PROFESSIONALISM--COMMITMENT BEYOND EMPLOYMENT

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WILDLIFE BIOLOGISTS -- WHERE ARE WE COMING FROM?

Vocation, from the Latin word *vocare*, means the work to which one is called to by the Gods (Morris 1976). Frederick Buechner (1973) proposed a 2-faceted test by which a true vocation could be judged (1) it is the kind of work you need to do, and (2) it is work that the world most needs to have done. A vocation occurs where deep personal gladness and the world's deep hunger meet.

Some 25 years ago, when I worked for Texas Game and Fish Commission, a young wildlife biologist with the ink drying on his diploma was put to work under my supervision. He found our crew at a remote camphouse and reported for work. At the end of his first day, spent clearing bursh from deer census lines, he exuberantly remarked, "Four years ago I couldn't even spell wildlife biologist and here I are one." We laughed at his joke and shared his joy.

But later, as he and I sat by the fire and talked late into the night, it became clear that he did not have a vocation. He exhibited an overwhelming concentration on $\underline{\text{his}}$ dreams, $\underline{\text{his}}$ needs, $\underline{\text{his}}$ desires. The position he occupied was merely a means to those ends. He had not recognized that his new job was the tangible expression of work that the world needed to have done.

Maturity brought that recognition. A job became a vocation. With vocation came self-imposed obligations: to grow; to improve; to strive; to serve; to be his best. Jobs are easy compared to vocations. In a vocation the driving mechanism is not the boss but the will, the goal is not money but mission.

I believe that most resource management professionals have a vocation. If so, it is a precious possession.

The Chinese have a blessing, or perhaps a curse, that says, "May you live in interesting times." If it is a blessing, we are doubtly blessed. We have a vocation and, considering the importance of the enlightened management of natural resources at this juncture of history, we live in the most interesting of times; the most critical of times; the most challenging of times.

How else do we define ourselves? As usual, Aldo Leopold (1949:vii) probably said it best: "There are some who can live without wild things and some who cannot." We cannot or, at least, we chose not to.

I will discuss the commitment beyond employment that is required to produce wildlife biologists who are always in the process of becoming all that they can be. My word for such people is "professional." That goes beyond the dictionary definition of a profession as "an occupation or vocation requiring in the liberal arts or the sciences and advanced study in a specialized field" (Morris 1976:1045). That's not nearly enough.

A sense of professionalism is largely within control of the individual. Though they can help, professionalism does not depend on professional societies and organizations, nor on employers. Professionalism is a reflection, through behavior, of vocation, commitment,

and will. Those who have "the right stuff" will find a way or make a way to express their professionalism. Such people never allow their view or vision of their own professionalism to rest in the hands of another. The responsibility for attaining professional status lies primarily with the individual.

CONTINUING EDUCATION--STAYING SHARP

The professional is always in the process of education. University diplomas are not proof of education or of competence. Such training is and has always been inadequate. It always will be. A university degree is merely a ticket to board, a license to learn, a platform on which new learning and experience can be structured. University degrees signify the beginning of real learning not its terminus. Yet, my experience tells me that of all our failings in our striving for professionalism this is where we fail most grievously. There is no excuse for that failure.

Universities, professional societies, and agencies are paying more and more attention to our needs in continuing education. Approaches run from short courses, seminars and video tapes to more and better publications. I know that some employers are unable or unwilling to provide their employees such training. That's no excuse. Pay your own way. Step up your reading. There is more and better literature than ever before in wildlife biology. But, we can't stop there. We must learn more about economics, forestry, range management, land-use planning, politics, sociology, philosophy, history, etc. Biologists operate in an increasingly complex world, and if we are to be effective agents for good management of natural resources we must be conversant in other fields. Yet, we often hear the refrain, "I'm so busy I don't have time to read." I don't buy it. We wouldn't and shouldn't accept such a statement from the laywers and medical doctors we employ. We shouldn't accept such a statement from any person that aspires to be a professional.

EFFECTIVENESS--THE MEASURE OF SUCCESS

In the end, the measure of success is the professional's effectiveness in achieving objectives. The following are considerations in enhancing effectiveness.

