Black Natural Resources Managers: Why, Where and How

Ronald J. Field, *Dean, College of Life Science, University of the District of Columbia, Washington, DC 20008*

Proc. Annu. Conf. Southeast. Assoc. Fish and Wildl. Agencies. 43:11–17

The perception of the use and management of wildlife in the United States has traditionally been that, with the exception of Native Americans, racial minority groups have played nearly insignificant roles. One possible factor for this phenomenon may involve the geographic distribution of blacks. The majority of black Americans in this country historically has been concentrated in the southeastern United States, (Franklin 1947) and the ownership and use of firearms, including hunting weapons, by blacks in that region were not societally encouraged. During the early 1900s, with a peak between 1916 and 1918, southern rural blacks began a large scale migration from the rural southeast to the urban areas of the north and the west coast in search of more lucrative employment (Franklin 1947).

The economic attractiveness of steady employment, coupled with the decline in profitability of the small family farm, have continued to draw blacks away from rural communities and into urban environments in the southeast as well as those of the north and west. One result of this large scale population shift of blacks from rural to urban culture has been the gradual loss of appreciation for what Leopold (1966) called the "conservation ethic" by large segments of the black population. Kellert (1979) in his surveys involving American attitudes toward wildlife, clearly showed that the greatest concentrations of non-hunting and anti-hunting attitudes were centered predominantly in the urban areas primarily in the northeastern United States. Individuals from these areas were also the least knowledgeable about wildlife and wildlife habitat issues. Blacks were found to be among the least ecologically knowledgeable or informed groups regarding wildlife issues (Kellert 1979).

Separately, Kellert (1978) identified a distinct difference between blacks and whites in attitudes toward wildlife and the natural environment. He generally found that issues involving wildlife and environmental concerns were considered to be of little relevance to the overwhelming majority of blacks surveyed. Kellert surmised that there were important cultural differences between blacks and whites regarding perceptions of wildlife and environment. He further concluded that these differences could not be wholly ascribed to educational or socioeconomic status.

While Kellert's theoretical conclusions may or may not be valid, his data showing blacks to be underinformed regarding ecological issues are extremely important. I have conducted some preliminary investigations at the University of the District of Columbia (UDC) to determine the general knowledge and interest of the student body in natural resources professions. I administered a very simple survey form to first semester freshmen who were enrolled in a 1-credit freshman orientation course on the campus. Data from UDC's Office of Planning, Assessment and Evaluation indicate the makeup of our freshman class is approximately 85% black; 86% are residents of the District of Columbia. Forty two percent of the class is male with an overall class average age of 22.

One hundred seventy-five students representing 38 program majors responded to the survey. They comprised 3% of the incoming freshman. Of the respondents, 46, 26%, had resided in a rural areas for at least 1 year during their lives. When asked to rate their level of knowledge regarding several natural resources professions, the respondents rarely considered themselves to be very knowledgeable. Twenty-two freshman, 12.6% of the sample, considered themselves to be very familiar with the wildlife management profession, and an additional 102, 58%, indicated they had some knowledge of the profession. Fisheries biology was not nearly as familiar to the respondents, with only 6 students considering themselves very knowledgeable about the profession, and 30% expressing some knowledge about it. Conversely, 117 students, 67%, indicated that they had never heard of fisheries biology as a career occupation.

The park manager profession was the most familiar occupation of those listed to the freshman surveyed. Twenty-eight students, 16% of the group, indicated that they were very knowledgeable about the profession, or indicated they personally knew a park manager. The large number of federal parks in and surrounding Washington is likely a contributing factor to this statistic.

