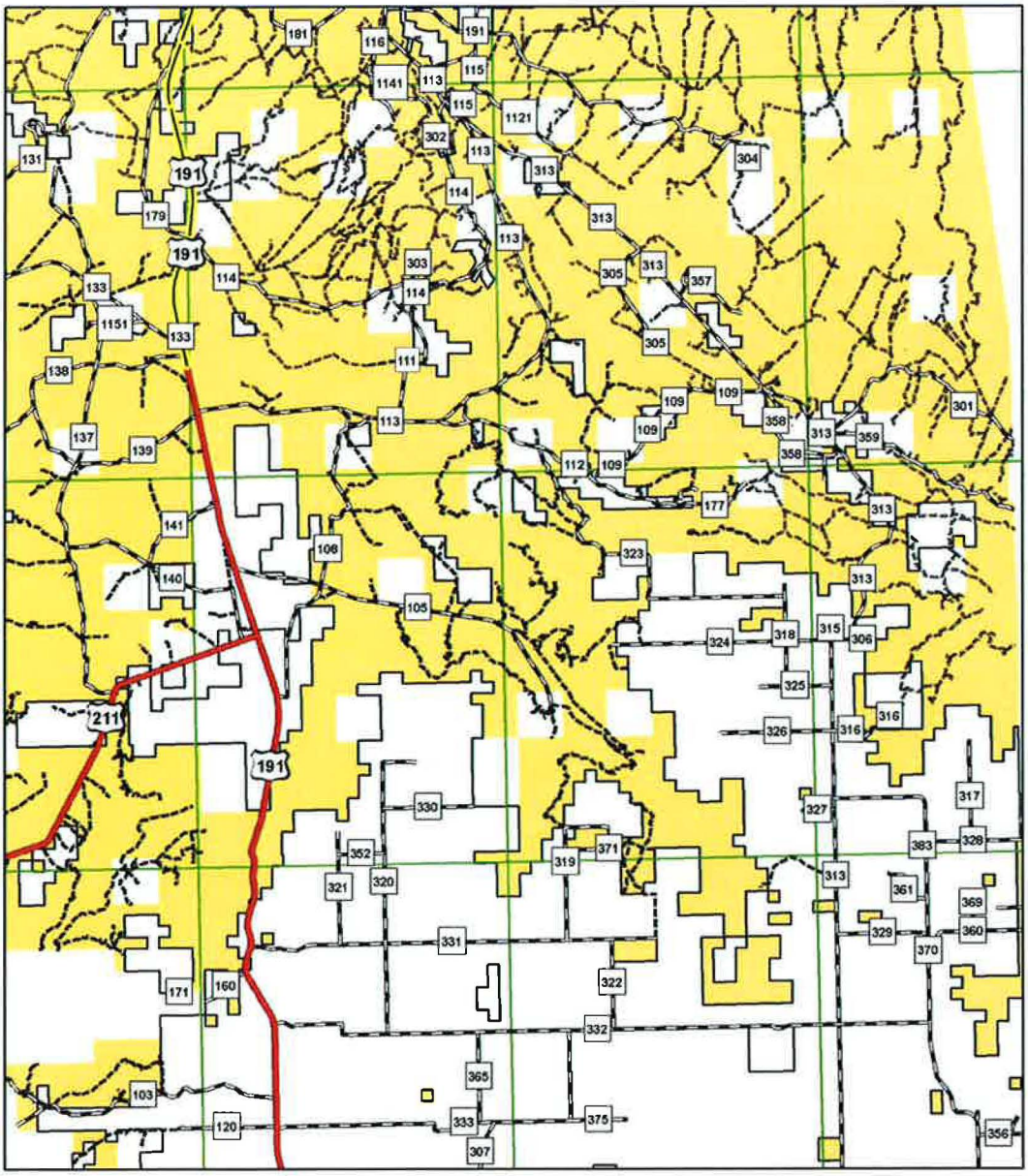
Table 5.2 BLM Preparers

Name	Title	Responsible for the Following Section(s) of this Document
Rebecca Doolittle	NEPA Coordinator	Team Lead, Paleontology
Jed Carling	Range Management Specialist	Floodplains; Wetlands/ Riparian; Invasive Species; Livestock Grazing; Rangeland Health Standards; Vegetation
Todd Parker	Outdoor Recreation Planner	Recreation Management; Wild and Scenic Rivers; Areas of Critical Environmental Concern
Mandy Scott	Wildlife Biologist	Water Resources; Wildlife; Special Status Plant and Wildlife Species; Migratory Birds ; Threatened, Endangered or Candidate Animal Species; Fish and Wildlife Excluding USFW Designated Species; Utah BLM Sensitive

		Species; Woodlands/Forestry
Cliff Giffen	Natural Resource Specialist	Air Quality; Soils
Brian Quigley	Assistant Field Office Manager	Visual Resources; Lands/Access
Leigh Grench	Archaeologist	Native American Concerns; Cultural Resources
Jeff Brown	Hazardous Material Coordinator/Safety	Hazardous and Solid Wastes; Public Safety
Ted McDougall	Geologist	Mineral Resources/Energy Production
Jan Denney	Realty Specialist	Lands/Access
Paul Plemons	Fire Management	Fuels/Fire Management
Bill Stevens	Recreation Planner	BLM Natural Areas; Wilderness/WSA; Socio-Economics; Lands with Wilderness Characteristics; Environmental Justice

