

## **APPENDIX C: COMMENTS ON DRAFT ENVIRONMENTAL ASSESSEMENT**

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The Riflepit draft environmental assessment was issued for public comment in October 2003. Nine comments from individuals or organizations were received. These included seven letters and two e-mail comments.

Comments are listed below and responded to in the order in which they were received. Each comment letter or e-mail appears in its entirety, followed by the response. Responses to letters with topical headings or an outline follow the headings. Topical headings have been added in the left margin of letters without headings so responses can be correlated to the appropriate comments in those letters.

### ***Sara Jane Johnson, Native Ecosystems Council***

#### **1. Failure to address public issues.**

Response: A number of NEC's scoping comments are addressed in the EA, including population and habitat trends for management indicator species (MIS, section 3.2.2); how timber management and wildlife goals would be achieved (sections 1.4, 2.2.2, 2.2.4, 2.2.6, 2.5.1, 2.5.5, 2.5.6, 3.2.1, and 3.2.2); and providing a complete inventory of roads and evaluating road impacts on wildlife (sections 3.2.2 and Appendix C maps 1, 8, 9, and 10). Other NEC scoping comments, such as requests for an inventory of snags and coarse woody debris by structural stage and conservation strategies for all MIS and sensitive species, are either beyond the scope of this project-level analysis or the data does not exist and is not required for or within the scope of the decision.

#### **2. The Forest has not addressed our concerns about viability of the Northern Goshawk.**

*Paragraph 1: Provide a map showing goshawk nests and PFA.*

Response: The EA states that a historic goshawk nest site is located within the project area (EA Section 3.2.2, Environmental Consequences; Direct and Indirect and Cumulative Effects, TEPS Species, Northern Goshawk). The exact location of the nest site and post-fledging area (PFA) are not disclosed in the EA to protect site integrity. Designation of the PFA was conducted according to Phase 1 Amendment standards.

Site-specific information is included in the project record.

*Paragraph 2: Provide literature citations, including page numbers, demonstrating that logging will improve habitat. What monitoring in the Black Hills is this claim based on?*

Response: Analysis of prey remains conducted by Bartlett (1974, pp. 59-64) and Erickson (1987, pp. 10-11) indicates goshawks in the Black Hills feed primarily on red squirrels, chipmunks, ground squirrels, lagomorphs, and various birds. Due to a lack of

spruce within the project area, red squirrels are not believed to be abundant. Therefore, a shift in prey to emphasize other species is likely. Thinning from below, prescribed burning, and hardwood maintenance treatments are expected to provide a mix of habitat conditions that will benefit potential goshawk prey species, particularly habitat for lagomorphs, ground squirrels, ruffed grouse, common flicker, and American robin. Reynolds et al. (1992, p. 29) recommend hardwood regeneration to benefit woodpeckers and other prey species.

*Paragraph 3: Address why goshawks are no longer here as related to timber harvesting.*

Response: Research provides several possible explanations for potential abandonment of nest sites by goshawks. Bartelt (1974) and Erickson (1987) speculate that nest abandonment during their studies was related to human disturbance. DeStefano et al. (see citation below) point to weather as a potential factor in nesting variability. Loss of nesting habitat can occur as a result of timber harvest, stand-replacement fire, insects and disease, and extreme wind events. The lack of nesting activity at the known historic nest site could be due to factors such as predation, fluctuations in the local prey base, reductions in overall habitat suitability, or repeated disturbance. Timber harvest has not occurred in the historic nest stand since the discovery of the nest.

Citation: DeStefano, S., S.K. Daw, S.M. Desimone, and E.C. Meslow. 1994. Density and productivity of northern goshawks: implications for monitoring and management. In: W.M. Block, M.L. Morrison, and M. Hildegard Reiser, eds. The northern goshawk: ecology and management. Allen Press. Lawrence, KS. 136 pp.

*Paragraph 4: Why would 5% old growth provide adequate habitat for goshawks when goshawk guidelines recommend 20%? How does the lack of old growth in the area affect goshawk habitat suitability?*

Response: The Revised Forest Plan states as an objective that at least 5% of the forested land base will be managed for late succession. Experts interviewed for the Phase 1 Amendment (USDA Forest Service 2000) state concern that managing for only 5% late succession may be too low to maintain goshawks across the landscape. The Phase 1 Amendment directs maintenance of 20% old growth in goshawk PFAs. Interviewed experts also raised concern that managing for late succession in small patches (i.e. in PFAs up to 600 acres) may keep Forest-wide goshawk populations artificially low. A lack of true old growth within the project area could potentially reduce habitat suitability for goshawks; however, older, dense stands do exist within the project area and are likely to contribute to overall habitat effectiveness within a potential territory.

*Paragraph 5: Since goshawks have been eliminated from this landscape, how will the project affect Forest-wide viability? Provide viability information and population trends for the Forest.*

Response: The EA does not state that goshawks have been eliminated from the landscape, but does state that no nesting goshawks have been identified through surveys. Reynolds (in USDA Forest Service 2000) states that some goshawk pairs may

not lay eggs for up to five years. A detailed description of past management activities affecting forest structure is provided in the EA (See Section 3.2.1, Cumulative Effects on Forest Vegetation). Additional cumulative effects analysis related to past activities logging and goshawk habitat has been added to the final EA.

Goshawk population trends across the Forest are discussed in the BHNF 2002 Monitoring and Five-year Evaluation Report. This document indicates populations are relatively stable or slightly decreasing. Goshawk habitat is relatively stable for the five-year period addressed in the report.

Citation: USDA Forest Service. January 2004. Black Hills National Forest, 2002 Monitoring Report. United States Department of Agriculture. Custer, SD.

**3. The conclusions provided in the EA are entirely arbitrary regarding project impacts on sensitive and management indicator species.**

*Paragraph 1: There are no habitat criteria for species except for big game, and the big game criteria are not presented in an understandable manner.*

Response: Habitat effectiveness figures presented in the EA describe habitat as a percent of optimum. For example, Table 29 (EA section 3.3.2) shows current habitat effectiveness for elk in summer to be 39. This means that the existing habitat provides conditions that are 39% of optimum for elk during summer. Figures are based on amount and spatial arrangement of foraging areas, cover, and roads.