A complete statistical analysis of these data is not the purpose of this paper. Some of the significant interactions, however, are worthy of mention here. Of some surprise, none of the 19 hunters in the group professed familiarity with the wildlife profession, and only one-third, 6 of the hunters, wanted to learn more about wildlife management. On the other hand, 41 of the 58 individuals who were very familiar with or wanted to learn more about wildlife as a profession had been on 1 or more fishing trips. Sixteen of the 46 respondents who had lived for at least 1 year in a rural area were very familiar with or wanted more information about wildlife biology, and 10 more wanted information about fisheries biology. Forty-two of the 58 who wanted more wildlife information had never lived in rural areas. It was no surprise to learn that of the 17 respondents who wanted more information about careers in fisheries biology, 12, 71%, had engaged 1 or more times in recreational fishing.

The important information gained from this survey is not simply the various interactions among factors, but the level of knowledge and interest in the several natural resources professions which was displayed by the students. While few students (23%) indicated that they were very familiar with any of these professions, they clearly indicated their interest in wanting to learn more about several of the

occupations, ostensibly with an open mind toward a career opportunity. This may be a valid indicator of the potential to recruit minorities into the natural resources professions if greater effort is exerted to familiarize students with the disciplines. Arguably, the most effective means of doing this is by directing resources toward the development of academic natural resources programs on selected Historically Black College and University (HBCU) campuses.

This development of academic programs at HBCUs may be critical to the continued success of wildlife management in the United States as we enter the next century. As minorities who are urban residents begin to make up an increasingly larger segment of our population, it will become essential to educate this portion of the electorate to the fundamental principles of wildlife management and natural resources conservation. The U.S. Department of Labor report (Johnston and Packer 1987) projects a significant shift in U.S. demographics over the next decade. Their data show that the total population and the workforce in the United States will grow at the slowest rate since the Great Depression era of the 1930s. They also project that the majority of growth will occur in what are presently considered non-traditional groups, resulting in a dramatic shift in the racial and ethnic composition of the workforce. White males, for instance, will constitute only 15% of the net additions to the labor force in the 15 years beginning in 1985. Blacks and hispanics will triple this figure, making up 17% and 29%, respectively, of the net additions (Johnson et al. 1988). Women and immigrants are projected to make up the rest.

This shift in demographics has important implications for the wildlife management and the other natural resources professions in this country.

1) The projected overall population increase from 240 million in 1985 to approximately 275 million in the year 2000 (Johnston and Packet 1987) will place a tremendous burden upon our natural resources for their continued survival.

2) The various direct and indirect user pressures on the natural resources will require more intensive management of both resources and users as these pressures increase.

3) The disproportionate increase in poorly informed segments of the population, i.e. blacks, immigrants, urban dwellers, etc., will further increase the need for both management and education of resource users.

4) The lack of proportional representation of minorities as role models or representatives of minority user groups among the resource managers and decision-makers, will result in more frequent challenges to management efforts and dilute the effectiveness of some management decisions.

These issues at least are clear. What remains to be clarified is how best to address them in order to ameliorate the impending problems that will face natural resources managers in the next decade.

It is the purpose of this paper, and of this panel in general, to suggest methods for addressing those issues which involve minorities.

If, in fact, we can buy into Kellert's 1978 data and then concur that inadequate

education is one of the major contributing factors to the absence of blacks in natural resources professions, then it follows that greater emphasis must be placed on educating the black population about natural resources. Further, if we buy into my premise that blacks and other minorities will display a stronger inclination to respond positively to sound and informed natural resources management decisions if they are represented stakeholders in those decisions, then it follows that more blacks and other minority professionals must be employed as professionals by natural resources management agencies.

This leads us to 2 new questions. First, where can "qualified" blacks, or other minorities be found to fill professional positions? Secondly, how can better programs be developed which will more effectively pump larger numbers of well qualified minorities into the pipeline?

