tus) is listed in Ridgely's *A Guide to the Birds of Panama* (1976), as hypothetical, based on Wetmore's observation of "a bird believed to be this species at Mandinga, San Blas, on January 22, 1957."

Thus, our observation constitutes the first documented observation of this species for the Republic of Panama and the first breeding record for Panama. This fills in, not unexpectedly, part of a supposed gap in the range of the species, which had been recorded from Costa Rica and the upper Cauca valley of Colombia.

Others who saw the birds described above on both occasions included Ann Cullen, Ray and Betty Deur, Bob and Juanita Krebs, Norm and Maggie Mellor, Mary Ann Neuses, Lee Oetzel, Roger Ridley, and John Rowlett.

The photographs of this bird were verified by Robert S. Ridgely, Kenneth C. Parkes, and Eugene Eisenmann.

—P.O. Box 4429, Austin, Texas 78765

Communications

To the Editor:

About cuckoos and tent caterpillars, and logic in reference to your editorial comments in my article (*AB* 33(6):863). As an observable fact in years of great caterpillar outbreaks there are more cuckoos visible (if we use the word visible to include audible here also) than in other years, and I do believe that there are more of them present. Somehow the idea of a lot of cuckoos sitting silently and motionlessly around in the woods on non-caterpillar years while whooping it up in calling, and flying around all over in caterpillar years doesn't strike me as very likely.

I think that it's likely that there are indeed more birds present during the big years of outbreak, and that this follows from the nature of the caterpillar outbreaks. I must confess that I have not researched these outbreaks thoroughly and my opinions derive largely from watching two cycles and anticipating another this year or next. This is the way I see caterpillar outbreaks here in our area [West Virginia]. There will be years of only a few or maybe even no, caterpillars for a while. Then will come a year or maybe two in which numbers are very large. This will be followed by a year in which the numbers far exceed those previous large years. After this enormous year there is a die-off for some reason, and the following year may see practically no caterpillars. Then the cycle starts over. In other words we have a moderately fast build-up to a grand peak, and very abrupt decline. Now all geographical regions do not get the cycle at the same time. There is a north-south progression and a time lag of a year or two. Thus the cycle seems to have about a ten-year period, and while southern West Virginia may have had its peak this last year I expect one in northern West Virginia this year or next.

Now let's fit the cuckoos into this picture. As a result of the good preliminary years they have had reproductive success so there are numbers of them present in the boom year. Now your "logic" would say that that's all there is to it, but maybe there is more. In the boom year breeding would be even more successful and so in the year following the die-off there should be lots of birds around. Are these those silent motionless birds sitting around in the woods waiting for the cycle to repeat? I think that rather most of them would simply move farther north where the caterpillar populations are still good. So there would be more birds

in outbreak years. The timing for this is just right. By the time the cuckoos come north in May the caterpillars are already evident, although not yet as fully conspicuous as they will be. It seems to me that birds which arrive where they were last year and find no good supply of caterpillars would move on north until they found them. But don't ask me what happens to these birds in the year when they finally run to the north of the caterpillar range.

Of course if anyone is wedded to the concept that all birds come back every year to the exact place they were in the summer before this idea does not work. This is indeed true for many species, but there are numerous exceptions: crossbills, and Cedar Waxwings in particular, which seem to be highly nomadic. Nobody knows enough about cuckoos to really say what the situation is. In fact our two eastern cuckoos are essentially a mystery to ornithologists. What exactly are the ecological differences between the two that enable them to coexist over a wide area? I don't think anybody knows.

—George A. Hall, Department of Chemistry, Morgantown, WV 26506.