Assessment of effects on other species is based on habitat components and Revised Forest Plan direction. Evaluation of effects on cavity nesters, for example, includes discussion of snags and whether the alternatives would meet Forest Plan snag standards.

The EA states that proposed thinning from below, which removes the smaller trees, would result in increased growth of the remaining, larger trees. The EA does not state that the objective of treatments such as shelterwood seedcut and overstory removal is to increase the growth of the mature trees.

*Paragraph 2: Implement conservation strategies for all MIS and sensitive species, and provide an assessment of logging impacts on habitat. Explain how impacts are measured.*

Response: Habitat criteria and effects analysis for each species with management status are described in the EA (See 3.2.2, Wildlife Habitat).

**4. The Forest Service failed to define how significant environmental impacts were identified in the analysis.**

Response: The IDT identified no significant impacts during analysis of this project. The Responsible Official will decide whether the effects analysis shows that significant effects may occur. The rationale for the determination of significance will be included in the Decision Notice.

**5. There are no wildlife inventories for the project area.**

Response: The EA states that the analysis uses inventory data from project area reconnaissance, District wildlife observation databases, Rocky Mountain Bird Observatory (RMBO) transects, and the South Dakota Department of Game, Fish and Parks. The project area was surveyed for presence of northern goshawk in 2001. RMBO sampled 63, 31, and 25 points for bird species occurrence in 2001, 2002, and 2003, respectively. No pygmy nuthatches were found within the project area. Brown creepers were recorded during all three years of survey. Proposed treatments under all action alternatives are located outside stands with brown creeper occurrence.

**6. The information on snag habitat is contradictory.**

Response: We are not able to find any statements in the EA that the area has a large number of snags and large trees. Chapter 3 states that the project area appears partially to meet Revised Forest Plan standards for existing snag density. Elsewhere the EA states that some individual stands are largely devoid of snags; this is not in conflict with the earlier statement, which refers to an average across the watershed. Chapter 3 also states that the area is projected to meet green snag-replacement tree standards within 20 years, but does not claim that this direction is currently met.

**7. The security needs of big game were not addressed in the EA.**

Response: Big game security is analyzed as part of the overall habitat effectiveness assessment provided by the HABCAP model. All action alternatives would reduce open road densities from an existing 4.1 miles per square mile to 2.8 miles per square mile or less. Proposed road closures would create six blocks of land devoid of open roads, ranging from 500 to 2,200 acres in size. Chapter 3 discloses that deer and elk populations have increased in recent years.

**8. You failed to answer NEC's question about what the average snag density is within each structural stage, and how this affects landscape planning for snags.**

Response: Snag density by structural stage is not available. Revised Forest Plan standards require that snags and thus green trees of various sizes be “well-distributed” across each watershed. All stands are included in these calculations, including those with few large trees. This assures that treatments removing all large trees cannot take place in large, contiguous areas, and that a range of diameter classes exists so that large green trees will be available in the future across the watershed.

**9. The Forest has yet to demonstrate that snag and old growth management strategies are maintaining viable populations of associated species.**

Response: Further information has been added to Chapter 3.

**10. How will you balance the needs of wildlife with your goal to control insects and disease?**

Response: Retention of dense forested stands within the project area, in addition to snag and green tree retention standards, is expected to maintain adequate habitat for species that rely on dead trees. While the frequency of future timber entries into the project area is beyond the scope of this analysis, proposed treatments emphasizing thinning, underburning, and hardwood maintenance are designed to maintain and enhance various types of habitat, while retaining management options for the future.

**11. Since timber management will be emphasized in this area, you need to address the availability of wildlife habitat in a larger, cumulative effects area.**

Response: Cumulative effects on wildlife were analyzed at the 7th-field watershed level and have been clarified in the final EA (see Chapter 3). Measures to mitigate effects on wildlife were incorporated into the project or are identified in the EA (section 2.5).

***Aaron Everett, Black Hills Forest Resource Association***

**Paragraph 3: Objectives 207 and 208 (late succession)**

Response: The district RIS database for the project area includes 464 acres of timber component code 801 (tentatively suitable, management for other multiple-use objectives: late successional site).

Stands proposed for management of old-growth characteristics are the stands in the project area closest to displaying old-growth attributes. Managing these stands as fire-maintained old-growth is consistent with Objective 5.1-202. These stands may be exchanged in the Forest RIS database for previously identified old-growth stands in accordance with Objective 207, depending on the selected alternative.

**Paragraph 4: Objective 229 (insects and diseases)**

Response: The effects of the alternatives, including the no action alternative, on mountain pine beetle risk are disclosed in EA section 3.2.1. As stated in the EA, "Treatments proposed under alternatives B, D, and F would decrease the risk of mountain pine beetle-caused losses in ponderosa pine stands. Risk of mountain pine beetle-caused losses would continue to increase under alternative A as stand stocking increased." The relative risk reduction estimates are listed in Table 16. While the Revised Forest Plan emphasizes timber production in Management Area 5.1, forest-wide standards and guidelines, such as those regarding snags, also apply.

**Paragraph 5: Allowable sale quantity**

Response: The referenced statements have been removed.

## ***Response to Jim Hoxie, Pope and Talbot, Inc.***

### **Paragraphs 2 and 3: Alternative B does not respond adequately to the purpose and need.**

Response: Each of the alternatives responds differently to the purpose and need. The action alternatives would reduce the risk of mountain pine beetle infestation and remove hazardous fuels to varying degrees. Alternative D would decrease mountain pine beetle risk the most (EA section 2.2.4., Alternative D; section 2.3.2., Alternative E; Tables 9 and 10). See also section 3.3.3, Fire Hazard and Fuels.

### **Paragraph 4: Overstocked stands need to be thinned to prevent loss of wildlife habitat.**

Response: Post treatment stocking is displayed in Table 18. Alternatives A, B, D, and F would respectively retain 922, 397, 381, and 473 acres of overstocked ponderosa pine (60%+ AMD; for additional information regarding stocking, see Revised Forest Plan Appendix H, Timber Stocking Charts).

