

EDITORIAL

THE USE OF WILD BIRDS IN RESEARCH

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In a previous issue of *The Condor*, I described problems created for avian biologists by the Law Enforcement Division of the U.S. Fish and Wildlife Service (USFWS) (Walsberg 1993). I noted that scientific collecting generally is an insignificant source of mortality in wild birds, amounting to a vanishingly small fraction (less than 0.0002%) of the bird population of the United States and equalling less than 0.01% of total human-caused mortality of these animals (Banks 1979). Scientific collecting as a source of avian mortality is dwarfed by losses to hunting, collisions with windows, pest control operations sanctioned by the USFWS, and either natural or domestic predators. For example, a Cooper's Hawk (*Accipiter cooperii*) probably kills an average of at least two birds per day (Rosenfield and Bielefeldt 1993), or approximately 700 birds per year. Scientists probably collect about 21,000 birds per year in the United States (Banks 1979), or about as many as only 30 hawks distributed across the entire nation. Among domesticated predators, the most notorious are the 58 million 'domestic cats in the U.S. A conservative estimate is that each annually kills an average of at least 5.5 birds (Churcher and Lawton 1987), totalling 319 million birds per year. The actual value is undoubtedly greater, as this estimate is based only on the number of captures observed by the cat's owners. This probably underestimates the number killed by about one-half (George 1974), suggesting that these pets destroy approximately 638 million birds per year in the U.S. This is 30,000 times as many birds as are collected by scientists.

Despite such considerations, however, the USFWS treats scientists harshly for essentially innocuous transgressions of collecting regulations. This includes seeking huge fines and imprisonment, and engaging in lengthy legal contests that can financially ruin a biologist. A less visible, but very important, problem is that cumbersome collecting regulations significantly discourage research and education at a time at which improving our understanding of biological systems is most critical. We do not know how many projects are never initiated, or are critically delayed, or are transformed into studies of scientifically less suitable species because of the biologists' desire to avoid the regulatory impediments of the USFWS. Clearly, the permit process for scientific collecting needs major restructuring and the priorities of the Law Enforcement Division of the USFWS and federal attorneys need to be focused on genuine threats to bird populations and not on scientists.

In the past year, biologists represented by groups

such as the Committee on Ornithology and the Law of the American Ornithologists' Union have worked to improve this situation. In addition, the administration and structure of the U.S. Fish and Wildlife Service has changed, including the appointment of Mollie Beatty as new Director and the formation of the National Biological Survey. It therefore is worth revisiting the issues I raised in my editorial of August 1993.

Unfortunately, there is little indication of improvement in the attitude or functioning of the U.S. Fish and Wildlife Service or in the U.S. Department of Justice. Rather, antagonism toward scientists remains and these agencies remain inefficient and apparently oblivious to the consequences of their actions for science. Three to six months routinely are required to process applications for federal collecting permits. Anxious researchers who contact the Law Enforcement Division regarding long-awaited permits may receive dubious oral instructions, such as to collect birds using their *expired* permits and assume that they will eventually receive their renewals. Collecting without a valid permit is, of course, illegal. As demonstrated by the case of Nathaniel Wheelwright described in my previous editorial, USFWS personnel are likely to disavow oral directions and prosecute the hapless scientist to the maximum extent possible. Finally, scientists may find conditions attached to their permits that are biologically unreasonable. One example is the policy in some regions that prohibits a biologist from collecting more than two individuals of any species per year. A second example is that permits issued this year in some areas prohibited collection or capture of many bird species that are not rare, endangered, or otherwise given special legal protection. In USFWS Region 2 (Arizona, New Mexico, Texas, and Oklahoma), for instance, 30 such species were listed. Most are abundant species for which there is no biological basis for extraordinary protection (e.g., Cactus Wren, Curve-billed Thrasher, Rock Wren). Remarkably, several species considered by individual states to be threatened were not described as being of special concern to the USFWS.

The response by federal agencies to biologists' concerns has, with a notable exception, been dismaying. Agencies have refused to admit that problems exist, much less that fundamental changes are needed. For example, the previous Director of the USFWS replied to my earlier editorial and simply asserted that no problems exist in the operation of the Law Enforcement Division and that no changes are needed. Another example is the experience of the AOU's Committee on Ornithology and the Law. The committee succeeded in arranging meetings with Director Beatty, to whom they presented a detailed memorandum that described problems surrounding collecting permits and suggested solutions. In the committee's annual report, however, it noted that the reply to its concerns from the Acting Director of Law Enforcement "reflected neither good will nor any acknowledgment of the legitimate concerns of biologists. . . ."

A single positive development occurred at the recent joint meeting of the Cooper Ornithological Society, the Wilson Ornithological Society, and the American Ornithologists' Union. There, Richard Banks arranged for Thomas Striegler, Deputy Chief of the USFWS Law Enforcement Division to meet with ornithologists. Mr. Striegler appeared sympathetic with the position of scientists and agreed that scientific collecting generally should not be an important concern for his division. He also described plans to possibly transfer handling of permits from the Law Enforcement Division to the USFWS Office of Migratory Bird Management, a move which could improve the permitting process. Unfortunately, it was apparent from the information Mr. Striegler presented that this agency's bureaucracy is so choked with awkward procedures that even if changes in regulations were desired by the USFWS, six to seven years would be needed to implement them.

Biologists cannot afford to ignore these issues associated with the study of wild animals. They are important; ill-conceived federal actions are harming both scientists and science. Clearly, a much more streamlined permit system must be developed. An example of such a system might be one in which scientists undergo a one-time process to be certified as users of wild birds. The certified individual could then be allowed to collect a moderate number of individuals each year (perhaps 50) of any species not under special protection for biologically valid reasons. Exceptions such as collection of greater numbers would require a special permit. An annual report of collecting activity to federal biologists would allow oversight that ensured that vulnerable populations are not importantly affected. Such a simplified system would facilitate research and teaching about birds, reduce the workload imposed upon regulatory agencies, and be consistent with the typically insignificant effects of such collecting for bird populations.

Achieving such reform is unlikely to occur unless the USFWS is exposed to substantial political pressure. Ornithologists need to establish contacts with other biologists that face similar difficulties with federal agencies and thereby present a united front for reform. We may well need to seek hearings of the Subcommittee on the Environment and Natural Resources of the U.S. House of Representatives. Finally, we must recognize that attitudes of the general public often drive the actions of federal agencies. Popular perceptions of scientists have rarely been realistic and the public view of our studies with animals has become remarkably distorted. We therefore must take particular care to educate the public as to the genuine needs for the scientific study of wild animals, the insignificant magnitude of scientific collecting, and the very real benefits that such study carries for our understanding and conservation of the natural world.

LITERATURE CITED

- BANKS, R. C. 1979. Human related mortality of birds in the United States. U.S. Fish Wildl. Serv. Spec. Sci. Rep. Wildl. No. 215.
- CHURCHER, P. B., AND J. H. LAWTON. 1987. Predation by domestic cats in an English village. *J. Zool., Lond.* 212:439-455.
- GEORGE, W. G. 1974. Domestic cats as predators and factors in winter shortages of raptor prey. *Wilson Bull.* 86:384-396.
- ROSENFELD, R. N., AND J. BIELEFELDT. 1993. Cooper's Hawk (*Accipiter cooperii*). In A. Poole and F. Gill [eds.], *The Academy of Natural Sciences, Philadelphia; The American Ornithologists' Union, Washington, DC.*
- WALSBERG, G. E. 1993. The treatment of biologists by the U.S. Fish and Wildlife Service. *Condor* 95: 758-759.