APPENDIX A: Map

General map of East Canyon area



APPENDIX B: Interdisciplinary Team Checklist

INTERDISCIPLINARY TEAM CHECKLIST

Project Title: East Canyon Paleontological Excavation

NEPA Log Number: DOI-BLM-UT-Y020-2014-009 EA

File/Serial Number:

Project Leader: Rebecca Doolittle

DETERMINATION OF STAFF: ***(Choose one of the following abbreviated options for the left column)***

NP = not present in the area impacted by the proposed or alternative actions
NI = present, but not affected to a degree that detailed analysis is required
PI = present with potential for relevant impact that need to be analyzed in detail in the EA
NC = (DNAs only) actions and impacts not changed from those disclosed in the existing NEPA documents cited in Section D of the DNA form. The Rationale column may include NI and NP discussions.

The following elements are not present in the Moab Field Office and have been removed from the checklist: Farmlands (Prime or Unique), Wild Horses and Burros.

Determi-nation	Resource	Rationale for Determination*	Signature	Date
RESOURCES AND ISSUES CONSIDERED (INCLUDES SUPPLEMENTAL AUTHORITIES APPENDIX 1 H-1790-1)				
NI	Air Quality Greenhouse Gas Emissions	The Proposed Action is in conformance with the Monticello FO RMP, 2008. Impacts to air quality were adequately analyzed in the PRMP/FEIS which states on page 4-10 "The implementation of …paleontological decisions … would have negligible impacts on air quality …" Air quality would not be impacted to the degree that would require further analysis in the EA.	CGiffen	4/7/14
NP	Floodplains	The proposal is located in the uplands on a talus slope and is not situated in any immediate active floodplains.	Jed Carling	03/21/14
NI	Soils	The Proposed Action is in conformance with the Monticello FO RMP, 2008. Impacts to soils were adequately analyzed in the PRMP/FEIS which states on page 4-451 "Management decisions regarding … paleontology … would result in negligible impacts to soils and water resources." Soils would not be impacted to the degree that would require further analysis in the EA.	CGiffen	4/7/14
NP	Water Resources/Quality (drinking/surface/ground)	The proposed action conforms to the Soil and Water Resources goals, objectives and management actions of the Monticello RMP (RMP pg. 116 and 117). Paleontological collection permitting under the proposed action would occur on areas with little soil (exposed rock) or badland type soils that support little or no vegetation. The areas to be impacted would be small (¼ acre or less), collection would be accomplished with hand and hand held power tools, and the site restored to a natural condition after collection operations are completed. Water Resources/quality would not be	M. Scott	4/8/14

Determi-nation	Resource	Rationale for Determination*	Signature	Date
		affected by the Proposed Action. Water Resources/quality would not be analyzed in detail in the EA.		
NP	Wetlands/Riparian Zones	The proposal is located in the uplands on a talus slope (dig site) and at the base of slope (camp site). They are not situated in any defined wetlands and/or riparian zones.	Jed Carling	03/21/14
NP	Areas of Critical Environmental Concern	The 2008 Monticello RMP designated seven areas as ACECs where special management attention is required (Map 11 RMP). There are no ACECs within the Proposed Project area The Proposed Action would utilize only routes designated in the Monticello Field Office Resource Management Plan. There would be no impact to ACECs with the approval of the Proposed Action as the designated routes would not be within Areas of Environmental Concern.	Todd Parker	4/22/14
NI	Recreation	Conflicts with recreational uses of this area would be minimal.	Todd Parker	5/22/14
NP	Wild and Scenic Rivers	There are no Wild and Scenic River segments in the area of the Proposed Action.	Todd Parker	4/22/14
NI	Visual Resources	This proposal is in an area with a Visual Resource Management Class 3. Activities associated with this proposal meet the management objective of a low level of change to the landscape. Visual Resources would not be impacted to the degree that would require detailed analysis in the EA.	B.Quigley	4.4.14
NP	BLM Natural Areas	See 2008 Monticello RMP	B. Stevens	6-24-14
NI	Socio-Economics	Any benefit to the planning area would be minimal relative to the planning area's overall economy.	B. Stevens	6-24-14
NP	Wilderness/WSA	See 2008 Monticello RMP	B. Stevens	6-24-14
NI	Lands with Wilderness Characteristics	The project area is on the very edge of an area identified by the BLM as possessing wilderness characteristics, but for which the 2008 Monticello RMP chose to manage for other resources. The surface disturbance involved is minimal.	B. Stevens	6-24-14
NP	Cultural Resources	A Cultural Resource Class III Survey (U14BL0584) was conducted in May 2014.	Leigh Grench	8-11-14
NP	Native American Religious Concerns	There are no known Native American cultural sites within the proposed project area.	Leigh Grench	8-11-14
NI	Environmental Justice	Although the planning area contains EJ populations, none of these would be affected adversely by the proposed project.	B. Stevens	6-24-14
NI	Wastes (hazardous or solid)	No hazardous wastes would be generated. Any solid wastes generated would be packed out and properly disposed of.	J. Brown	
NP	Threatened, Endangered or Candidate Animal Species	There are no know threatened, endangered or candidate wildlife within the proposed project area.	M. Scott	4/8/14
NI	Migratory Birds	The proposed project may cause minor temporary disturbance to migratory birds. Birds my temporarily disperse from the area because of noise associated with the activities. There are no known nests within 0.5 miles of the project area.	M. Scott	4/8/14
NP	Utah BLM Sensitive Species	There are no known Utah BLM sensitive species within the project area.	M. Scott	4/8/14
NI	Fish and Wildlife Excluding USFW Designated Species	There would be a very small amount of disturbance associated with the proposed action. Wildlife may temporarily disperse from the area because of noise associated with the activities. The proposed action is not	M. Scott	4/8/14

