
VERNON C. BLEICH - WILDLIFE CONSERVATION AND WILDERNESS MANAGEMENT: UNCOMMON OBJECTIVES AND CONFLICTING PHILOSOPHIES

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Abstract: The concept of wilderness was grounded primarily in a sociological context (i.e., “solitude” or “primitiveness”), and largely lacked an ecological perspective. The failure of wilderness advocates to consider the ramifications of wilderness on wildlife conservation activities has been problematic, especially for the conservation of landscape-level processes and for activities associated with the restoration of ecosystems. Wilderness advocates, both within and outside of agencies, often invoke wildlife conservation as the primary benefit of wilderness, and this is especially true when the rationale for wilderness designation must be defended. In reality, wildlife conservation objectives frequently conflict with the goals and objectives of wilderness managers. In this paper, I provide some specific examples of such conflicts. I also discuss the reasons that wildlife conservation and the designation of wilderness in its strictest sense are seemingly incompatible activities. Further, and specific to the conservation of mountain sheep (*Ovis canadensis*) inhabiting the deserts of southeastern California, I discuss the lack of ecological foresight in establishing nearly 70 wilderness areas. There is a need for reasonableness in the application of wilderness management policies, because reasonableness is the key to the conservation of large, vagile mammals and the habitats in which they evolved.

Wildlife management in legislated wilderness faces many difficult challenges (Haufler et al. 1996). These challenges are the result of differing objectives or mandates affecting the various state wildlife agencies, and those federal agencies charged with managing wilderness. For example, the California Department of Fish and Game (CDFG) has statutory responsibility for the conservation, protection, and management of fish, wildlife, native plants, and the habitats necessary for sustaining biologically viable populations of those species (California Fish and Game Code Section 1802). Those resources are held in trust for the people of California by CDFG (California Fish and Game Code Section 711.7). Wilderness is administered by federal agencies as directed by the Wilderness Act (U.S. Congress 1964). The primary objective of wilderness management is to “protect America’s last remaining wildlands as cultural and scientific enclaves and to protect the natural processes and values from indiscriminate development” (Kloepfer et al. 1994). It is clear, however, that the Wilderness Act emphasizes

aesthetics and the relative absence of humans (Haufler et al. 1996), rather than wildlife conservation. As a result, wildlife and habitat restoration activities frequently conflict with wilderness management objectives (Bleich 1999).

It is not my intent to say that wilderness has no value to wildlife conservation, and I will go to my grave arguing that habitat protection is the key to wildlife survival. Wilderness designations are, in fact, one way of achieving habitat protection. Nonetheless, conflicts between wildlife conservation objectives and wilderness management objectives are real. There is a need to bring reasonableness and some semblance of common sense to policies and to the interpretation and administration of wilderness legislation if wildlife conservation is to be a meaningful goal in legislated wilderness. It is my intent to elaborate upon these concerns, and to issue a plea for the realization that wilderness areas are not a panacea for habitat or ecosystem protection, particularly as they relate to

the viability of populations of mountain sheep (*Ovis canadensis*) in desert ecosystems.

In this paper, I will provide several examples, which I am personally familiar with, that illustrate some conflicts between wildlife conservation objectives and the strict application of wilderness policy. Moreover, some of these examples potentially represent the misapplication of regulations for what I interpret to be obstructionist purposes. I am concerned about the inconsistencies in interpretation and application of wilderness legislation (Bailey and Woolever 1992), resultant impacts on wildlife management and conservation activities, and the potential implications that the overzealous application of some aspects of wilderness law has for the conservation of large mammals. Moreover, the lack of ecological foresight associated with designation of wilderness areas in the deserts of California (United States Congress 1994) has serious implications for the maintenance of viable populations of large mammals. Just as there have been concerns about overzealous application of the Endangered Species Act, I predict in the future that there will be increasing public concern about overzealous application of wilderness policies.