In response to the "where" question, Atelsek and Gomberg (1977) discovered an interesting statistic. During the mid-1970s approximately 25% of the black college students in this country were enrolled in the HBCUs. Forty-nine percent of the black college graduates, however, came from those HBCUs. Stated another way, HBCU's are 3 times more effective in producing competent black college graduates than the non-minority institutions. These figures have shifted only slightly in the past decade, with the percentage of black college students enrolled in the HBCUs declining from 25% to 17% (Wilson and Carter 1988). The "where," then, is apparent. The best source for recruiting black professionals who have earned college degrees is in HBCUs. Table 1 lists a number of minority institutions which presently offer degree programs and are producing black graduates in several fields which pertain to natural resources management.

Table 2 illustrates the changes that have occurred from 10 years ago when we found 12 HBCUs offering programs in various natural resources disciplines (Field 1979). One change lies in the fact that several of these schools have expanded their programs. The University of Maryland Eastern Shore headlines this group with its masters and doctorate programs which were not available in 1979. Other schools such as Fort Valley State, Southern University, and Jackson State no longer have the active natural resources programs that existed 10 years ago. These schools have now been replaced by others such as Central State, the University of Arkansas at Pine Bluff, Hampton University, and Grambling.

An answer to the "how" question is more complex. One effective method is simply to send resources agency recruiters to the campuses which house these programs. When agencies are not represented in the school's placement offices or career fairs, 1 message that is conveyed is that graduates of that university are not actively sought as employees. A second method is to develop closer and more substantive ties between the HBCUs and the natural resources agencies. The awarding of research contracts, the use of co-op or intern students, the providing of adjunct faculty, and the investment of earmarked scholarship awards by natural resources agencies would all be sincerely welcomed by the schools. A detailed proposal entitled "Preparing Minority Students for Fish and Wildlife Management and Research" which was submitted to the U.S. Fish and Wildlife Service earlier this year

Table 1. Natural resources programs and enrollment at HBCUs, 1989[a].

Name of HBCU	College or Department Offering Program	Name of Program	Year Program Was Initiated	1989 Enrollment
Alabama A & M	Horticulture and Environmental Science	Plant & Soil Sciences Forest Harvesting and Operations	1971 1974	15
Albany State University	Natural Sciences	Minor area of concentration in Natural Resources	1983	10 to 15
Central State (Ohio)	Center for Water Resources	Water Resources	1985	15
Delaware State	Agriculture and Natural Resources	Park & Recreation Wildlife Mgmt. Vegetation Mgmt. Soil & Water Mgmt. General Resource Mgmt. Fisheries Mgmt. Environmental Health Mgmt.	1960	55
Florida A & M	Division of Agricultural Sciences	Aquatic Biology	1979	12
Grambling University	Biological Science	Fisheries & Wildlife	1986	15
Hampton University	Environmental Science	Marine Science	1980	25
North Carolina A & T	Agricultural Sciences[b]	Forestry	1988	not available
South Carolina State College	Natural Science	Ecology	1984	10 or fewer
Tuskegee University	Agricultural Sciences	Pre-forestry	1967	10 or fewer
Univ. of the District of Columbia	Environmental Science	Marine Science Environ. Science Water Quality	1968 1968 1968	16 18 13
Univ. of Arkansas Pine Bluff	Agriculture	Fisheries Biology	1980	15
Univ. of Md. Eastern Shore	Environ. Science	Marine Biology Air & Water Pollution	1978	29 6 B.S. 12 M.S. 11 Ph.D.

[a]Survey data was collected from program administrators as of fall semester 1989.
[b]Joint program with North Carolina State. Degrees granted by North Carolina State.

clearly outlines several steps. The proposal, generated at the request of former Director Frank Dunkle, recommends 3 basic techniques for increasing the influx of minority wildlife and fisheries biologists into the workforce. These are:

1) The creation and support of an undergraduate study and research scholarship program at HBCUs.

2) Establishment of a formal Cooperative Research Unit Partnership Program,

Table 2. Natural resources program participation by HBCUs in 1978 and 1979[a].

