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Does Nature Want Us to Kill Wild Animals?

Walter E. Howard, Professor Emeritus of Wildlife Biology and Vertebrate Ecology Department of Wildlife, Fish, and Conservation, University of California, Davis

We cannot leave the solution of managing

the make up of human-modified ecosys-

tems to Nature. We have interjected too

many uncertainties into the natural sys-

tems. Management by us is essential.

As a youngster I was always distressed when my turtles, snakes and shrews killed and ate fish, birds and small rodents in my backyard menagerie. I still have a genuine love and deep protective feeling toward the welfare of birds and mammals, as I am sure you do. My early childhood experiences put me on a path to try to understand what I call Nature's "life-death" ethic.

As tragic as it may seem at times, Nature's death ethic requires that most animals die before they become sexually mature to prevent populations from continuing to grow in size. Most of the animals that are born must die before they mature sexually to preserve the balance of Nature. Nature would not be able to cope with the huge population densities that would result ...if most animals reached sexual maturity.

The most valuable asset I have obtained during my 85 years has been learning to analyze Nature's death ethic objectively, not just emotionally. This is not easy. Those of us who love Nature

and animals can't help but feel emotional about the welfare of animals and we inherently want all animals to live to an old age despite Nature's death ethic. One of the main traps we fall into is that we become so sentimental about individual animals. Yet Nature does not recognize individuals, only populations of animals.

Balance of Nature

Since some undesirable exotic plants and animals in America are now permanently established and cannot be eliminated, we must learn how to live with them. The huge populations of people that exist today along with these exotic animals are here and can't be ignored. They are not going away; hence we must deal with them. The high

population of people and the well-established unwanted plants and exotic animals must be included in any management scheme we develop. We cannot leave the solution of managing the make up of human-modified ecosystems to Nature. We have interjected too many uncertainties into the natural systems. Management by us is essential.

I am sure many people join me in my concern about the welfare of wild birds, mammals and other animals. Most of us want to preserve as much "natural" biological diversity as possible and to do what we can to conserve natural resources and to protect the environment. But at what cost? In 1982 I spent one month in Khana National Park, India, at a conference with 60

wardens from India's tiger preserves. The wardens told me that each year surplus tigers from their preserves annually killed around 150 villagers. Now I think the number of fatalities each year is only around 50.

Could it be that despite our "good" intentions to protect "individual" animals and to conserve natural resources and the environment, we have inadvertently caused some populations of animals, such as deer, raccoons, foxes and others, to be exposed to needless suffering — this because we have eliminated too many of their natural mortality factors? After spending much of my life studying animals and how they interact with us, I must say the answer to this question is unequivocally "yes". Just look at the degree of suffering deer sometimes have in suburban areas and the plight of surplus bears, when populations exceed the food supply and they are reduced to rummaging through garbage for a meal.

Continued on page 6, Col. 1

News From The Berryman Institute, Utah State University

Michael Conover, Director, Jack H. Berryman Institute, Department of Fisheries and Wildlife, Utah State University

Rirst, the Berryman Institute is hoping to expand from a one-university to a two-university institute. We are hoping to open an eastern branch at Mississippi State University in order to better serve our constituents in the eastern U.S.

Second, Mike Conover's book, Resolving Human Wildlife Conflicts: The Science of Wildlife Damage management, has now been published by CRC Press. Copies can be ordered for \$69.95 from the publisher or for a much lower price from Amazon.com.

Third, the Berryman Institute announced the winners of its 2002 Awards before a packed auditorium at the Vertebrate Pest Conference in Reno, NV. Each year the Institute recognizes superior work aimed at enhancing human-wild-life relationships and resolving human-wildlife conflicts by bestowing three awards.

Our research Award was given to Richard Dolbeer, Sandra Wright, and Edward Cleary. They were honored for their publication in the Wildlife Society Bulletin, entitled "Ranking the hazard level of wildlife species to aviation." Their research has improved the safety of airline passengers by reducing the threat of bird-aircraft collisions. The award

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Your contributions to *The Probe* are welcome and encouraged. The deadline for submitting materials is the 15th of the month prior to publication. Opinions expressed in this publication are not necessarily those of NADCA.

winners work at the Ohio Field Station of the USDA/Wildlife Service's National Wildlife Research Center.

