American Society of Mammalogists

BRUCE D. PATTERSON, President The Field Museum 1400 S. Lake Shore Drive Chicago, IL 60605-7754 (312) 665-7750 FAX: 665-7754 Email: bpatterson@fieldmuseum.org

GUY N. CAMERON, President-Elect Department of Biological Sciences University of Cincinnati Cincinnati, OH 45221-0006 (513) 556-9740 FAX: 556-5299 Email: g.cameron@uc.edu

ROBERT M. TIMM, Vice-President
Department of Ecology & Evolutionary Biology
University of Kansas Natural History Museum
Dyche Hall, 1345 Jayhawk Blvd.
Lawrence, KS 66045-7561
(785) 864-4180 FAX: 864-5335
Email: btimm@ku.edu

NPR-A Planning Team Bureau of Land Management Alaska State Office 222 W. 7th Avenue, #13 Anchorage, Alaska 99513-7599 FAX (907) 271-5479 nwnpr-acomment@ak.blm.gov



SUZANNE B. McLAREN, Recording Secretary O'Neil Research Center, Carnegie MNH 5800 Baum Blvd. Pittsburgh, PA 15206-3706 (412) 665-2615 FAX: 665-2751 Email: mdarens@carnegiemuseums.org

RONALD A. VAN DEN BUSSCHE, Secretary-Treasurer Department of Zoology 430 Life Sciences West Oklahoma State University Stillwater, OK 74078 (405) 744-9679 FAX: 744-7824 Email: ravdb@okstate.edu

BARBARA BLAKE, Journal Editor University of North Carolina at Greensboro Dept. of Biology, Box 26170 Greensboro, NC 27402-6170 (336) 334-4965 FAX: 334-4839 Email: bhblake@unog.edu

29 March 2003

Dear IAP/EIS Team Members:

The American Society of Mammalogists (ASM) is a non-profit, professional scientific society consisting of over 3,500 members from the United States and 60 other countries worldwide. It was founded in 1919 and is the world's oldest and largest organization devoted to the study of mammals. The ASM is deeply concerned about the future of mammals worldwide, and promotes the conservation of mammals throughout the world through scientific research and education. When decisions are made that affect the conservation of mammals, the ASM seeks to support decisions that ensure sound conservation planning based on quality research and scientific accuracy.

Accordingly, the ASM is herein submitting comments on the Northwest National Petroleum Reserve-Alaska Draft Integrated Activity Plan/Environmental Impact Statement (NW-NPR-A Draft IAP/EIS) prepared by the Bureau of Land Management (BLM). The ASM is deeply concerned about the management of these 8.8 million acres of public land as well as the future of North America's Arctic. Results of scientific studies on Alaska's North Slope indicate that its ecological integrity is being seriously jeopardized from > 30 years of poorly planned oil and gas exploration and development. The recent National Academy of Sciences report on cumulative environmental effects of oil and gas activities on Alaska's North Slope (Orians et al. 2003) confirms that oil and gas development has had profound impacts on the environment of the North

Slope and its biota, and that these effects extend well beyond the immediate footprint of the oil and gas facilities and associated infrastructure.

The first comment that has to be made concerning the draft EIS document regards the comment submission process and comment period. We feel very strongly that a 60-day comment period with a 14-day extension is grossly insufficient for thorough review and commentary on a document that exceeds 1000 pages in length. The actions proposed in this document are too important and potentially consequential to receive such a short deadline; instead, a comment period of 90- to 120-days is warranted, consistent with comment periods for other draft EISs (some much shorter than this one). May we suggest a 90-day comment period for what we sincerely hope will be a revised version of this EIS?

Although the ASM recognizes the extensive efforts made by the BLM in compiling this voluminous (>1,000 pages) draft EIS, we feel that this document falls significantly short of what we believe to be acceptable for a draft EIS as mandated under NEPA. This draft EIS presents a rather lopsided development plan that would endanger the unique areas of the NW NPR-A and undermine responsible environmental safeguards. The Alternatives offered are not balanced, not realistic, nor do they conform to the requirements for "adequate and appropriate protection for the unique cultural, natural, fish and wildlife, scenic and historical values" of the NPR laid out in the National Petroleum Reserve Production Act of 1976. The Alternatives given emphasize the literal assets of the area ("National Petroleum Reserve"), ignoring most or all of its other valuable natural aspects. We strongly believe that at least one management alternative should be identified that provides adequate protection to the ecological, wildlife, subsistence, cultural, and wilderness resources of the NW NPR-A; as currently written, this draft EIS fails to provide one. This is not to say that energy development cannot be considered in the NW NPR-A at some point, but this is only possible with a balance between energy development and environmental protection. Besides this over-arching issue, there were many other significant problems in the draft EIS that we identified, including the following:

- (1) the draft EIS simply does not make the case that leasing for oil and gas development in the NW NPR-A is even necessary at this time. Your draft EIS states that you (BLM) are following the NEPA process to fulfill the mandates of the President's energy policy, to meet your obligations under certain federal laws, and to meet the country's energy needs. None of these reasons come close to adequately demonstrating a need at this time for such a large-scale leasing program proposed by your agency, especially in light of the scientific and economic uncertainties associated with the impacts of the decision to lease these lands for this purpose. The President's energy policy, which, by the way, has not been approved by Congress, does not provide a legitimate basis for a decision to lease or demonstrate a need for such action at this time.
- (2) two extremely important recent publications (National Audubon Society 2002; Orians et al. 2003), both with tremendous relevance for oil and gas exploration and development in the NW NPR-A, were not used or cited anywhere in this document. Orians et al. (2003) is particularly important as it identifies a number of significant cumulative environmental effects of oil and gas activities on Alaska's North Slope, something that this draft EIS fails to consider or acknowledge.

- (3) it appears that the evaluation of potential impacts from oil and gas development activities in the draft EIS is based upon a series of development scenarios that are incomplete and unrealistic in the context of existing oil and gas development activities in the region. As a result, the nature and extent of potential direct, indirect, and cumulative impacts are significantly understated in the draft EIS. Further, while the BLM has stated that these proposed actions warrant a full NEPA review, it has failed to address the NEPA requirements for such an analysis in this draft EIS. The generic discussion of resources and potential impacts given in the draft EIS fall far short of the required site-specific analysis required by NEPA.
- (4) the draft EIS contained absolutely no mention or consideration of environmental restoration of oil and gas exploration and development facilities and associated infrastructure and lands following facility closure. This is a serious issue to ignore, particularly in light of the fact that all oil and gas facilities have limited life spans and that the facilities themselves and their associated infrastructure must be removed and lands restored or environmental effects will continue to persist. The high probability of failure of all leasees to restore the lands they leased for oil and gas development was brought to light by the recent National Academy of Sciences report (Orians et al. 2003).
- (5) the Stipulations in this draft EIS fail to require the oil and gas industry to use the proclaimed best available technologies. Therefore, they fail to meet the mandate of the President's energy policy, which directs the Secretary of the Interior to "consider environmentally responsible oil and gas development based on sound science and the best available technology."
- (6) the draft EIS contains little real consideration of possible impacts of oil and gas activities on the endangered bowhead whale (*Balaena mysticetus*), an inhabitant of the coastal marine habitats adjacent to the NW NPR-A. None of the Stipulations listed in the draft EIS specifically apply to bowhead whales. Past and present oil and gas seismic exploration activities on Alaska's North Slope have significantly altered the fall migration routes of bowheads, which, in turn, may affect other associated behavioral traits such as feeding (Orians et al. 2003). This species is strictly protected by the Endangered Species Act and Marine Mammal Protection Act and absolutely requires fuller consideration in this draft EIS. Further, the alteration of migration route in bowheads has negatively impacted the native Inupiat, whose culture depends on whale hunting. Instead of boating 1-2 miles out on the Arctic Ocean to hunt bowheads, the Inupiat are forced to travel 30 or more miles out on the Arctic Ocean to find bowheads, which can lead to increased mortality rates in the hunters. This factor must also be considered.
- (7) we feel that the Stipulations given for mitigating impacts from oil and gas development are grossly inadequate to protect the ecological integrity of the NW NPR-A. The draft EIS generally fails to evaluate adequate mitigation measures for wildlife species. Further, it perplexing that the Stipulations in the present draft EIS are noticeably weaker than those listed in the NE NPR-A Record of Decision.
- (8) we are particularly concerned with the preponderance of "gray" literature and paucity of peer-reviewed literature cited throughout the document. As you are probably aware, gray literature generally is not peer-reviewed and reliance on non-peer-reviewed documents can unduly weaken an otherwise workable. We strongly recommend undertaking a serious review of the peer-reviewed literature germane to this EIS and citing it wherever possible in a revised draft EIS.

In view of the serious flaws in the draft EIS outlined above, we recommend that the BLM significantly revise this draft EIS and make the revised version available again for public comment for period of at least 90 days. No amount of tweaking will correct the severe problems outlined above.

