Call for Retraction

BIRD BANDING OPINION PIECE RAISES OBJECTIONS

By Ellen Paul, John Alexander, Susan Finnegan, Alexander L. Bond, Jeffrey A. Stratford, and Scott Weidensaul

Credit: Timothy Boucher

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We request retraction of the Point-Counterpoint article by Marlene Condon titled "Is It Time to Halt Bird Banding?" that ran in the fall 2011 issue of *The Wildlife Professional* (Condon 2011). Though the magazine is not peer-reviewed *per se*, publication by the highly regarded Wildlife Society implies that a peer-review process is in place. Further, the magazine's contributor guidelines state that articles "are usually sent to outside experts for review to ensure completeness and accuracy of information" and that they contain "sound, verified information and well-supported arguments."

The Condon article, which condemns one of the most common and important research techniques used by ornithologists and wildlife biologists, does not meet those standards. However, it will likely be cited as though it had been published in a peer-reviewed scientific journal by opponents of research involving live animals.

The research community should listen to its critics, but those critics should be knowledgeable and experienced, and base their criticisms on fact, not on emotion and the faulty or selective citation of literature. Condon's statements on the BirdBand listserve make it clear that she lacks training or experience in bird banding or in any relevant scientific discipline that would qualify her to comment on the impact of banding on birds. Instead, it appears that emotion motivated Condon, as revealed by her listserve comment after publication of the article: "I did visit a banding station once," she wrote, "but when I saw the intense fear in the eyes of the birds being handled, I had to leave."

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We do not hold the editors responsible for foreseeing what Condon would later reveal, but we do assert that professional editorial standards dictate that an author's knowledge or expertise and the evidence underlying his or her argument—especially in a controversial opinion piece—be investigated before the piece is accepted for publication.

Flawed Arguments

Condon's piece is characterized by hyperbole and a lack of scientific rigor. She cited a 1999 article in *Birder's World* (an unreviewed popular publication) as saying that biologists routinely discover thousands of dead birds that have washed ashore. The statement is greatly exaggerated. She then suggested that a band weighing 0.005 grams on a bird with a migration-onset weight of about 6 grams (Robinson *et al.* 1996) could be a danger if the birds encounter headwinds. That conclusion is unwarranted. A review of Condon's article would have revealed that she relied on greatly simplified popular accounts unsuitable for drawing broad inferences, much less for urging changes that would have strong ramifications on scientific research. In fact, a 1994 paper, which reported the finding of 40,000 dead birds in Louisiana following a tornado and a storm, actually suggests how uncommon such major mortality events are, even following severe storms—much less following the more common shifting of winds (Wiedenfeld and Wiedenfeld 1994). Birds migrating over the Gulf usually have enough reserves to continue inland for several hundred miles in good conditions (Lowery 1945). If conditions are so severe that birds are unable to make it to or past the coast, it isn't the added weight of the band that will do them in, but the severity of the weather.

Condon uses the relatively low "recovery" rate of banded birds to argue against banding's efficacy.

Her argument, citing an unreviewed *Birder's World* article (Kerlinger 2005), actually refers to the encounter rate (any report of a band subsequent to the initial banding), which is 6.3 percent across all taxa but as high as 42 percent for some hunted taxa. More important, Bruce Peterjohn, chief of the bird banding laboratory at the USGS Patuxent Wildlife Research Center, points out in his counterpoint to Condon (Peterjohn 2011) that encounters are not the only goal of banding. The return rate of banded birds encountered on or near their breeding or wintering grounds is significantly higher and more meaningful for most purposes than are the overall encounter rates. For example, one study of Kentucky warblers (*Geothlypis formosus*)—a species that migrates across the Gulf of Mexico—reported a 35 percent recapture rate over two years of birds that had been banded in the previous two years (Kricher 1986).

Until recently, it was impossible to compare the fate of banded and unbanded birds, so it is impossible to know if their survival rates differ. New technologies using radio frequency identification chips or analyzing DNA now allow us to identify unmarked individuals. Although technological and financial restraints limit their use for many species and many situations (Bonter and Bridge 2011), we may, in some cases, be able to compare the longevity of banded birds versus unbanded birds.

The Condon article selectively cited studies reporting injuries on a range of bird marking methods. It pointed to popular accounts of a paper on penguin tags (Saraux 2011), but neglected to mention that famed penguin biologist Dee Boersma has been putting flipper tags on penguins for 30 years. Upon finding that aluminum tags were harming the birds, Boersma switched to stainless steel bands that had no effect on the birds' survival, reproduction, or behavior (Boersma and Renstock 2009, Petersen *et al.* 2005).

The Condon commentary also quoted from a paper saying that house sparrows "may lose an average of 4.2 percent of their body mass, and possibly as much as 7.4 percent" (Refsnider 1993), a reference implying that this loss occurred during the routine banding process. However, the paper clearly states that mass loss occurred over a period of two hours in captivity, not "during the banding process," which typically is much shorter.

Researchers have shown a consistent concern for the welfare of their study subjects. Condon herself cited a report (Henckel 1976) of leg lesions on banded turkey vultures (*Cathartes aura*), and noted that, as a result of this study, the U.S. Bird Banding Lab prohibited the use of leg bands on these birds. She also cited a paper (Hatch and Nisbet 1983) about corrosion of bands from wear and exposure to salt water, but did not state that for this reason, banders switched to stainless steel or incoloy bands.

A Well-Regulated Practice

Banders and ornithologists, in cooperation with the U.S. Bird Banding Lab and the Canadian Bird Banding Office, continually identify and minimize the impacts of capture and marking, as seen in their publications on ethics and best practices. The North American Banding Council publishes a series of banding manuals and offers training and certification, and the Ornithological Council publishes *Guidelines to the Use of Wild Birds in Research*, a peer-reviewed publication recognized as a reference standard in wildlife research. In fact, banding requires federal and state permits, which signify that an impact from a banding activity is acceptable. Banding is also monitored through the research protocol review process mandated by laws in the United States and Canada.

If research on wild animals is to end because the methods might have impacts on the subjects, our ability to study and understand wildlife would be severely curtailed. Even mere observation can affect wildlife, as the presence of a researcher is not always well-tolerated. The Wildlife Society itself states in its position statement on animal rights that "animals can be studied and managed through science-based methods ... provided the practice is sustainable and individual animals are treated ethically and humanely."

All research methods warrant discussion, but that discussion must be well-supported by science. Because the Condon article does not meet that standard, we urge the editors to retract it. ■

Editor's note: *Paul* et al. *raise some excellent points that we will discuss with our Editorial Advisory Board, particularly regarding author credentials, citations from the "popular" press, and review procedures. Though we are not inclined to retract an opinion piece, we will strive to ensure that all TWP articles have a sound scientific base.*