The Professional in Endangered Species Conservation: An Introduction to Standpoint Clarification

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Abstract

As society itself changes, the work and role of professionals who carry out endangered species conservation are changing. Knowing about the range of standpoints a professional can assume in conservation is one way to enhance effectiveness. Professionals may assume a variety of standpoints, depending on how they see the recovery process and their own role in it. Recovery may be viewed as a biological-technical task or a multifaceted task with biological-technical and *social dimensions. An endangered species case illustrates how one professional changed her standpoint from a "conventional" one to "policy oriented" professionalism. These two forms of professionalism are compared.*

Introduction

Most endangered species conservation work is carried out by professional biologists and land managers. Professionals labor to meet goals as laid out in the Endangered Species Act and in other public policies. For our purposes, a professional is a person with specialized education who participates in a community with standards of practice and shows a commitment to public service (Clark 1997a). The work of a professional and their role in society have changed dramatically in recent years, and both are expected to change even more in the foreseeable future. Today's work settings are as diverse as the species and habitat conservation challenges faced by a professional. The days when professional biologists could go to the field and work in solitude at their own pace are long gone. Among recent changes are partnerships of various kinds that aid the work of professionals and make it more difficult. As a result, professionals should always be on the lookout to improve their performance. Being explicitly aware of the standpoint a professional assumes in endangered species work or in other conservation efforts is one way to improve performance, and it can significantly aid in the recovery of a species. In this paper we (1) examine the notion of standpoint clarification for a professional, (2) look at two ways to conceptualize the recovery process and examine models of professionalism, (3) give an example of these issues, and (4) offer recommendations for improving professional standpoint clarification and performance.

Standpoint clarification and the professional

Regardless of the professional work to be done in endangered species conservation or any other conservation effort, managing oneself constructively is important. Two dramatically different professional standpoints are well-illustrated in companion articles on the controversy over elk management in Yellowstone National Park (see Bugle 1998). Many endangered species cases show diverse standpoints among participants, why it happened, its significance, and what should happen in the future. Knowing about one's own behavior and role in endangered species recovery requires knowing about the biological challenge (e.g., the species requirements) and the organizational environment (e.g., what the boss wants and will permit), and it also requires knowing about oneself. All too often professionals assume, perhaps unconsciously, that they know what they are doing and why and that other people will see and appreciate their good works. Clarifying one's standpoint relative to the endangered species recovery challenge *and* other participants is just as important to achieving conservation goals as knowing that the population status of a threatened species is an important variable. Being clear about one's standpoint can aid successful teamwork and successful conservation. Being unclear can lead to conflict and disaster.

Professionals must clarify their standpoints to themselves and those with whom they share working relationships so they can most effectively participate in recovery efforts. They can be either participants in or observers of the recovery process, depending on their level of involvement and

how they perceive themselves in the process. They can be more or less aware of both themselves and others, depending on how self-reflective and observant they are (Schon 1983). To be as effective as possible in endangered species recovery, professionals must be clear in their standpoint–how they fit into the process–and seek to avoid biases. This is possible only by being self-aware and using that knowledge of self in professional judgment and interpersonal relations. Most individuals have at one time or another analyzed their actions and role in interpersonal relationships, whether with a spouse, partner, parent, sibling, or friend. We do this in order to know where we stand with someone concerning expectations, demands, trust, and many other aspects of relationships. This self-analysis is at the heart of clarifying one's standpoint, and the process is no different in a professional setting than in a personal relationship. All people have biases as a result of experience, personality, interest, and education, among other things. Learning about one's own standpoint and the perspectives of others is not easy, but it is essential to effective professional practice. Over time, as professionals gain experience, they improve understanding of self and others. To reach their potential for effectiveness in either technical work or in leadership, they must be able to look at and understand themselves and others involved in or interested in the species and its conservation.