Determi-nation	Resource	Rationale for Determination*	Signature	Date
		occurring within any critical habitat; therefore impacts would be negligible to wildlife species.		
NI	Invasive Species/Noxious Weeds	There are no known infestations of State of Utah listed noxious weeds in the immediate vicinity of the proposed action. The MFO does not anticipate any changes in the proportion of controllable spreading agents to contribute in the establishment and spread of invasive plants as a result of the proposed action. Also, the limited scope of proposed surface disturbance (~24 metes^2, or 0.006 acres) should curtail the opportunity for the establishment and propagation of invasive and noxious weed species. Thereby, invasive species and noxious weeds are not impacted to a degree that detailed analysis is required.	Jed Carling	03/21/14
NP	Threatened, Endangered or Candidate Plant Species	There are no known threatened, endangered or candidate plant species within the project area.	M. Scott	4/8/14
NI	Livestock Grazing	The dig site is located on a talus slope that is unavailable for livestock grazing. The bottom camp site is located in the East Canyon Allotment, which is authorized for grazing from 12/01-04/30. The proposed action and associated work would not measurably influence livestock grazing management, cattle distribution, and/or available forage. This is due to the limited amount of surface disturbance in relation to the scale of the allotment, and the proposed excavation in July-August would occur outside of the grazing season. Thereby, there are no impacts to a degree that detailed analysis is required.	Jed Carling	03/21/14
NI	Rangeland Health Standards	Utah Standards for Rangeland Health are individually addressed as separate resources for determination of impacts in this checklist. It has been determined that the proposed action, in consideration of associated mitigation measures, would have No Impact or the resource is Not Present for Standard #1 (Soils), #2 (Riparian), #3 (Biotic), and #4 (Water Quality). Thereby, there are no affects to a degree that detailed analysis is required.	Jed Carling	03/21/14
NI	Vegetation Excluding USFW Designated Species	The proposed action is located in a Talus Slope (dig site) and Semidesert Sand ecological site (camping / parking area). Vegetation is sparse and primarily consists of blackbrush, shadscale, fourwing saltbush, sand dropseed, galleta grass, and Indian ricegrass. This action would not impact vegetation to a degree that detailed analysis is required, because the scale of surface disturbance associated with the dig site is negligible (~24 meters^2, 0.006 acres) in relation to the available ecological site and associated vegetation, camping is short-term and would allow for plant recovery, the site is sparsely vegetated, biotic integrity would continue and be maintained at a level appropriate for the site and species involved, and it would have no negative influence on the landscape's ability to achieve the Standards for Rangeland Health.	Jed Carling	03/21/14
NP	Woodland / Forestry	The proposed project site is located on an un-forested steep talus slope. The action would not impact woodland or forestry resources.	M. Scott	4/8/14
NI	Fuels/Fire Management	Vegetation is generally very sparse at the excavation site and limited to low density Pinyon/ Juniper forest with potential	P. Plemons	3/21/14

Determi-nation	Resource	Rationale for Determination*	Signature	Date
		grass and shrub understory at the staging and camping areas. Due to the limited vegetative cover and small size of the disturbance area there would be no impact to fuels. Camping and driving to the site on this project would have no greater impact or possibility for accidental fire ignition than would be expected from general land use by the public.		
NI	Mineral Resources/Energy Production	There are no mineral exploration or production operations in vicinity of the proposed action. The proposed action would not interfere with future mineral resource development because of the small scale of proposed surface activity (total surface disturbance roughly 24 square meters). Any future mineral activity in the area could be reasonably sited to avoid the project.	T. McDougall	4/9/14
NI	Lands/Access	This proposal would have no impact on activities within the Lands and Realty program.	B.Quigley	4.4.14
PI	Paleontology	The project would result in protection of paleontological resources using scientific principles and expertise (PRPA Sec. 6302), while also protecting the scientific value of these significant fossil resources (FLPMA Sec. 102.8), while also following the Monticello Field Office RMP.	R. Doolittle	8-11-14

FINAL REVIEW:

Reviewer Title	Signature	Date	Comments
Environmental Coordinator	/S/Brian Quigley	8.12.14	
Authorized Officer	/s/ Donald K. Hoffheins	8.14.2014	