Fire and insects can certainly affect densely stocked stands. The Forest Service has two options: 1) leave some dense stands, taking the chance that their wildlife value may be affected by insects or fire, or 2) thin all of them, which would reduce their value to the same species immediately. The proposed activities attempt to strike a balance by substantially reducing beetle and fire risk while “providing for a variety of life through management of biologically diverse ecosystems” (Revised Forest Plan Goal 2).

## ***Jim Seward, Lawrence County Commissioners and Bill Coburn, Lawrence County Timber Committee***

### **Page 2: Purpose and need for project**

See response to Jim Hoxie, Pope and Talbot, paragraphs 2 and 3.

### **Page 2: Mountain pine beetle**

See response to Jim Hoxie, Pope and Talbot, paragraphs 2 and 3, and Aaron Everett, Black Hills Forest Resource Association, paragraph 4.

### **Page 2: Stand treatments**

Response: The effects of the alternatives, including no action, in regard to risk of mountain pine beetle caused losses are disclosed in EA section 3.2.1. The Revised Forest Plan includes thermal cover requirements only in Management Area 5.4 (big game winter range emphasis), which does not occur in the project area. There is no direction on hiding cover, but screening cover (Guideline 3203, to be treated as a standard) is not a limiting factor in the project area. Big game habitat effectiveness direction (Guideline 5.1-3201, to be treated as a standard) requires a distribution of various stand structures, but is heavily affected by open road density. See also response to Jim Hoxie, Pope and Talbot, paragraph 4.

### **Page 3: Road management**

Response: The road system proposed for the project would maintain adequate access for public uses and agency management. Road 393.1P is poorly located (in a riparian meadow in several places) and is no longer needed, since road 393.1 provides access to the same destinations and is located in a better spot on the hillside south of the meadow. Road 393.1 is open yearlong and maintained. The USFS is unaware of any RS2477 claims on any roads in the project area.

Two-track roads are generally user-created, without regard for resource impacts or the overall management goals for an area. They are not National Forest System roads and thus are not maintained by the Forest Service. Following implementation of any of the alternatives, open roads would still support a wide array of OHV recreational experiences.

A majority of research concerning the effects of roads on wildlife has shown that big game use of habitat decreases within various distances of open roads, depending on road use. In addition, the presence of a roadbed itself often removes vegetation that would otherwise be available for forage and cover. Open roads also increase the potential for illegal harvest and vehicle-caused mortality. Habitat effectiveness models do not assume that an increase in road density automatically reduces big game populations, but that high road density reduces the suitability of habitat for various uses; this may indirectly affect populations under some circumstances. As road density has increased over time, big game populations have probably fluctuated more in relation to weather, disease, predation, hunting regulations, harvest goals, and availability of high-quality forage and cover.

### **Page 3: Projected harvest**

See responses to Page 2: Stand treatments, above, Jim Hoxie, Pope and Talbot, paragraph 4, and Aaron Everett, Black Hills Forest Resource Association, paragraph 5.

### **Page 4: Prescribed burning**

Response: In most stands proposed for prescribed burning without prior mechanical treatment, structure is such that a wildfire would be expected to stay on the surface of the ground rather than moving into the tree crowns. Many of these areas are meadows. Before any prescribed burn takes place, the proposal would be reevaluated during preparation of a burn plan.

### **Page 4: Old growth/mature stand enhancement**

See response to Aaron Everett, Black Hills Forest Resource Association, paragraphs 3 and 4.

**Carl R. Stonecipher, Greater Dacotah Chapter, Safari Club International**

**Paragraph 2: Alternatives don't address mountain pine beetle and hazardous fuels aggressively enough.**

See responses to Aaron Everett, Black Hills Forest Resource Association, paragraph 4, and Jim Hoxie, Pope and Talbot, paragraphs 2 and 3.

**Paragraph 3: Similar past actions have not prevented mountain pine beetle infestation and fires.**

*Insect damage*

Response: In the last 20 years, silvicultural activities have occurred on approximately 53% of the forested acres in the project area. Harvest has occurred mostly in the north and central parts of the project area. Current mountain pine beetle infestation is greatest in the southern part of the project area, where little treatment has occurred in the last 20 years. Nevertheless, during epidemics and droughts such as those currently affecting the Black Hills, it is not possible to completely prevent beetle infestation.

Management emphasis in the project area is on commercial forest products. Maximizing wood fiber production requires full or nearly full site occupancy during most of the rotation. Sites at or above full stocking are more susceptible to beetle infestation. Maintaining stocking near the optimum level requires more frequent entries, however, which may not be economically or environmentally desirable.

See also EA section 1.4, Objectives 228 and 229.

*Fire risk*

Recent large fires in the Black Hills occurred during extreme weather conditions, with high temperature, low relative humidity, and high winds. Revised Forest Plan direction for areas with moderate fire risk, hazard, and value, such as the Riflepit project area, requires management of vegetation and fuels to reduce fire intensity "on 90% of the days when fires occur" (Guideline 4110) rather than for the most extreme conditions. The actions required to prevent all fires, even during extreme conditions, would severely affect other resources and would probably not be economically or socially feasible.

How and where fire hazard would be reduced is displayed in EA section 3.3.3 and Maps 5, 6 and 7 in Appendix C. Emphasis is on stands where crown fire is a hazard (as estimated for the 90th percentile) and in locations near homes and private property, around goshawk PFAs, and in the general forest where harvest and underburning could reduce surface and ladder fuels. Overall, approximately a third of the stands with crown fire hazard are proposed for treatment.

Proposed activities would alter the mosaic of fuel types in the project area. Prescribed burned areas, in combination with meadows and hardwood stands, would form contiguous areas across the landscape where potential fire intensity is low to moderate, suppression actions can be applied safely and effectively, and harmful effects of intense wildfire would be lessened.

**Paragraph 4: Amend the Forest Plan to make treatments more effective.**

Response: The planning team investigated an alternative that would have required a Forest Plan amendment. This alternative was eliminated from detailed study because it would have had unacceptable negative effects on other resources (EA section 2.3.1).

