Feature Article:

Professional Excellence in Wildlife And Natural Resource Organizations

Tim W. Clark

The dual themes of personal and professional integrity and objectivity propounded in letters to the editor of *The Wildlifer* by Maurice Hornocker in 1982 and R.B. Finley, Jr.,* in 1983 are still timely, as is the more recent essay by M. Frome in *Defenders*, which rhetorically asked: "Are biologists afraid to speak out?"

All people in our professions want the two professional norms of *integrity*—meaning sound principles, honesty and sincerity—and objectivity—meaning without bias or prejudice—to prevail. Evidence that they do not prevail, for whatever reasons, prompted Hornocker's and Finley's letters and Frome's essay and is apparent in J.J. Kennedy's and J.A. Mincolla's 1985 study of USDA Forest Service professional land managers and wildlife biologists. In this article, I want to introduce an organizational perspective that may be new to some and suggest that the structure and functioning of complex organizations involved with wildlife may enhance or inhibit our ability to act with professional integrity and objectivity.

The writers of the two *Wildlifer* letters have a number of things in common: (1) both say that these two critical professional ideals—integrity and objectivity—either are in short supply or are somehow short-circuited far too often; (2) both expound on some of the difficulties facing wildlifers in bureaucratic organizations; (3) both use threatened/endangered species as examples; and (4) both have Ph.D.'s, university affiliations and extensive experience working in bureaucracies and in complex, interorganizational, coalitional settings. All of these elements relate to the role of research and research professionals in bureaucracies.

*See Editor's Note, next page.

Consideration of these two themes largely ignores the technical and scientific content of wildlife and natural resource work and focuses on the sociological and organizational environments in which wildlifers practice. Among these sociological factors are cultures and ideologies (value sets and cognitive perspectives), attitudes, beliefs, formal and informal organizational structures, reward and incentive systems, information flows and sites of decision-making. Worrel (1970) suggested that natural resource personnel need to explore the social sciences for tools to better understand their own work-a-day world. I would like to explore briefly the dominant organizational pattern of our working world—bureaucracies—and the role of bureaucracies in promoting or inhibiting professional integrity and objectivity in the wildlife arena and in allied fields.

BARRIERS TO INTEGRITY AND OBJECTIVITY

The structure and function of organizations determine how well professionals meet individual and organizational goals and policy directives. Kerr (1984) defines the three major obstacles to integrity as governmental bureaucracies, the professions and our research systems. These hurdles dictate how we determine what knowledge is and how we subsequently formulate acceptable ways to use knowledge. Incongruous as it may seem, those very structures designed to enhance the use of knowledge may be, instead, barriers to integrity. Galbraith (1977) notes that an "organizational bottleneck" is a major factor that limits how effectively and efficiently individuals relate within and between organizations and how well they can solve problems. There are numerous cases, cited in the organization and management literature, of situations where ineffectiveness is directly attributable to the "wrong organiza-

tional structure" or the wrong culture or ideology (Byars 1984:229).

Thus, the way we organize ourselves can either encourage or stifle professionalism. Cooperative behavior, where integrity and objectivity thrive, requires more than an individual sense of good will. That good will must be nurtured by appropriate organizational designs, supporting cultures and ideologies and reward and incentive systems. Organizational design is the neglected dimension of wildlife work. Hornocker, Finley and Frome attest to this.

In a short article prepared for the U.S. Fish and Wildlife Service, F.G. Evenden in 1976 noted that "in these times of planned and unplanned confusion, distrust and general grubbing for influence and power, it is hard for the professional to keep a clear head and even more difficult to follow a true course." Talking about professional problems in terms of personalities and conflict may be personally cathartic, but it detracts from productive resolution of the problem. Gordon (1984) and Galbraith (1977) give useful approaches to the type of problem solving that employs *systems views of organization designs* to understand the range of individual, group and organizational issues which may be at work in any given case.