To the Editor:

I believe a statement in *AB* 33(6):895 about the Anna's Hummingbirds is unintentionally misleading due to an inexact use of words. The text reads: "Although in some places this species is seemingly sedentary, it can often be *highly migratory.*"

Migratory, especially *highly migratory,* implies a regular and repeated one-directional and seasonal movement from one climate to another. The Anna's movement is multi-directional, irregular and non-seasonal, depending more on lack of food supply or nesting sites than on the recurring inner time-clock or day-length signals that trigger typical bird migration movements. If the writer insists on using the term *sedentary,* then the more accurate contrast for Anna's behavior would be "highly mobile." I believe the sense of the thought would be better expressed as: "Although this species usually remains year-round in the same general locale, some individuals do considerable wandering and often establish new year-round territory at rather distant points, north or east."

Describing them as highly migratory implies that they go *and return,* and I know from considerable correspondence with other observers that many far-wandering Anna's go *and stay* when they find suitable sites.

—Virginia C. Holmgren, 2726 N.E. 92nd Avenue, Portland, Oregon 97220.

To the Editor:

We have read with great interest the article entitled "Death by Drowning — One Cooper's Hawk's Approach" by Roy Gerig in the *American Birds* issue of November, 1979.

However, upon close examination of the photos, and the original slides which you graciously loaned us, we are convinced that the raptor pictured is a juvenal plumage female Sharp-shinned Hawk (*Accipiter striatus*).

The reasons why it is a Sharpie are evident from the following tabular summary of the differences between juvenal plumage Sharpies and Cooper's.

A comparison of juvenal plumage Accipiters (see next page):

	Cooper's Hawk	*Sharp-shinned Hawk*
Eye size relative to head	Eye placed forward on side of head; eye takes up a small amount of head area	Eye centrally placed on side of head; eye takes up a considerable amount of head area
Hackles	When subduing prey, most always raised	Almost never raised
Breast	Streaked finely with dark brown; much white showing	Streaked *broadly* with red brown, very little white
Back	Most feathers with whitish tips	Very few feathers with rufous tips, heaviest on rump
Leg size	Very robust and thick	Very stick-like
Tail (on photo not published)	White tip to rounded tail	Very little or no white on squarish tail

The hawk in the photograph is closer to the Sharp-shinned Hawk description on every count. We have also verified this by checking with slides and specimens from our teaching collection.

It is also our experience that a Cooper's Hawk would have little trouble subduing a Starling.

—Michael E. Pramstaller, William S Clark, Raptor Information Center, 1412 16th St., N.W. Washington, DC 20036

Announcements

HAWK MOUNTAIN RESEARCH AWARD

Applications for the $500.00 annual Raptor Research Award, should be submitted to Alexander C. Nagy, Curator, Hawk Mountain Sanctuary Association, Route 2, Kempton, PA 19529 by October 31, 1980. Students should submit a description of their research program, a curriculum vitae, and two letters of recommendation.

The award will be announced in February 1981. Only students, both undergraduate and graduate enrolled in a degree-granting institution are eligible. Projects will be picked on the basis of their potential contribution and understanding of raptor biology and their ultimate relevance to conservation of North American hawk populations.

ANNOUNCEMENT AND CALL FOR PAPERS

The fourth annual meeting of the Colonial Waterbird Group will be held October 9-12, 1980 in Ottawa, Ontario. It will be co-sponsored by the Colonial Waterbird Group and the Canadian Wildlife Service. A symposium on the effects of human beings on colonial birds is planned, and a Proceedings will be published. Anyone wishing to contribute to the symposium should send an abstract to J Burger by August 1, 1980. For information on contributing papers, contact J. Burger, Department of Biology, Livingston College, Rutgers University, New Brunswick, NJ 08903. Abstracts must be received by Sept 1, 1980. For information on registration, contact R. Michael Erwin, Migratory Bird and Habitat Research Laboratories, U.S. Fish and Wildlife Service, Laurel, MD 20811.

SYMPOSIUM ON POPULATIONS

The symposium on "Estimating Populations of Terrestrial Birds" will be held October 26-31, 1980, at Asilomar, near Monterey, California. The invited papers, given by authors from the United States, Canada, Europe, New Zealand, and Australia, will cover a wide range of subjects. The principal topics will be the problems, methods, and analyses of bird censusing. There will be a variety of field trips during and after the Symposium to explore