

## CHECKLIST ENVIRONMENTAL ASSESSMENT

<b>Project Name:</b>	Sprunger Fossil License
<b>Proposed Implementation Date:</b>	October, 2010
<b>Proponent:</b>	Michael and Sandra Sprunger
<b>Location:</b>	Sections 25,26,27,28,33,& 36, Township 11 South – Range 12 West
<b>County:</b>	Beaverhead County

### I. TYPE AND PURPOSE OF ACTION

Michael and Sandra Sprunger have applied for a Land Use License (LUL) to collect Dawn Redwood (*Met sequoia*) fossils from State land to sell to schools for educational purposes. The samples will be collected in shale rock using hand tools, pick and shovels. The fossils will be gathered in a 6"-12" range below ground surface in exposed shale rock. Disturbed areas will be reclaimed as the fossils are found. Very little ground disturbance is anticipated from this proposal. The Sprunger's will be required to have written permission from private land owners they cross to access state land in areas where public access is currently not available.

### II. PROJECT DEVELOPMENT

#### 1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

*Provide a brief chronology of the scoping and ongoing involvement for this project.*

Beaverhead County Commissioners  
Craig Fager, Wildlife Biologist with Montana Fish Wildlife and Parks  
Patrick Rennie, Archeologist, with Montana Department of Natural Resources and Conservation (DNRC)  
Minerals Management Bureau, MT DNRC  
BLM Field Office, Dillon, MT  
Dillon Ranger District, US Forest Service  
Paul Hanson, Hanson Livestock, Rancher & lessee  
Denhan Ranch  
Michael Barrett, Ranch  
NRIS

#### 2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

No other governmental agencies or permits are needed or involved with this proposal.

#### 3. ALTERNATIVES CONSIDERED:

- A. Action Alternative:** Grant a Land Use License to Michael and Sandra Sprunger for the removal of **Met sequoia** Fossils for commercial purposes.
- B. No Action Alternative:** Deny a Land Use License to Michael and Sandra Sprunger for the removal of **Met sequoia** Fossils for commercial purposes.

### III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES* potentially impacted are listed on the form, followed by common issues that would be considered.
- Explain **POTENTIAL IMPACTS AND MITIGATIONS** following each resource heading.
- Enter "NONE" if no impacts are identified or the resource is not present.

#### 4. **GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:**

*Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.*

The fossils will be taken where shale rock outcrop features have been uplifted and exposed. The only fossils that will be taken will be within 6- 12" of the surface. Because all exploration and digging will be with hand tools and within existing rock outcrops minimal impacts to the soil are anticipated from this proposal. Reclamation work will occur as the fossils are found by smoothing out disturbed soil and placing it back to its original location. No cumulative impacts to soils or geological features are anticipated.

#### 5. **WATER QUALITY, QUANTITY AND DISTRIBUTION:**

*Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.*

A number of perennial streams run through these state sections, Anton Creek, Schwartz Creek, Keystone Gulch, and a number of tributaries of these creeks. Because the digging will be in relatively non erosive areas, (rock outcrops) away from the streams and non motorized equipment will be used to dig for the fossil very little disturbance to the streams are anticipated. No cumulative impacts to water quality will occur from this proposal.

#### 6. **AIR QUALITY:**

*What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.*

This proposal will not produce any cumulative impacts to air quality standards in Southwestern Montana.

#### 7. **VEGETATION COVER, QUANTITY AND QUALITY:**

*What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.*

There are two sensitive vascular plants that have been identified near where the project is proposed, Dense – leaf Draba, (*Drabra densifolia*) and Red Sage (*Kochia Americana*). Red sage is listed as sensitive by the BLM, Forest Service and Fish & Wildlife Service. These plants however have not been identified within the project proposal. The closest either plant has been identified and recorded is within 1 mile of this proposal. No impacts to these sensitive vascular plants are anticipated because the fossils will be taken from rock outcroppings in areas away from where these plants have been identified.

#### 8. **TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:**

*Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.*

The Montana Natural Heritage program was contacted regarding species of concern within the project area. The endangered Gray Wolf was listed as possibly traveling through the area, along with seven other sensitive species of concern that are found near the proposal area; Greater Sage Grouse, Northern Goshawk, Long Billed Curlew, Sage Thrasher, Brewers Sparrow, Grasshopper Sparrow, and Pygmy Rabbit.

**Gray Wolf (Canus Lupus)** Wolves are distributed throughout Southwest Montana. This proposal would not have any measurable effect on wolf prey or wolves, thus direct, indirect, or cumulative effects are not anticipated.

**Greater Sage-grouse (Centrocercus Urophasianus)** Greater Sage Grouse use has been recorded within two miles of the of the project area including nesting and leks. The DNRC is not aware of any important breeding leks within the proposal area. If sage-grouse are using the tract, they could be directly disturbed by activities associated with this project; however, the disturbance would be short term and would not be expected to have a measureable impact on the overall sage grouse population. Measurable direct, indirect, or cumulative effects would not be anticipated as a result of the proposed project.