According to Wilson (1980), complex organizations typically are composed of people in three major categories. *Professionals* relate to norms and styles set by others in the same occupation and norms generally cut laterally across organizational boundaries. Rewards to professionals come from the independent profession and not from the employing bureaucracy. The professional role is usually

Editor's Note: Because some knowledge of the contents of the two letters mentioned at this point by the author is central to a clear understanding of his article, the letters are briefly summarized herewith for the reader's information. In his 1982 letter to *The Wildlifer*, Maurice Hornocker, leader of the Idaho Cooperative Wildlife Research Unit, of the University of Idaho, cited the long-standing Yellowstone National Park grizzly bear controversy in which the research team of John and Frank Craighead found that the bears were in trouble and that drastic measures were needed to ensure their survival. This was denied by the National Park Service, which said the bears were plentiful and surviving well—a view that prevailed until August 1982 when the chairman of the Interagency Grizzly Bear Steering Committee declared the park's grizzly population had seriously declined and that the bears were in danger. In his letter, Hornocker said the committee chairman's statement vindicated the Craigheads and praised them for standing on principle and for their personal integrity.

"The Craigheads stuck to what they believed in," Hornocker said, "and they paid a very dear price. Their research was stopped. A large segment of the profession ostracized them. They were criticized by many. Yet, on principle they endured and never faltered in their position. . . .

"Many of the lasting contributions in biology and wildlife management have been made by individuals willing to endure criticism and hardship for what they believed in. . . . Yet most of us are employed by public agencies in which 'going along' is rewarded far more frequently than any stand on principle. This is a sorry state of affairs."

In his 1983 letter to *The Wildlifer*, Robert B. Finley, Jr., a research associate of the University of Colorado Museum, took a similar position.

"I heartily endorse Hornocker's plea for recognition of the importance of personal integrity and the courage to take a stand on principle as exemplified by the efforts of John and Frank Craighead in the face of severe pressures," he wrote.

"I was involved in grizzly bear research 'planning' from 1972 to 1974 as a section chief in the Denver Wildlife Research Center when the Interagency Grizzly Bear Study Team was established by direction of the Assistant Secretary of the Interior.

"A capable biologist in my section, Bob Phillips, was the Fish and Wildlife Service's member of the team. It quickly became apparent that the team leader was expected to run the team in a way that gave support to the policies of Yellowstone National Park. Views of other team members were overruled or ignored. Phillips was unable to get access to original data on which the National Park Service claims were based. The use of color markers on bears within the park was forbidden, as was the use of telemetry.

"When I wrote to the Park Superintendent attempting to get some loosening of restrictions, Phillips and other dissenting agency biologists on the study team were excluded from working in the Park. In August 1973, I was removed from supervisory responsibility for Phillips, who henceforth took his orders from our Washington office. He was removed from the interagency team in December and a former student of the team leader was hired by the Fish and Wildlife Service the following spring. Thus, the 'Interagency' Study Team was converted to a more accommodating adjunct of Yellowstone National Park."

not the most powerful in organizations. *Careerists* receive rewards largely from inside their employing agency and, hence, define their primary goals and loyalties vertically up the organizational heirarchy and career ladder, maintaining the organization and their position within it. *Politicians* expect their futures to lie in appointed or even elected office outside the agency and, hence, focus on maintaining and expanding career opportunities outside the agency. Yaffee (1982) examined these roles and the conflict among them in endangered species program implementation.

Even though an individual may play two or more roles in his or her daily working life, one is often dominant. It is obvious how people in these three categories within a single organization—each with a different subculture, supporting structure and reward/incentive system—may come in to conflict when they are brought together to work on complex wildlife challenges. Indeed, Hornocker, Finley and Frome noted that integrity and objectivity may not be the dominant values for all organizational roles. Even though the formal goal of an organization may be to conserve wildlife, the informal, operating goals may, in fact, differ among the three subculture groups. Each subculture may perceive a given situation differently and, therefore, define the problem and envision a solution differently (Jones 1970). Professional researchers need flexibility, discretion, autonomy and access to resources to deal creatively and effectively with wildlife problems. Careerists and politicians dealing with the same problem may perceive a need to centralize all decision-making and power and, thus, may view the professional researcher as a threat to that objective (Warwick 1975). Careerists and politicians may apply top-down, coercive control to bring about bureaucratic centralization. Thus, these roles, control systems and incentive/reward systems may conflict directly. The real job of administrators (usually careerists or politicians themselves) is to "bring about coherence among people, organizing mode and strategies" (Galbraith 1977:9)—not an easy task in complex organizations.

