



An approach for demonstrating the social legitimacy of hunting

M. Nils Peterson

Abstract Successful lobbying against certain hunting practices by animal-welfare and animal-rights groups and a steady decline in hunter recruitment, retention, and numbers raise legitimate concerns regarding the future of hunting and its relationship to wildlife management. The nonhunting, non-animal-rights-advocate majority will determine the fate of hunting. Thus, a successful hunting ethic must be logically consistent and intuitively appealing to this moderate majority. This shared ethic could encourage cultural, political, and economic support for wildlife management from both hunters and nonhunters alike. In light of this goal, I argue that 3 dominant hunting ethics—the naturalness hypothesis, the land ethic, and the sporting ethic—fail to justify hunting or place it in a shared context with modern society, and I suggest an alternative ethic that combines Aldo Leopold's vision of an expanding community with traditional utilitarian and rights-based evaluations of ethical criteria within an n -dimensional moral framework. This conceptualization of an ethical system would allow the use of tools applicable to systems analysis in analyzing moral issues and would foster communicative practices capable of creating a more inclusive community. Further, it can both create and elucidate the ethical space shared by the moderate majority and hunters.

Key words ethics, hunting, land ethic, morality, *Odocoileus virginianus*, white-tailed deer

The gun has been recognized as 1 of 5 fundamental wildlife management tools since Aldo Leopold's (1933:xxxix) famous statement: "game can be restored by the *creative use* of the same tools which have heretofore destroyed it—axe, plow, cow, fire, and gun." Successful lobbying against hunting by animal-welfare and animal-rights movements (Minnis 1998) and a steady decline in hunter recruitment, retention, and numbers (DiCamillo and Schaefer 2000, Enck et al. 2000, United States Department of the Interior and United States Department of Commerce 2002, Dizard 2003) have given rise to legitimate concerns regarding the future of both hunting and the nature of wildlife management itself.

Wildlife management would be severely weakened, in terms of economic and social support, without hunting. Although nonhunting environmental interests have supported alternative funding sources such as the failed Teaming With Wildlife legislation or the languishing Conservation and Restoration Act (CARA), opposition to new taxes within Congress and the executive branch and opposition from some parties most directly impacted by proposed taxes have proven difficult to overcome. Even if CARA or a similar act became the premier wildlife management funding source by funneling nearly \$1 billion a year into conservation (Dizard 2003), social and economic support from hunters would still remain crucial to wildlife management.

Author's address: Department of Wildlife and Fisheries Sciences, Texas A&M University, College Station, TX 77843, USA; present address: Department of Fisheries and Wildlife, Michigan State University, 13 Natural Resources Building, East Lansing, MI 48824, USA; email: peter529@msu.edu.



Father deer-hunting with children. Photo by Wildlife Program, Texas Cooperative Extension.

As wildlife conservation goals begin to conflict with urban interests as well as rural ones (Liu 2001), public support needed for management will inexorably and incessantly rise. In the foreseeable future, wildlife management will require ethical, cultural, political, and economic support from hunters and nonhunters alike. Hunters, in turn, need these forms of support from nonhunters. Because pluralistic democracies protect minority rights, some hunting apologists have suggested that hunters do not need public support. MacDonald (1987) likened hunters to golfers, stating that the activities of both parties, although objectionable to some, were protected in pluralistic democracies. This approach is both illogical and unsupported by empirical evidence. "Rights" deemed unethical in a pluralistic democracy (e.g., polygamy, child labor, animal abuse) are deemed "wrongs" and receive no protection. Thus, one may incur criminal charges for shooting stray dogs with a compound bow but not for golfing. Minnis' (1998) discovery that animal-protection interests won 7 of 11 citizen-sponsored ballot measures addressing hunting illustrated the weakness of the minority-rights argument. Pluralistic democracy does not provide refuge from the need for a hunting ethic shared with nonhunters.

Historical acceptance of hunting is inextricably intertwined with the degree to which hunters and nonhunters shared common mythical and symbolic views of hunting (Dizard 2003). The self-sufficient, rugged, thoughtful, and selfless (ultimately agreed to self-taxation) sportsmen-hunters embodied by Theodore Roosevelt represented the shared view of hunting prior to the 1960s. This image, however, did not survive the civil- and women's-rights move-

ments, Vietnam and the peace movement, and Rachel Carson and the environmental movement (Swan 1995, Dizard 2003). The protest seen in these movements was a social reaction to conditions deemed unethical by the public (Swan 1995). Society in general became more critical, divided, and disillusioned in the late 1960s and early 1970s (Brick 1998, Schulman 2001).

We have learned to tolerate, albeit grudgingly, a more pluralistic nation made up of loosely connected minorities, but only those minorities sharing an ethical foundation with the public at large maintain social legitimacy. As a cultural minority, hunters must forge a coherent ethical stance shared at least in part with society because the future of practices in liberal democracies depends on their social legitimacy (Fishkin 1991, Lee 1993, Stern and Fineberg 1996, Daniels and Walker 2001, Peterson 2003). Although the objectification of hunted animals demonstrated in vocabulary such as "game," "stocking," and "taking" has enabled some hunters to avoid this task, the will to do violence implicit in hunting demands moral justification.

Decker and Brown (1987:601-602) suggested "we need to ask ourselves whether the neutral majority is more inclined to relate to our perspective or that of the animal rightists." Although "moderate majority" is probably more accurate than "neutral majority," the statement captures the essence of what must be done. A hunting ethic logically must be consistent and intuitively appealing to the moderate majority. Such an ethic will allow and encourage cultural, political, and economic support for wildlife management from both hunters and nonhunters alike. In light of this goal, I 1) argue that 3 dominant hunting ethics—the naturalness hypothesis, the land ethic, and the sporting ethic—fail to justify hunting or place it in a shared context with society, and 2) suggest an alternative ethic that combines Leopold's vision of an expanding community with traditional utilitarian and rights-based evaluations of ethical criteria.

Dominant hunting ethics

The naturalness hypothesis

According to this concept, humans are predators and hunting is the only way for them to enter nature as a participant rather than a spectator (Shepard 1959, 1973, King 1991, Marchinton 1991, Dizard 2003). Thus, hunting is "right" because it is a natural human role. Deviation from our instinctual

nature to hunt "is a primary cause of mental disease" (Swan 1995:175). This approach forces humanity to acknowledge that its existence requires the death of wildlife (Dizard 2003). Hunting is an honest relationship with nature while most others are deceptive, obscuring the fact that some wildlife mortality is inflicted by human society via vehicle collisions, urban sprawl, and conversion of habitat to the agricultural lands that provide sustenance to all humans.