Two views of the recovery process

One aspect of professional standpoint is viewing or conceptualizing just what the recovery process is. There are many different ways to understand the endangered species recovery process. Depending on how the process is understood determines how a professional might act, as well as how other people involved may respond. Clark (1996) describes two views that professionals may take of the recovery process.

The first view sees the recovery process largely as a technical task requiring that a professional be given a relatively free hand to formulate the challenge and address it. The professional is guided by the scientific method and adheres to the view of technical rationality (Schon 1983). The major constraint perceived by a traditional professional is the lack of scientific information about the species and its habitat, lack of funding, and political obstacles (e.g., public opinion, politicians, developers), all outside the program. Examples of this standpoint abound, and it is perhaps the dominant view in endangered species recovery (e.g., McFarlane 1992; Butler and Merton 1992). In accordance with this view, species recovery is achieved by carrying out appropriate studies, filling in the missing biological knowledge, ascertaining the species' management implications, implementing the chosen management actions, and otherwise maximizing money flows into the program and minimizing external political interference. Professionals who subscribe to this view tend to see themselves as scientists carrying out "good science." They believe they are agents of objective, value-neutral science and are often relatively unaware or inattentive of the social matrix within which they work. Despite their skills in scientific methods, these professionals are little skilled in social processes, decision process analysis, or team participation. This view is called a "science-based" approach to species recovery.

The second view sees recovery as a multifaceted task with biological-technical and social dimensions. The professional is guided by a problem-oriented, contextual outlook and diverse methods, including traditional biological scientific approaches, as well as diverse social science methods and qualitative and integrative methods. This view is partly described by Schon (1983) and called "reflective practice" and more fully described by Lasswell (1971), Clark et al. (1992), and Clark (1992) and labeled "policy-oriented" professionalism. This conceptualization requires a broader, genuinely interdisciplinary approach and professional skills that the technical rationalist does not know about or use. In this view, the major constraint perceived is lack of effective social processes that would integrate values and knowledge for successful conservation. Examples of this view are less evident in the literature (e.g., Kellert 1985, Clark 1989, Miller et al. 1996). From this view, the way to achieve recovery is to simultaneously and explicitly address socioeconomic, organizational, and political as well as biological dimensions of recovery. This is both a methodological challenge and a challenge to the ability of professionals to integrate often disparate fields of knowledge. This approach explicitly requires that professionals develop awareness of their roles in the social process of endangered species recovery. This "practice-based" approach encourages people to observe what actually works, both technically and socially, and apply experience and lessons successfully.

We believe the second view is the more practical of the two. Professionals, other participants, and observers may use one or the other without being fully aware of the assumptions and approaches that they bring to the recovery process. In turn, these lead to differences in expectations, demands, and actions by professionals and others involved in the conservation effort, which may lead to miscommunication, conflict, and possibly failure if these viewpoints are not

Table 1. Two models or standpoints of professional problem solving in endangered species (from Pimbert and Pretty 1995; Clark 1997a).

Conventional Professionalism	Policy-Oriented Professionalism
Technological rationality	Reflective practice
Scientific method is singular, reduction istic, and positivistic (cause and effect, prediction)	Scientific method is holistic and post-positivistic (human freedom, empirical, systematic)
Strong natural science biases	Mix of natural and social sciences
Professional categories and perceptions are central	Local categories or contextuality is central to problem solving
Professionals know what they want and follow a pre-specified plan or project design	Professionals do not know where projects will lead so work is an open learning process
Information and results are extracted from controlled situations	Understanding and focus emerge from interaction with context
Problem solving is like a blueprint	Problem solving is like a process
Use problem-blind, acontextual outlook, and disciplinary methods	Use problem-oriented, contextual outlook, and integrative methods
Assumption of single, tangible reality reality	Assumption of multiple realities that are partially socially constructed
Professionals control problem solving and clients	Professionals enable and empower people in close dialogue about problem solving in context
Often work alone with single disciplinary focus	Work in groups with an interdisciplinary focus
Careers are inward and upward	Careers are outward and downward
High-level professionals loose touch with changing local realities	Professionals stay in touch with action at all levels

clarified and differences addressed. These two views of endangered species conservation are based on two very different models of professionalism, as contrasted in Table 1. These show dramatically different assumptions, approaches, and consequences.

