

Mr. William H. Clay
Deputy Administrator
Animal and Plant Health Inspection Service
U.S. Department of Agriculture
Washington, DC 20250

7 May 2012

Re: your response to American Society of Mammalogists letter on Wildlife Services

Dear Mr. Clay:

Our Society president, Dr. Michael Mares, forwarded your letter to him of 26 April 2012, in response to the Society's letter that was submitted through the Federal Register on March 23, 2012, in response to APHIS's request for input on agency priorities. Our Society's Conservation Committee drafted that letter, which was then revised and edited by Dr. Mares. We thank you for the time you've taken to respond and for your willingness to enter a dialogue with us on these important issues.

We emphasize that our comments were submitted in response to the "Stakeholder Survey" in which Director Parham wrote (letter of 10 February 2012): "In this era of shrinking budgets, federal agencies are facing hard choices about the delivery of important services and APHIS is no exception." "This means that it will be more important than ever for APHIS to understand its stakeholders [sic] concerns and priorities." Thus our letter shared the concerns and priorities of the American Society of Mammalogists on certain programs of Wildlife Services (WS).

We did not address the valuable work of the National Wildlife Research Center, and we state now that we believe the work of NWRC scientists and collaborators is important and a vital part of moving WS toward a future with emphasis on more sustainable, holistic, and scientifically sound management of our nation's wildlife resources. If anything, we would support an increase in funding for this research arm of WS, because there is a great need for increased monitoring of populations of native mammals that have received lethal control, of costs and benefits of such control, and especially of new non-lethal methods and more specific and targeted lethal methods that reduce what has been, in our view, an excessive take of non-target species.

We stated our strong support of WS's work in lethal control of invasive exotic species. We favor ample funding of WS to support eradication of those invasive exotics that can still feasibly be eradicated and specifically targeted lethal control of those that cannot, in order to alleviate damage to native wildlife and ecosystems and to human society. So, although we are not an "animal rights" organization, our priorities do sometimes overlap with those of the NGOs in that arena. As a Society, all of our members are dedicated to the ethical treatment of subject animals in our research, which applies to all forms of experimentation, handling, and scientific collecting (Sikes et al. 2011). In your letter, you make an unfair comparison of WS lethal control to scientific collecting; for one thing, our animal care and use protocols (and oversight by USDA-monitored Institutional Animal Care and Use Committees established at universities) prevent us from using several of the methods that WS employs. Also, your characterization of mammalogists conducting "lethal collection of tens of thousands of mammals... for someone's future studies" is both cavalier and seriously behind the times. The "skin and skull" days passed

away decades ago, as modern museum collecting concentrates on vouchers and tissues, the latter often collected from animals released alive and well. As professional mammalogists, we are not anti-hunting or anti-trapping, but we endeavor to collect wildlife for scientific research in the minimum quantities necessary for sound science and according to humane principles.

We also applaud the work that WS does in control (including humane lethal control) of native predators and parasites in specific cases in which the survival and reproduction of a rare, threatened or endangered species (of any vertebrate) relies on it. These include, just to name a few, control of Brown-headed Cowbirds in Kirtland's Warbler nesting habitat, control of nest predators of beach-nesting Least Terns and sea turtles, and control of large carnivores that threaten Peninsular Bighorn Sheep in their breeding areas. None of us was involved in the letter of 2000 signed by Dr. Reichman; he is currently not available, so we cannot comment on the specifics of that letter. We do understand the need to control transplanted species such as Arctic Fox on certain Aleutian and Bering Sea islands, where their predation threatens nesting seabirds and has actually altered nutrient flows to the tundra of some islands.

As we stated in our letter, our concerns are mostly with WS programs that heavily target certain species of native predators and rodents that actually play key roles in ecosystem health and whose depletion brings unintended consequences that cascade through ecosystems (Estes et al. 2011). The end result can be negative for species of conservation concern as well as the health of the range and livestock. For example, prairie dogs and their towns, in addition to providing habitat for a great many species of native plants and animals (Davidson et al. 2012), have been shown to increase nutritional content and digestibility of forage plants, and increase live-plant to dead-plant ratio, for both bison and cattle forage, especially in more productive prairie ecosystems (Lauenroth and Burke 2008). Scientific study has shown that healthy and unmanaged populations of gray wolves in the Yellowstone ecosystem preferentially prey on old and diseased elk (Wright et al. 2006). Therefore, this top predator, allowed to establish and maintain natural pack structure, is an ally in disease prevention in ungulate populations, which reduces risk of disease transmission to domestic livestock.

You mention that coyotes have been "a particular interest of ASM over the years", but that is only because the numbers tell of WS's own obsession with the species. While WS finds it necessary to kill 70-90,000 coyotes per year, ostensibly both for stock depredation and ungulate predation, it also kills wolves in collaboration with certain states. Yet removing wolves often is a catalyst for increased coyote populations in an area. In fact, it has been shown that pronghorn fawn survival in areas with wolves is 4 times higher than in areas without wolves, because wolves suppress coyote populations, thereby indirectly enhancing pronghorn populations (Berger et al. 2008).