Shepard (1973:152) described the natural role of hunting in these words: "Man is in part a carnivore: the male of the species is genetically programmed to pursue, attack, and kill for food. To the extent that they do not do so, they are not fully human." Swan (1995:15) wrote, "I am like the cougar; I need to eat meat." DiCamillo and Schaefer's (2000) Internet hunter-recruitment tool for school children explained the natural food chain and how hunters and the Florida panther (*Puma concolor coryi*) held similar positions in it. Marchinton (1991:6) wrote: "The prey must have the predator, just as the predator needs the prey. One without the other eventually becomes something less. The wolf becomes the dog. The deer becomes the cow. And what does man become?" These statements imply that humans are naturally atop the food chain, and the last one implies that humans become "less" when they are not hunters.

The fact that a dog plays a different role than a wolf (*Canis lupis*) does not in itself make the dog inferior or less natural. In fact, one is inclined to prefer dogs over wolves when seeking guardians for human toddlers. Further, was the domestication of canines unnatural? Likewise, humans who hunt play a different role than humans who do not, but neither is better or more natural except by constrained definitions of the terms. Arguments that humans are naturally hunters, because most of human history involved hunting, ignore the likely possibility that natural selection dictates an agrarian society today just as it dictated a hunting society historically. Like pigs, we can choose our position on food chains, but unlike swine, we include moral criteria in decision-making. This strains the argument that a human who critically evaluates hunting according to ethical criteria is somehow less "natural" than one who enacts his or her role as a top-level predator.

Even if you accept the argument that modern humans are naturally top-level predators, the most problematic aspects of this ethic must be

addressed. Does "naturalness" equate to ethical behavior? One proponent of the hunting hypothesis asked, "why is it that killing an animal is so immoral for a person, and not so for a chimpanzee, a cougar, a wolf, or a shark" (Swan 1995:121)? Intra-specific killing occurs naturally among some humans, sharks (*Carcharhinus* spp.), and lions (*Panthera leo*). Can we deem it unethical for sharks to eat each other for food because it is unethical for humans to do so? Or is it ethical for humans to kill each other to improve their genetic fitness as it is for lions?

Moreover, why do the criteria chosen to make hunting "natural" also not apply to the intuitively less appealing attributes, such as male domination of hunter-gatherer cultures? Most hunting cultures were patriarchal in nature, so is male domination of society natural and ethical? Swan (1995) cited female goddesses of the hunt in Greek and Roman mythology to support his claim that hunting magic is feminine, but in those cultures and earlier hunting cultures society was dominated, on earth, by males (King 1991). Further, in these cultures hunters were predominantly male (Konner 1990, King 1991). Does this suggest females are less natural?

Assuming that males need hunting to avoid mental illness and achieve self-actualization because it is natural requires the assumption that females also assume their Paleolithic and "natural" role to find joy. Although staunch supporters of this view may actually think the "natural" role of women is digging tubers from the ground, the idea is not publicly accepted in contemporary society. Finally, if hunting is necessary for human society to truly appreciate nature, either the future of nature is doomed or so many hunters will descend on limited wildlife habitat that the impact of their presence will destroy the wildlife and the habitat. The flawed logic and misogynous implications of this view can only damage the social legitimacy of hunting.

The land ethic

Leopold (1949:224-225) immortalized the land ethic in these words: "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise." Because Leopold did not define integrity, stability, and beauty, his land ethic has become Biblical in its broad acceptance, impact, and divisive interpretations. His approach was powerful because it allowed readers to use meanings peculiar to them-

selves and avoided the impossibility of defining terms, like stability, that have no universally accepted meaning. The weakness of this approach, however, is that it means hunting ethics derived from the land ethic are deeply personal in nature and difficult to describe and hence justify to society at large.

This ethic is intertwined with the hunting hypothesis because naturalness has been intuitively equated with integrity, beauty, and even stability. In advocating hunter-based control of deer (*Odocoileus* spp.) populations, Swan (1995:77) wrote, "man has always been the most significant predator of deer." When the age of the species in question and their geographic distribution over time are considered, this is a questionable statement. That hunters can prevent ungulate eruption scenarios, however, seems a reasonable deduction.

If hunting can prevent scenarios like the mule deer (*O. hemionus*) eruption on Arizona's Kaibab plateau so lamented by Leopold (1949), the question remains whether this preserves integrity, beauty, or stability. This question has no perfect answer. Recent research in community dynamics suggested that a more common relationship involves prey controlling predators rather than vice-versa (Keith et al. 1984, Begon et al. 1996). If, however, predators do control prey, as Leopold suggested, hunting would be rendered unnecessary when integrity was restored to natural systems. Further, some may consider dynamic community relationships "stable" rather than a fixed community composition dictated by humans. Finally, the park-like landscapes resulting from careful pruning of high-density deer herds often is considered more beautiful than tangled thorny scrub (Dizard 2003).

Most wildlife-management-oriented arguments for hunting are rooted in the land ethic and relate to preserving stability and integrity of biotic communities. Here hunters are "healers" (Swan 1995:23). Proponents of this approach maintain that no other options for population control exist (Muth and Jamison 2000, Smith and Anderson 2001). For instance, Smith and Anderson (2001:331) concluded that "hunting remains a necessary control on elk (*Cervus elaphus*) numbers in Grand Teton National Park." When stability (which has meaning only as framed by human values) is threatened, hunting is not the only option. Sterilization will become a viable alternative to hunting in many cases if it is not already (Fraker et al. 2002). Interestingly, the elk in question would be

among the easiest ungulate populations in the United States for administration of immuno-contraceptives. Elk are conditioned to human contact and congregate in open areas during winter months. Immuno-contraceptives with longevity well in excess of 3 years (Fraker et al. 2002) could be administered on a mass scale.

Apologists for hunting as a necessary population control tool have suggested that alternatives to hunting will cause a shift from the conservation model of wildlife management to a pest-management model. They posit a future where hunters would be replaced by "agency sharpshooters and private pest-control firms" (Muth and Jamison 2000:849). This, in turn, would "diminish the respect, wonder, and awe with which many people in modern society presently regard wildlife" (Muth and Jamison 2000:850). The plausibility of this argument stems partly from semantics.

Calling wildlife managers in the hypothetical nonhunting future "pest-control specialists" appears to support the assumption that the public will lose respect for wildlife. There is no reason, however, for choosing "pest-control firms" rather than "wildlife-control firms" to describe these individuals. Humans using contraceptives do not become more pest-like; in fact, the opposite relationship is suggested by many environmental groups. It seems almost comical to imagine a "pest-control firm" coming to remove a rampaging lion or bison (*Bison bison*). The view of rats (*Rattus rattus*), gophers (*Thomomys* spp.), and beavers (*Castor canadensis*) as pests stems from their impact, not from the words on the exterminator's truck. Accordingly, a white-footed mouse (*Peromyscus leucopus*) eating grain in a farmer's silo is a pest, but one scurrying across the forest floor trying to avoid the gaze of owls (*Strix* spp.) is not. Finally, Holsman (2000) found that hunters and nonconsumptive wildlife users had similar stewardship values. The nonconsumptive wildlife users did not require hunting to support the conservation model of wildlife management. The land ethic holds great potential for a socially legitimate hunting ethic, but current defenses based on it are either self-contradictory or at least incomplete.