Biopolitics -- Achieving Results in the Real World

Wildlife biologists are trained to be concerned with science and scientific management of wildlife and habitats. Another facet of management—biopolitics—is seldom openly discussed or even acknowledged. In fact, biology and politics often represent opposing views in the purist's mind of how wildlife should be managed. Biology implies the gathering, interpretation, and application of data in a scientific process to achieve goals dispassionately derived. Politics, on the other hand, is defined as "artful; ingenious, shrewd or using, displaying or proceeding from policy; wise, prudent; judicious or crafty, unscrupulous or cunning" (Morris 1976:1015). In a management sense, biology is never pure. All data and all analyses come through a set of filters and experiences. Believing is seeing. And, politics are not necessarily corrupt. Biopolitics is concerned with the interaction between biological facts and theory and the reconciliation of the desires of individuals and organizations within the constraints of law (Peek et al. 1982). It is "the art of resolving biological...management problems in a biologically sound and politically acceptable manner" (Greenley 1971:505).

There is nothing inherently wrong with biopolitics. In fact, it is the guts of wildlife management in government agencies. Unfortunately, most biologists didn't learn about biopolitics in school--neither that it exists nor how to practice the art.

No natural resource manager can be truly effective without a mastery of biopolitics. So far as I know, there are few formal training programs and no degrees in biopolitics; perhaps there should be. Biologists learn biopolitics from apprenticeship to a master practitioner if they are lucky, from experience if they are not, and remain perpetually naive and ineffective if they don't learn at all. In either case, it is apt to be a school of very hard knocks.

The effective natural resource manager is expert in biology and a politician. The biologist knows something about what makes elk or deer or ducks or woodpeckers tick. Yet, the law, the land-use planning process, agencies, governing boards, and landowners largely determine the goals and objectives. The politician practices the art of achieving the possible. A good biopolitician combines biological and political skills to achieve goals and objectives in the best way possible considering prevailing circumstances and ethical constraints. The fate of wildlife in America depends and will continue to depend largely on effective application of biopolitics (Peek et al. 1982).

Economics -- What Makes the World Go Around?

Money does not make the world go around: but biologists are part of the tiny minority of the American population that believes that. The rest of the folks (i.e., society) operate on the premise that money does, indeed, make the world spin on its axis. If biologists persist in having our own version of the Flat Earth Society, we won't be able to converse intelligibly with the body politic.

The effective biologist knows that economics looms very large in biopolitical decision making and natural resource allocations. More and more, the fate of wildlife is being determined in the final analysis by which way a cost-benefit ratio turns out. That has probably always been true but now we've gone so far as to formalize in law the requirement for considering cost-benefit ratios in the management of national forests.

When wildlife biologists were forceably thrust into the cost-benefit analysis game, they quickly found that, with the exception of game species in some states, wildlife does not have a market value. That means that wildlife's value must be derived indirectly through one of a number of techniques. Value estimates so derived are, in reality, easy to distinguish from real dollars and are, in my view, notoriously ineffective in influencing resource allocation and management decisions.

Craig Rupp, a Regional Forester for the U.S. Forest Service, summed it up perfectly. "The times are changing. Today it's a matter of dollars and cents. That makes it tough on uses that don't produce much income..." (Findley 1982:313).

That observation is difficult to dispute-eparticularly as it relates to the production of game species for sport hunting. If wildlife doesn't produce income for the landowner that produces it, there is apt to be a continuing loss of wildlife habitat and wildlife. Purposeful provision of wildlife needs on evermore intensively managed lands will, almost inevitably, exact significant opportunity costs (Thomas 1984). Costs that exceed benefits produce terrible cost-benefit ratios.

Wayne Sandfort, President of the Colorado Wildlife Federation, told me that a new study indicates that wildlife in Colorado generates economic activity of over \$1 billion per year. That's good news. I believe it. The bad news is that it won't make much difference to the landowners who control the habitat and hold the ultimate key to wildlife welfare. For wildlife to matter to many of them, enough real dollars must accrue to landholders to produce not only a positive cost-benefit ratio but a better cost-benefit ratio than other alternatives.

The effective wildlife biologist understands (1) economics, (2) the role of economic considerations in decision making, (3) the capitalistic nature of the economy, and (4) increasing expectations that government assets produce revenue.