**Paragraph 5: Aspen stands do not respond well to the coppice method.**

Response: The Revised Forest Plan designates coppice regeneration as an acceptable silvicultural system for aspen in the Black Hills (Guideline 2408). Measures to project aspen regeneration are included in EA section 2.5. Site monitoring would take place one, three, and five years after treatment. Rumble et al. (1996) recommend retaining all slash after clearcutting aspen as an alternative to fencing. In addition, “clearcutting, or (more specifically) clearfell-coppice cutting, is the harvest method of choice in most situations” (p. 358, Sustaining aspen in western landscapes: symposium proceedings. 13-15 June 2000. Grand Junction, CO. RMRS-P-18. Fort Collins, CO: USDA Forest Service, Rocky Mountain Research Station).

The project silviculturist is familiar with ongoing aspen research in the Black Hills. If an action alternative is selected, aspen prescription implementation guides will be prepared by a certified silviculturist and will reflect the latest science on regeneration techniques and post-treatment protection.

**Paragraph 6: Travel management**

Response: Alternative D would close more roads than would alternative F.

**Paragraph 7: K-V funds**

Response: K-V funds are available for up to five years after termination of a timber sale contract. Completing all post-treatment K-V activities prior to timber sale closure is usually not feasible, although many activities do take place in that time period. Some activities can conflict with a timber purchaser’s operations and contractual requirements, and some depend on the completion of other K-V or purchaser actions. Continuous vegetation treatments can also exacerbate forest insect problems, specifically *Ips* spp. beetles. See EA section 3.2.1, Direct and Indirect Effects, Alternatives A, B, D, F, Forest Insects.

The Revised Forest Plan, rather than the Riflepit project, proposes 8,000 acres of prescribed burning per year for 10 years. Feasibility of this goal across the forest is outside the scope of this analysis. Prescribed burning in the Riflepit project area would be accomplished using a variety of funding sources, probably including timber sale purchaser deposits, K-V funds, and appropriated funding.

## **Shelly Deisch, South Dakota Department of Game, Fish and Parks**

### **1. Enterprise team**

*We are not convinced that enterprise teams are afforded adequate time to gather and read the most recent and applicable information and local research. It appears there was no contact with the Rocky Mountain Research Station (RMRS).*

Response: The team researched and used Black Hills National Forest information, data, and research, and other appropriate publications in the evaluation of this project. The team is aware of the work of Drs. Uresk and Rumble, including the documents listed in the Literature Cited section of the EA. Of the 74 publications cited in the commentator's Appendix A, most are both contemporary and specific to the Black Hills, South Dakota, or USFS Region 2. This literature was appropriately used to evaluate and prescribe management according to the project purpose and need statements and the Black Hills National Forest Plan including the Phase I Amendment.

### **2. Lack of communication and use of local information**

*2A. Lack of communication with RMRS and SDGFP has jeopardized treatments to improve vegetation diversity of hardwoods and shrubs for MIS such as mule and white-tailed deer, mountain lions, aspen, and snags.*

Response: The EA states that treatments are expected to improve hardwood diversity (see Section 2.2, Alternatives Considered and Analyzed in Detail). Consequences to MIS and snags are also discussed in the EA (see Section 3.2.2, Wildlife Habitat).

*2B. The enterprise team does not understand long-term problems with the HABCAP model and the need for field reconnaissance.*

Response: The team followed standards and guidelines pertaining to big game habitat modeling as they exist in the Phase 1 Amendment.

*2C. Lack of local knowledge and HABCAP inaccuracies caused the enterprise team to misunderstand the need for big game winter cover. Should have considered forest plan amendments.*

Response: Alternative C would have required a forest plan amendment (see Section 2.3.1) due to violations of Revised Forest Plan wildlife habitat standards. This alternative was dropped from detailed consideration. Further, the team felt that a Forest Plan amendment was not necessary to meet the project's Purpose and Need. Road closures were considered and incorporated into some alternative proposals. Road closures and/or road decommissioning are part of each action alternative (see sections 2.2.2, 2.2.4, 2.2.6 and Table 11 page 29).

*2D. Lack of knowledge that Supervisor Twiss has recognized the need to improve poor deer habitat on BHNF.*

Response: The EA recognizes the need for improved deer forage habitat (see Section 3.2.2, Affected Environment, and Direct and Indirect Effects: Management Indicator Species).

### **3. Lack of ecologically sound hardwood treatments/protection and lack of science**

*3A. The enterprise team chose to ignore local SDGFP and others with local knowledge, did not research peer-reviewed science, or include protection for hardwood stands after treatment.*

Response: Literature used and cited in the project silvicultural analysis includes the following:

Rumble, M.A.; T. Pella, J.C. Sharps, A.V. Carter, and B.J. Parrish. 1996. Effects of Logging Slash on Aspen Regeneration in Grazed Clearcuts. The Prairie Naturalist: 28(4).

Sheppard, W.D., and M.A. Battaglia. 2002. Ecology, Silviculture, and Management of Black Hills Ponderosa Pine. USDA Forest Service General Technical Report RMRS-GTR-97. Fort Collins, CO: Rocky Mountain Research Station. [Aspen is discussed on pp. 92-94]

DeByle, N.R., and R.P. Winokur. Aspen: Ecology and Management in the Western United States. USDA Forest Service General Technical Report RM-119. Fort Collins, CO: Rocky Mountain Forest and Range Experiment Station.

The project silviculturist also reviewed “Sustaining Aspen in Western Landscapes: Symposium Proceedings, 13-15 June 2000” (USDA Forest Service 2000), although the document was not cited.

Measures to protect aspen regeneration are included in EA section 2.5, Mitigation Measures, and Appendix B, Monitoring Plan.

The project silviculturist is familiar with ongoing aspen research in the Black Hills. Upon implementation of the selected alternative, the district silviculturist will prepare aspen stand implementation guides, which will reflect the latest science regarding regeneration techniques and post-treatment protection. See also the response under Item 1 above.