Sporting values

An oft-cited poll suggested that only 40% of Americans approved of hunting exclusively for sport and only 20% approved of trophy hunting (Kellert 1980). At this time, the connotations of

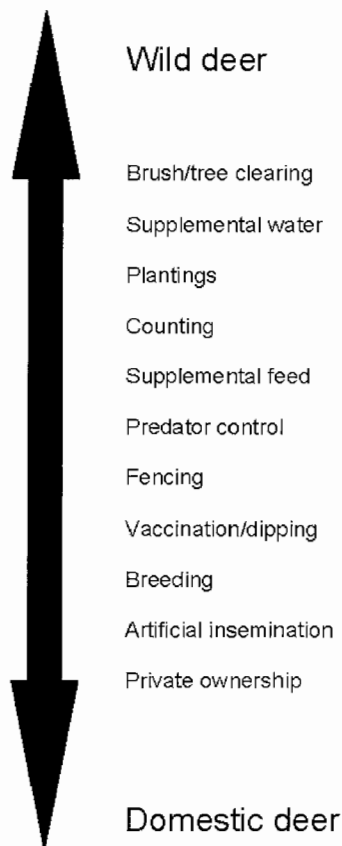


Figure 1. Human activities driving the transition from wild to domestic deer (modified from Brown 2001).

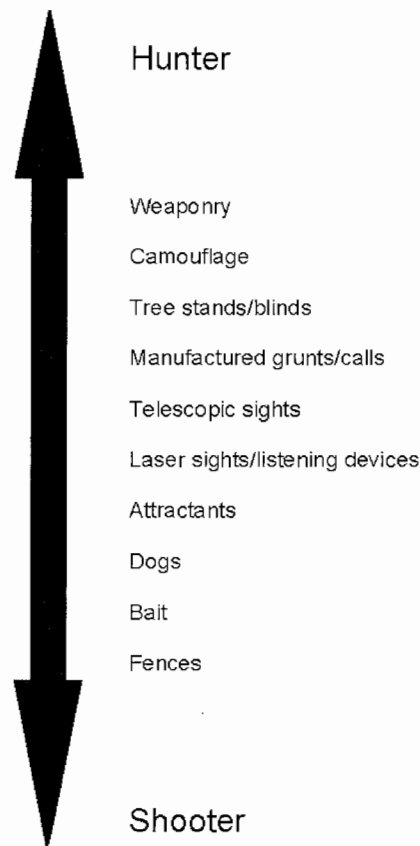


Figure 2. The continuum from hunter to shooter (modified from Brown 2001).

“sport” were changing from a love of fair play as advocated by hunters early in the conservation movement to competition and winning at all costs (Organ et al. 1998, Muth and Jamison 2000). If the latter view is abandoned, as I argue it should be, the term sport also should be dropped in reference to hunting (Stowe 1997). The split between hunting as love of fair play and hunting as competition with the goal of winning is epitomized by the definition of the term “quality deer management.”

This loaded phrase can be defined as quality-deer management (Q-DM) or quality deer-management (QD-M). The former definition focuses on increasing the quality of deer (e.g., larger antlers, larger body size, more trophy animals per unit area) for sport value (Green and Stowe 2000), while the latter definition focuses on improving deer habitat for other social values (e.g., viewing or hunting opportunities, biodiversity, biotic integrity).

The practice of Q-DM is integral to the transition between wild and domestic deer (Brown 2001; Figure 1). This process has occurred with cattle,

goats, sheep, and pigs, and is proceeding in many areas for white-tailed deer (*O. virginianus*). Humans direct this process by manipulating habitat for pastures, providing water, supplementing feed to maintain desired yields, controlling predators so we can be the only consumers, instigating herd health programs, beginning breeding processes to select for desired traits, and finally insisting on private ownership because animal husbandry has high costs for landowners maintaining domestic animals. Quality-deer management has led to high fencing, breeding programs, interstate commerce in “breeding bucks,” supplemental feeding, cloning bucks with large antlers (Baker 2003), and wildlife management agencies financially supporting research regarding these strategies with funds generated by hunters (Federal Aid Project Numbers. W-76-R-17-20, Job Number 20).

Quality-deer management also drives the transition from hunter to shooter (Gilbert 2000, Brown 2001; Figure 2). If the ultimate goal of hunting is “bagging” a large deer, rather than experiencing the

hunt, then laser sights, bait, dogs, and fences are logical and reasonable parts of hunting. The media was quick to portray the ethical morass created by Q-DM in hunting. In a recent episode of the animated television situation comedy *King of the Hill* ("Good Hill Hunting," Episode KH304, Original Air Date: 1 December 1998), Hank takes his son Bobby hunting. When they arrive at LaGrunta, the hunting lodge, they ride a shuttle to their allocated hunting area. They begin silently stalking through the woods, only to be interrupted by a guide on an all-terrain vehicle who ushers them to a shooting stand mounted atop a feeder. As they await their prey, Hank cautions Bobby to remain quiet just before the feed spreader rattles to life and deer scurry from the forest to feed at the hunters' feet. Neither Bobby nor Hank can stoop to killing a deer in this fashion, so they leave the resort empty-handed. Such portrayals "educate" the public about hunting and are unlikely to change until the Q-DM approach is abandoned.

Quality-deer management also can raise the overhead for landowners, thus the cost for hunters (Green and Stowe 2000). Higher costs reduce opportunity for those who cannot pay, particularly small-game and youth hunters (Adams et al. 2000). This translates into priority access for trophy hunters, hunting's most socially illegitimate form (Kellert 1980), and weakens the hunting constituency itself by culling younger and less affluent hunters. Eventually, this approach can reduce lobbying power through negative feedback. For instance, politically powerful Q-DM advocates in Texas have convinced state agencies to spend public hunter-dollars on studies with an ultimate focus on antler size (Federal Aid Project Numbers W-76-R-17-20, Job Number 20). This money could have been used to increase hunter opportunity through state leases or purchasing land for public hunting. The lack of public land where hunting is affordable severely restricts the ability to recruit new hunters and hurts future voting and lobbying power.

Rather than weakening itself through negative feedback like Q-DM, QD-M is self-aggrandizing in nature. Increasing opportunity may increase participation by new or less avid hunters and should prevent the loss of participants unable to afford Q-DM. Further, QD-M promotes the social values of hunting like self-reliance, an honest relationship with nature, and family bonding above "sport." Quality deer-management does not imply that hunters should not enjoy a trophy kill; instead, the

ultimate goal of management should be creating opportunity rather than trophy animals.