Program discipline	Host university	1978	1989
Aquaculture	Southern University	X	—
Aquatic Ecology	Florida A & M	X	—
	Jackson State	X	—
Ecology	South Carolina State College	—	X
Environmental Science	Alabama A & M	X	X
	Delaware State	X	X
	North Carolina A & T	X	X
	Univ. of D.C.	X	X
Fisheries Biology	Delaware State	X	X
	Fort Valley State	X	—
	Grambling University	—	X
	Southern University	X	—
	Univ. of Arkansas at Pine Bluff	—	X
Forestry or Forest Operations	Alabama A & M	X	X
	North Carolina A & T	—	X
	Tuskegee	X	X
	Univ. of D.C.	X	—
Marine Science	Hampton University	—	X
	Jackson State	X	—
	Univ. of D.C.	X	X
	Univ. of Md. Eastern Shore	—	X
Natural Resources	Albany State	—	X
	Lincoln University (Mo.)	X	—
Water Quality	Central State of Ohio	—	X
	Delaware State	X	X
	Univ. of D.C.	X	X
	Univ. of Md. Eastern Shore	X	X
Wildlife Biology	Grambling University	—	X
	Delaware State	X	X
	Univ. of D.C.	X	—

[a]Survey data was collected from program administrrators as of fall semester 1989.

consisting of (A) paired institutional partnerships, and (B) cluster institutional partnerships.

3) Installation of Fisheries and Wildlife Cooperative Research Units at 2 or more HBCUs.

These actions would not only encourage students to pursue natural resources degree programs, they would also lend strength and greater credibility to the academic programs themselves. It must be recognized that the HBCUs cannot afford to offer programs in all disciplines unless a reasonable source of financial support is identified to help underwrite the program costs.

The discussion extended in this paper can be summarized quite concisely. The total population and the workforce within the United States will undergo significant changes over the next decade. Minorities will increase more than twice as fast as their white counterparts. They will bring increasing levels of pressure to bear, both

on natural resources and on employment. At present the black population as a whole is inadequately informed concerning issues of wildlife and the natural environment. We are also severely underrepresented in the professional workforce in natural resources disciplines. If steps are to be taken which will create an atmosphere causing the pressures on natural resources to be beneficial rather than potentially detrimental, a much greater emphasis must be placed on education and employment of minorities. These goals can be accomplished through better use and investment in the HBCUs which presently offer programs in natural resources management.

The facts are before you. The decision lies on your desks.

Literature Cited

Atelsek, F. and I. Gomberg. 1977. Bachelors degrees awarded to minority students. Higher Education Panel Reports No. 24. Am. Counc. on Ed. Washington, D.C.

Field, R. J. 1979. Blacks and careers in natural resources: the role of black schools. Pages 13–15 in Proceedings of Tuskegee Forest Council, 17–19 Jan. 1979.

Franklin, J. H. 1947. From slavery to freedom: a history of negro Americans. Third Edition. Random House, New York. 686pp.

Johnston, W., B. S. Faul, B. Huang and A. Packer. 1988. Civil service 2000. The Hudson Institute, prepared for U.S. Office of Personnel Management Career Entry Group, Washington, D.C. 52pp.

Johnston, W. B. and A. H. Packer, 1987. Workforce 2000: work and workers for the twenty-first century. Hudson Inst., Indianapolis, Indiana. 118pp.

Kellert, S. R. 1978. Policy implications of a national study of American attitudes and behavioral relations to animals. U.S. Fish and Wildl. Serv., U.S. Gov. Printing Off., Washington, D.C. 124pp.

———. 1979. Public attitudes toward critical wildlife and natural habitat issues. U.S. Fish and Wildl. Serv. 138pp.

Leopold, A. 1966. A Sand County almanac with essays from Round River. Oxford University Press 1947 and 1953. Reprinted by Ballantine Books, New York. 295pp.

Wilson, R. and D. J. Carter. 1988. Minorities in higher education: seventh annual status report. Am. Coun. on Ed., Washington, D.C. 36pp.