I will initially describe some specific examples of conflicts between wildlife conservation activities and wilderness management policies. I will then comment on the reasons that wildlife conservation and the designation of wilderness in its strictest sense are seemingly incompatible objectives. Finally, I will issue a plea for reasonableness in the application of wilderness policies, because of the effect of those policies on landscape-level processes that occur outside of legislated wilderness. Without realization that the overzealous application of wilderness policies can be detrimental to wildlife conservation objectives (Bailey and Woolever 1992, Bleich 1999), the future existence of large, desert-dwelling mammals will be compromised.

Some Specific Examples of Conflict:

(1) During the early 1980s there was much discussion regarding the proposed Sheep Mountain Wilderness, on the Angeles National Forest, and

mining activity in the east end of the San Gabriel Mountains, Los Angeles County, California. Well-intentioned advocates of the Sheep Mountain Wilderness argued that wilderness designation was necessary to prevent a tungsten mine, located in Cattle Canyon, from impacting mountain sheep. Ultimately, the Sheep Mountain Wilderness was established, but the tungsten mine continues, even today, to operate within the wilderness. More onerous, however, the designation of that wilderness has precluded use of prescribed fire to maintain the openness and productivity of vegetation within mountain sheep habitat in that mountain range. Nearly 2 decades ago, Holl and Bleich (1983) made specific recommendations with respect to the management of vegetation in the San Gabriel Mountains. Those recommendations have not been carried out because of wilderness in the east end of that mountain range. There remains a large-scale mining operation in the Sheep Mountain Wilderness, but wildlife biologists cannot use prescribed fire to manipulate vegetation for the benefit of mountain sheep. Inability to use prescribed fire in legislated wilderness has impacted habitat used by other populations of mountain sheep (Etchberger et al. 1989, Bailey 1992, Bailey and Woolever 1982).

(2) In 1985, CDFG identified Cattle Canyon as an area from which mountain sheep could be captured and translocated to Cobblestone Mountain, Ventura County, approximately 100 kilometers away. At that time, the supervisor of the Angeles National Forest denied a request from CDFG to use mechanical equipment and vehicles on an existing road (that was used daily by tungsten mine personnel) to facilitate that translocation, because the trap-site was within the newly designated Sheep Mountain Wilderness. The owner of the tungsten mine, on whose claims the trap-site was located, volunteered his heavy equipment to clear an area (0.1 ha) on which a drop-net could be erected. The forest supervisor, however, refused to allow the owner of the mine to cooperate in that endeavor, because the proposed action was not among the permitted mining activities. As a result, a 15-person hand crew camped and worked in the area for 30 days to prepare the site.

Ironically, the forest supervisor did approve use of a helicopter to transport sheep from the trap-site, in lieu of horses that had been identified as the preferred alternative by wilderness specialists. CDFG was not permitted to use vehicles to drive to the trap-site to transport animals, even though it was adjacent to the aforementioned road and costs would have been reduced substantially. The forest supervisor defended his actions, stating that he, "...would not compromise the integrity of the Sheep Mountain Wilderness..." by allowing wheeled vehicles to use an existing road (Bleich et al. 1991). This capture occurred as bulldozers operated less than 100 m away.

(3) The Manly Peak and Surprise Canyon wilderness areas were established in the Panamint Range in 1994, as a result of the California Desert Protection Act (Act; United States Congress 1994). During the political shenanigans leading to that legislation, the open-pit Briggs Gold Mine was gerrymandered out of the proposed wilderness, but is surrounded on 3 sides by legislated "wilderness". During 1995, when research examining the effects of the mine on mountain sheep was initiated (Oehler 1999), wilderness specialists from the Bureau of Land Management (BLM) prepared an environmental assessment (EA) addressing the potential impacts of research activities on wilderness. They opined that the proposed use of time-lapse cameras to monitor mountain sheep at Redlands Spring would be offensive to wilderness connoisseurs that might visit that water source for solitude and a high-quality wilderness experience. Moreover, they wrote that the presence of a researcher hiking in the mountains could impact others seeking solitude there. Redlands Spring is located about 1 km from the Briggs Mine, and in the same canyon as the mine. More than 19,000,000 metric tons of ore will be processed by the mine during its projected 7-year life; this processing is facilitated by blasting, using high explosives, on a near daily basis (Oehler 1999). In addition, this wilderness lies within an area that is used daily for low-level training missions by pilots flying a variety of subsonic and supersonic military aircraft. Ultimately, use of the time-lapse camera at Redlands Spring was authorized, despite

protests from wilderness advocates among the general populace.