*3B. Forest Plan guideline 2205 should not be followed. Pine in aspen does not add to bird species richness.*

Response: Retention of some conifers in hardwood stands retains existing, within-stand tree species diversity. Fires that regenerated the project area aspen stands near the turn of the century left scattered, large-diameter ponderosa pines within the aspen stands. Proposed treatments would retain this mix in some stands. Presence of scattered, remnant large pine does not necessarily mean the stand is being taken over by pine.

*3C. Standard 2408 for coppice and coppice with standards should not have been considered due to a significant lack of effective post-treatment protection methods.*

Response: The coppice method is considered an acceptable silvicultural system for aspen in the Black Hills. See also response to 3A, above.

*3D. The team failed to consider realistic and tested protective measures for aspen regeneration and instead relied on archaic silvicultural treatments such as coppice/clearcutting...by the time monitoring happens, it's too late.*

Response: Measures to protect aspen regeneration are included in EA section 2.5, Mitigation Measures, and Appendix B, Monitoring Plan. Site monitoring would be completed one, three, and five years after harvest. Rumble et al. recommend retaining all slash after clearcutting aspen as an alternative to fencing for protecting the regenerating aspen suckers. In addition, “clearcutting, or (more specifically) clearfell-coppice cutting, is the harvest method of choice in most situations” (p. 358, “Sustaining Aspen in Western Landscapes: Symposium Proceedings”, USDA Forest Service 2000) See also response to 3A, above.

*3E. SDGFP views proposed hardwood treatments as irresponsible.*

See above responses.

#### **4. Lack of support that the proposed alternative would make a significant impact to reduce MPB and fuel concerns**

*4A. The team failed to present treatments that aggressively address, repress or increase disturbance intervals.*

Response: The EA addresses the degree to which threat of pine beetles and wildfire would be reduced in sections 3.2.1 and 3.3.3.

*4B. Reduction of BAs and variation within large monotypic stands was not offered in the action alternatives. FS management practices are creating too much small-diameter biomass and overstocked stands.*

Response: Proposed treatments include preparation cuts and commercial thinning, which would retain the largest trees in the stand and remove small diameter stems (see EA section 2.1, Treatment Definitions). Prescribed burning and piling and burning would also reduce the stocking of small-diameter stems. Regeneration harvests, including shelterwood seedcut, coppice, and coppice with standards, are shown in Table 10. The Revised Forest Plan states “the preferred silvicultural system used for treating ponderosa pine on suitable lands will be shelterwood” (p. II-31, guideline 2408e).

*4C. Alternative B appears to be “business as usual”. Continued fire and bug risk is due to non-effective treatments and loss of big trees.*

Response: In the last 20 years, silvicultural activities have occurred on approximately 53% of the forested acres in the project area. Harvest has occurred mostly in the north and central parts of the project area. Current mountain pine beetle infestation is

greatest in the southern part of the project area, where little treatment has occurred in the last 20 years. Nevertheless, during epidemics and droughts such as those currently affecting the Black Hills, it is not possible to completely prevent beetle infestation.

Management emphasis in the project area is on commercial forest products. Maximizing wood fiber production requires full or nearly full site occupancy during most of the rotation. Sites at or above full stocking are more susceptible to beetle infestation. Maintaining stocking near the optimum level requires more frequent entries, however, which may not be economically or environmentally desirable.

*4D. Standard silvicultural practices are contributing to beetle and fuel threats. Alternative B did not demonstrate that the proposed treatments were going to significantly reduce bug and fire threats any more than they have in the past 20 years.*

Response: Up to 2,330 acres of prescribed burning is proposed in forested stands (see EA Table 10, Alternative F), which is 31% of the forested area. Thinning and shelterwood preparation treatments would retain the largest trees (EA section 2.1, Treatment Definitions) and constitute the majority of the commercial harvest treatments (EA Table 10). Shelterwood seedcut and shelterwood removal, which remove large-diameter trees, would occur on 521 acres in Alternative D (8% of the ponderosa pine stands). Alternatives B and F include less shelterwood seedcut and removal.

Recent large fires in the Black Hills occurred during extreme weather conditions, with high temperature, low relative humidity, and high winds. Revised Forest Plan direction for areas with moderate fire risk, hazard, and value, such as the Riflepit project area, requires management of vegetation and fuels to reduce fire intensity “on 90% of the days when fires occur” (Guideline 4110) rather than for the most extreme conditions. The actions required to prevent all fires, even during extreme conditions, would severely affect other resources and would probably not be economically or socially feasible.

How and where fire hazard would be reduced is displayed in EA section 3.3.3 and Maps 5, 6 and 7 in Appendix C. Emphasis is on stands where crown fire is a hazard (as estimated for the 90th percentile) and in locations near homes and private property, around goshawk PFAs, and in the general forest where harvest and underburning could reduce surface and ladder fuels. Overall, approximately a third of the stands with crown fire hazard are proposed for treatment.

Proposed activities would alter the mosaic of fuel types in the project area. Prescribed burned areas, in combination with meadows and hardwood stands, would form contiguous areas across the landscape where potential fire intensity is low to moderate, suppression actions can be applied safely and effectively, and harmful effects of intense wildfire would be lessened.

*4E. If the FS is going to allege bug and fire threats, then do something different by aggressively removing smaller diameter trees, retaining areas for late succession, retaining more large trees, and use uneven-aged management.*

See response to 4B, above.

**5. FS presentation that environmental issues impede public safety, forest health and commodity interests is not accurate**

*5A. Forest Service presentation of biological issues leads the public to believe that we cannot address forest health issues and meet watershed, wildlife and fish purposes.*

Response: The three action alternatives proposed represent multiple-use management approaches to satisfying the project purpose and need. Proposed treatment strategies follow Revised Forest Plan management area 5.1 direction, which emphasizes timber production within a context of multiple use values such as wildlife habitat.

*5B. An example... Why was alternative C dropped without complete evaluation? How would this alternative have compromised Forest Plan wildlife standards, what standards, what species?*

Response: Levels of treatment in alternative C would have reduced habitat effectiveness values below the minimum values required by the Phase I Amendment. Alternative C was not considered in detail because the Forest Service judged that Forest Plan amendment was not necessary to meet the project purpose and need.