The USDA/Wildlife Service's Brown Tree Snake Program was the recipient of the Program Achievement Award for its work in preventing the spread of these snakes from Guam. These exotic snakes have driven many of Guam's native birds to extinction. The Brown Tree Snake Program works to save the remaining birds from these predators and to prevent the spread of these snakes to Hawaii and throughout Oceania. Through an integrated approach involving both the Wildlife Service's operations wing and its research wing, the Brown Trees Snake Program has helped to alleviate wildlife damage and preserve our natural resources for future generations.

Michael Fall won the Lifetime Achievement Award for his decades of research aimed at alleviating wildlife damage. During his long career with NWRC, he wrote over 70 publications and helped more than 20 countries deal with problems caused by mammals.

CALENDAR OF UPCOMING EVENTS

September 15-18, 2002 - Society for Vector Ecology Annual Meeting, Hyatt Regency, Albuquerque, New Mexico. For information see www.sove.org or e-mail soveoffice@pe.net.

October 22-24, 2002 - 4th Joint Annual Meeting of: Bird Strike Committee USA/Canada, Sacramento International Airport, CA. Theme: practical Wildlife Control Techniques for Airports. Will include papers, posters and demonstrations on wildlife control techniques, new technologies, land-use issues, training, engineering standards, wildlife strike statistics, and habitat management. For further information go to www.birdstrike.org.

April 6-9, 2003 - 10th Wildlife Damage Management Conference, Clarion Resort on the Lake, Hot Springs, AR. Sponsored by The Wildlife Society, Wildlife Damage Working Group. This conference is the continuation of the former Eastern and Great Plains Wildlife Damage Conferences. Abstracts due July 1, 2002. For information contact Co- chairs, Robert Timm (rmtimm@ucdavis.edu) and Kathleen Fagerstone (kathleen.a.fagerstone@aphis.usda.gov)

December 1-5, 2003 - 3rd International Wildlife Management Congress, University of Canterbury, Christchurch, New Zealand. For information see www.conference.canterbury.ac.nz/wildlife3003 or e-mail wildlife@cont.canterbury.ac.nz

NADCA Minutes of Annual Meeting: Reno, NV March 5, 2002

The meeting, called into order by President Michael Conover; was attended by 27 people. Opening the meeting was a general discussion about NADCA's history and current mission. It was reaffirmed that NADCA has a unique mission and that is to be the voice of professional wildlife damage managers. Its main conduit of communication with its members is through its newsletter: *The Probe*. A motion was made and passed to thank its editor, Larry Sullivan, for creating a high-quality publication and to thank Scott Hygnstrom and Pamela Tinnin for their tireless efforts producing, printing, and distributing *The Probe*. Larry Sullivan noted that his major challenge in editing the newsletter is to get people to submit articles, especially ones suitable for the front page. He encouraged all NADCA members to consider writing articles for *The Probe*.

President Conover noted that it is unfortunate that more people are not receiving *The Probe* given its high quality. A discussion followed about the wisdom of allowing new members to join NADCA and receive its newsletter without having to pay dues for their first year of membership. A motion was made, seconded, and passed to allow new members joining NADCA during the next year to do so without paying dues. This offer does not extend to current NADCA members. The offer may be rescinded at anytime if it becomes too costly for NADCA to continue its offer of no dues for one year.

A discussion followed about whether NADCA should take a position on current issues in wildlife damage management. A motion was made, seconded, and passed that any NADCA member can ask NADCA to pass a motion and take a stand on an issue in wildlife damage management. Such a request must be conveyed to the President of NADCA, who will work with the requesting member(s) to draft a motion for NADCA. Once such a motion is completed, it will be forwarded to the Executive Board via email. After reading the proposed motion and discussing it, the Executive Board shall vote by email. If the majority of the Executive Committee votes in favor of the motion, it shall be accepted and passed. The President will then notify the editor of The Probe, who will publish a notice about the motion in its next issue. The President will also forward a copy of NADCA's motion to any interested parties. The motion shall be accompanied with a cover letter from the President explaining the mission of NADCA and the intent of its motion.

