

# Letters

## Grizzlies: To Spare or Banish

Herrero gives a well-balanced analysis of the grizzly bear problem in the national parks ("Human injury inflicted by grizzly bears," 6 Nov., p. 593), but his flat statement that no hikers have been attacked by grizzly bears while actively making noise (loud talking, singing, clanging a bell) should be qualified. It applies to truly wild grizzlies that have little or no experience feeding in garbage dumps, but, according to the Craigheads, such bears are rare.

In 1969, while on a geological traverse a mile from Rabbit Creek dump in Yellowstone Park, I was charged twice, but not injured, by a sow with two cubs, despite shouting and ringing a cowbell vigorously for the half hour I was in the area. Maintenance men unloading garbage at the dump were approached by grizzlies so often that remote controls were installed to enable them to dump garbage without leaving the truck cab.

Grizzlies who feed at dumps have become so accustomed to the sight, smell, and sound of man and his machines that noisemaking, although it will alert the bear to the hiker's presence, is no longer a reliable way of avoiding an encounter and possible attack. This will be true through the transition period as the dumps are closed and the grizzlies are encouraged back into a natural state.

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In support of Herrero and the bears, it would be interesting to see comparative statistics on the number of people who have died from snakebite, bees, wasps, vector-borne diseases, spiders, scorpions, rabies, and other naturally occurring calculated risks associated with our national parks. To carry this a little farther, I wonder how many

people have died or been seriously burned as a result of the geothermal activity in Yellowstone. Isn't this also a calculated risk on entering this park? After we remove the threat of grizzly attacks are we going to turn off the hot water?

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The Lewis and Clark Expedition had something to contribute to the discussion about whether grizzly bears and man can coexist. Several analyses of the expedition, such as Cutright's (1), have mentioned their encounters with the big beasts. Burroughs (2) has summarized it: Lewis and Clark encountered the "white bear," as they usually called it, beginning on 1 September 1804 about 25 miles below where the present Niobara River enters the Missouri at Bon Homme Island. Later, on 20 October near the present Bismarck, N.D., they encountered a second animal, but no more activity was observed until the expedition approached the mouth of the Little Missouri River on 13 April 1805. A few other sightings were made that spring, but, as Burroughs states, "from the mouth of the Yellowstone River and Three Forks, Montana in 1805 twenty-three grizzly bears were killed and several escaped the hunters. . . . [O]n the return trip, six grizzly bears were taken west of the continental divide on the Clearwater River in Idaho, and fourteen more were killed east of the Rockies in the valleys of the Yellowstone and the Missouri." However, Lewis's personal encounter with a grizzly on 14 June 1805 in the vicinity of Great Falls is rather classic. He had just killed a buffalo and had not as yet reloaded his gun when "a large white, or rather brown bear, had perceived and crept up on me within 20 steps before I discovered him [Lewis was on an open level plain with

no trees within 300 yards]. . . . [I]n short there was no place by means of which I could conceal myself from this monster until I could charge my rifle. . . ." As he prepared to retreat slowly to the river he says, "I had no sooner turned myself about but he pitched at me, open mouthed, and full speed. I ran about 80 yards and found he gained on me fast. . . . The idea struck me to get into the water to such a depth that I could stand and he would be obliged to swim, and that I could in that situation defend myself with my esponton; accordingly I ran hastily into the water about waist deep, and faced about and presented the point of my esponton, at this instant he arrived at the edge of the water within 20 ft. of me; the moment I put myself in this attitude of defence he suddenly wheeled about as if frightened, declined combat on such unequal grounds, and retreated with quite as great precipitation as he had just before pursued me." The bear then ran off about 3 miles until he disappeared in the woods on Medicine River. This could be an example of Herrero's suggestion that standing one's ground rather than running from a grizzly is the best procedure.

Herrero's suggestion that campground and garbage dump food is an attractant that increases the possibility of people being attacked may be supported by the lack of attack indicated by Lewis for 28 June 1805 at the Great Falls area: "They come close around our camp every night but have never yet ventured to attack us and our dog gives us timely notice of their visits, he keeps constantly padroling [sic] all night." This could indicate that the bears were not yet used to feeding on man's food and, hence, possibly attacking man.