There are also questions of efficacy and stewardship of federal tax dollars. And, after all, stewardship of public funds is not only any agency's responsibility, but it was specifically referenced in Director Parham's letter to stakeholders asking for their input. Despite a considerable effort by WS at lethal coyote control in the West, evaluation of a 60-year data set on the sheep industry in the United States indicated that the decline of that industry in both East and West could be attributed to market trends and production costs, and predator control (lacking in the East) did not have a significant impact (Berger 2006). So, we ask, where are the data that

show that the massive and ongoing effort to kill coyotes—fully accounting for compensatory increases in rabbit or rodent populations and the damage they do on the negative side of the ledger—has been a prudent use of federal tax dollars and promotes the general welfare of American citizens? Where is the evidence that this is not merely a subsidy for a select few individuals, and perhaps an ineffective subsidy at that (i.e., merely creating population sinks that temporarily increase rabbit and rodent populations then re-fill with coyote populations that reproduce maximally)?

Correct us if we're wrong, but we suspect that in targeting species such as wolves and prairie dogs heavily for lethal control, WS accounts only for direct livestock losses (or putative losses) in its calculations rather than taking the more realistic and holistic view of the many cascading benefits of these two keystone species, whose activities have the above-stated indirect benefits. We ask you to show us the evidence of the cost accounting by APHIS that takes into account the ecosystem values of maintaining a healthy population of an apex predator like the gray wolf, and conversely the deficit accounting for the loss of those ecosystem services when WS depletes apex predator populations in certain areas. If these data are not available, then we suggest this should be a priority for research by NWRC.

We once again take this opportunity to urge most strongly that WS not use federal tax dollars (or accept collaborator funding) to become involved in politically motivated and scientifically unsupported efforts to deplete predators in the erroneous goal of increasing game (native ungulate) populations. We refer specifically to Idaho's zeal in reducing its recently recovered gray wolf population to a fraction of its recent peak size. A recent long-term, large-scale manipulative study of the effects of predator removal on mule deer abundance in Idaho found the effects of predator control to be marginal and short-term (Hurley et al. 2011); in fact, winter severity in the current and previous winters were the best predictors of deer population trends. In a 3-year study of elk calf mortality in northern Yellowstone, wolves did not meet an important criterion of ability to control elk populations, namely that they were the dominant predator on all stages of the life cycle of the prey (NRC 1997); in fact grizzly bears (*Ursus arctos horribilis*) and black bears (*Ursus americanus*) accounted for 58 to 60 percent of calf deaths, whereas wolves accounted for 14 to 17 percent (Barber-Meyer et al. 2008).

Not only is predator control unproven in its long-term ability to increase ungulate populations (whose dynamics are more influenced by habitat and weather), but such a practice specifically favors certain segments of the U.S. population over others. According to The Wildlife Society in their recent technical review of carnivore management (Peek et al. 2012), "Although the Public Trust Doctrine for Wildlife Management clearly articulates that state and federal agencies manage wildlife for the benefit of all citizens, often the opinions of non-consumptive users are ignored. Unbalanced information that supports the perceptions of some stakeholders over others can increase conflicts." This seems to us to be the case when state or federal agencies conduct predator control on wilderness areas or other public lands far from any grazing leases. TWS's technical review goes on to say "In places where human presence and impact is minimized, wildlife populations of all species should be allowed to fluctuate with as little anthropogenic interference as possible (Peek et al. 2012)." We would like to see your agency comply with this dictum, for the benefit of all Americans.

In contrast to your condemnation of ASM and its input over the decades, we feel that we have provided you specific recommendations and criticisms—along with citations to the scientific literature—that are indeed constructive. We have told you which types of programs and activities we believe are scientifically justified and which are not, and which are at least questionable and require that you justify them. We do not know the complete life story of Ira Gabrielson, but given that he was an administrator trying to shore up support for his agency, which was under intense scrutiny during a time when the official policy was complete eradication of large mammalian predators (and we hope, by dropping his name, that you are not defending that policy even retroactively), it is certainly not surprising that he felt it necessary to his job to cut ties with the Society that was leading that fight. If you are indeed proud of the fact that WS no longer has as a policy of eradication of native species or of lacing carcasses with poison, then you should thank ASM rather than condemn it, because without the forceful written statements by ASM as a whole and, individually, by ASM members including C. Hart Merriam (first director of the Bureau of Biological Survey), Aldo Leopold (former federal predator control officer and founding father of American conservation), and renowned 20th-century mammalogist E. Raymond Hall, WS would not have made many of the progressive changes that you tout.

As a committee, we would welcome the opportunity to discuss these issues with you, and we invite you or a representative to arrange a meeting with us while we are gathered for ASM's annual conference in Reno, NV from 22-26 June 2012.

Sincerely,

Dr. Bradley J. Bergstrom, Chair,
Conservation Committee
American Society of Mammalogists

and Professor of Biology
Valdosta State University
Valdosta, GA 31698-0015
bergstrm@valdosta.edu

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