The Hornocker and Finley letters are, in part, about a conflict between subcultures. Ph.D.'s and university graduates, in most cases, are socialized into the professional collegiate role (Reskin 1978), but may be resocialized into various organizational cultures and ideologies in their working lives, depending on the type of organization they work for (Kaufman 1959; Charles 1982). Agency pressures to socialize their workers has led to the "conformity theory"—consistent with traditional administrative theory—that agencies use formal and informal practices to ensure "an extremely high degree" of compliance with the agencies' central ideologies and cultural norms. The problems and examples cited by Hornocker and Finley are those confronting research professionals in bureaucracies dominated by administrative careerists/politicians in which opposing organizational subcultures are structurally and operationally antagonistic. The problems of an antagonistic organizational arrangement are even more complex and damaging when several organizations are involved in a coalition, or when research professionals work in one organization and careerist/politician administrators work in another. In the Yellowstone National Park grizzly bear case, for example, John and Frank Craighead controlled many financial and informational resources, while the National Park Service held legal authority. Power is usually unequally distributed in these antagonistic situations and resolution comes from the most powerful organization or subculture, usually by coercive means. This usually leads to further deterioration in working relationships and the alienation—sometimes profound alienation—of professionals. In short, professional integrity and objectivity may be sacrificed when careerists/politicians integrate the various subcultures along rigid bureaucratic lines.

ORGANIZATIONAL CONCEPTS AND TOOLS

We wildlifers are good at applying scientific conceptual tools, such as ecosystem, biotic community and predator-prey concepts, to complex natural resource challenges (Romesburg 1980), but we are deficient at bringing equally productive concepts and tools from sociology, political science and organization and management to bear on these same challenges. We accept and use sociological methods to study public attitudes (e.g., hunting vs. anti-hunting groups) so as to better understand our external working environment and our clientele groups, but we seldom apply those same concepts and tools to ourselves so as to better understand our own behavior and organizations and the working relationships they permit and the values they promote (Twight 1983).

Relevant sociological theory and a record of its successful application in designing and operating appropriate organizational systems exist for other fields outside the natural resource arena. This theory and case record are available to us, too, to understand and solve our own professional problems to the degree that they are organizationally rooted. The popular literature, such as T.J. Peter's and R.H. Waterman Jr.'s 1982 *In Search of Excellence: Lessons from America's Best-run Companies*, recognizes and discusses these themes.

I have met resistance in explaining organizational systems concepts to colleagues. Each wildlifer wants to argue that his own project is unique, that the eggheads, vicious manipulators, company "yes" men, etc., he has to deal with are without peer and that nothing from the sociological or organizational literature, with its analytical case histories and theory, can be of practical value to him or her. Organizational designers, policy analysts and organizational sociologists would strongly disagree. Extensive

examination of organizations reveals common problems, patterns and concerns (Hrebiniak 1978). Perrow (1970:30) noted that many people hold a "human relations" model of organizations, i.e., that organizations are composed of people and, therefore, "people. . .are the source of problems," when, in reality, "visible organizational problems are *exemplified* by the people in the organizations and their relationships with one another." The emphasis is mine.

Based on numerous studies of organizational designs and behavior in the private sector, Galbraith (1977) estimated that only 25-50 percent of the variance in design and behavior is due to unique aspects. This means that 50-75 percent of organizational behavior patterns and problems is common to all or most organizations. These lessons from organization and management can be invaluable to wildlifers and the benefits can extend well beyond those few suggested by Hornocker and Finley. Unfortunately, the "people-are-always-the-problem" view is widely held in the natural resource arena and I suggest that this acts as a barrier to implementing organizational designs with more efficiency, effectiveness and equality. In the corporate world, by contrast, several models of organizations more productive than the traditional bureaucracies used in the public sector have been developed over the last 25 years and are productively in use (Peters and Waterman 1983; Kanter 1983).