-Michael Conover

Ever Wonder?

What characteristics are used to differentiate reptiles from amphibians?

An intriguing difference between these two classes of animals is the fact that amphibians (*e.g.* frogs, toads, newts, and salamanders), unlike other classes of vertebrates, develop from a larva stage (*e.g.* tadpoles). That is, amphibian eggs hatch into a larva stage that is unlike the adult and the

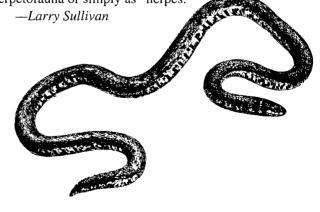
larvae must pass through a metamorphosis before assuming adult characters. Whereas reptiles (e.g. snakes, lizards, alligators, turtles, and tortoises) may develop from eggs or be live born, but there is no free-living larva stage.

Other differences between these

classes of animals include their respective association with habitat types. Most reptiles spend most of their lives in terrestrial habitats and most amphibians in aquatic habitats. The skin of most amphibians is soft, moist and not waterproof. Therefore, most amphibians are found in wet or moist environments that help keep them from drying out. Most reptiles, on the other hand, have dry, scaly, waterproof skin which prevents their bodies from drying out.

Some similarities between these classes are that they are both vertebrates (have a segmented spinal column) and they are both "cold-blooded" (ectothermic). Ectothermic animals are not able to produce their own body heat and their body temperature depends on the temperature of their immediate surroundings.

Together, reptiles and amphibians are the subject of the study of herpetology and are commonly referred to as herpetofauna or simply as "herpes."



The editor of **The PROBE** thanks contributors to this issue: Walter Howard, Kevin Clark, Jennifer Dangerfield, Jeff Worwood, and Michael Conover.

Regulatory Actions on the Horizon

Kevin D. Clark, President, Critter Control, Inc.

The Humane Society of the United States (HSUS) is moving forward on a state-by-state legislative initiative calling for licensing of Wildlife Control Operators (WCOs). As the Founder and President of Critter Control, Inc., I am greatly concerned over the current efforts of the HSUS to further their agendas by the proposed micro-management of the wildlife control industry. Much of the proposal is based on "idealistic" versus "realistic" wildlife management philosophies, and fails to take into consideration the impact the proposal would have on wildlife control operators, wildlife management agencies, and the general public.

In general, the proposal contains several areas that may be considered intrusive micro-management. This may ultimately result in even greater inhumane treatment of animals, increase costs to consumers, and leave more of the public left to deal with problems as they see fit. The level of state agency involvement, as compared to the revenue from it will, in nearly all states, divert financial resources, as well as agency personnel, from traditional wildlife management activities.

While I agree that in some instances the wildlife resource and the wildlife control industry would benefit from improved oversight by those state agencies vested with the responsibility for wildlife, I do not think the long term interests of either the resource or the industry are served by current proposals that call for action by the various state legislatures. History already shows that it is hard to amend state legislation in the arena of wildlife control, and combined with the Law of Unforeseen Consequences, makes it impossible for the appropriate state regulatory agencies to effectively manage the wildlife resource or meet public needs.

The stated lofty goals of these proposed legislative changes include everything from humane treatment of animals, to consumer protection, to advancement of wildlife control industry's professionalism. The devil, however, remains in the details - and one needs to look no further than the language of the HSUS final draft document to appreciate the self-serving nature of the proposal. This proposal is directed squarely and solely at the wildlife control industry. Local humane societies and animal rights organizations that provide wildlife control services are excluded from all of the cumbersome and costly requirements of the proposed regulations. This exclusion from regulation amounts to nothing more than a legislative guarantee of a competitive advantage to local organizations that support HSUS. Wild animals that are mishandled by unlicensed, untrained, unskilled and un-

regulated volunteers will pay the price (so much for animal welfare).