The ethical power of hunting as sport, according to the competition and winning connotations, is minimal. In fact, if the ultimate goal is a trophy, the paradigm has negative ethical connotations for the general public. Values associated with competition and sport are important to society, but there is no logical reason that capturing big antlers has value not found in capturing a medal for a 4-minute mile or 2-m high jump, or capturing a Super Bowl championship ring. Such "trophies" do not require taking life or violence against nonconsenting individuals, so why is a branching mass of bone more valuable than a round piece of gold? Actually, antlers may be more valuable to some, but their unique value cannot be attributed to winning. Even the most outspoken hunting apologists argue that the value of trophies adorning some hunter's homes is relatively independent of their size. Rather they are a "reminder of the need for conservation" or a link to the memories of hunting (Swan 1995:184).

Hunting advocates may be inclined to point out that objects, such as antlers and rings, are not as valuable as the experience, and that the hunting experience is unique and carries unique benefits for human society. If this is true, the ultimate goal in hunting should be increased opportunity to benefit from the experience, not collecting antlers. In some areas, this will require a serious re-evaluation of priorities in both hunting and wildlife management. In other areas, where trophies are the least important motivation for hunters (Decker and Connelly 1989) and presumably managers, little change is needed.

Utilitarian and rights-based social value

A shared view of wildlife

A hunting ethic shared with society requires a mutual concept of the relationship between humans and wildlife. Ethical models, like scientific ones, are evaluated by generality, number of anomalies, and parsimony. In ethics, these attributes are evaluated with intuitive judgments of particular cases. For hunting, this requires determining which animals have moral standing or intrinsic worth and ranking them, which is beyond the scope of this paper. Suffice it to say that hunted wildlife species are given moral standing in the land ethic by virtue of their role in natural systems, in animal-rights

ethics by virtue of their sentience, and by society in general for a multiplicity of reasons ranging from those mentioned earlier to Schweitzer's (1950) reverence-for-life ethic.

The complicated issue is ranking individuals. Advocates of the land ethic (Callicott 1980) and deep ecology (Naess 1973) side-stepped this process by suggesting that life is valuable to the extent it contributes to biotic integrity or that all life is equal. When faced with misanthropic and pragmatic problems associated with these views, however, these philosophers tacitly acknowledged the need to rank humans higher than their contribution to biospherical integrity would allow (Naess 1973, Callicott 1990).

The battle surrounding animal rights began with categories of insentient, sentient, and conscious or self-aware animals (Callicott 1980). Dennett (1995) refined the categories into: 1) Darwinian, those capable of evolution, 2) Pavlovian, those with stimulus-response learning, 3) Popperian, those with internal models of their environment, and 4) Gregorian, those using tools to shape their environment. Animal-rights apologists are quick to point out that according to these criteria, mentally retarded humans and humans rendered unconscious are less important than higher mammals (Singer 1975). Their hypothetical quandaries suggested that killing mentally retarded humans or inarticulate infants to save chimpanzees (*Pan troglodytes*) or dolphins (*Tursiops truncatus*) is an ethical act. This argument knocked self-consciousness off the top of the animal-measuring stick, leaving all sentient animals equal, and the logical rationale for animal rights sprang forth. The argument, however, is based on an unrealistic and improbable measuring stick. In reality, the aforementioned categories are arbitrary and boundaries between them unknown. Although Dennett's (1995) categories are less arbitrary, the boundaries still are based on conjecture.

Relatedness is more intuitively acceptable and logically defensible as an ethical measuring stick. Society in general does not believe animals are equal to humans (Muth and Jamison 2000), and if ranking depends on relationships, mentally retarded humans are safe from the misanthropic hypothetical quandaries hurled by animal-rights advocates. While it is tempting to state that genetics make all distinctions "real," I have a closer relationship with my wife (who is genetically quite removed from me) than with my great grandmother. Logically, divisions are still arbitrary, but they are

explicit rather than implicit. In most cases this approach elevates humans to the pinnacle of ethical standing. In addition, it creates a graded level of responsibility from family and loved ones to community (however it is defined) to nation and onward. This approach is intuitively appealing, has general applicability, and has few, if any, anomalies at an intra-personal level.

An n-dimensional framework for morality

Many environmental ethicists disdain the moral ambiguity inherent in less parsimonious ethics (Callicott 1990, King 1991). These "ambiguous" ethics, however, are the norm in our society precisely because of their generality (Light and Katz 1996, Norton 1996). Since my goal is to describe how hunting can be socially legitimate, I will refrain from entering the parsimonious versus pluralistic ethical debate and focus on describing an ethical model that hunters share with society.

Each moral perspective has a particular volume or decision space with the "ideal" choice representing the foci (Figure 3:A). As decisions become less tolerable, they are farther from the foci (Figure 3:B), and when an option is intolerable it falls outside the boundary of decision space (Figure 3:C). As multi-

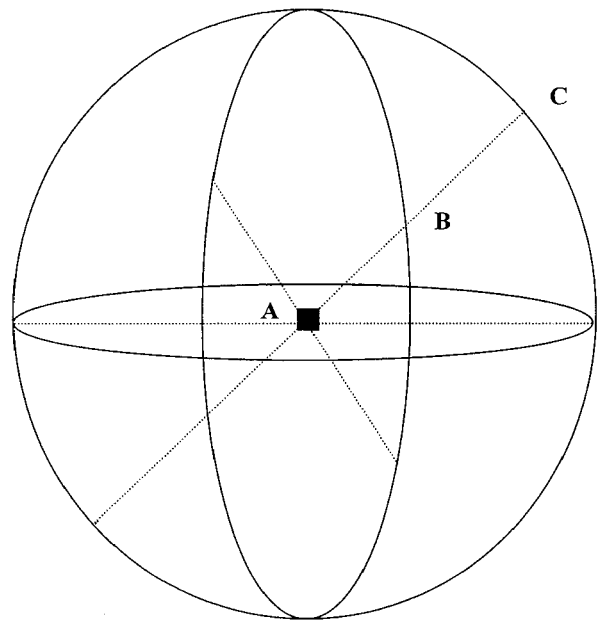


Figure 3. A depiction of an agent's multidimensional moral decision space where A represents the ideal choice, B represents an acceptable choice (within the agent's decision space), and C represents an unacceptable choice (outside the agent's decision space).

ple diverse ethics are combined, shared decision space decreases (Figure 4). Asking what type of hunting is socially legitimate in a particular context is like asking which species can survive in a particular environment. Fundamental ethics of those making the decision replace environmental variables in constraining the niche space (Hutchinson 1957) for a socially legitimate practice. Admittedly, in many cases no niche volume exists, and technical and biological feasibility may preclude options dictated by shared decision space.