However, we should remain cognizant of Leopold's (1949:225) exhortation that "...The fallacy the economic determinists have tied around our collective neck, and which we now need to cast off, is the belief that economics determines all land-use..." But, while knowing and believing that, biologists must be prepared to live and work in an atmosphere permeated by economic determinism.

Communication Skills

Biologists cannot be truly effective without good communication skills. That includes being able to write in both technical and popular style, converse intelligibly, and speak persuasively to groups.

In my youth, I had a vision of a biologist. He looked remarkably like Mark Trail, pipe clenched in teeth, paddling his canoe (with a big dog in the front) into the glowing sunset. Such paragons would commune with nature, avoid people and their works, be unhurried and at peace. Obviously, they would not be bothered by jangling telephones, budgets, work plans, study plans, project proposals, reports, publications, speeches, reviews, inspections, computers, video tapes, politicians, bosses, commissioners, supervisors, editors, personnel problems, statisticians, computer operators, irate citizens, and little old ladies in tennis shoes. I grew up, became a biologist, and found out that dreams don't always turn out right.

I suspect that the last thing any wildlife biologist ever wanted to be was a salesman. Then, I looked up one day and discovered that biologists, the really effective ones, were also salesmen--for wildlife and for programs, for proposals that benefited wildlife.

We stand our watch during a critical time for wildlife in our country and the world. How wildlife fares in the long run probably does not depend on a census perfectly done or a new piece of information on elk behavior or whether a hunting season runs for 7 to 10 days. It does depend, however, on effective communication between biologists and others interested in wildlife and natural resources and the general public.

We have an obligation, beyond employment, to be effective. To be effective we must communicate well and often. There is no lack of information or training on how to improve one's communication skills. The key is to try--over and over.

I recently saw a remarkably successful habitat management procedure and said to the originator, "This is great, why don't you publish it:" "I sent an article in once and they turned me down. I'll never submit another," the biologist replied. "Well, why don't you present it at the chapter meeting?" I tried again. "It's a lot of trouble," the biologist came back. "They probably wouldn't accept it and, besides, I don't like to talk in front of people."

I didn't know whether to have a temper fit or to cry. That biologist's attitude was all too typical. That biologist refused to be as effective as possible. Worse than that, there was refusal to even try. That biologist forgot what it was all about. A fragile ego may have been protected but others were deprived of needed knowledge, the biologist was robbed of being more effective, and less than the best was done for wildlife. That biologist let "them" take charge. Our profession can't afford that. More important, wildlife can't afford it.

Philosophical Positions--Contracts and Conflicts

Schizophrenia comes from combining two Greek words. <u>Schizo</u> (meaning split) and <u>phrenia</u> (meaning mind). Therefore, schizophrenia describes a person with a split mind torn between two views of the world, two views of duty and obligation.

I don't think biologists, as a group, are mentally ill—a bit strange perhaps, but not mentally ill. However, many (if not most of us) have a split mind about what we are and what we do. The dilemma is manifested in one of the names we give our profession—wildlife management. We have lived with the name so long that we fail to see that the words are diametrically opposed in meaning.

"Wild" means "occurring, growing or living in a natural state, not domesticated, cultivated or tamed; a natural unrestrained life or state" (Morris 1976:1464). Management means "the act of managing, handling or controlling something." To manage is "to exert control over, make submissive to one's authority, discipline or persuasion" (Morris 1976:792).

I see signs that this does not quite make sense to many wildlife biologists and it shows up in job dissatisfaction and in emotional distress. For example, consider the role of biologists in the management of our national forests. First and foremost, the wildlife biologist is dedicated to welfare of wildlife and to all that the term implies. Second, the wildlife biologist may be charged with helping convert wilderness into managed forests.

The managed forest is by definition, and in reality, a comparatively tame and controlled place compared to wilderness. The wildlife in the managed forest is, a product of a controlled environment. Therefore, the wildlife biologist, philosophically dedicated to the preservation of wildlife or wildness, participates in the purposeful dilution of wildness in order to preserve or produce wildlife in a managed environment. Being a participant in the process of producing wildlife from increasingly tame environments forces many wildlife biologists face to face with a paradox that leaves them confused and unsettled.

I suspect that there are very different philosophies between classes of natural resource management professionals concerning how man relates to the natural world. Remember, there are no inherent rights or wrongs in these philosophical positions—there merely are. Some groups tend to be anthropocentric in philosophical positions and take a utilitarian view of the forest—i.e., the forest exists for and is to be managed to satisfy people's needs (Devall and Sessions 1984).