Under these proposals property owners who feel neither safe nor comfortable due to the proximity of wild animals near their homes, families and pets would be precluded from hiring a wildlife control operator to remove the offending wild animal because it is not actually causing damage. Of course, a local non-profit animal welfare group that is not subject to these regulations could step in and provide the same service for a "donation". Even more likely is an affected homeowner attempting a desperate or unwise home remedy that harms the animal far more than the services available from a professional wildlife control operator.

The staff at Critter Control, as well as representatives of the National Wildlife Control Operator's Association (NWCOA), reviewed the HSUS drafts and there were several areas we voiced concern with and asked for changes to be made. Critter Control submitted several basic and reasonable recommendations with the hope that HSUS would seriously consider our comments and suggestions for these changes so that we might endorse the effort. Since HSUS did not incorporate most of the recommendations, it suggests their broader goals are not much more than cover to promote an agenda that is entirely self-serving to the organizations promoting such legislative action.

The "neglect to the regulation of the wildlife control industry" that supposedly sparks this effort is in reality not neglect at all, but rather an appropriate attitude of the state regulatory agencies that rightly places the health, safety and welfare of people over that of animals. While we need input from the animal welfare community, it scares me to have them pushing regulations through via legislative actions without adequate input from the appropriate state agencies and the wildlife control industry.

I would like to believe these efforts to regulate the wild-life control industry are based on a sincere willingness to reach a cooperative agreement on common ground. If that is the case then I would have thought HSUS would willingly work with the industry, within the existing regulatory and state rule making channels, rather than go directly to the state legislatures, however, it is precisely the emotional and dogmatic history of animal welfare/rights legislative initiatives that gives me concerns about the sincerity of their offers to work cooperatively, and causes me the greatest concern for the future of our industry.

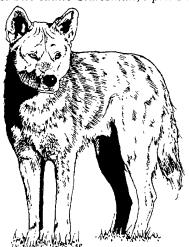
Whitehawk Wolf Pack Gunned Down

Jennifer Dangerfield, Student, The Berryman Institute, Utah State University
The five remaining members of the Whitehawk wolf pack located in the White Cloud Mountains, were gunned down by helicopter earlier this month. The last two and a half years have been a battle between ranchers and wolves in the White Cloud Mountains and the East Fork of the Salmon River in Idaho. Despite a valiant effort to preserve the Whitehawk pack by U.S. Fish and Wildlife Service employee Carter Niemeyer, he felt that his decision to gun down the remaining members of the pack was the right thing to do.

The Whitehawk pack was infamous for preying on livestock, therefore non-lethal control methods, such as alarms and electric fencing, were used numerous times in different areas in an attempt to deal with the problem. Niemeyer, along with local wolf advocates even formed a group called the Wolf Guardians who put these non-lethal methods into action to try and sustain the pack. Although the non-lethal control methods worked to some degree, ultimately they failed; wolves were still killing livestock.

The death of the remaining Whitehawk pack caused outrage worldwide. Niemeyer received angry e-mails in regards to the killings and numerous articles were written in papers and magazines across the globe. Niemeyer commented on the issue by stating that in order for the effort of wolf recovery to work, they (environmentalists) must get used to the reality that wolves are going to die in the process. The primary challenge to wildlife managers is trying to obtain public approval on management decisions made. Niemeyer's decision to kill the wolves emphasizes this challenge placed on wildlife managers today.

—Sources: The Idaho Statesman, April 14, 2002.



Washington's Initiative 713, The Trapping Ban

Jeff Worwood, Student, The Berryman Institute, Utah State University

Initiative 713 is reeking havoc among trappers, farmers, and wildlife managers. Outlawing steel jaw and body gripping traps, as well as two types of poison, Initiative 713 has made nuisance wildlife nearly impossible to control. Outcries from farmers, loggers and ranchers, have reported increased numbers of coyotes, beaver, and many small mammals. Bill Pickell, a tree farmer from Washington reports, "As you fly over the countryside you see a lot more ponds where ponds didn't used to be." Beaver catches fell from 5000 to less than 1000 after the ban. Special permits are issued to control some of the animals. Of the 326 permits that went out, 279 of them were for beaver. The law has made it illegal to sell the beaver fur, so most of it is left to waste.