In society, as in other systems in nature, competition can change niche space. Positive and negative feedback can change the size, shape, and position of decision space for each ethical perspective. Thanks to human rationality, we occasionally can predict the outcome of our decisions and use predicted feedback to guide decision-making. Conflict, collaboration, communication, and empathy-building exercises combine with positive and negative feedback to mold and shift the dimensions of moral space until shared volume exists. Morality grounded in intuitionism, where our basic sense of wrongness of certain types of actions (e.g., torture) is more fundamental than any moral theory, can provide a touchstone for opposing ethical theories (Little 1993). For instance, a deep ecologist can feed a hungry child even if the child's life will lead to environmental degradation; conversely, an anthropocentrist can try to save an endangered species even if its existence comes with human cost (Naess 1973, Peterson and Peterson 1996).

Positive feedback need not be positive in the sense of recognizing common intuitions. A group espousing one ethical theory may change its range of acceptable choices when faced with unfavorable

positive or negative feedback. For example, an eco-centric group may allow the construction of a hospital on a virgin prairie because they foresee their resistance leading to the election of anti-environment government officials, weaker conservation laws, and less support for enforcement of remaining laws.

Once an ethical system is modeled in this manner, many tools applicable to systems analysis can be used in analyzing decisions. Although hierarchy theory does not apply to hunting ethics *per se*, it can be applied to the spatial dimension of ethics (Warren and Cheney 1993, Peterson and Peterson 1996). The *n*-dimensional framework of morality can be hierarchical at intra-personal and inter-personal (i.e., community, national, and international) scales. In liberal democracies rooted in conflictual-consensus between liberty and equality, the application is essential (Mouffe 2000).

At the intra-personal level, positive and negative feedback occurs quickly, and often subconsciously (Wenz 1993), as information is used to shape moral decision space when decisions are made. At inter-personal levels, such as families and communities, the process is slower. Responses to feedback, predicted or actual, are slower in higher levels (Allen and Star 1982, O'Neill et al. 1986). For instance, an individual may decide that smog is bad after one exposure to it and buy an air filter, while the community often takes years of negative feedback before it "decides" smog is bad and acts to reduce it. Higher hierarchical levels such as community or nation constrain lower levels by their infrequent action. As group size increases, the probability of shared decision space decreases while moral pluralism intensifies. Arguably, part of this constraint is leveled by the failure of liberal democracies to allow challenges to the dominant power structure, but scale also is involved. In a liberal democracy, moral systems also are decomposable to the degree the national moral-hyper-volume reflects the local one.

This model provides a tool for demonstrating previously unrecognized common ground and demonstrating benefits of cooperation and collaboration when shared decision space does not exist. It does not preclude monistic or pluralistic super-theories so sought after by ethicists, but provides a framework where similarities, differences, and implications of different views can be analyzed and consensus sought. Diverse moral grounding within our species, nations, communities, familial units,

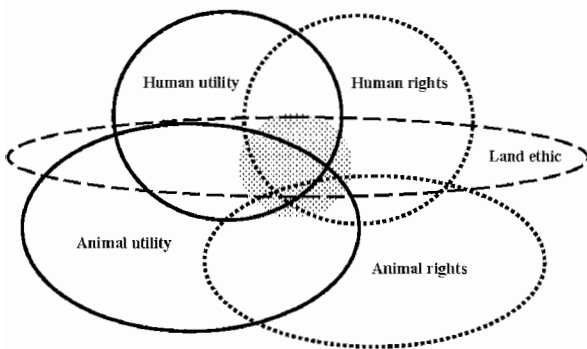


Figure 4. Multidimensional relationship of ethics where area shared by all ethical spheres is most socially legitimate. Shaded area indicates target for a viable hunting ethic. Multidimensionality of individual ethical paradigms removed for clarity.

and even selves consists of nested, overlapping, and multi-dimensional space. Working within that space, we can achieve optimal solutions to conservation that include hunting.

Shared values for hunting

As a liberal democracy, the United States uses utilitarian and rights-based criteria simultaneously to evaluate decisions and practices. Acknowledging and managing the conflict between individual rights, human or otherwise, and equality and group utility is critical to maintaining such governments (Mouffe 2000). While democracy always carries the threat that the majority will choose to abrogate individual rights, liberalism always carries the threat that the polity will dissolve into anarchy. In tandem, however, they maintain a check on each other's excesses. When ethics are seen as contextual, rather than the embodiment of absolute truths and universal reason, they can foster communicative practices aimed at creating a more inclusive community. This inclusive community, like the one envisioned by Leopold (1949), can include hunters, animal-rights advocates, wildlife, and our environment.

Most Americans oppose cruelty to animals but are equally adamant in their opposition to granting animals equal standing with humans (Muth and Jamison 2000). Some animal-rights advocates concede in part to these societal moral intuitions. For instance, Varner (1998:8) admitted, "a certain class of human interests are more important than the interests of any nonhuman organism" and "human beings are generally more important than other animals." Thus individual rights of animals targeted by hunting are less important than similar rights of hunters. This inequality can be offset, however, if the lower-ranking individual stands to lose a more vital right (i.e., life) in exchange for a less crucial one (i.e., pleasure for the hunter). Additional rights of the animal (possibly undisturbed refugia) and hunter (liberty or property) also must be considered. The utilitarian value of killing the animal can be evaluated on both fronts as well. While it is difficult to project what animals would "want," the utility of a killing might be evaluated according to density and prevalence of its species or the degree to which harvest is compensatory to other causes of mortality (Anderson and Burnham 1976, Guthery 2002). Utility to humans can be evaluated according to market value, reduced property damage, prevention of disease, psychological and spiritual ben-

efits to the hunter, benefits of family (including male and female) bonding, and the value of publicizing the inescapable relationship between human existence and killing.

Discussion

Determining the extent to which hunting is socially legitimate in this n -dimensional ethical system rooted in rights and utility will involve potentially unpleasant changes and trade-offs for hunters and other groups such as animal-rights advocates, so I will not suggest which changes should be made. I will, however, suggest ways hunters can share more decision space with society at large.

Jettisoning the concept of hunting as "sport" will help legitimize hunting (Stowe 1997). Viewing hunting as a competition where winning is dictated by physical attributes of the animal killed is morally reprehensible to most of the public (Kellert 1980) and will severely constrain the ethical space shared between society and hunters. Managing for opportunity rather than trophies may lead to greater hunting access. This will, at least indirectly, reduce costs and favor youth and family participation, which in turn will lend credence to the argument that hunting strengthens families and communities and rebut arguments that it is merely a brutal pastime for the wealthy.

Organizations like the Humane Society of the United States are outspoken regarding their strategy to ban the most "abusive forms of hunting for now, all hunting eventually" (Kerasote 1993:98). This lends credence to slippery-slope arguments such as assuming that banning hound-hunting of bears (*Ursus americanus*) will lead to bans on all forms of hunting. Apparent hunter support for forms of consumptive wildlife use that outwardly appear abusive weakens social legitimacy because fighting to keep all forms of hunting directly links all hunters to the stereotypes most abhorred by the public (Stowe 1997).