(4) Wilderness areas in the Panamint Range also contain many well-established roads, the use of which was critically important for research purposes. Nevertheless, vehicular access on those roads was disallowed. In fact, one researcher received a ticket from a National Park Service (NPS) Ranger for driving on a well-traveled road that was not posted as closed. Indeed, neither the wilderness boundary nor the boundary of Death Valley National Park were identified as such. Use of the existing roads would greatly have facilitated research, with no further ground disturbance, in an area that has been heavily impacted by humans, and where daily temperatures in excess of 40°C are the norm (Oehler 1999).

As a result of the inability to legally operate a vehicle, data acquisition was compromised. CDFG was, however, allowed to use a helicopter to capture mountain sheep within the wilderness. Section 103(f) of the Act clearly provided for use of motorized vehicles by CDFG for wildlife conservation purposes in newly created wilderness administered by BLM. The Act, however, does not address those wilderness areas administered by NPS.

(5) In an attempt to circumvent access problems in wilderness within the Mojave Desert, members of The Society for the Conservation of Bighorn Sheep developed a method to determine water levels in big game guzzlers (Bleich and Pauli 1990) and to relay that information via satellite link to remote computer terminals (Hill and Bleich 1999). The antenna enabling communication with the satellite extends about 2 m above the top of the water storage tanks which, in turn, are about 2 m in height. These monitoring devices have been installed surreptitiously because some federal employees have opined that the addition of the antenna would impact wilderness or scenic values, despite the intent for these monitoring devices to reduce (but not eliminate) the need for physical inspections of the guzzlers (Hill and Bleich 1999).

(6) In another example of the way that wilderness can hinder restoration efforts, a BLM wilderness specialist provided input for an EA addressing the proposed translocation of mountain sheep to the Bristol Mountains, San Bernardino County, California. In so doing, he noted that the presence of mountain sheep, "...would not enhance wilderness values..." (Bleich et al. 1991). Hence, that individual recommended denial of an application to develop a water source that would facilitate translocation of mountain sheep to the Bristol Mountains. The resource area manager concurred with the wilderness specialist, and denied the water development, even though mountain sheep had been extirpated as a result of human actions (Bleich et al. 1991). The decision to deny the project eventually was reversed by the BLM district manager, but with a delay of >1 year in the implementation of the project. The water development and translocation occurred over the continuing protests of the wilderness specialist and wilderness advocates among the general populace.

(7) Indian Writing Tank is located in the Indian Pass Wilderness in Imperial County, California. This wilderness is inhabited by numerous feral donkeys (Andrew 1994) that compete with mountain sheep for forage and, especially, for water (Andrew et al. 1997). During 1997, a proposal by CDFG to install a fence that would preclude access by feral donkeys to that critically important water source was denied by the BLM area manager, who followed the recommendation of a wilderness specialist. The project was rejected because proposed construction materials (12 mm diameter steel rebar and steel t-posts; Andrew et al. 1997) were not "natural". After the decision was questioned by members of Desert Wildlife Unlimited, a local conservation organization, the area manager approved a re-designed fence that would be installed by BLM personnel (BLM NOPA CA067-97-04). This fence was constructed of "natural" materials, consisting of 150 mm diameter, wooden "peeler cores" that were bolted together and held in place by heavy wire. Apparently, the wilderness specialist determined that those materials would be less offensive to wilderness advocates, both within and outside the agency, even though the volume of

construction materials was ca. 200 times that needed for the fence designed by Andrew et al. (1997), and the resulting structure was much more obtrusive.