Wildlife biologists, I dare say, are largely biocentric in philosophical positions—ie., they view humans as part of nature, and ascribe to the admonition "...organic wholeness, love that, not man apart from that..." (Sessions 1977:450).

When biocentrists are employed by management agencies that are essentially (by law and tradition) anthropocentric in outlook and mission, there is apt to be friction (Devall and Session 1984). And it is unlikely that anyone involved will recognize the problem for what it is—a basic difference in philosophy.

As an aside, I am bemused by wildlife biologists who have an anthropocentric view of handling populations of game animals and predators and a biocentric view of forest and range management. That just demonstrates that self-examination of basic philosophies and prejudices can be revealing.

The system for dealing with the management of public lands that has evolved in the United States has, in far too many cases, produced an adversarial relationship between, as an example, wildlife biologists and foresters dealing with management of public lands. In the formalized system that now exists, the land-use planning and allocation procedure can be referred to as advocacy planning. In advocacy planning, each interest group is expected to strive for satisfaction of its own welfare. As compromise is inevitable as the culmination of such a process, each interest group feels that it has lost--a little or a lot. By this time, relationships are apt to be just a bit strained. Managers are given "targets" for various products from the forest. The best defined, and the driving mechanism, for the overall process is timber harvest followed by stand regeneration. Wildlife targets are much less easy to define and quantify. As a result, objectives of wildlife have usually entered into the equation as constraints. Now, a constraint is a miserable thing to be: "A constraining agency or force; a repression of one's own feelings, behavior or action" (Morris 1976:286). How would you like to be known as a constraint? Yet, there is a tendency for wildlife considerations and wildlife biologists to become identified as constraints in the management of forest lands. So long as wildlife considerations operate in the management arena as constraints, there will be intensifying conflict. Wildlife must be considered as a desired product--not as a constraint--to receive adequate attention (Thomas 1985a).

When wildlife biologists become identified as constraints or obstructionists or both, effectiveness is compromised. We need to recognize our split minds and deal with the problem. Our job is to provide required information on wildlife and its responses to management action. We can and should be advocates for wildlife. But, we should recognize that when the decision is made professionals pull together to get the objectives accomplished.

In other words, wildlife biologists that have a biocentric philosophy should recognize that they work for a land management agency or state game and fish department, are facing an inherently anthropocentric orientation in the work place. Merely recognizing the situation can help biologists be more effective. At least it can help us understand and deal with those schizophrenic hot flashes that come in the night.

Getting Your Head Straight

Sometimes it seems to me that wildlife biologists, as a group, are "losers". We lose a lot of the time, we expect to lose, and when we lose we revel in the loss. I'm tired of that. Winning is better than losing; winning part is better than losing all; expecting to win is uplifting; and hating to lose is the mark of a champion. Too many of us have come to personify Thoreau's (1950:7) "...mass of men [who] lead lives of quiet desperation."

If true, this must be changed, for the effective professional is, by definition, a winner. By a winner, I don't mean (necessarily) a quick climb up some bureaucratic ladder or making money. I mean being effective for wildlife and sound, holistic management of renewable natural resources.

We need to remember that there are few total victories for those interested in wildlife and none that are final. We have to win for wildlife what we can, where we can, how we can and be proud, rejuvenated, and encouraged by each success.

I watched a situation where several biologists helped consider the fate of a pristine water-shed on a national forest. They looked at the fish and wildlife situation carefully and professionally, mustered the available information, and concluded and recommended that the area be included in an adjoining wilderness area. Considering additional pertinent information, the decision-makers decided otherwise.

The watershed was allocated to be managed forest and alternatives were considered. The biologist's first recommendation was for "back country" status. Again, the decision was otherwise. An alternative was selected, however, in which fish and wildlife received high emphasis. The biologists were ready with recommendations as how to accomplish the goals. Most important perhaps, they learned something at every step about how to play the game and to be more effective next time, and they came away determined to do a better job next time. So, we must think of ourselves as winners. We must always focus on next time -- next time. Yesterday's defeats and victories are, indeed, yesterday's. Next time--always next time. We must believe we are winners in a good and necessary cause. For, I believe, people become what they believe in their hearts.