Society at large may exist in a protective bubble hiding the reality that death and violence are inherent in life, but the explosion of extreme sports occurring alongside the decline of hunting indicates that it does not want to. Humanity needs and wants a bond with something natural (Abram 1996). Thus, the hunting hypothesis (Swan 1995, Dizzard 2003) can improve the social legitimacy of hunting if it does not require dominance of hunting as a natural way of life or define exertion of domi-

nance by physical force as both natural and ethical. Hunting can join hiking, swimming, and birdwatching as activities bringing humanity closer to its sensuous nature.

Expanding the ethical community represented by hunting does not necessarily require the expansion of hunting. Supporting and creating hunting-related festivals, fairs, art shows, dinners (e.g., Winsor Dinners sponsored by Orion: The Hunter's Institute), and cook-offs where hunters and non-hunters can enjoy "hunting" and participating in community service through organizations such as Sportsmen Against Hunger will create a larger hunting community even without the recruitment of new hunters (Swan 1995).

The socially accepted claim of animal-welfare organizations that frivolous reasons do not justify recreational killing of animals begs an answer (Rutberg 1997). Removing sport, with its frivolous connotations, from the hunting ethic and considering the balance of rights and utility involved will justify hunting in many contexts. This approach will not provide an unambiguous and unique right answer in every hunting scenario, but it provides a socially legitimate justification for hunting in many situations.

Demonstrating that hunting creates social capital also will improve its social legitimacy. Social capital refers to the ability to secure benefits through membership in communities and other social structures and motivates observance of group norms (Bourdieu 1985). Its creation, however, requires the investment of both economic and cultural resources (Portes 1998). Hunters have invested these resources (Dizard 2003), and a pool of social capital exists to "fund" game management activities. The social capital created through hunting is unique because it is used to support game management rather than Little League baseball or Pee Wee football. Since hunting builds social capital for game management, the supply used to support management of game species grows as it is used.

Hunters may not score significantly higher than nonconsumptive outdoor enthusiasts on stewardship indices, or always want to support endangered-species management and ecosystem-integrity initiatives (Holsman 2000), but they are undeniably advocates of conserving game species. In situations where biological control is not crucial, the legitimacy of hunting can be established using a rights- and utility-based ethical model to evaluate social and economic benefits accrued through hunting.

This *n*-dimensional ethical model can help demonstrate the legitimacy of hunting to the moderate majority.

It is no coincidence that hunters were joined by virtually every environmentalist faction in advocating Leopold's (1949) land ethic as inspiration for their views. Leopold's poetic and inspirational writing demonstrated that "Conservation is born of discovery and wonder, then of understanding, and finally of action" (Ridgely et al. 2001:x). Because hunting places humans in nature, it has the potential to foster a stewardship ethic (Holsman 2000). The ethical space shared between hunters, animal-rights advocates, ecofeminists, deep ecologists, and sincere advocates of all environmental paradigms is political activism and a love of wild things and wild places rooted in experience. This shared ethical space is missing from the apathetic moderate majority and is needed to challenge the growing consumptive materialistic paradigm of human existence.

Acknowledgments. I thank R. D. Brown, R. R. Lopez, M. J. Peterson, T. R. Peterson, N. J. Silvy, and S. W. Whisenant for their perspectives, input, and guidance. I also thank S. C. Grado, C. Jacobson, and J. Stowe for investing more work in improving this manuscript than referees should be expected to. Funding and support was provided by the Texas A&M University System and the Texas Agricultural Experiment Station.

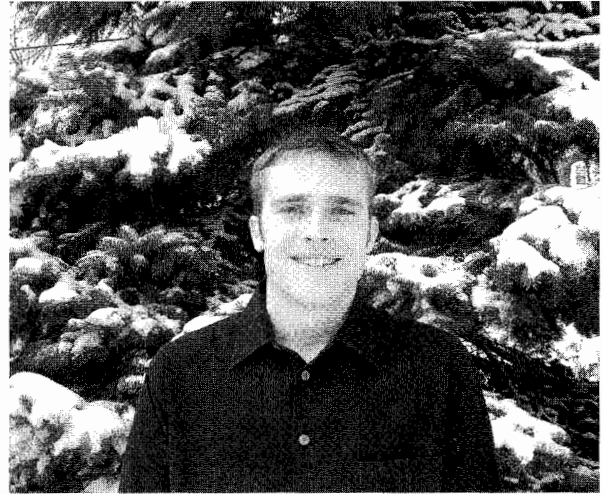
Literature cited

- ABRAM, D. 1996. The spell of the sensuous: perception and language in a more-than-human world. Pantheon Books, New York, New York, USA.
- ADAMS, C. E., N. WILKINS, AND J. L. COOKE. 2000. A place to hunt: organizational changes in recreational hunting, using Texas as a case study. *Wildlife Society Bulletin* 28: 788-796.
- ALLEN, T. F. H., AND T. B. STAR. 1982. Hierarchy: perspectives for ecological complexity. University of Chicago Press, Chicago, Illinois, USA.
- ANDERSON, D. R., AND K. P. BURNHAM. 1976. Population ecology of the mallard. VI. The effect of exploitation on survival. United States Department of the Interior, Fish and Wildlife Service, Resource Publication 128, Washington, D.C., USA.
- BAKER, L. 2003. Deer cloning aims to bring in bigger bucks. *The Battalion*, February 18: 1.
- BEGON, M., J. L. HARPER, AND C. R. TOWNSEND. 1996. Ecology: individuals, populations and communities. Third edition. Blackwell Scientific Publications, Boston, Massachusetts, USA.
- BOURDIEU, P. 1985. The forms of capital. Pages 241-258 in J. G. Richardson, editor. *Handbook of theory and research for the sociology of education*. Greenwood, New York, New York, USA.

