

## TO ADVOCATE OR NOT: VALUES, OBJECTIVITY, AND PROFESSIONAL CREDIBILITY

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*ABSTRACT:* A wildlife biologist's first loyalty must be to protect wildlife resources and the public interest, and at times this may call for advocacy. Nevertheless, for the professional, advocacy is a double-edged sword, and should not be undertaken lightly; it should be resorted to only in the presence of strong evidence of harm and when alternatives have been exhausted. Personal values must be recognized so that they do not influence objectivity. Evidence for statements must be presented and opinions clearly labeled as such. Credibility, the first requirement of a professional, is difficult to acquire and easy to lose. Credibility is earned by having a thorough knowledge of a field and applying that knowledge fairly and objectively. A professional must not claim expertise outside of his/her specialty. Advocating frequently or questionably will result in loss of credibility. Consequently, each person should decide how he/she can best contribute to wildlife conservation—as a professional or as an advocate.

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### INTRODUCTION

A much debated issue, not only among wildlife professionals, but natural resource management professionals generally, is the place and role of advocacy in professional practice. These discussions have been hampered by the lack of clarity about what is meant by the term "advocacy", and the distinctions that need to be made about how it is to be applied to different activities by professionals. There are many views of advocacy among professionals, and I'm sure considerable latitude in judgment about what is acceptable. Nevertheless, it is apparent that many resource professionals are searching for standards by which to direct their own conduct, and to judge that of their peers.

I do not propose such standards. Instead, I accept that there are many ways to contribute to wildlife conservation and management, and it is probably best that the efforts of all professionals not be channeled to the same mode of operation. I will try to give a personal assessment from my own experience of the pros and cons of advocacy by professionals in the hopes that my views might prove helpful to others in determining how best to utilize their particular talents and skills to achieve wildlife conservation goals.

### DIFFERENT KINDS OF PROFESSIONALS

Professional wildlife biologists, numerically, are most abundant in State and Federal Agencies. Agencies manage public resources for the benefit of the public. The various agencies have charges specified in their enabling legislation. Some are value laden in that they are charged to achieve specific ends or specific purposes. Most wildlife agencies were initially charged to manage wildlife for the benefit of hunters, and only subsequently were expanded to consider the interests of the all of the people in wildlife conservation. Furthermore, the budgets of most state agencies reflect this historical fact, and this

tends to skew efforts towards hunting and fishing constituencies.

The role of a scientist is different from agency wildlife professionals. The special claim of the scientist to the public ear is objectivity. One can count on the two sides in a controversy to advocate, misrepresent, obfuscate, or what ever else serves their interests (Pye-Smith 1999). This is true of Chevron Corporation and the Sierra Club. So where does society turn to get a fair evaluation? Only science can make that claim. A scientist spends a career building up credibility by developing skills in his/her field, and doing objective work. What takes years to establish in the way of a reputation can be lost in an instant by passing off biased results as objective. Taking sides, even on the side of "good" is a double edged sword for a scientist, for it is easy to become type-cast.

Science, like all other human enterprises, is an imperfect institution. But we know that good scientists can be counted on to give the unvarnished picture independent of what they would personally like to have the facts be. We also know that some people who carry the scientist label can be bought, and will testify for whatever position the advocate (or defendant, etc.) will pay for. We automatically discount those people. We know the "scientist" testifying for a tobacco company is not to be trusted. So too, the Sierra Club scientist bears some scrutiny, but we know that he/she is being paid a fraction of the amount of the other guy, and probably comes from the academic world rather than some pricy private "research" institute.

Professionals working for consulting firms, in many ways, function like scientists in that most work involves environmental impact assessment and inventory. The firm is in an advisory, rather than decision-making role. Work of consulting firms differs from academic science in that seldom are hypotheses tested, and theory ad-

vanced. The work is more of the nature what is there, how does it work, and what would be the impacts if a given project were constructed? Decision authority usually resides with a regulatory agency. The professional in consulting is also under considerable pressure, because invariably some entity wants to pursue a given project as an economic venture. Almost never is objectivity their goal beyond that necessary to get past regulatory agency review.

The contractee wants a no-impact outcome-no or little impact by the project on key resources. Making money is their motivation and spending money their solution to problems. For consulting firms, maintaining credibility is difficult, because the firm must make a profit while not selling out their objectivity for money.