(8) As part of the aforementioned project, the BLM area manager stipulated that the barrier was to be monitored to determine its effectiveness (BLM NOPA CA067-97-04). During September 1998, CDFG personnel conducted an aerial survey of mountain sheep in the East Chocolate Mountains, where Indian Writing Tank is located. Because of Section 103(f) of the Act, CDFG personnel volunteered to transport two BLM technicians to Indian Writing Tank to facilitate their monitoring effort. However, the technicians were denied permission to take advantage of that offer, because Section 103(f) did not specifically authorize use of motorized vehicles for wildlife conservation purposes by BLM personnel in wilderness. As a result, the technicians were required to hike to Indian Writing Tank from outside the wilderness area. It is important to note that there is a long-established road to Indian Writing Tank, but the technicians were not allowed to drive on it because use of motorized vehicles for wildlife conservation purposes was not specifically conveyed to BLM for wildlife conservation purposes by the Act. CDFG personnel use that same road for access to Indian Writing Tank on a regular basis.

At approximately mid-morning, CDFG biologists flew over Indian Writing Tank and observed the BLM technicians. After ascertaining their status, CDFG personnel continued the survey. Ambient temperatures in this region routinely exceed 40°C (Andrew et al. 1999). After completing the survey, word was received that ≥1 of the technicians had suffered heat exhaustion and, possibly, hyperthermia. The pair had become incapacitated while still several kilometers from their vehicle, and radioed for assistance. Help arrived in the form a Bell UH-1 search and rescue helicopter dispatched from the U.S. Marine Corps air base near Yuma, Arizona.

Reasonable interpretation of Section 103(f), consistent with motorized access for CDFG per-

sonnel for wildlife conservation purposes, would have prevented this life-threatening situation and resultant rescue. Use of the military helicopter to transport the technicians from the wilderness area later was rationalized under Section 103(g) of the Act (BLM NOPA-CA067-98-07). It is ironic that Section 103(g) provides for use of motorized vehicles by federal (including BLM), as well as state and local, law enforcement agencies, but use of existing roads for wildlife conservation purposes by BLM personnel repeatedly has been disallowed.

(9) The stringent application of wilderness regulations has had other serious impacts to wildlife habitat. For example, during July 1996, approximately 2,500 ha were burned in a wildfire on the Round Valley mule deer (*Odocoileus hemionus*) winter range on the Inyo National Forest in Inyo County, California. That fire severely reduced availability of bitterbrush (*Purshia tridentata*), a critically important winter forage for mule deer (Pierce 1999). The probable cause of the fire was a powerline failure. During August 1998, an additional 1,200 ha burned in another fire on the Round Valley winter range, further reducing the availability of forage for mule deer; the cause of that fire was arson. Some of the latter fire burned into the John Muir Wilderness.

Helicopters dispatched to this fire initially obtained water from Horton Lake, located just inside the wilderness boundary: the pilots hovered over the lake and filled their holding tanks via suction hoses, or dipped external buckets into the lake, to obtain water for transport to the fire. The pilots did not land, because such activity was prohibited by the Wilderness Act (United States Congress 1964). Instead, they operated the aircraft at low elevation inside the wilderness, but no ground-disturbance occurred. Round-trips from Horton Lake to the fire and back to the lake required approximately four minutes.

A directive was then issued not to obtain water from Horton Lake because it was within legislated wilderness. Instead, pilots were redirected to Pleasant Valley Reservoir, located ca. 16 km from

the fire. As a result, round-trip times increased from 4 minutes to ca. 18 minutes. The pilots were forced to lose ca. 1,500 vertical m of elevation with empty tanks and to regain it with full tanks. Impacts to bitterbrush (Countryman and Cornelius 1957, Mueggler and Blaisdell 1958) and resultant effects on mule deer were much more severe than would have been with greater fire-fighting efficiency, because less habitat would have burned.

During a meeting following the second fire, diversion of helicopters from Horton Lake to Pleasant Valley Reservoir was questioned by an angry public. An official from the U.S. Forest Service (USFS) stated that CDFG personnel had made that request out of concern for potential impacts to "neotropical migrants and amphibian populations" at Horton Lake. I later ascertained that CDFG personnel had never been contacted regarding that recommendation: the official apparently was attempting to rationalize *her own* desire for helicopter pilots to obtain water from outside the wilderness. During the same meeting, other USFS officials admitted that crews fighting the fire had used chain saws in the wilderness (which also contains a road) to protect some buildings (that, by definition, don't exist in wilderness), and that an aircraft landed in the wilderness to "rescue" some hikers that, in retrospect, were not endangered by the fire.