The ability of Lewis and his men to apparently outrun grizzlies is rather interesting in view of Herrero's comments on their speed. The expedition encountered many bears in the open plains in Montana near Great Falls but no one was actually injured by them in spite of the many encounters and lack of trees in most cases into which they could climb. The general absence of injury to members of the expedition in this case may be likened to the Craigheads' lack of injury. The fact that they were well aware of the presence of the bears and of their danger was probably good protection against the type of injuries now occurring to the unsuspecting in our national parks. The few times when they really took risks hap-

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pened not to turn out as a source of in-  
jury to them. Some were even quite  
humorous and I recommend reading  
the accounts if one is interested in  
bears.

Herrero's recommendations are ex-  
cellent. I hope we never try to delib-  
erately eliminate even mosquitoes from  
the national parks. Those afraid of  
injury should observe their bears in  
zoos and those who would like to ob-  
serve them close at hand should know  
how to do it. They will not be injured  
either, even if they are able to find a  
grizzly. . . .

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### References

1. P. R. Cutright, *Lewis and Clark: Pioneering Naturalists* (Univ. of Illinois Press, Urbana, 1969).
2. R. D. Burroughs, Ed., *Natural History of the Lewis and Clark Expedition* (Michigan State Univ. Press, East Lansing, 1961).

Herrero correctly named me as a  
supporter of the proposal to remove  
grizzly bears from parks such as Yel-  
lowstone and Glacier and then labeled  
the proposal both undesirable and  
"clearly contrary to the obligation  
stated in the statutes" under which our  
national parks were established.

Herrero himself recently pointed out  
(1) that "few people would suggest  
reintroducing the grizzly into the back  
country of the Sierra Nevada National  
Park areas. Back country use by people  
in the Sierra is simply too great to per-  
mit such sharing." Thus the main dif-  
ference between our positions reduces to  
whether or not people should be per-  
mitted, indeed encouraged, to get out  
from behind their windshields and hike  
as they are doing in the Sierra park.  
It is worth noting that in the new Ger-  
man national park in the Bavarian For-  
est grizzlies will not be reintroduced.

The extensive statistics cited by Her-  
rero on the miles hiked, grizzlies stud-  
ied, and man-hours devoted by the  
Craigheads in Yellowstone without seri-  
ous injury are no doubt accurate al-  
though the Craigheads reported (2)  
that their "information was not gleaned  
without risk. Time and again we have  
been treed by bears." It is difficult to  
see how the experience of a group of  
professionals, usually armed at that,  
applies to the average hiker or camper.

An Act of Congress established Yel-  
lowstone in 1872 both as a "pleasur-  
ing-ground for the people" and for "the  
preservation of all the timber, mineral  
deposits, natural curiosities, and won-

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ders within said park." As soon as roads through the park and Old Faithful Inn were built, the inherent conflict of purposes became apparent. Clearly, if the first part of the 1872 obligation is to be fulfilled, some compromise is inevitable in the second. Furthermore, no one generation can in fact forever bind future generations. . . . Even though laws remain the same, as decades pass and new circumstances arise, the laws tend to be reinterpreted.

We can all agree that feeding garbage to grizzlies in national parks should stop. But will the Park Service, which does such a superb job in so many ways, continue to enforce no-feeding rules after the present excitement has subsided? I have seen garbage fed to grizzlies every night under the eyes of unprotesting park rangers even though it was in flagrant violation of regulations.

Last, some caution is in order before accepting Herrero's theme that "the highest function our parks can serve" is to give man a sense of being "part of nature." This is a complex and slippery idea. Does he imply that the man studying biochemistry or atomic physics is not as fully and deeply immersed in the study of nature as the man hiking the back trails and thinking about grizzly bears? Most of us believe we find mountain scenery ennobling, something which uplifts the mind and heart. Yet Hitler found his inspiration in the Berchtesgaden Alps. There simply is no assurance that a sense of union with an alpine ecosystem including large and savage carnivores will automatically be a civilizing experience.

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#### References

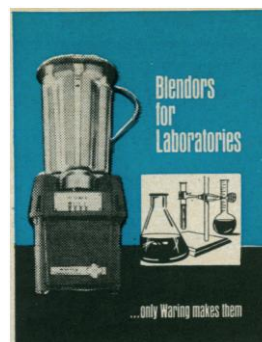
1. S. Herrero, *BioScience* 20, 1148 (1970).
2. F. Craighead and J. Craighead, *Nat. Geogr. Mag.* 130, 252 (1966).

#### Measuring Radioactive Materials

We have noted with interest the correspondence on the subject of the mislabeling of radioactively tagged chemicals, culminating with the letter (4 Dec.) from A. Broido entitled "More mislabeling—more frustration." Broido rightly points out the hazards of using, to say nothing of supplying, solid "standard" sources of such low specific activity, low-energy beta-particle emit-

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