The professional who chooses to work for a non-governmental organization (NGO), virtually by definition, is an advocate because almost without exception, NGOs have agendas. Their missions are to obtain or protect some status, privilege, or policy. They are clearly special interest groups, although invariably they cast the public interest as aligned with their own objectives. I realize that some professionals working for NGOs are able to maintain reputations for objectivity by dedication, strength of personality, and high ability, but they are exceptions. Few NGOs are interested in hiring people who do not aspire to be strong advocates.

#### SEMANTICS

Carrier (1997) noted that the dictionary definition of to "advocate" is that it is to argue for a proposition without the requirement for the argument to be based on "facts". This is the common usage of the term, for we know from experience that people advocate many propositions based on beliefs and emotions, even if the propositions go against the "facts". Part of the debate about advocacy in the wildlife profession could be resolved if we accepted Carrier's proposal that only propositions based on fact be advocated by wildlife professionals. But this changes the dictionary definition of advocacy, and it seems unlikely to be accepted in practice. The word is likely to be understood by most people in the conventional meaning, so using a particular definition not in general usage would lead to confusion.

It seems to me that the definition being sought by Carrier and others of similar thinking could be better satisfied by a different word (perhaps "education", which seems to be the root of this thinking), or by adding an adjective such as "informed" or "factual" advocacy. This would solve the semantic problem, but it would still not address the really thorny problem: values.

#### VALUES

A position based on facts really means based on sound science, the only accepted criterion for establishing facts as opposed to beliefs, suppositions, or premises relying on religious, philosophical, or political teachings. This creates the conundrum that to be objective and unbiased, science must be value-free. This, of course, is hard to achieve in practice, but the ethos of science requires that this ideal be pursued relentlessly, and thus, challenge, critique, criticism, and peer review are part and parcel of the process. Critical results require duplication, and alternative explanations need to be excluded as possibilities. This is a particular problem in ecology (including wildlife conservation) for this science is a minefield of complex variables. But, because it is objective, science will not sort among values.

The biggest problem with values is that they are always present, but often so masked by familiarity as to go unrecognized. We say things are "logical", "make sense", and are "only common sense" without adding the critical element-in the context of a value system. For example, common sense to a political or economic conservative may be folly to a liberal, and vice versa. What makes sense to an American can be totally mystifying to someone from an Asian culture. The concepts of individual property and ownership brought to North America by Europeans seemed absurd to the Native Americans. There is hardly a value that applies uniformly across cultures, and one culture's hero may well be another culture's villain. Furthermore, values change over time. Only about 140 years ago genocide was the official U.S. Government policy towards Native Americans. Today we are ashamed of this history and appalled by genocide, but over evolutionary time it was the means by which humans groups, even Native Americans, dealt with troublesome neighbors-hence the need for tribes to defend their boundaries. Recent racial, ethnic, and religious conflicts around the world illustrate that this thinking is still commonly held. Even the most heinous acts are heinous only in the context of a value system. Today we abhor the very thought of nuclear war. Yet, in 1945 use of atomic weapons seemed preferable to conventional warfare in the invasion of Japan, and almost certainly saved many lives on both sides.

I do not excuse genocide or nuclear war. My point is that we are so enmeshed in values that we notice them only when confronted with a moral dilemma. Still, we can not do without values: they are our compass in a moral wilderness, and our standards for keeping mental sanity in the confusion of daily life.

## WILDLIFE ISSUES AND VALUES

Huge moral issues like genocide and nuclear war stretch the envelope, one of the most useful ways to expose values. Are there similar issues in wildlife management? Are they as value-free as we often claim? I submit they are not. I submit that "scientific management" is an oxymoron because science is value-free and management decisions are made with reference to some set of values. I consider two case histories, which have had broad support among professionals in the Wildlife Society as being the "right thing to do" and "supported by the facts". In one case, the Angel Island deer population controversy, I was directly involved. In the second, the leg-hold trap ban, I was only peripherally affected.

Examination of these two cases reveals different aspects of values that wildlife professionals hold, but seldom acknowledge. Management of black-tailed deer on Angel Island was a major controversy in the 1980s. I have published a number of papers on the case history in the hope-vain I suspect-that it will not have to be repeated too many times. My involvement began in the summer of 1980 when I took my family on a picnic to Angel Island, and found the picnic grounds inhabited by black-tailed deer that were skin and bones. One didn't need years of deer research experience to see that this was a population about to crash.