The Humane Society of the United States argued that the use of traps was cruel and inhumane. Nearly 55 percent of the voters in Washington state agreed. Many professionals will argue that live-catch traps are much more inhumane. The ban was put into effect two years ago, and there was recently an effort to repeal it. A repeal takes a two-thirds house majority, and many of the house members were unwilling to go against a vote of the people. Repeal supporters seem very optimistic that they will win next year.

Wildlife managers are given the task of controlling the nuisance animals, but without the use of traps and poison the job becomes even more difficult. Cage traps are being used to replace the body gripping traps, but the traps are less effective and cost more. Without the proper equipment, it takes longer to capture the animals, and more property is being damaged in the mean time.

John Consolini of Northwest Nuisance Wildlife Control, noticed that one of the consequences of the initiative is that it has taken traps out of the hands of professionals, and trappers causing many homeowners to try to solve wildlife damage on their own. The result is more animal injuries due to the improper use of traps by novices.

—Sources: Yakima Herald-Republic, March 13, 2002. Associated Press Spokesman-Review, March 10, 2002.

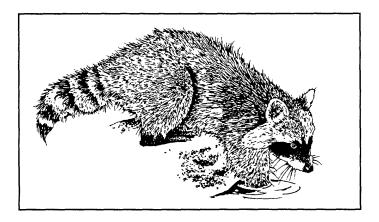
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Does Nature Want Us to Kill Wild Animals?

Perhaps without realizing it, we have gone against Nature's ways because of our emotions and ignored a basic fact of life, i.e. Nature's life-death ethic. Our innate desire to want to preserve life interferes with the need for us to assist Nature in managing the population density, e.g. of skunks, foxes and other animals in human-modified environments which then often develop rabies or other diseases because of their excessive density. Unfortunately, many of today's habitat modifications are well established and it is impossible to change them back to a pristine state.

Surplus Animal Populations

Our help is especially needed because the natural predatorprey balance, which is so important to an ecosystem, now no longer exists in many altered habitats. Original natural balances have disappeared because either the original predators are no longer present or the altered habitat now enables such species as blackbirds, squirrels, rats, coyotes, deer, opossums, and skunks to overpopulate, sometimes with terrible consequences to the welfare of entire populations of these animals.



When plague occurs in the Sierra Nevada Mountains and local populations of golden mantled ground squirrels, chipmunks and woodrats die, public health has to temporarily close the campgrounds until the now hungry infected fleas in the unoccupied rodent burrows have been controlled. It is important to note that these plague epidemics in California have only occurred where human-induced environmental changes have enabled these rodent species to overpopulate.

Most people feel we should manage wild animals without killing them. Of course, when possible, but in practice this isn't just difficult; it is impossible. How should animals die? At what age? By what means? Are all wild animals entitled to a long and happy life? Or do you agree with Nature that to prevent overpopulation most animals of all species must die while young? All animals produce surplus offspring to serve as food to others. It is difficult, isn't it, to separate one's emotions from the facts of Nature.

Many people think a good solution for dealing with unwanted animals, particularly larger manimals like bears, but also even mice, is to capture and release them somewhere else where we think they might survive. One can then rationalize that at least this approach gives the animal another chance to live. However, to do so, shows a lack of understanding of Nature's scheme of things. With radio telemetry we know that the odds are stacked against the survival of any translocated mammal — from rodents to bears — released into a strange environment. In fact once released a mammal rarely settles down but tries to find its original home. How sad. In addition to the trauma of being put in a strange environment, they seldom survive. Therefore, capturing misplaced mammals and releasing them elsewhere is clearly not a compassionate resolution for disposing of unwanted or surplus mammals.

In today's human-modified environments, which frequently are still changing, Nature's scheme usually cannot maintain a balanced ecosystem without our help. Natural or surrogate predators are essential in preventing species like rodents and deer from overpopulating and maintaining a balance of Nature. To help Nature people need to become surrogate predators, stalking the out-of-balance predator-prey relations like a hungry lion.