**6. SDGFP comments on draft EA**

*6A. Cumulative effects of adjoining timber sales were not addressed.*

Response: Table 13 lists past treatments in the four 7<sup>th</sup>-order watershed that encompass the project area. Text prior to Table 13 has been amended to reflect the treatment areas covered in the table. Adjacent, proposed projects are identified in section 3.1 and the cumulative effects implications discussed in section 3.2.1. Section 31 is not included in both Hell Canyon and Northern Hills projects. The section number was in error and has been corrected.

*6B. The EA is not clear on existence of old growth. Please provide supportive documentation for reducing beetle outbreaks and fires by cutting large-diameter trees. Analysis should consider past treatments that removed old growth. There is an imbalance of structural stages in the project area and across the forest. This project would increase structural stages that are already common...uniformity and high densities are conducive to beetle outbreaks and wildfire.*

Response: See EA section 2.1, Treatment Definitions for “old growth/mature stand enhancement”. Existing and post treatment structural stages are disclosed in the EA section 3.2.2 and Tables 20-23. See also response to 4D, above.

*6C. Analysis should address ways in which human-caused situations have contributed to beetle conditions, such as timber sale contract term extensions. If baiting is proposed, is it effective? Will any of the new CEs be used to address bugs and fuels?*

Response: If an action alternative were selected, the term of the resulting commercial timber sale contract/s would probably average three years, depending on the timber volume to be removed. Cutting units may be prioritized for harvest based on the urgency of the treatment and local beetle populations at the time the timber sale contract is prepared.

Baiting is not proposed.

The new categorical exclusion authorities are being used across the Forest (see the Black Hills National Forest Schedule of Proposed Actions).

*6D. The FS is not providing current and accurate public education related to wildfire and pine beetle control.*

Response: The Forest recently began efforts to increase distribution of its message in the local media. The objective is to present all the relevant sides of each issue, which may contrast with reports from other sources.

*6E. Residual basal area in smaller-diameter pine should be lower than what is proposed.*

Response: The proposed action and alternatives include shelterwood seedcuts, which would reduce stocking to the 20-40 square feet per acre range. Seed cuts retain the biggest and healthiest trees for a seed source (Sheppard and Battaglia 2002), but do not generally occur in smaller-diameter stands. Stocking in stands targeted for thinning and shelterwood preparation would be maintained above 60 square feet per acre to minimize pine regeneration and leave a well-stocked stand of sawtimber size trees for sawtimber growth and production until stand growth has culminated. When stocking is reduced below 60 square feet of basal area per acre, abundant natural regeneration is usually produced (Sheppard and Battaglia 2002). From a silviculture perspective, regenerating pine stands before growth has culminated is not desirable.

*6F. Alternatives should have included more aggressive non-commercial pine treatments.*

Response: Non-commercial treatments of pine and fuel treatments that include treatment of non-commercial pine are listed in Table 10, and would occur on a considerable portion of the project area (44% in Alternative D).

*6G. The EA should have stated that KV funding is not a sure thing. Most of the post-sale activities would be paid for by KV.*

Response: Project implementation could be supported by variety of funding methods, including KV, timber purchaser deposits, timber purchaser requirements, and appropriated funding. Reforestation and regeneration surveys are classified as required KV and would be funded before other projects.

*6H. The EA did not address how Forest Plan shrub direction would be met.*

Response: Proposed burns, non-commercial pine encroachment treatments, and some commercial harvest treatments would contribute to improvement of forage conditions. The effects of these treatments are discussed in sections 3.2.1, 3.2.2 and 3.2.4. Description of effects in section 3.2.1 has been expanded.

*6I. Why did the alternatives not include variable density treatments and uneven-aged management?*

Response: The preferred silvicultural system used for treating ponderosa pine on suitable lands is shelterwood (Revised Forest Plan p. II-31, guideline 2408e). Stands proposed for treatment in the proposed action and alternatives are generally even-aged stands. While it is possible to eventually convert a strictly even-aged forest to an uneven-aged condition after several cutting cycles, uneven-aged management is best suited to forests that already contain several age-classes (Sheppard and Battaglia 2002). Stand reconnaissance during proposed action development identified five stands with uneven-aged stand structure, or structure approaching uneven-aged, but those stands were not included for treatment in the proposed action or alternatives. Additional stands with structures approaching uneven-aged were identified for management of their old-growth attributes (non-commercial treatment).

Uneven-aged management was not identified as an issue during scoping, so uneven-aged management was not incorporated into alternative development. Commercial thinning and shelterwood preparation treatments in Alternatives B, D, and F would not preclude future uneven-aged management.

Past and existing mortality through forest insects, disease, and weather has created and will continue to create diversity in stand stocking. Prescribed burning would cause some mortality and result in diversity in stand stocking. See EA section 2.5.12, Prescribed Burning/Fuel Treatment, for prescribed burning mortality guidelines.

*6J. The HABCAP model is flawed.*

Response: The purpose and need for the project did not identify a need to amend the Forest Plan. Adequacy of the HABCAP model is beyond the scope of this analysis.

*6J(1). USFS, RMRS and SDGFP need to consult on management for big game habitat to reduce conflicts with mountain pine beetle conditions.*

Response: Cover is also recognized for big game summer thermoregulation and security (see SDGFP correspondence to Hell Canyon District Ranger, re travel management for fire areas, dated December 12, 2001). Stands that may serve as big game winter cover also serve as suitable habitat for a variety of nongame species.

*6J(2). More priority should be given to development of shrubs and deciduous trees.*

Response: Hardwood habitats are considered and managed under all action alternatives. See also response to 2D above.

*6J(3). The bigger biota picture – deer habitat requirements represent habitat diversity in a sea of pine. Justify why vegetation treatments will enhance or maintain optimal habitat for MIS and R2SS.*

Response: Summaries of changes in vegetation cover type and structural stage composition by alternative are provided in Tables 20 through 23. Effects on R2

Sensitive and BHNF MIS are discussed in section 3.2.2. See also response to 2D, above.