- BRICK, H. 1998. *Age of contradiction: American thought and culture in the 1960s*. Twayne Publishers, New York, New York, USA.
- BROWN, R. D. 2001. The dangers of using supplemental feeding to increase the carrying capacity of land for white-tailed deer. Southeast Deer Study Group, 19 February 2001, St. Louis, Missouri, USA.
- CALLICOTT, J. B. 1980. Animal liberation: a triangular affair. *Environmental Ethics* 2:311-338.
- CALLICOTT, J. B. 1990. The case against moral pluralism. *Environmental Ethics* 12:99-124.
- DANIELS, S. E., AND G. B. WALKER. 2001. *Working through environmental conflict: the collaborative learning approach*. Praeger, Westport, Connecticut, USA.
- DECKER, D. J., AND T. L. BROWN. 1987. How animal rightists view the "wildlife management-hunting system." *Wildlife Society Bulletin* 15:599-602.
- DECKER, D. J., AND N. A. CONNELLY. 1989. Motivations for deer hunting: implications for antlerless deer harvest as a management tool. *Wildlife Society Bulletin* 17:455-463.
- DENNETT, D. C. 1995. *Darwin's dangerous idea: evolution and the meaning of life*. Simon & Schuster, New York, New York, USA.
- DICAMILLO, J. A., AND J. M. SCHAEFER. 2000. Internet program impacts youth interest in hunting. *Wildlife Society Bulletin* 28:1077-1085.
- DIZARD, J. E. 2003. *Mortal stakes: hunters and hunting in contemporary America*. University of Massachusetts Press, Boston, USA.
- ENCK, J. W., D. J. DECKER, AND T. L. BROWN. 2000. Status of hunter recruitment and retention in the United States. *Wildlife Society Bulletin* 28:817-824.
- FISHKIN, J. S. 1991. *Democracy and deliberation: new directions for democratic reform*. Yale University Press, New Haven, Connecticut, USA.
- FRAKER, M. A., R. G. BROWN, G. E. GAUNT, J. A. KERR, B. POHAJDAK. 2002. Long-lasting, single dose immunocontraception of feral fallow deer in British Columbia. *Journal of Wildlife Management* 66:1141-1147.
- GILBERT, F. F. 2000. Considerations in managing wildlife populations for sport. *Wildlife Society Bulletin* 2:457-463.
- GREEN, D., AND J. P. STOWE, JR. 2000. Quality deer management: ethical and social issues. *Human Dimensions of Wildlife* 5:62-71.
- GUTHERY, F. S. 2002. *The technology of bobwhite management: the theory behind the practice*. Iowa State Press, Ames, USA.
- HOLSMAN, R. H. 2000. Goodwill hunting? Exploring the role of hunters as stewards. *Wildlife Society Bulletin* 28:808-816.
- HUTCHINSON, G. E. 1957. Concluding remarks. *Population studies: animal ecology and demography*. Cold Spring Harbor Symposia on Quantitative Biology 22:415-427.
- KEITH, L. B., J. R. CARY, O. J. RONGSTAD, AND M. C. BRITTINGHAM. 1984. Demography and ecology of a declining snowshoe hare population. *Wildlife Monographs* 90:1-43.
- KELLERT, S. R. 1980. American's attitudes and knowledge of animals. *Transactions of the North American Wildlife and Natural Resources Conference* 45:111-124.
- KERASOTE, T. 1993. In the belly of the beast. *Sports Afield*, July: 92-98, 100.
- KING, R. J. H. 1991. Environmental ethics and the case for hunting. *Environmental Ethics* 13:59-84.
- KONNER, M. 1990. *Why the reckless survive: and other secrets of human nature*. Viking Press, New York, New York, USA.
- LEE, K. N. 1993. *Compass and gyroscope: integrating science and politics for the environment*. Island Press, Washington, D.C., USA.
- LEOPOLD, A. 1933. *Game management*. University of Wisconsin Press, Madison, USA.
- LEOPOLD, A. 1949. *A Sand County almanac*. Oxford University Press, New York, New York, USA.
- LIGHT, A., AND E. KATZ. 1996. *Environmental pragmatism*. Routledge, New York, New York, USA.
- LITTLE, D. 1993. The nature and basis of human rights. Pages 53-72 in G. Outka and J. P. Reeder, editors. *Prospects for a common morality*. Princeton University Press, Princeton, New Jersey, USA.
- LIU, J. G. 2001. Integrating ecology with human demography, behavior, and socioeconomics: needs and approaches. *Ecological Modelling* 140:1-8.
- MACDONALD, D. 1987. Hunting - an exercise in pluralistic democracy. *Wildlife Society Bulletin* 15:463-465.
- MARCHINTON, L. 1991. The spirit of the hunt. *Signpost* 3:3, 6.
- MINNIS, D. L. 1998. Wildlife policy-making by the electorate; an overview of citizen-sponsored ballot measures on hunting and trapping. *Wildlife Society Bulletin* 26:75-83.
- MOUFFE, C. 2000. *The democratic paradox*. Verso, New York, New York, USA.
- MUTH, R. M., AND W. V. JAMISON. 2000. On the destiny of deer camps and duck blinds: the rise of the animal rights movement and the future of wildlife conservation. *Wildlife Society Bulletin* 28:841-851.
- NAESS, A. 1973. The shallow and deep long-range ecology movement. A summary. *Inquiry* 16:95-100.
- NORTON, B. G. 1996. Integration or reduction: two approaches to environmental values. Pages 105-138 in A. Light and E. Katz, editors. *Environmental pragmatism*. Routledge, New York, New York, USA.
- O'NEILL, R. V., D. L. DEANGELIS, J. B. WAIDE, AND T. F. H. ALLEN. 1986. *A hierarchical concept of ecosystems*. Princeton University Press, Princeton, New Jersey, USA.
- ORGAN, J. F., R. M. MUTH, J. E. DIZARD, S. J. WILLIAMSON, AND T. A. DECKER. 1998. Fair chase and humane treatment: balancing the ethics of hunting and trapping. *Transactions of the North American Wildlife and Natural Resources Conference* 63:528-543.
- PETERSON, M. J., AND T. R. PETERSON. 1996. Ecology scientific, deep, and feminist. *Environmental Values* 5:123-146.
- PETERSON, T. R. 2003. Social control frames: opportunities or constraints? *Environmental Practice* 5:232-238.
- PORTES, A. 1998. Social capital: its origins and applications in modern sociology. *Annual Review of Sociology* 24:1-24.
- RIDGELY, R. S., P. J. GREENFIELD, AND F. B. GILL. 2001. *The birds of Ecuador: field guide*. Comstock, Ithaca, New York, USA.
- RUTBERG, A. T. 1997. Lessons from the urban deer battlefield: a plea for tolerance. *Wildlife Society Bulletin* 25:520-523.
- SCHULMAN, B. J. 2001. *The great shift in American culture, society and politics*. Free Press, New York, New York, USA.
- SCHWEITZER, A. 1950. *The philosophy of civilization*. C. T. Campion, translator. First American edition. Macmillan, New York, New York, USA.
- SHEPARD, P. 1959. A theory of the value of hunting. *Transactions of the North American Wildlife Conference* 24:504-512.
- SHEPARD, P. 1973. *The tender carnivore and the sacred game*. Scribner, New York, New York, USA.
- SINGER, P. 1975. *Animal liberation*. Random House, New York, New York, USA.
- SMITH, B. L., AND S. H. ANDERSON. 2001. Does dispersal help regulate the Jackson elk herd? *Wildlife Society Bulletin* 29:331-341.

- STERN, P. C., AND H. V. FINEBERG, editors. 1996. Understanding risk: informing decisions in a democratic society. National Academy Press, Washington, D.C., USA.
- STOWE, J. 1997. Hunting in the 3rd millennium and beyond? Quality Whitetails 4:10-14.
- SWAN, J. A. 1995. In defense of hunting. Harper, San Francisco, California, USA.
- UNITED STATES DEPARTMENT OF THE INTERIOR AND UNITED STATES DEPARTMENT OF COMMERCE. 2002. 2001 national survey of fishing, hunting, and wildlife-associated recreation. United States Government Printing Office, Washington, D.C., USA.
- VARNER, G. 1998. In nature's interests: interests, animal rights and environmental ethics. Oxford University Press, New York, New York, USA.
- WARREN, K. J., AND J. CHENEY. 1993. Ecosystem ecology and meta-physical ecology: a case study. Environmental Ethics 15: 99-116.
- WENZ, P. S. 1993. Minimal, moderate, and extreme moral pluralism. Environmental Values 15:61-74.