A case: An endangered species biologists "situates" herself

This case is about a professional who started off with the first view of species conservation and rapidly shifted to the second conceptualization as a result of her direct experiences (see Bentrupperbaumer 1998). This professional studied the endangered cassowary (*Casuarius casuarius*). This large, forest-dwelling, flightless bird inhabits wet tropical regions of northern Queensland, Australia. In a section called "situating the author," Bentrupperbaumer (1998) explains why she changed her standpoint in her Ph.D. thesis. Her story is an interesting one, but not atypical of endangered species professionals. At the heart of her standpoint was that she hoped to contribute to preventing the extinction of a species even in a modest way. And as a result of her experiences, she indicated that she left "normal" biology behind and came to have a broad interest in ecology, environmental psychology, and environmental management.

Over several years she collected data on the bird and its habitat. Even though her work began as a biological study, it soon progressed into conservation and management when the bird's forest habitat began to be logged. She came to realize that conserving this magnificent bird would require overcoming the "ineffectual" way in which the recovery effort at the time was unfolding. Several incidents propelled her into a fuller appreciation of the second view described above. She soon found that "despite the harsh and demanding physical and climatic conditions of the field, the actual biological component of the field work presented the least difficulties. Cassowary 'politics' inevitably came to the fore, on many occasions threatening to terminate the project." Denials of access by private landowners halfway through her study and attempts by local community conservation organization to terminate the "human population study" component of the research are two examples of these politics.

The first incident resulting in a significant change in her standpoint was a response by the major landowner, who became concerned about the possible implications her results would have on his property's future. The state government was at the time preparing nature conservation legislation. This private property completely land-locked the northern boundary of the study site, a 319 ha World Heritage area listed as a National Park. The other boundaries included the sea and a mangrove river. This property had been described as critical habitat for cassowaries previously. In addition to

Table 2. Questions professionals should ask themselves to clarify their standpoints (after Willard 1998, personal communication).

(1) What roles are you and other people engaged in while working in the recovery effort: scientist, technician, manager, student, teacher, advocate, advisor, reporter, decision maker, scholar, facilitator, concerned citizen, or others?
(2) What problem solving tasks do you carry out when performing your roles: clarifying goals, determining historical trends, analyzing conditions, projecting trends, and inventing and evaluating alternatives? [These tasks are described by Wallace and Clark (In press), forthcoming in Endangered Species Update.]
(3) What factors shape how you carry out your tasks and roles: culture, class, interest, personality, and previous experience?
(4) What conditioning factors shape your personal and professional "approach" in general and in reference to any particular conservation case? Which approaches or roles are you predisposed toward or against, and how are you predisposed to conduct your professional work from each?
(5) How does your approach shape how you carry out the intellectual tasks associated with your roles? For example, what is the impact of your "reflective approach" on the goals you clarify and how you specify them? the trends you identify and describe? the conditions you analyze and how you analyze them? the projections you make and how you make them? the alternatives you invent, evaluate, and select?

denying her access to the study site, the landowner cleared extensive areas of his property, preempting the potential restrictive status of a formal critical cassowary habitat classification. The second incident that resulted in a significant change in her standpoint was the negative response of the local conservation organization when she "disengaged" herself from it. She worked with this group at the request of the then State Minister of the Environment and left the organization to begin her Ph.D. work.