**Pygmy Rabbit (Brachylagus idahoensis)** Pygmy Rabbits are present in Section 36, T11 South – Range 12 West which is a part of this proposal. The NRIS search revealed resident animal presence on this section on numerous occasions. The rabbit is a BLM and US Forest Service sensitive species. This project would probably not cause direct, indirect, or cumulative effects on this species because disturbance to sage brush and the surrounding habitat would be minimal and of a short duration.

**Northern Goshawk, (Accipiter gentillis)**, is listed as a sensitive species by the BLM. The bird inhabits and lives in old growth forests where its food source is found. A nesting area has been identified on Forest Service land within 1 mile of this proposal. This project would be far enough away from the nesting site to prevent disturbance of the birds during the nesting period. Because of the limited nature of this proposal and its distance from the nesting hawks and timber, no long term or cumulative impacts to the Goss Hawks in this area should occur.

**Brewers Sparrow, (Spizella breweri)**, is listed as a sensitive species by the US fish & Wildlife Service, Forest Service and BLM. Although the sparrows presence has been identified near the vicinity of the project its presence has not been identified within the proposal area. Because of the limited disturbance from this proposal and its lack of habitat disturbance this proposal should not affect the habitat or cause cumulative effects to the bird. No short term or cumulative effects are anticipated because of this proposal to Brewers Sparrows.

**Long Billed Curlew, (Numenius americanus)** is listed as a sensitive species by the US Fish & Wildlife Service, Forest Service and the BLM. There is a confirmed breeding area identified within the proposed project area in Section 36, Township 11 South – Range 12 West. This proposal should not negatively affect Curlews nesting and summer habitat. No long term or cumulative impacts are anticipated to Long Billed Curlews from this proposal.

**Sage Thrasher – (Oreoscoptes montanus)** – Sage thrashers are a BLM listed sensitive species. The sage thrasher migrates into Montana to nest and summer on sagebrush sites in late April to mid-May. No sagebrush communities would be compromised by this proposal. Because its habitat will not be affected by this proposal the long term impacts will be minimal and not cumulative effects are anticipated.

**9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:**

*Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.*

As listed above the proposal area has the possibility of having one endangered species (Gray wolf) passing through the area and the presence of six sensitive species near or are in the general vicinity of this proposal. The proposal however will have little to no impact on the habitat of any of these species. There will only be a small amount of disturbance on the ground and the overall effect to the environment will be minimal. The gathering will be done by foot travel and the use of hand tools. The proposed removal of fossils in the Medicine Lodge area presents little evidence of causing cumulative impacts to the current environmental resources present in this area.

**10. HISTORICAL AND ARCHAEOLOGICAL SITES:**

*Identify and determine effects to historical, archaeological or paleontological resources.*

Patrick Rennie archeologist for the MT DNRC was contacted about this proposal and his search didn't identify any historical, archeological or paleontological resources in this area.

**11. AESTHETICS:**

*Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.*

This proposal will not affect the aesthetics of the area. The proposed project is not located on a prominent topographic feature and will not be visible from populated or scenic areas. There will be very little excavation or disturbance from this proposal and if fossils are removed it will be undetectable without being directly on the site of the digging. There is no long term or cumulative effects to aesthetics anticipated from this proposal.

**12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:**

*Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.*

The proposed project will not require any limited resources and would not affect other activities located near the project area. No cumulative effects to environmental resources are expected as a result of this project.

**13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:**

*List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.*

The MT DNRC is unaware of any proposed projects in the general vicinity of this proposal. The BLM, Forest Service, Fish Wildlife and Parks, County government and private landowners were contacted during the scoping process. No other projects or studies were identified.

**IV. IMPACTS ON THE HUMAN POPULATION**

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" if no impacts are identified or the resource is not present.*

**14. HUMAN HEALTH AND SAFETY:**

*Identify any health and safety risks posed by the project.*

The proposed project would not affect human health or safety in the proposal area.

**15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:**

*Identify how the project would add to or alter these activities.*

Grazing is the current dominant use of the private, state, and federal land in this area. This proposal will not affect the ability to graze the lands in the project area. No impacts or cumulative effects are anticipated to the current agricultural use.

**16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:**

*Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.*

The project would not create, move, or eliminate jobs.

**17. LOCAL AND STATE TAX BASE AND TAX REVENUES:**

*Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.*

This proposal will not affect the current local or state tax base or revenues for either County or State governments.

**18. DEMAND FOR GOVERNMENT SERVICES:**

*Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services.*

No changes in demand for government services are anticipated from this proposal.

**19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:**

*List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.*

No additional environmental plans or goals were received or mentioned in the scoping that was conducted for this project.

**20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:**

*Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.*

This proposal will not affect the quality of recreational activities in the general vicinity of the proposed project area.

**21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:**

*Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.*

No changes in the density or distribution of population and housing are anticipated from this project.

**22. SOCIAL STRUCTURES AND MORES:**

*Identify potential disruption of native or traditional lifestyles or communities.*

No change in social structures and mores would result from this project.

**23. CULTURAL UNIQUENESS AND DIVERSITY:**

*How would the action affect any unique quality of the area?*

No effect on cultural uniqueness and diversity are anticipated from this proposal.