Having spent significant time reviewing the draft EIS, we wish to include some additional comments on Alternatives listed in the current draft, to suggest improvements and revisions of this draft EIS. After reviewing the three Alternatives that would allow some level of oil/gas exploration and development (as outlined in the Draft IAP/EIS), the ASM strongly rejects Alternatives A and B outright. These two alternatives place the overwhelming emphasis on exploratory activities and development by opening up 100% and 96%, respectively, of BLM-administered lands in the NW-NPR-A to oil and gas leasing. Under these two Alternatives, all (or virtually all) of the NPR-A land and its coastal boundaries would be exposed to likely long-term and cumulative damage. These Alternatives do not offer much "middle ground" or balance to other public interests in the area—it is clear that oil and gas development is the main priority in this document.

Alternative C seemingly provides a "conservation" Alternative to Alternatives A and B. However, about half (47%) of the BLM-administered lands in the NW-NPR-A are opened to oil and gas leasing. Alternative C is the only alternative with adequate protections for arctic caribou herds that utilize the NW NPR-A, including no leasing in caribou insect-relief areas and specific operating procedure guidelines for pipelines. However, Alternative C is still missing many significant items. In addition to earlier recommended changes, we suggest the following additional modifications for Alternative C:

- (1) Modify Stipulation J-1 for Alternative C so that no permanent facilities would be constructed in the Colville River Special Area, identified in the 1983 NPR-A EIS. The Colville River drainage area, which includes the Arctic Foothills Province and Colville River Special Area, contains important habitat for moose and wolves (Carroll 2000a, b). Previous surveys, habitat characteristics, and food source opportunities (such as scavenging wolf kills; Magoun 1987, Carroll 1995) suggest this is important wolverine habitat. This is also among the best suitable habitat for muskoxen in the entire Planning Area, expanding south and west from reintroductions east of the NPR-A (Reynolds 1998, Carroll 2002).
- (2) Modify Stipulation E-2 to prohibit construction of permanent roads connecting production sites between separate oil fields, so that caribou and riparian habitats are afforded better protection. Studies have shown that a portion of the Central Arctic caribou herd has been displaced from their traditional calving areas in the Prudhoe Bay and Kuparuk oil fields (Cameron et al. 1992, Nellemann and Cameron 1998, Wolfe 2000). The Western Arctic caribou herd has its traditional calving areas in the southwestern portion of the NW NPR-A and significant summer and transitional use occurs here as well. This herd is substantially larger than the Central Arctic herd and human dependence on subsistence hunting is greater. However, oil and gas development exacerbate the adverse effects of insect harassment on caribou—loss of additional habitat, when accompanied by weather conditions that favor insect harassment, is likely to depress nutrient status (hence summer weight gain) for lactating female caribou. Depending upon the degree of nutritional stress, this could result in increased mortality of young caribou.

As seen in other areas of the North Slope, even a slight displacement (a few miles) of caribou can suffice to halt growth in the herd.

- (3) Ensure application of Stipulation C-1 on overland moves, listed under the No Action Alternative to Alternative C to prevent disturbance of denning polar bears. Human activity along the coast and near shore has influenced the suitability of some areas for use by denning female polar bears; disturbances during denning could result in population declines (Orians et al. 2003).
- (4) Modify Stipulation J-2 to prohibit petroleum exploration and production activities within 4 km of an occupied grizzly bear den (identified by the ADF&G). Net effect of cumulative effects on grizzly bears of oil and gas development-related killing of bears, hunting, habitat alterations, disturbances, and climate warming are not known, but all of these factors have a negative impact on grizzly bears (Orians et al. 2003).
- (5) Many of the Stipulations contain wording that would allow other types of mitigation of effects from a particular activity. We feel that mitigation efforts are largely unsuccessful in arctic ecosystems and therefore are not acceptable as allowances for violating a Stipulation or other condition.
- (6) All Alternatives should state that the BLM requires all oil/gas lessees to participate in and fund any and all needed habitat restoration once exploration and development activities have ceased.
- (7) The BLM should initiate action now to designate permanent protection for at least five special areas within the NW NPR-A Planning Area, including the Colville River, Teshekpuk Lake, Kasegaluk Lagoon, Peard Bay, and Meade River/Dease Inlet. These areas are of particular ecological importance due to their unique wildlife species and wilderness values—no oil or gas exploration or development should be contemplated in these areas. Once protected, these areas could serve as valuable benchmarks (control sites) for assessing and tracking cumulative effects of oil and gas development, something that is badly needed (Orians et al. 2003).

Thank you for the opportunity to provide comments on this draft EIS. We sincerely hope the BLM fully considers our recommendations, as well as the impacts of its decisions in light of its mandate for multiple use of the National Petroleum Reserve and conserving this fragile arctic area for future generations. The National Academy of Sciences' recent report (Orians et al. 2003) outlines some serious cumulative impacts of oil and gas development on the environment of Alaska's North Slope that must be anticipated and controlled in any viable plan.

Respectfully submitted,

Bruce Patterson, Ph.D.

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American Society of Mammalogists

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