*6J(4). Elk make substantial use of the project area, and the project area provides quality habitat. USFS should use the latest and best information in analysis of the habitat, such as Rumble and SDGFP. Consider road density and human use.*

Response: The project wildlife biologist observed many elk within the project area. Local stand conditions were incorporated into the habitat effectiveness modeling process. The action alternatives reflect modeling results and comply with Revised Forest Plan direction for MIS wildlife habitat.

Road density would be reduced under all action alternatives.

*6J(5). Analysis should include North and Geranium projects. Some areas should remain undisturbed by logging and cattle in order to provide solitude for elk and deer, especially during the calving and fawning season.*

Response: Actions considered in the cumulative effects analysis are listed in EA section 3.1. A mitigation measure to defer treatments in hardwood stands during the period when fawns are vulnerable has been added to the final EA.

*6J(6). Request that supportive documentation [attached to comment letter] be incorporated into the analysis and alternative development.*

Response: The *Addendum of Supportive Documentation for Summer/Fall Deer and Elk Habitat Requirements in the North Project Area* has been reviewed. Existing forage inadequacies for deer are recognized in the EA (see Section 3.2.2. Affected Environment and Direct and Indirect Effects: Management Indicator Species). The shrub component is expected to respond positively where timber harvest reduces basal area to 20-40 square feet per acre, as well as in stands with open overstories proposed for prescribed fire. Meadow and hardwood maintenance/enhancement treatments are also expected to improve big game forage. Large patch cuts were not proposed because a need for them was not identified during project development. The project area has existing natural and man-made openings. Proposed reductions in road densities are integral to all action alternatives.

*6K. Travel Management and Open Road Density*

*6K(1). Request open road density of less than 2.8 miles per square mile.*

Response: Open road density would be 2.5 mi./sq. mi. under alternative B and 2.1 mi./sq. mi. under alternatives D and F (see Table 31). The figure of 2.8 mi./sq. mi. is total road density, including Forest Service system roads that would be closed year round.

*6K(2). Request maintenance of dirt and two-track roads at the least improved level.*

Response: Maintenance under the three action alternatives would take place in accordance with Revised Forest Plan standards and South Dakota BMPs (see EA section 3.3.2).

*6K(3). Request area restrictions.*

Response: Proposed transportation changes are discussed under each alternative in chapter 2 of the EA. The proposed road closures were developed from the project level roads analysis. Proposed road closures would enhance wildlife security.

*6K(4). Request information on road closure effectiveness in reducing disturbance and economics of various road closure methods.*

Response: Economic effects are discussed in chapter 3 of the EA. Section 3.3.2 states, "Closures using large rocks, stumps, or other barriers are more effective, although gates are preferred when access to improvements such as stock watering tanks is needed." Physical obstructions other than gates will be used where access is not needed.

*6K(5). Please clearly document justifications for FS system roads that remain open for various FS programs and public needs.*

Response: Road system needs and justification for existing and potential temporary new road segments is discussed in EA sections 3.3.2 and 3.4.1 as well as the roads analysis report for the project area.

*6K(6). USFS should review [attached] documents on travel management.*

Response: Documents have been reviewed.

*6L. We support the proposal not to cut white spruce...*

Response: There are no white spruce stands in the project area.

*6M. Removal of pine from riparian meadows, reestablishment of native shrubs, and removal of stream crossings and livestock from riparian meadows should be addressed.*

Response: The proposed action and alternatives include meadow enhancement, meadow burning, and road decommissioning (see EA section 2, description of alternatives, and Table 10). The project-level roads analysis identified hydrology concerns related to transportation planning. Livestock grazing is beyond the scope of this analysis.

*6N. Aspen Management*

*6N(1). Coppice is not appropriate.*

Response: Slash removal is not proposed. See also response to 3D, above.

*6N(2). High biodiversity cannot be jeopardized.*

Response: Aspen management would not take place during May or June. See also response to 6J(5), above.

*6N(3). Need to determine the best time to cut and best methods to use in aspen.*

Response: If an action alternative is selected, a silviculturist will prepare site-specific stand prescriptions prior to implementation. Mitigation has been added to ensure retention of slash in hardwood areas.

*6N(4). Please discuss the general condition and structural stages of the proposed hardwood treatment areas.*

Response: See response to 6N(3). Stands were field-reviewed by the project silviculturist. The stand selected for coppice treatment ranks “highest priority” when prioritized with the “Key to the Risk Factors Used to Prioritize Areas with Aspen for Restoration and Conservation Actions”.

*6N(5). Include treatment and protection considerations for small hardwood inclusions.*

Response: The proposed action and alternatives include treatment of aspen inclusions within pine stands. See EA 2.1, Treatment Definitions, Tree encroachment control; and Tables 3, 5, 7, and 10.

*6O. Goshawks and PFA*

Response: PFA locations are not shown in the EA to protect site integrity. Maps are contained in the project file.

*6P. Miscellaneous Comments*

*6P(page 6). Water developments for wildlife are not necessary in the northern Black Hills.*

Response: No water developments are proposed.

*6P(page 8). Use of term “overmature” pine is not clear.*

Response: Overmature is a silvicultural term that refers to stands in which culmination of mean annual increment (CMAI) has been achieved. See page 13 for a discussion of CMAI.

*6P(throughout). Several citations are missing.*

Response: The missing citations have been added to the EA.

*6P(page 45). Mitigation should be in the EA.*

Response: Mitigation measures are in section 2.5 of the EA.

*6P(pages 69 and 82). Fecske's mountain lion and marten habitat data should have been considered.*

Response: This information will be reviewed.

*6P(page 69). Marten trapping is not allowed.*

Response: The statement in the EA has been modified.

*6P(page 81). The type of big game cover in question needs to be identified.*

Response: Reductions in big game cover described in the EA are related to thermal cover. Cover described as associated with roads or security is meant to include hiding and screening cover.

*6P(page 81). Are other motorized vehicles allowed to use snowmobile trails out of season?*

Response: Some sections of the snowmobile trails are on roads that are open to motorized use in the summer, while others are on trails with no specific travel management in summer or on closed roads. The Forest does enforce existing closure orders to the best of its ability and staffing.

