

## ON COLLECTION: POINTS OF VIEW

*EDITOR'S NOTE: An article by Pete Dunne, "Putting a Dead Bird to Roost," in the Spring 1988 issue of The Living Bird Quarterly [7(2): 38] produced a number of letters, both critical and approving, subsequently published in the Autumn 1988 issue [7(4): 4-5]. Among the points raised by Dunne were the following: 1) the limits to identifying birds in the field, 2) the ethics and morality of sacrificing wild birds for scientific study, 3) the rights of birdwatchers to see birds, which they cannot do if the birds are dead, and 4) broad considerations of ecology and conservation as they apply to birds. In the following commentaries, Dr. William E. Davis, Jr., chairman of the Division of Science in the College of Basic Studies at Boston University, and Dr. John C. Kricher, Jennings Professor of Biology at Wheaton College, address these issues from differing points of view.*

### "A BIRD IN THE HAND IS WORTH TWO IN THE BUSH."

by William E. Davis, Jr.

Witmer Stone, a prestigious ornithologist at the Philadelphia Academy of Sciences, gave an address to the Nuttall Ornithological Club on its fiftieth anniversary in 1923. He focused his attention on the emergence of "field glass" ornithology from the "shotgun" ornithology of the nineteenth century but, nonetheless, made the following statement: "As a Kentucky mountaineer friend once said to me, 'This is a perfectly law-abiding country, no man ever gets killed here unless he needs killing,' and some birds will always need killing." In my opinion some birds still "need killing," even as we are about to enter the twenty-first century. I will try to apply this philosophy to the four issues raised by Dunne and enumerated in the Editor's Note above.

Despite the incredible advances that have been made in optical instruments, photography, sound and video recording, some birds cannot be identified beyond question in the field, except in unusual circumstances. It is interesting to note that Peter Dunne chose Ludlow Griscom as his champion for unequivocal sight recognition of birds and for the elimination of the need to collect birds for identification. The following quote from Griscom's field journals may be enlightening on this point. In a series of notes spanning nine days Griscom consistently misidentifies an eider until the eider has been collected, and then he points out the moral of the story:

*Steller's Eider* - Watched all a.m.; return after lunch at 1:30 p.m..  
Bird's habits quite regular...Hagar tells dramatic story of efforts to collect the *Steller's Eider*...Hagar at Plum Island working on Eider.

As a result of studies in field last week & study of specimens at Museum, begins to doubt bird is a Steller's Eider...*King Eider* 1 imm. - proves to be remarkably small bird of this species...The whole incident is as fine an illustration as any in my experience of the risk in "sight records" & the value of collecting the specimen!

It seems unlikely that even today the eider would have been correctly identified unless collected. Identification of some *Empidonax* flycatchers and immature shorebirds, for example, are problematic, even with the live bird in the hand. Specimens are still the most reliable method for the subtle comparisons that may be necessary for definitive identification in difficult cases. In addition, more is gained than just a study skin when a bird is collected. Blood samples can be used in DNA studies for establishing phylogenetic relationships, tissue samples for pesticide and heavy metal contaminants, or soft parts and skeletal materials for a variety of studies.

Collecting procedures that are inhumane, such as putting out mist nets at dawn and retrieving the dead birds hanging in them at dusk, are deplorable and cannot be condoned, nor can the "if it flies, it dies" mentality demonstrated by some collectors. However, the conduct of many aspects of modern scientific ornithology still requires the sacrificing of limited numbers of wild birds. For example, a recent issue of *Colonial Waterbirds* (1, 1988) contains twelve major articles, of which two involved collecting birds (one a study of King Cormorants to establish criteria for sexing adults *without* collecting the birds). A third paper dealt with pesticide levels in heron and tern eggs (very young, but nonetheless live, birds), and a fourth relied on museum skins. In addition, a "Commentary" by R. W. Storer explained the need for collecting many of the larger waterbirds to improve museum collections which are generally deficient in these specimens. Hence, a third of the papers involved killing birds. I think that the general view in the scientific ornithological community is, and ought to be, that some scientific studies require sacrificing birds and that this is morally and ethically acceptable as long as the collecting is carefully controlled and the projects have scientific merit and do not threaten or endanger a population or species of birds. The sacrifice of an occasional vagrant bird for identification meets these criteria. Most stragglers are probably not going to survive anyway, and most are already "genetically dead," i.e., they will not reproduce. Griscom commented on this situation in a letter to G. L. Richardson who had inquired why Ludlow had shot a Long-billed Curlew.

Thirty years of experience with selecting [collecting] purely accidental stragglers has proved, thanks to dissection and post mortem study, that unless their occurrence can be accounted for by a violent hurricane they are invariably diseased and defective individuals, and as a matter of common sense it is reasonable to

infer that they never would conceivably get to where they really belong. In the case of this particular Long-billed Curlew which I collected on June 15th, careful study and inspection of it beforehand showed that it was in a very frowzy condition of plumage, that it had never succeeded in moulting into breeding or summer plumage, and when collected dissection showed that the ovaries were minute and diseased.

When a rare bird shows up, an obvious conflict occurs between birdwatchers who wish to see the bird and persons who wish to collect it. I think that in most cases a compromise can be arranged, where collecting the bird is postponed, thereby providing time for birdwatchers to see it. This certainly would have been possible with the December 1987 Hammond's Flycatcher in Wellesley, Massachusetts. Even though this is a perfect example of why, under ideal conditions, it is not always necessary to collect a bird to identify it (it was positively identified by experts on the basis of videotapes and recordings of its behavior and calls), the bird should have been collected. Confirmation of species identification, age, and sex would have been achieved and any pathological conditions determined, as well as samples obtained of blood, other tissue, and skeletal material. It is impossible to study pathology in vagrant birds unless they are collected. This bird was predictably going to die during the first major storm that entered the area and did, in fact, disappear when that occurred. It should have been collected the day before the storm arrived, thus giving birdwatchers ample time for viewing the free-living bird, as well as serving the interests of science with a collected bird that probably was dead within twenty-four hours anyway.

The Cox's Sandpiper should have been collected because of the potentially significant scientific information that could have come from collecting this bird. There are no specimens of this species in immature plumage, and blood and other tissue samples could conceivably shed some light on the enigmatic taxonomic status of this shorebird.

Killing birds is a volatile issue that frequently produces emotional rather than rational arguments on both sides of the question. Focusing attention on the *minor* issue of collecting a small number of vagrant birds detracts from attention to *major* ecology and conservation issues that concern practices in which millions of birds are being killed annually and entire populations and even species are threatened. More of our attention and energy should be focused on issues such as the misuse of pesticides and the clear-felling of rain forests, where significant threats to our birds, in fact, exist.