Let's not make things worse by allowing animals to greatly overpopulate. In environments where the natural plant and animal communities have been permanently altered, and obviously can't be reestablished, we need carefully developed management schemes that will regulate the density of animal populations. And they must be grounded in sound science.

Survival of the fittest? A shortsighted strategy at best. We should be willing to help Nature engineer healthy ecosystems that improve the lives of wildlife and the balance of Nature. Self-limiting mortality factors — starvation, disease, territoriality, cannibalism, poor breeding success, and sexual battles — usually become more horrible and truculent in

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Does Nature Want Us to Kill Wild Animals?

modified environments where the natural predator-prey balance no longer exists.

On Angel Island in San Francisco Bay, in the absence of predators or hunting, deer became so abundant and sickly that the public finally agreed that the only solution was for wardens to cull their numbers. First, some deer were captured and moved to the mainland, but they did not survive.

Mortality of Nature

Nature is naturally harsh, of course, but where human-induced environmental changes have occurred, she is often forced to be much crueler, causing a higher percentage of animals to suffer from these self-limiting factors than occurs with natural mortality. Few wild animal deaths are as humane as those at the hands of humans. When people cull animal populations, they are governed by many regulations designed to ensure that hunting, trapping or other lethal measures are as humane and selective as is feasible. Only we humans express compassion towards prey — certainly Nature does not. We must rise above our emotions and recognize the environmental importance of Nature's death ethic. We can't leave the needed management to the whims of Nature.

Death is an inevitable fact of life. The public and many biologists do not seem to realize that most wild animals of all species do die before they have a chance to reproduce. This early mortality is absolutely essential for a number of reasons. Without it every species would overpopulate. Suppose every acorn grew into an oak tree or every pine nut into a pine tree. All species must have an effective mortality factor to prevent them from overpopulating and destroying both themselves and their habitat. For example, if the prairie deer mice, whose livelihood I studied in the field in Michigan, had the life expectancy of the human race, they would theoretically cover the earth in just a few years.

Nature must produce surplus offspring for a reason that may not be readily apparent. This is the source of energy that keeps Nature moving forward through time. Surplus young are the major food source of other organisms. That may sound harsh, but in Nature it is an eat-and be-eaten reality and not many animals grow old. The bulk of the few that do grow old are either pets, domestic livestock, live in zoos, or *Homo sapiens*, all of which have been insulated from Nature's death ethic.

We must do everything we reasonably can — in toady's increasingly human-modified world — to preserve as much of the original biological diversity as is feasible. Tools like the Endangered Species Act have been of tremendous help, but need to be modified.

We must find better ways of creating sustainable plant and animal communities that successfully incorporate the wanted or unwanted "exotics" we are stuck with. Many nonnative pests and undesirable plants and animals cannot be eliminated, hence must be incorporated in any management scheme we design. For instance, in California stripped bass, and large mouth bass, brown trout, sunfish, and catfish are all introduced species, as also is the ring-necked pheasant. But you don't hear any complaints from most hunters and anglers about the presence of these species in the wild.

In summary, surely we shouldn't always try to let all wild animals live a long life and die "naturally." It's ironic, but for the welfare of wildlife and the preservation of natural biological diversity it is paramount that we search for responsible balance-of- Nature management schemes in which we play an active role. Actually, a renaissance is needed on the ecology of animal deaths in human-modified environments. Let's develop a broader dialogue as to whether or not humans have an ethical and moral right to help Nature by serving as surrogate predators.

—Editor's note: This article will appear in Rangelands, a publication of the Society for Range Management.

Proceedings of the 9th Wildlife Damage Management Conference

The proceedings of the 9th WDM Conference are now available (\$15 US funds only, made to the order of WDMWG) through Gary Witmer at the USDA/APHIS WS, National Wildlife Research Center, Ft. Collins, CO, (970) 266-6095, fax (970) 266-6089, e-mail gary, w. witmer@aphis.usda.gov.

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Other (describe)

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