*6P(page 101). Recreational use has declined in the last 5 years?*

Response: The source for this statement was the Forest's 2001 monitoring report. The 2002 monitoring report, released in early 2004, indicated an increase in most types of recreation.

*6P(page 102). Travel management and hunting (road density is too high).*

Response: See response to 6K(1), above. The "1.5 mile" reference was from the ends of roads where hunters mainly stage, and was not intended to be an exact distance nor measure of road densities.

*6P(page 109). Do not perpetuate a park-like appearance.*

Response: As stated in the EA, "the combination of Riflepit and adjacent proposed projects would result in a forest with a variety of textures, patterns and seasonal colors."

## **Jeffrey G. Olson**

### **Paragraph 1: Modify alternative B.**

See response to Carl Stonecipher, paragraph 3.

**Paragraph 1: Close more roads.**

Alternative D would close more roads than alternative F (see Table 11). All three action alternatives would substantially reduce the number of roads and road density compared to the present condition.

**Paragraph 2: Aspen is declining at an alarming rate... clearcutting does not work for aspen.**

See response to Shelly Deisch, South Dakota Department of Game, Fish and Parks, #3.

***Nancy Kile***

**Do not proceed with the Riflepit timber cut until sufficient nation-to-nation consultation has taken place. Consult with tribal elders.**

The Black Hills National Forest implements the National Historic Preservation Act for each undertaking. This includes inventory, identification, and evaluation of heritage resources. The Forest proposes avoidance or mitigation measures for each site that is eligible for listing on the National Register of Historic Places or has not been evaluated. The Forest consults with South Dakota and Wyoming State Historic Preservation Officers (SHPOs) on the inventory, evaluation, and protective measures for each undertaking. The Forest also consults with Tribal Historic Preservation Officers (THPOs) from the Standing Rock and Cheyenne River Sioux Tribes in the same manner and with the same documentation for each undertaking.

For the Riflepit project, as for all other projects, the Forest Service conducted an inventory and identified, recorded, and evaluated sites. In consultation with the SHPO and THPOs, each site was evaluated for its potential to be eligible for nomination to the National Register.

If a site is eligible to the National Register, unevaluated, or has been identified as a sacred site, the Forest consults with Tribal government officials and the appropriate SHPO on protection, avoidance, or mitigation measures. As part of the consultation process, the Forest requests site visits by tribal government representatives to identify or verify sacred site locations.

The Forest maintains a continuously updated mailing list of Tribal chairpersons, council members, staff, and elders who have been identified by the Tribes as points of contact for cultural sites and Forest management in general. These individuals were contacted during the Riflepit planning process. In addition, in each of the last four years, two meetings per year were held with Tribal representatives to discuss specific projects, Forest policy, and special topics such as protection of petroglyph sites. Tribal governments are asked to review meeting agendas and add any projects or topics they wish to discuss. Through letters, phone conversations, and the twice-yearly meetings, specific concerns are identified. As a result of these communications, field trips to review projects or site locations may take place. The Forest clearly understands that merely writing a letter does not equal consultation. Therefore, opportunities for face-to-face meetings are requested by the Forest on a regular basis. The Forest feels that it

is providing or requesting every opportunity to consult with Tribal governments and meet its trust responsibilities with regard to cultural resources.

## ***Heather Wood***

**I am opposed to the Riflepit project... The extraction of natural resources in this sacred area would be a severe intrusion not only upon our 1851 and 1868 Fort Laramie Treaty, but also upon the sacred sites and plant and animal life that exist in this area.**

In the Fort Laramie Treaty of April 29, 1868 (15 Stat. 635), the United States promised the Sioux Nation that the Great Sioux Reservation, including the Black Hills, would be “set apart for the absolute and undisturbed use and occupation of the Indians named(.)” Within a decade, however, the Act of February 28, 1877 (19 Stat. 254) abrogated the Fort Laramie Treaty and the Indians’ claim to the Black Hills land. The Act ratified an agreement made between the Federal Government and some of the adult male Sioux population to cede the Black Hills to the United States in exchange for subsistence rations and other considerations.

After nearly 60 years of litigation, the Supreme Court in *United States v. Sioux Nation of Indians* (65 L.Ed. 2d844; 100 S.Ct. 2716 (1980)) held that the 1877 Act constituted a taking which implied a right to just compensation under the Fifth Amendment. The Court affirmed an Indian Claims Commission’s award of \$17.1 million, plus interest at the annual rate of five percent dating from 1877.

On July 18, 1980, the Oglala Sioux Tribe filed a complaint in U.S. District Court for return of the Black Hills, additional damages, and a restraining order on payment of the previous award. The court dismissed this complaint for lack of jurisdiction, whereupon the Oglala Sioux Tribe appealed to the Eighth Circuit Court of Appeals. On June 1, 1981, the circuit court affirmed the District Court’s dismissal because Congress had established the Indian Claims Commission as the exclusive remedy for the claim (see *Oglala Sioux Tribe v. United States*, No. 80-1878, slip op. at 2-3, note 4 (8th Cir. 1981)). Since the Indian Claims Commission has already disposed of the Indian claims to the Black Hills, the decision in *Oglala Sioux* means there is no legal Indian right to ownership or permanent occupation of the Black Hills under the 1868 Treaty.

The Black Hills National Forest has neither the authority nor the need to establish or re-establish a Presidential Commission to determine compensation to be paid Sioux Tribes under the 1851 and 1868 treaties. All compensation claims under these treaties were addressed in 1980 by the Indian Claims Commission, and the Tribes have exhausted all Court remedies available for resolution of their claim. Only Congress has authority to transfer ownership of the Black Hills National Forest to the Sioux Tribes. Until Congress takes such action, the Forest Service must continue management in accordance with the direction of Congress. The Forest will continue to make payments to counties in accordance with statutory direction provided by the Congress of the United States.

The Forest Service has consulted with Tribal governments and elders (see response to Nancy Kile) and is not aware of any sacred sites in the project area.