Winners or losers? They played hard, fair, truthfully, ethically, and effectively in the only game in town. In the end, wildlife was well served by their efforts. I say they were winners.

Only when we do less than our best, are less than truthful, or are less effective than we can be, are we losers in the professional sense.

Attitude is crucial to effectiveness and the professional is obligated to be effective.

Doing the Best You Can With What You've Got

A few years ago, some U. S. Forest Service supervisors came to me and explained that most of the Blue Mountains of Oregon and Washington was going to be brought under management (that means roaded and logged). They had concerns about Rocky Mountain elk and wanted me to put together a team to develop a way to which they could judge habitat effectiveness for elk in evaluating various management schemes.

I explained that there was obviously insufficient information of adequate quality to allow the development of such a management tool. Further, it would be inappropriate for them to proceed until such adequate information was forthcoming. And, there were a number of other species (378 more or less) on which similar data would be required before management action could be appropriately instituted.

One supervisor scowled, one blinked, and the other laughed. Soon, they were all laughing-hard.

I explained it was not my intention to be amusing. Then came the punch line. "The process will take place. If you have anything to say we want to hear it and we will pay attention. If you don't have anything to say, beyond 'we don't know enough', then stand aside." It was time to put-up or shut-up.

We put together a team and did the best we could with the information available and our experience. The supervisors got their criteria for judgment and evaluation. And, in spite of being dissatisfied with what we knew, we believed that elk were going to be better off than if we had said nothing. Seven years worth of research later, I'm pleased to say that we were essentially correct.

Perhaps the greatest challenge that faces professionals engaged in wildlife management is the organization and synthesis of information on wildlife into a form that can be applied to management and evaluation. To say "we don't know enough" is to take refuge behind a half-truth and ignore the fact that decisions will be made regardless of the information available. In my opinion, it is far better to examine available knowledge, synthesize it, and combine it with expert opinion on how the system operates, and make predictions about the consequences of alternative management actions. What results are working hypotheses—places to start, ways to derive tentative responses to questions to which there are no certain answers (Thomas 1979). Ecology is made up of successive approximations—there is no final truth (Franklin 1985).

Yet, those who produce, and certainly those who apply, models in natural resource management need to hear a whisper saying over and over: "You are dealing only with the essence of what is--nature seen through a glass darkly. It is not real--it is but the shimmering image of the moment that will change as the viewer's perspective and need changes" (Thomas 1985b).

Do the best you can with what you've got. But, remember to tell the truth, all the truth, all the time, about where the information came from, about the assumptions involved, and about the level of confidence that you have in the product. Credibility requires that, and credibility is a prerequisite to effectiveness.

Appearance--Seeing is Critical to Believing

Some time ago, during his anti-establishment period, a colleague had an occasion to deliver what could have been a very important briefing to some agency heads. After the briefing, one of them quietly said, "I suspect that what you said was important. But, frankly, I had a hard time hearing you because of the way you look."

He grumbled and rationalized, but came to the inescapable conclusion that his appearance had detracted from his effectiveness. A too rare chance to really do something for wildlife had been lost. He never lost another chance for that reason.

Too often, we let the dress code of our particular subculture get in the way of our effectiveness to do something for wildlife and for society. Too often people can't hear us because of how we dress or act or talk.

Dress and behavior should be suitable to the occasion. There is a time for field clothes and a time for suits--not because of anything so mundane as professional image but because of necessity to enhance effectiveness. Professionals do have the obligation to be effective.

ETHICS

The Wildlife Society has a code of ethics and standards for professional conduct and standards of behavior for Certified Wildlife Biologists (The Wildl. Soc. 1978). They are written in flowery words but they are good words for professional wildlife biologists to live by.

In brief they say:

- 1. Tell folks that your prime responsibility is to the public interest, the wildlife resource, and the environment.
- 2. Don't perform professional services for anybody whose intent is to damage the wildlife resource.
- 3. Work hard.
- 4. Don't agree to perform tasks for which you aren't qualified.
- 5. Don't reveal confidential information about your employer's business.
- 6. Don't brag about your abilities.
- 7. Don't take or offer bribes.
- 8. Uphold the dignity and integrity of your profession.
- 9. Respect the competence, judgment, and authority of other professionals.