**24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:**

*Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.*

If this project is allowed to go forward the trust would be compensated the minimum amount for a LUL of \$150/year for the digging of fossils on state lands.

<b>EA Checklist Prepared By:</b>	<b>Name:</b> Tim Egan	<b>Date:</b> 9/24/2010
	<b>Title:</b> Dillon Unit Manager	

**V. FINDING**

**25. ALTERNATIVE SELECTED:**

Issue Land Use license authorizing the removal of fossils.

**26. SIGNIFICANCE OF POTENTIAL IMPACTS:**

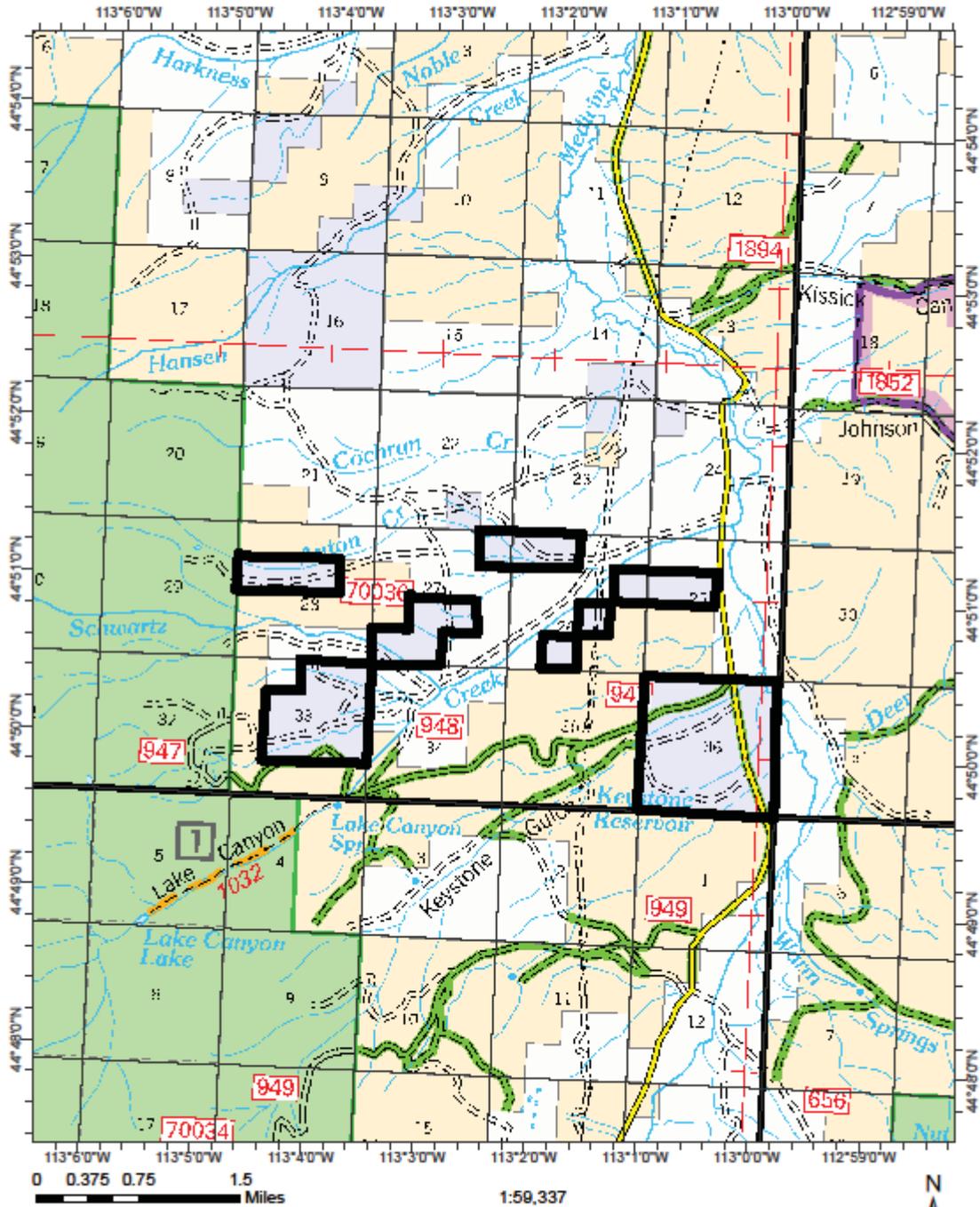
Significant impacts are not anticipated as a result of the proposed activity. Ground disturbance will be minimal due the hand work required for fossil removal and the specific site locations are sparsely vegetated. The volume of material removed is low.

**27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:**

EIS       More Detailed EA       No Further Analysis

<b>EA Checklist Approved By:</b>	<b>Name:</b> Garry Williams
	<b>Title:</b> Area Manager Central Land Office
<b>Signature:</b> 	<b>Date:</b> 9/27/2010

**Sprunger Fossil Land Use License  
Sections 25,26,27,28,33 & 36 Township 11South - Range 12 West**



**State Sections Where Mining will Occur**

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T Egan, 9/3/2010