In talking to Angel Island State Park rangers and Department of Fish and Game biologists I learned that the herd had built up and crashed twice in the past, amid enormous controversy. Lethal means of population control were not acceptable because public hunting was ruled out by state park status, and culling by rangers had been rejected because of public opposition. Biologists knew that relocation and contraception would not work. Given this impasse, I proposed the introduction of sterilized coyotes as an experiment, a proposal that was roundly castigated. Consequently, deer were relocated with the expected high mortality (O'Bryan and McCullough 1985). A subsequent contraception attempt failed because too few deer could be captured and treated to halt population growth (Avenzino 1996). Deer population irruption and crashes occurred three times on Angel Island before culling by rangers brought an end to the oscillations. The public (with anguish) accepted culling as the best solution when the results of relocation and contraception became known. Wildlife biologists were vindicated, for this was the fix they prescribed in the first place.

Still, it is important to recognize that values are involved in all treatments of the problem, including those favored by biologists. Starvation was not acceptable to either the public or most biologists, and culling was seen as preferable. Still, our attitudes about starvation also are value laden. Starvation is a natural process, and I

have witnessed starvation in deer herds in other areas of California. We biologist say that being shot is a more humane form of death than starvation; yet confronted with the choice, I think few of us would opt to be shot now rather than taking their chances with starvation later. Indeed, any person carrying out such a humane act for a starving fellow human would be charged with murder.

If in the heat of the Angel Island controversy I had pointed out the discrepancies in values when applied to humans and deer I would have been considered even more loony by the media and public than I already was (in his column Herb Caen referred to me as a nutty professor). I knew starvation was not acceptable to the public. I doubted whether relocation and contraception would work. I quickly found out that my proposal to introduce coyotes (which may not have worked either) was not acceptable to the public. Therefore, I advocated culling as the best solution to the Angel Island deer problem. I claimed that this solution was scientifically informed, but if asked (I wasn't) I would have had to admit it was not value-free, but was conditioned both the public's and my own values. I think I would argue that my position was fair in the sense that it weighed both the pure scientific facts and the values brought to the case by all of the parties. That a decision based on both science and values can be argued to be "fair" points out the many shaded nuances between value-free information generated by science and the inclusion of the values of the parties involved in a resource decision process.

What does this say about our values? First, that they are definitely present and important even if we don't notice them. Second, we have some major inconsistencies. Our values differ when applied to humans and animals, and when applied to animals vary with the views of the person involved. In other words, they are arbitrary.

The key seems to lie in the recognition of the values, specifying what they are for the various interest groups, and overtly stating why a particular decision seems best. I stated that culling was the least objectionable response from among undesirable choices. But the decision was determined mainly by the one thing (value) about which everyone agreed: no one wanted the deer to starve.

Another reason biologists use to justify culling is the widely-held assumption that herbivores damage their own habitats. But this position is loaded with value judgments as well. The nature of the damage is more perceived than documented. We say that there are severe consequences to the habitat from too many deer, but elsewhere (McCullough 1996) I noted that the dynamics and the height of the successive peaks of the Angel Island population have not changed, indicating no significant long-term loss of carrying capacity. There have been

some shifts in plant form and plant species composition, but these impacts on Angel Island vegetation by deer are minuscule by comparison to human alterations of the rest of the Bay Area. If we lived in a George Orwellian world in which a value-free computer were making these decisions, the computer almost certainly would specify that yes, the Angel Island deer population could use a bit of culling, but that the bullets should be put to a far greater need: halting human population growth.

The evidence for long term loss of carrying capacity due to over-populations of deer is actually quite weak (McCullough 1996). For example, in the early 1950s Jones (1954) described over-browsed winter ranges of deer on the east side of the Sierra in Owens Valley. I first saw these bitterbrush (*Purshia tridentata*) stands in 1963, and they looked all beat up. They have continued to look beat up for at least 60 years, and given that these stands were established at least before the turn of the century, probably nearer 100 years. Deer numbers have gone up and down many times over the same time period.

One wonders if our beliefs about vegetation damage are determining what our eyes see rather than the other way around. One could argue that vegetation looking all beat up is nature's way of saying, "I can handle this problem myself, thanks: if you want to hunt deer, fine, but don't blame it on me." One could elaborate further by arguing that predators and aboriginal hunting originally balanced things, but if we have problems understanding the relationships between the first and second trophic levels, how is adding the third going to help? Furthermore, our belief in a balance of nature (i. e., that deer should not overbrowse bitterbrush) also may be a myth of our human value system. I am leaning more to the view that nature has a multitude of fixes, and a short attention span: it balances things in a messier way, if at all, by not doing any one thing very much or for very long.