(10) An additional example of conflicts between wilderness management policies and wildlife conservation objectives also occurred near Round Valley. In the past, large numbers of migratory mule deer have been killed when they slipped while crossing an ice field located near Bishop Pass (Jones 1954). A similar incident occurred in 1995 (Bleich and Pierce *in press*). A proposal to use hand tools to cut a path across the ice field and to deposit native sand and gravel on that path to prevent further losses of deer was made to the Inyo National Forest by well-intentioned citizens. Wilderness specialists denied this request, despite much public interest in the deer population (Clark 1996), and strong public support for that action. The decision was based on the notion that such an action would alter the wilderness characteristics of

the area, and would preclude natural processes from operating. It is important to note that deer are hunted for several months each year in the same wilderness, presumably with resultant affects on the age and sex structure of the deer population.

(11) A final example of why I question many wilderness regulations concerns neither the use of mechanical equipment nor interference with natural processes. Rather, the issue involves inconsistencies with respect to management of livestock. For example, outfitters guiding mountain sheep hunters in wilderness areas in the Mojave Desert have been issued permits to use horses, but were required to carry all food and water that their livestock might require (BLM NOPA CA069-98-05). Coincidentally, these same wilderness areas are open cattle range, and there is no shortage of either cows or donkeys. Those exotic ungulates have done extensive damage to vegetation, and have year-round access to water sources in these wilderness areas. The horses would be present only for the duration of any hunt, which typically are less than 2 weeks in duration (Torres et al. 1993). It is incongruous that requirements such as these are placed on users of public lands because of potential impacts to wilderness, but feral or domestic exotic ungulates are not similarly constrained.

Related Conservation Concerns: Incidents described above provide examples of the inconsistencies that are common in wilderness management policies (Bailey and Woolever 1992), particularly as they relate to wildlife management and conservation issues. In California, Section 103(f) of the Act has greatly facilitated the use of motorized equipment for purposes of wildlife conservation in wilderness, particularly those administered by BLM. Nevertheless, use of motorized equipment still is opposed by many wilderness specialists in federal agencies, as well as wilderness advocates among the general public (Bleich 1999). As a result, conflicts continue to arise on a case-by-case basis.

Section 103(f) does not address wildlife conservation activities within national parks or preserves,

and CDFG management activities in wilderness administered by NPS are controversial. Future wilderness legislation, such as that currently being considered for the state of Nevada, should specifically provide that wildlife conservation activities deemed necessary by the state wildlife agency be allowed in any wilderness to be administered by NPS, in addition to those administered by BLM.

The Act established 74 wilderness areas in the deserts of eastern and southeastern California; 69 of these are administered by BLM, 2 by U.S. Fish and Wildlife Service, and 3 by NPS. The majority of these are inhabited by resident populations of mountain sheep (Torres et al. 1994), but designation of wilderness is an opportunistic political process (Haufler et al. 1996). The tragedy is that these wilderness areas were established largely at the insistence of special interest groups, and were delineated primarily on convenient topographic features (i.e., wilderness boundaries largely were drawn around the basal contours of isolated desert mountain ranges, or along peripheral roads). As a result, no consideration was given to the juxtaposition of those wilderness areas; the increased use *within* those areas that would result from their "protected" status (Wallace 1992, Klein 1994); the increased use *outside* of those protected areas that would occur as the public was denied motorized access to newly legislated wilderness; or, to the synergistic impact that all of the above factors would have on the potential for movement by large mammals between islands of "protected" habitat (Schwartz et al. 1986, Bleich et al. 1990, Bleich et al. 1996).

To further confound the problematic spatial arrangement of wilderness established by the Act, federal bureaucracies are moving to acquire all private or state-owned lands *within* those areas. These lands are not being purchased but, instead, are being exchanged for federal lands *outside* of designated wilderness, further complicating efforts to ensure that isolated wilderness areas are linked by intermountain corridors. Moreover, private and state-owned lands provide opportunities for habitat enhancement projects, particularly for mountain sheep, even within wilderness areas administered

by NPS (Pauli 1995). The value of these lands for habitat enhancement purposes has not been considered in the process of land acquisition. It is my contention that these exchanges ultimately will exacerbate fragmentation of mountain sheep habitat (Armentrout and Boyd 1994) by further isolating protected areas from each other (*sensu* Sarkar 1999). Of even more concern, however, is the continued fragmentation of desert *ecosystems* and resultant effects on evolutionary processes, including metapopulation dynamics (Bleich et al. 1996).