Like all the sciences, wildlife biology is practiced in an arena which is becoming increasingly bureaucratic (Weber 1947; Leopold 1978). No matter what your dealings with bureaucracies —whether you work in one as a professional, careerist or politician or consult for one, subvert one, survive in one, study in one, or use one in the interest of another organization—more than a superficial understanding of the nature of the beast is helpful. Bureaucracy is just one organizational type among many, and the role of the professional varies in each type. Despite its positive features, bureaucracy is a dirty word to many people, what with its unpopular image of rigid rules and regulations, impersonality, resistance to change, heirarchy of offices and narrow specialization of personnel. To put it another way, bureaucracy is a trap to hamstring those who want to get things done (Perrow 1979).

In fact, bureaucracies do tend to make routine and to standardize the challenges they confront, avoid or limit risks for themselves and centralize functions, information and control—all in the interest of *internal efficiency*. Unfortunately, internal efficiency does not necessarily accommodate itself to solving problems in the external world. Bureaucracies also tend toward personnel homogeneity ("professional monoculture") partly for internal efficiency and partly through self-selection by applicants. Furthermore, like all organizations, bureaucracies seek to limit both internal and external *uncertainty* by hiring individuals socially mergeable into their own culture or ideology (Kaufman 1959; Leman 1981; Twight 1983).

Professionals, those who subscribe and adhere to the values of their profession, often find the bureaucratic working climate stifling and wanting in integrity and objectivity. Professionals who imagine that "the facts will speak for themselves," guaranteeing them a smooth journey down the career road, are gravely mistaken. Evidence to the contrary is noted by Leopold (1978), Manwell and Baker (1979), Weinstein (1979, in Westrum and Samaha 1984) and numerous others besides Hornocker, Finley and Frome, who commented on the fickleness of the overt reward system within bureaucracies. Note, for example, what happened to the Craigheads, who Hornocker, Finley and Frome claim acted with professional integrity and objectivity.

Weinstein (1979, in Westrum and Samaha 1984:254) notes that "bureaucracies resemble authoritarian states because they do not provide for legitimate and institutionalized opposition." Because most wildlifers today are either employed by or authorized, sanctioned or legitimized by university, state or federal bureaucracies, knowing about complex organizations and how integrity and objectivity are rewarded or stifled is imperative.

ENDANGERED SPECIES AND UNCERTAINTY

Threatened and endangered species provide the highest *uncertainty* and riskiest challenges confronted by both individuals and their organizations (Clark 1985). *Uncertainty* is the difference between what is currently known about how to solve a problem and what is ultimately needed to solve it (Hrebiniak 1978). The Yellowstone grizzly bear program, for example, is rife with uncertainty. The unknowns leave room for substantial differences in perception of what should be done and how, by whom *and for whom* it should be done. As interest differentials solidify among individual actors, roles and organizations, politics, rather than rational analysis, comes to dominate the "play of power" (Lindbloom 1980). When coalitions of organizations join in highly uncertain endangered species programs, the policy process—the negotiated settlements resulting from the interaction of cooperating and/or competing interests—may lead to serious conflict and politicalization of the program. Competition often ensues in these high uncertainty cases as agencies vie for the support, interest and attention of the public or, in other words, for the legitimacy of their approach (Dana and Fairfax 1980).

There are many types of organization besides bureaucracy that can be used to meet natural resource challenges. Solving wildlife problems is hard enough as it is, without stacking the deck against ourselves by using inappropriate organizational arrangements. All organizations are a mix of three elements—technical, political and cultural/ideological (Tichy 1983). The *technical design dimension* con-

cerns garnering social and technical resources to meet desired outcomes—defining work tasks to meet goals. The *political allocation dimension* deals with *power* and resource problems, including uses to which the organization will be put and, importantly, who reaps the benefits. The *cultural/ideological dimension* recognizes that all organizations are held together by a glue of shared cultural beliefs, attitudes and outlook and that organizations must determine what values need to be held by what people. Some organizations are better at weaving these three elements together than others and this fact ultimately shows up in many ways—effectiveness and efficiency, to name but two. The wildlife cases cited by Hornocker, Finley and Frome are examples of poor weaving by organizational managers and administrators.