The second case, the leg-hold trapping ban, is an issue central to the values of the wildlife profession. The Wildlife Society passed a position statement in favor of leg-hold trapping. A recent survey of resource professionals reported by Muth et al. (1998), however, shows that there is considerably more difference of opinion on this issue in the profession than commonly appreciated. In response to whether leg-hold traps should be outlawed 46.1% replied yes, 39.3% replied no, and 14.6% had no opinion on the issue. Unfortunately, their results were not sorted by age of respondents, for I suspect that the young people coming into the profession are less accepting of the traditional positions on hunting, trapping, and other consumptive uses of natural resources than the gray-beards.

Passage of Proposition 104 in California banning leg-hold trapping restricted my research on coyotes and sheep predation on Hopland Research and Extension Center, but this project was near its end anyway. However, the ban on leg-hold traps is impacting negatively on research by my colleagues elsewhere. Furthermore, one of my graduate students abandoned a possible urban coyote study when Proposition 104 went on the ballot, and was likely to pass. Nevertheless, I accept that scientific research is a form of special interest, and I acknowledge the public's right to restrict my and my colleagues' activities in the interest of the larger public good.

By far the biggest impact of Proposition 104 will be on the domestic sheep industry. This industry was already on the ropes because of coyote predation before the passage of Proposition 104. The new law restricts not only leg-hold traps, but the use of the poison 1080 deployed in livestock protection collars. Personally I cannot work up much sympathy for the sheep industry, which is already protected by tariffs from foreign competition, but unfortunately, it is not so simple. The land-owners of range lands in California, and many other parts of the west, are in economic difficulty with the increase in operating costs and the low price of livestock. If bankruptcy of ranches resulted in reversion of these lands to natural habitat, it would be a benefit for wildlife. However, the economics of the situation are such that sale to developers is the likely outcome of failure of livestock on these properties, and that will be even more detrimental to wildlife than the combined impacts of sheep grazing and coyote control. So where in this complexity are the objective, value-free facts that indicate what should be done?

#### ROLES FOR THE WILDLIFE PROFESSIONAL

I submit that science can lay out the consequences of various actions, but the conflicts of values will remain, even if an optimal decision (i. e. the best cost to benefit ratio for society as a whole) can be specified. The losers are still going to be negatively affected, and that may violate other values we hold dear such as individual freedom, protection of minority views, maintaining traditions, etc. Whereas science can be nearly value-free, it can only inform decision-making, and management decisions will always be value laden. Advocating a particular decision, therefore, will always reflect the values of the advocate, no matter how "objective" the advocate may seem, for he/she will decide the weight to be given to costs and benefits, pluses and minuses, and public and private interests.

So, how do professionals function to maximize their effectiveness? Many professionals, in good faith, propose that we should become advocates. I find this proposal a bit troubling. It is not that we do not need the

energy and motivation of advocates. It is that if the professional has any special claim to being heard by the public, it is the specialized knowledge he/she possesses and the objectivity with which it is presented. If the public views us as advocates, how will we distinguish our motivations from those of the developers, and our modus operandi from those of pseudo-ecologists pitching the ecological equivalent of snake oil? I suggest that if one thinks like an advocate, talks like an advocate, and acts like an advocate, the public is likely to consider one an advocate. By being an advocate, I think we throw out the very essence of professionalism that we so desire—the objective, rational, unselfish laying out and weighing of alternatives, and considering various societal values so that the people, through the social and political process, can balance conflicts in ways that serve the public interest.

It is difficult for the wildlife professionals in agencies to serve equally their very different constituencies which in many cases hold opposing positions. Furthermore, changing programs or shifting priorities can be difficult, for often they go against traditional alliances, and are threatening to special interest groups favoring the status quo. Disagreements by professionals with current agency policies are often interpreted by their administrators and coworkers as disloyalty to the agency. The agency professional is under stress, being buffeted between different interest groups and political views with a no-win prospect, for no matter what the adopted policy, some group is going to be angry. It is a difficult role to be in, and the tradition of strong professionalism is extremely helpful in supporting the needed, but often difficult, defense of sound wildlife policies.

#### THE TASK BEFORE US

Wildlife biologists chose this field because of a personal commitment to wildlife and other natural resources, and they work in an environment of relatively low remuneration, public appreciation, and a gloomy prospect for long term success. To suggest that wildlife biologists should do everything they can to achieve wildlife conservation is hardly necessary.