Because of these two incidents and others, she decided to expand her thesis beyond cassowary biology to include the human dimension. Issues about who dominated the cassowary conservation issue arose, and there was a perceived loss of control by "locals" over a study being undertaken under the auspices of a distant university and a federal government management agency. It was perceived as a threat to the expertise and credibility of the conservation organization. One of the most important issues was the local conservation organization's efforts to "undermine the credibility of myself and the value and relevance of the research project were both instructive and sobering, as well as personally very difficult to accept." This history, especially with the community conservation group, highlighted the complex and dynamic role of the professional in endangered species conservation and the need to clarify just what standpoint a professional like herself should take in such a situation. She concluded by noting that the "emotionally charged and politically volatile community environment underscores the difficulties of 'field work' with human communities."

These incidents and others motivated her to move on to other knowledge areas beyond biology and survey social science literature for guidance. As she noted, this "presented many challenges for an ordinary biologist like myself." The social sciences gave her important concepts and methods to understand the hard conservation experience she had gained and how to tackle future work practically. She reported that there were "continuous tensions between my proceeding, being fully aware of the limitations and dangers of simplification, and not proceeding, thereby giving in to this conflict and continuing on 'as normal' with a biological perspective only." She expanded her research and gathered social science data on the human community in the region and interrelated them with the biological data set. She said she sought to "heed the current call for multidisciplinary research ... and have taken courage from the knowledge that more biologists, ecologists, psychologists, and other environmental scientists seem willing to cross disciplinary boundaries and levels of organization in an endeavor to contribute to solving the extinction crises." Through all of this, she sought a "coherent, holistic picture relevant to endangered species recovery." But it was not without difficulties. Her work evolved into a professional approach that integrated a number of disciplines, focused on understanding and aiding endangered species conservation. Not only did she add to cassowary conservation, but ultimately this effort significantly clarified her standpoint to herself.

This professional career is developing toward a fully mature, policy-oriented standpoint. The evolution of a traditional professional career into a policy-oriented one was first described by Lasswell (1971), and Bentrupperbaumer's account fits the profile. The conservation literature now contains similar descriptions of policy-oriented professionals and benefits (e.g., see "Conserving biodiversity in the real world: Professional practice using a policy orientation," (Clark et al. 1992) and "Practicing natural resource management with a policy orientation" (Clark 1992). More recently, a policy-ori-

ented approach to conservation biology was described by Clark (1977a). Bentrupperbaumer's professional transformation is one example of the kind of change needed broadly in conservation professionalism (see Schon 1983, Sullivan 1995).

Conventional professionalism and the policy-oriented professional

Bentrupperbaumer shifted her view of endangered species recovery from a conventional to a more holistic one (Table 1). As a result, she changed from understanding her role and herself in a 'conventional' sense toward a more comprehensive, policy-oriented understanding. Clarifying standpoint means finding out which kind of professional you are, which kind you want to be, and why. The conceptual tools a professional possesses include a way of seeing oneself, other people, the conservation challenge, and communication styles (see Clark and Reading 1994).

To clarify standpoint, we recommend that professionals start by asking themselves questions about their own professional roles, tasks, shaping factors, and orientation that they take or assume. Table 2 offers questions about these variables that professionals should ask themselves continuously over a career . Asking and answering these questions lead to "reflective" practice and can lead to policy-oriented professionalism, when combined with skilled use of a genuine interdisciplinary problem solving method (see Clark 1997b). Restructuring professionalism toward policy-oriented practice requires a substantial commitment to learning by professionals, universities, and other organizations (Clark 1997a). Training and updating training can take place in universities and professional schools, agency workshops, and at the individual level. If organized policy-oriented education is not available, then the individual is left to his or her own devices to improve problem solving.

Conclusion

Clarifying one's standpoint is a necessary first step toward gaining a better understanding of the human social process associated with endangered species conservation (Clark and Wallace 1998). Understanding of personal values and interests in the context of a larger social and organizational whole, in this case endangered species recovery programs, only helps a professional to raise awareness and eventually master many of the problems inherent in complex programs that transcend social and technical-biological realms.

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