Leopole (1978) warned against "bureaucratization" of biological problems and Adams (1979) and others noted that over-organization through bureaucratization brings a loss of creative problem-solving capabilities. Unfortunately, because most wildlife challenges are defined and shaped in bureaucracies, bureaucratization limits the solutions that are deemed feasible and that are tried or even allowed to be tried (Littrell 1980). Jacques (1980:440) said "our bureaucratic institutions are abysmally organized. They are tailor-made for trouble."

Professionals tend to operate best where power is less centralized, rules are fewer and the need for discretion is high, i.e., in non-bureaucratic environments. A bureaucracy that does not give its professionals a balanced role becomes pathological and is doomed to morale problems, controversy, failure to meet its mission and possible breakdown (Schein and Greiner 1977).

THE FUTURE

The future of wildlife is dependent upon scientific management which, in turn, is dependent upon professional integrity and objectivity. Evenden (1976) notes that the "morals" of wildlife biologists are at stake when they interpret biological data for their own or their organization's purposes at the direct expense of wildlife. Neither university training nor the working world arms wildlifers with the *sociological and political science tools* needed to carry out a professional role in complex interorganizational settings—especially in politicized, bureaucratic ones. Today's resource managers need university programs that address the broader challenges of resource management—and that include organization and management paradigms (Cookingham et al. 1980) which can be used in the working world to influence organizational designs and behavior. Our professional societies, such as The Wildlife Society, can foster a climate in which professionalism can thrive. The real challenge for both the present and future, of course, includes setting up appropriately structured organizations and programs in the first place.

Perhaps wildlife organizations should employ professional organizational designers equally knowledgeable in wildlife ecology and management. New positions, such as those of coordinator and integrator, would be useful, too. According to Galbraith (1977:158), a coordinating or integrating role "requires individuals to behave in ways which remove possible impediment to sharing information and behaving in a problem-solving fashion. Such individuals are difficult to find and training technologies are not yet developed to create them. Yet, this role is becoming increasingly important in a variety of organizations." Integrators should assist those doing the work so that the work is coordinated in the best interests of the wildlife in question—all within the complicated, dynamic social environment of complex organizations.

Originally, the major reason for fusing management with *research*, with its uncompromising concern for honesty and integrity and its requirement for freedom of inquiry, was to enhance administrative accountability (Schiff 1962). By having to demonstrate that their decisions are solidly based on facts gathered from research, bureaucracies might be prevented from "getting into ruts" (U.S. Forest Service 1938). Unfortunately, the promise of research's bolstering the accountability of organizations has not always materialized (e.g., Schiff 1962).

My comments in response to Hornocker, Finley and Frome are based on the growing body of organizational literature, as well as on numerous visits to a variety of endangered species programs under varying organizational control, numerous conversations over several years with agency personnel involved and on my own experience as an independent, university-affiliated wildlife researcher in the west, specifically working on several endangered wildlife programs and having some formal training in organization and management.

The subject of organizations in the wildlife arena needs systematic research and I hope that some of these dimensions will be picked up by sociologists for proper investigation. I also hope that wildlife curricula at universities and in in-service training programs of existing wildlife organizations will be enlarged to encompass the formal teaching of the sociological, political science and organizational and management dimensions of our demanding profession. In the meantime, individuals may inform themselves about those issues by delving into the literature which I have cited and much more that is available.

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Tim W. Clark is president of Biota Research and Consulting, Inc., of Jackson, Wyoming, and a member of the Graduate and Adjunct Biological Sciences faculty of Idaho State University, Pocatello, Idaho. *He acknowledges with appreciation the critical advice of Denise Casey, Heidi Youmans, Cliff Youmans, Jim Kennedy, Ron Westrum, Leland Hepworth and John Weaver in the preparation of this article. He adds that discussions with Bill Burch and Steve Kellert, both of the School of Forestry and Environmental Studies, and Gary Brewer, of the School of Organization and Management, while he was a Richard King Mellon Fellow at Yale University in 1983-84, were invaluable.*