M. Nils Peterson is currently a Ph.D. student in the Department of Fisheries and Wildlife at Michigan State University. His research project addresses how human culture, demography, and household dynamics impact wildlife conservation. Nils



received his B.S. and M.S. degrees in wildlife and fisheries sciences from Texas A&M University, where he studied cultural conflict, urban wildlife, and endangered-species conservation.

Associate editor: *Grado*





Father deer-hunting with children. Photo by Wildlife Program, Texas Cooperative Extension.

As wildlife conservation goals begin to conflict with urban interests as well as rural ones (Liu 2001), public support needed for management will inexorably and incessantly rise. In the foreseeable future, wildlife management will require ethical, cultural, political, and economic support from hunters and nonhunters alike. Hunters, in turn, need these forms of support from nonhunters. Because pluralistic democracies protect minority rights, some hunting apologists have suggested that hunters do not need public support. MacDonald (1987) likened hunters to golfers, stating that the activities of both parties, although objectionable to some, were protected in pluralistic democracies. This approach is both illogical and unsupported by empirical evidence. "Rights" deemed unethical in a pluralistic democracy (e.g., polygamy, child labor, animal abuse) are deemed "wrongs" and receive no protection. Thus, one may incur criminal charges for shooting stray dogs with a compound bow but not for golfing. Minnis' (1998) discovery that animal-protection interests won 7 of 11 citizen-sponsored ballot measures addressing hunting illustrated the weakness of the minority-rights argument. Pluralistic democracy does not provide refuge from the need for a hunting ethic shared with nonhunters.

Historical acceptance of hunting is inextricably intertwined with the degree to which hunters and nonhunters shared common mythical and symbolic views of hunting (Dizard 2003). The self-sufficient, rugged, thoughtful, and selfless (ultimately agreed to self-taxation) sportsmen-hunters embodied by Theodore Roosevelt represented the shared view of hunting prior to the 1960s. This image, however, did not survive the civil- and women's-rights move-

ments, Vietnam and the peace movement, and Rachel Carson and the environmental movement (Swan 1995, Dizard 2003). The protest seen in these movements was a social reaction to conditions deemed unethical by the public (Swan 1995). Society in general became more critical, divided, and disillusioned in the late 1960s and early 1970s (Brick 1998, Schulman 2001).

We have learned to tolerate, albeit grudgingly, a more pluralistic nation made up of loosely connected minorities, but only those minorities sharing an ethical foundation with the public at large maintain social legitimacy. As a cultural minority, hunters must forge a coherent ethical stance shared at least in part with society because the future of practices in liberal democracies depends on their social legitimacy (Fishkin 1991, Lee 1993, Stern and Fineberg 1996, Daniels and Walker 2001, Peterson 2003). Although the objectification of hunted animals demonstrated in vocabulary such as "game," "stocking," and "taking" has enabled some hunters to avoid this task, the will to do violence implicit in hunting demands moral justification.

Decker and Brown (1987:601–602) suggested "we need to ask ourselves whether the neutral majority is more inclined to relate to our perspective or that of the animal rightists." Although "moderate majority" is probably more accurate than "neutral majority," the statement captures the essence of what must be done. A hunting ethic logically must be consistent and intuitively appealing to the moderate majority. Such an ethic will allow and encourage cultural, political, and economic support for wildlife management from both hunters and nonhunters alike. In light of this goal, I 1) argue that 3 dominant hunting ethics—the naturalness hypothesis, the land ethic, and the sporting ethic—fail to justify hunting or place it in a shared context with society, and 2) suggest an alternative ethic that combines Leopold's vision of an expanding community with traditional utilitarian and rights-based evaluations of ethical criteria.

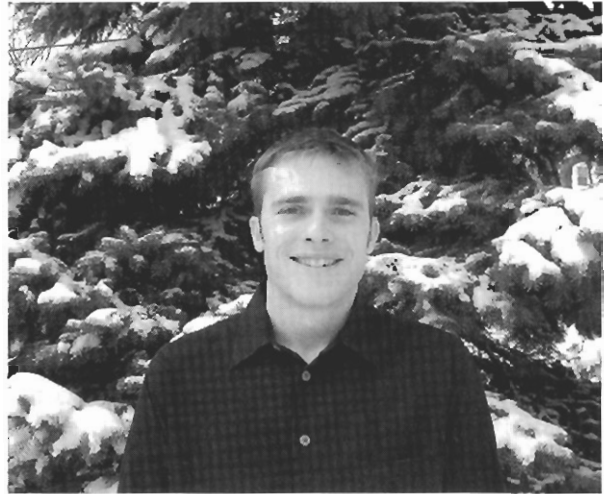
Dominant hunting ethics

The naturalness hypothesis

According to this concept, humans are predators and hunting is the only way for them to enter nature as a participant rather than a spectator (Shepard 1959, 1973, King 1991, Marchinton 1991, Dizard 2003). Thus, hunting is "right" because it is a natural human role. Deviation from our instinctual

- STERN, P. C., AND H. V. FINEBERG, editors. 1996. *Understanding risk: informing decisions in a democratic society*. National Academy Press, Washington, D.C., USA.
- STOWE, J. 1997. Hunting in the 3rd millennium and beyond? *Quality Whitetails* 4: 10-14.
- SWAN, J. A. 1995. *In defense of hunting*. Harper, San Francisco, California, USA.
- UNITED STATES DEPARTMENT OF THE INTERIOR AND UNITED STATES DEPARTMENT OF COMMERCE. 2002. *2001 national survey of fishing, hunting, and wildlife-associated recreation*. United States Government Printing Office, Washington, D.C., USA.
- VARNER, G. 1998. *In nature's interests: interests, animal rights and environmental ethics*. Oxford University Press, New York, New York, USA.
- WARREN, K. J., AND J. CHENEY. 1993. Ecosystem ecology and meta-physical ecology: a case study. *Environmental Ethics* 15: 99-116.
- WENZ, P. S. 1993. Minimal, moderate, and extreme moral pluralism. *Environmental Values* 15: 61-74.

M. Nils Peterson is currently a Ph.D. student in the Department of Fisheries and Wildlife at Michigan State University. His research project addresses how human culture, demography, and household dynamics impact wildlife conservation. Nils



received his B.S. and M.S. degrees in wildlife and fisheries sciences from Texas A&M University, where he studied cultural conflict, urban wildlife, and endangered-species conservation.

Associate editor: *Grado*