Designation of wilderness does not guarantee protection from potentially detrimental impacts (e.g., use by exotic ungulates or recreational use; Cole and Landres 1996), nor does it guarantee that such areas are “untrammeled by man” (Mitchell 1998, Bleich and Pauli *in press*). Nevertheless, recent experience has shown that wildlife conservation measures and habitat restoration is controversial and problematic in such areas (Bleich 1999). Additionally, the notion that protected areas necessarily benefit wildlife populations or enhance biodiversity can be unfounded (Berg 1991, Zika 1991, Gadgil and Guha 1995, Mace and Waller 1998, Sarkar 1999). Without consideration for landscape-level processes, wilderness areas may become islands of protected habitat (Sarkar 1999) that are subjected to more intensive human use (Klein 1994, Cole 1996a) with negative implications for conservation of wildlife or habitat, as a result of that designation (Repetto 1992).

Summary: The aforementioned concerns have implications for the long-term conservation of large mammals, and exemplify the lack of biological foresight inherent in the designation of wilderness in the deserts of California. The motivation for establishing those wilderness areas was founded primarily in a sociological context (i.e., “solitude”, “primitiveness”), and largely lacked an ecological perspective. Indeed, Spurr (1966; cited by Hauffer et al. 1996) concluded that, “Wilderness is a poetic and deep-felt concept, but is primarily sociological rather than ecological in implication...”. As a result, wildlife managers have been forced to conserve a biological wilderness

following natural laws, while the “wilderness clientele” has perceived the task as sociological, and centered largely on aesthetics (Hauffer et al. 1996). Even the ability to conduct scientific investigations has been compromised by unreasonable and inflexible wilderness policies; fortunately, however, the importance of scientific investigation in wilderness is being recognized (Cole and Landres 1996).

Wilderness has value in protecting examples of natural ecosystems (Noss 1991), as baseline or reference areas to which manipulated ecosystems can be compared (Franklin 1987), and because of the psychological and sociological benefits that humans derive from the use of such places (Lucas 1973). As I noted previously, it also has value in protecting wildlife habitat. However, the lack of ecological foresight in establishing most wilderness areas has important ramifications for landscape-level processes, including animal migrations (Brower and Malcolm 1991) and metapopulation dynamics (Bleich et al. 1996); this gaffe is especially onerous in the deserts of southeastern California.

It is ironic that advocates of wilderness inevitably invoke the importance of those areas as a method to protect habitat and conserve wildlife, but that few wilderness areas contain even the year-round ranges of indigenous large mammals (Hauffer et al. 1996). Bailey (1992) noted that wilderness management plans were being developed without consideration for the roles of those wilderness areas in the metapopulation dynamics of mountain sheep. Moreover, Bailey and Woolever (1992) concluded that the strict application of wilderness policies could jeopardize the existence of many populations of mountain sheep occupying small wilderness areas. It is my contention that if legislated wilderness had its foundations in wildlife conservation (as claimed by many advocates), then responsibility for administration of such areas would not be vested in persons whose primary responsibilities center on management of recreational activities.

The overzealous application of legislation, inflexi-

ble policies, pressures from special interest groups, and lack of ecological foresight in delineating wilderness areas have made wildlife conservation activities within wilderness difficult, at best. Nevertheless, the stewardship of wildlife by CDFG in the deserts of California has been facilitated by provisions of the Act (specifically Section 103[f]) that were negotiated during the legislative process. The Act ensured that management activities to maintain or restore wildlife populations and the habitats to support such populations may be carried out in wilderness, and provided for the use of motorized vehicles for those purposes. As other wilderness areas are established, similar concessions for wildlife conservation activities and for habitat enhancement or restoration will enhance the probability of maintaining viable populations of large mammals, particularly in desert ecosystems. There is concern that human actions (e.g., the restoration of mountain sheep) to enhance the "naturalness" of wilderness systems will further degrade legislated wilderness (Cole 1996b, Cole and Landres 1996) but, also, simultaneous recognition that such activities may be necessary for the maintenance of ecosystem processes outside of wilderness (Cole and Landres 1996).