Implied, but not specifically mentioned, is the requirement to simply tell the truth. More and more lately, I seem to find myself giving advice to troubled colleagues to tell the truth. It seems so simple. Yet, it can be so liberating. We live in an age of euphemisms, half-truths, obfuscations, double-talk, and double-think. Yet, this atmosphere has closed in on us so gradually, so cloaked in the camouflage of the committee or team report, so justified by the need to get the job done, that we've come to consider such things the norm. Tell the truth, all the truth, all the time. It's the professional thing, the right thing, and the healthy thing to do. The truth can and shall, indeed, set you free (John 8:32).

and figure in the testing page.

CONSTRUCTOR THE PROPERTY

THE PROFESSIONAL SOCIETY--THE PROFESSIONAL'S PROP

Some definitions of a profession indicate that the members are organized into an association, or society, responsible for maintaining and improving the quality of the service. Other definitions say that a profession is defined by the existence of a body of knowledge or literature.

The Wildlife Society serves that role for wildlife biologists. Many of us belong to other professional societies as well. There is no conflict and much benefit in that.

The Wildlife Society gives voice and form and definition to our profession. I cannot imagine our profession existing without it. It has served me well for the 30 years I've been a member and, in turn, I've served the Society.

Yet, probably more wildlife biologists do not belong to the Wildlife Society than do. But that's the norm for the natural resource management professions. I don't worry about that anymore. Others have their standards and interests, their criteria for judging their professionalism, and I have mine. The Wildlife Society is my professional society—pure and simple. It has never occurred to me to ask "what does The Wildlife Society do for me?" The opposite tack always seemed more appropriate—"What could I do for The Wildlife Society, for the profession, for wildlife." And truly, service has been its own reward yielding benefits far in excess of my contributions in time and money.

When President of The Wildlife Society, I assumed that there was something wrong with the Society. When it was discovered and corrected, the biologists outside the fold would be appealed to join and serve, and all would be well. I no longer believe that.

There are those who need The Wildlife Society, who believe in its goals and who are willing to support it with money and service. There are those who don't. Just maybe, the problem does not lie primarily with The Wildlife Society.

That doesn't mean I always agree with the Society's decisions. But, I have little respect for those who, upon losing an argument, withdraw support from the Society. We should be bigger than that—the stakes are too high and we are too few to make such action laudable. In short, professional involvement is a required commitment beyond employment for my idea of a professional.

SUMMARY

Those are my ideas of what commitments beyond employment are required for wildlife biologists to be professionals. I started this talk with an observation about vocations, about how precious and how rare it is to have a vocation instead of a job. More and more of our colleagues—disappointed by disparagement, discouraged by deemphasis on environmental concerns, beaten down by budget cuts on top of budget cuts—are saying things like, "That's it, I'm putting in the hours I have to and no more" or, basically, "To hell with it."

I've felt the temptation-but it is wrong. Don't let other people or circumstances make your vocation into a job. All that you have can be stripped away in a twinkling--wealth, possessions, status, job, loved ones. The only thing that belongs to you forever is, unless you give it up, what is in your head and in your heart. Hang on tight. A sense of vocation is a truly rare and precious possession. It is what, down deep, spells the difference between professionals and clock punchers.

Cervante's character Don Quixote, in his madness, saw things differently and, strangely enough, more clearly than other men. He recognized that the quest, the striving was everything. In the mustcal version of the story, The Man from La Mancha, he dared to dream the impossible dream. We pursue what some say is an impossible dream of maintaining wildlife as a continuing part of our nation's and the world's fabric. Impossible? It is we who bear much of the responsibility for the answer to that question.

For those interested in wildlife management, indeed in the management of natural resources, these are confusing and often discouraging times. Natural resource management professionals have great responsibilities to keep the faith and serve steadfastly as advocates and agents of good stewardship and management. These are indeed interesting times, a time of testing. It is useless to look back for the good old days—they are gone. It is pointless to look around for others to lead—they aren't there. For better or worse, we're it.

There are, indeed, interesting times, exciting times, critical times. When the history of conservation in the United States in the 20th century is written, I believe this period will loom as large, for good or ill, as the times of Pinchot and Roosevelt. We few, we band of brothers, are privileged indeed to stand this watch.

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