The first truth that we must recognize is that our numbers are few and our voices weak. The needs of wildlife conservation and management are so great that the best of not only wildlife biologists, but all citizens is required to retain wildlife and wildlife habitat in the face of continuing human population growth. Clearly the process of increased human numbers, development, and environmental contamination will work to the disadvantage of wildlife habitat and populations. It is absurd to assume that a bit more (or even a lot more) advocacy by trained wildlife biologists will make a significant difference in the face of the human juggernaut. Playing the

professional role of informing the public, I submit, is a more effective approach. An informed public committed to retain critical habitat and protect vulnerable populations in that habitat is our best hope for success.

Most of the public does not acknowledge our professionalism in the same way they do that of lawyers, doctors, or engineers. We need to accept that our field is not an exclusive domain. Unlike the widely accepted professions, nearly everyone considers conserving wildlife as a common sense activity, and many people consider themselves to be, and commonly are perceived as, experts because they have studied local natural history, are bird watchers, joined the Sierra Club, chained themselves to a tree, or opened their mouths wide and often at public meetings.

This is both good and bad news. The good news is that ordinary citizens can make important contributions which increase our numbers and influence. We would not have had the successes we have achieved without individual amateurs, and their organizations such as the National Wildlife Federation, Audubon Society, Wilderness Society, Sierra Club, Boone and Crockett Club, Ducks Unlimited, etc. We would not have been as successful without the support of general voters for environmental protection, zoning laws, air and water quality, the Endangered Species Act, parks and recreation initiatives, etc.

The bad news about our lack of professional status is that we are not given our due. Interactions in natural systems are complex, and they matter. Total understanding of these things is probably beyond human comprehension, for a life-time of education, study, experimentation, and mistakes gives us, at best, a rudimentary grasp of some local interactions of particular natural communities for some select species groups. That's why we specialize in the desert, or redwood forest, and call ourselves bat biologists or waterfowl experts.

The general public fails to recognize system complexity, and thus, is susceptible to the amateur or outright charlatan who, in the glory of their own ignorance, locks on to a simple fix. They want to protect the species and not the habitat; save the individual animal and lose the population; save the cute ones and ignore the ugly ones; stamp out the bad ones to save the good ones; break the bank to save one species and fail to notice the loss of 100 others. They bandy about terms such as ecosystem management and biodiversity, and pretend they convey knowledge instead of masking ignorance, not that we professionals understand them either. We ourselves often have a hard time telling until after the fact who of our colleagues is the genius and who the nut; who the prophet and who the quack.

Our methods of decision-making in a democracy are slow, cumbersome, frustrating, and imperfect in many

ways. Although we tend to denigrate "the public's" view about the environment and resources, in fact, the public has tried to balance wildlife conservation with economic development. The public simply does not agree with us as to where that balance should be struck. As a profession we wildlife biologists are more extreme in our view than the general public. This should serve as a reminder that we are a special interest group according to our own values—altruistic perhaps—but nonetheless, by definition a special interest group.

I think it might be useful to embrace the fact that we are a special interest group. That might help us to get over the impression that we are the public interest, and recognize that from the public's view, we seek an alternative to other special interests which want to build houses and roads, create jobs, and make money; things which also may contribute to the well-being of society. In fairness to these interests we should note that few wildlife biologist decline the amenities of modern civilization.

The question confronting the professional wildlife biologist, then, is not one of halting the advance of "civilization" but rather of marshaling our meager resources, and optimizing our effectiveness in conserving wildlife resources as development spreads. We should see our goals as shifting the balance of public opinion in our direction rather than always bemoaning the fact that the public doesn't understand the true value of wildlife. It might help us get over our nostalgia for the way things used to be, and focus our attention on the real issue: who is going to get what of natural resources that remain?

For myself, I decided I could make my greatest contribution in my career as a scientist. I think I have accomplished more behind the scenes as a scientist than I could have as an advocate. I have tried to claim expertise only in the areas of my own research. At times I have signed on with organizations such as the Natural Resources Defense Council, but cautiously, and then only in cases where the facts were clear and there was no realistic alternative way to prevent some pretty bad actions.

Should all people try to be scientists? Of course not. Should all people try to be wildlife professionals? Of course not. There is need for both objectivity and advo-

cacy: it is just that they do not mix very well. Given his/her personal skills, disposition, etc. each individual may make their greatest contribution to the environment as a poet, or engineer, or talk-show host, or whatever. No one has a particular claim that their skill alone will win the day. Each person must decide how to contribute to a better world, and we of the wildlife persuasion must decide how our individual skills can best be brought to the task of wildlife conservation and management. I would argue that as professional wildlife biologists, most of us can contribute most by doing striving for objectivity and balance, rather than assuming the role of the advocate.

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