I contend that the application of common sense to the interpretation of wilderness legislation, and implementation of reasonable policies, will provide greater public support for wilderness than will rigid enforcement of regulations that are deemed unreasonable by affected citizens (e.g., Hummel 1989, Klein 1994), or are inconsistent with wildlife conservation objectives (Sizer and Carr 1989; this paper). Further, consistency in the interpretation and application of wilderness policy, particularly as it relates to those areas established in 1994 by the Act, will lead to fewer disagreements between personnel in state and federal agencies, reasonable and effective wildlife conservation measures in legislated wilderness, and a greater probability of maintaining viable populations of large mammals in the deserts of California.

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QUESTIONS, ANSWERS AND COMMENTS - VERNON C. BLEICH PRESENTATION

JON HANNA, ARIZONA: Just to share an example, maybe on the other end. In some wilderness areas on Forest Service land where we have bighorn sheep, it looks like we'll have clearance to land helicopters for net-gunning and collaring sheep, and possibly also clearance for snaring lions on wilderness areas.

VERN BLEICH: I commend you and congratulate you on that. I think that my point is that things often must be pushed to the limit before one can make reasonable progress along the lines of implementing wildlife management activities due to the personal efforts of many people who may not agree with such activities occurring in designated wilderness areas.

MICHELLE BOURASSA, SOUTH DAKOTA: It seems a lot of these determinations of the acceptable activities in the wilderness areas comes down to individual managers and supervisors. I want to know if any unbiased public surveys have been completed to determine what the general public perceives as acceptable and nonacceptable activities in designated wilderness areas?

BLEICH: I can't respond to that question because I do not know. My point is that these wilderness areas as designated have been touted as being in the best interests of wildlife conservation. I clearly do not believe that is the case. I think that the sociologists and leisure studies people would perhaps have answers to your questions, but I would argue that if wilderness designation truly was compatible with wildlife conservation, agencies wouldn't have sociologists and recreation specialists administering wilderness areas.

DAVE SMITH, ARIZONA: I think you're preaching to the choir. We're the biologists who feel it's a pain to work around wilderness. I look at the inconvenience of having to walk in there to do surveys. However, at least when I go in there, somebody isn't going to be lopping the top of the mountain off for a mine. It's been Congressionally withdrawn from mineral entry, especially for the sheep metapopulations we have scattered around southeastern California. Somebody isn't going to put in an off-road competitive race track; there won't be any dirt bikes or ATVs.

BLEICH: Dave, I appreciate you're being part of the choir. However, I would counter that with, first of all, the raceways are not going to be occurring in the mountain ranges. They'll be occurring between the mountain ranges for lack any other place to put them. Also, where there were developable minerals or if any of these areas were of economic value, they've already been gerrymandered in or out of the wilderness areas as the case may be. Nothing went into wilderness if there was the potential for something economically to happen, that I've been able to determine.

SMITH: But if I want to spend a couple hundred dollars a year for recreational bulldozing, I can go anywhere I want if it's under five acres. There's a lot of that on the Quartzsite area. In the Kofa Wilderness that at least keeps the "snowbirds" from going "hobby mining". It's not the big mines. It's the hobby mines that require protection as wilderness.

BLEICH: You're absolutely correct. But there are ways to address those issues. The 1872 Mining Act is clearly a problem. The Taylor Grazing Act is a problem. But rather than deal with issues, we invented something really flashy, really chic. The sociologists and recreation planners have told us that we need places to go where we can get away from it all and not be exposed to the toils and troubles of daily life. Congress

called it wilderness for that reason, but didn't consider the ramifications of that for long-term conservation at a landscape level, and my concern really boils down to what's going to happen to the rest of the desert. I think we'll end up with island populations of mountain sheep in well-protected areas of suitable rocky terrain and, ultimately, with very little opportunity for emigration and immigration, and movement between those areas by mountain sheep.