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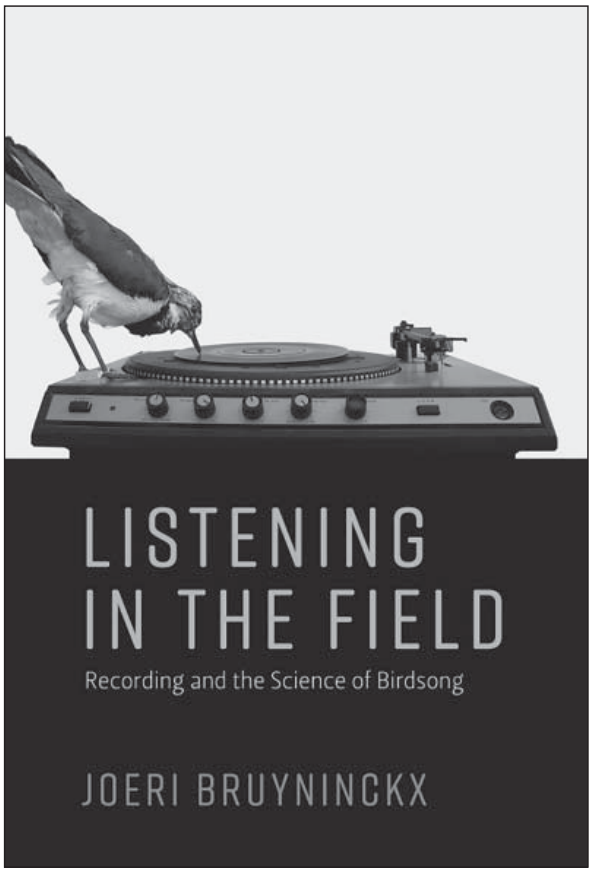
Book Review

Listening in the Field: Recording and the Science of Birdsong

by Joeri Bruyninckx
2018, MIT Press
Cambridge, Massachusetts
256 pages



Review by David D. Vail

In 1962, Rachel Carson penned one of the most powerful and controversial books of the mid-twentieth century. Often credited with launching Earth Day and sparking the environmental movement, *Silent Spring* argued for changes in agricultural science and wildlife management that considered a greater ecological health. Carson's first chapter depicts a fictional world where long-term use of entomological and wildlife controls, specifically pesticides, results in the death of all wildlife—a spring without birds: "There was a strange stillness…It was a spring without voices. On the mornings that had once throbbed with the dawn chorus of robins, catbirds, doves, jays, wrens, and scores of other bird voices there was now no sound; only silence lay over the fields and woods and marsh" (Carson, *Silent Spring*, 2). Carson's focus on the absence of birdsong reveals a much longer history of avian influence on wildlife science. Observation, representation, and management emerged as central tools and ornithology, especially birdsong science, helped lead the way.

In *Listening in the Field*, historian Joeri Bruyninckx explores the intersections of environment, science, and wildlife management through birdsong biology. He argues that the interdisciplinary field of biological acoustics in both its professional and amateur scientific forms guided larger efforts in conservation, environmental studies, and wildlife management. Bruyninckx insists it is through this tension "between sound recording as a cultural practice and its appropriation as a distinctly scientific technique, between sound as a form of evidence and its cultural existents…that helped tie together a broad-based community of listeners in the field, but it has also led them to listen to these recordings and their natural environment in very different ways" (6).

Bruyninckx begins by tracing these technical, cultural, and scientific intersections through 4 central technologies: the musical score, the electric microphone, the portable magnetic table recorder, and the sound spectrograph. Early attempts at scientific ornithology centered on systemic studies of preserved specimens while the actual living habits of birds, including song-communication, resided with amateurs—"natural historians in the civic realm of schoolteachers, civil servants, writers and pastors—along with a growing group of bourgeois birdwatchers" (24). A move from verbal recollections to musical scoring offered the first stage, according to Bruyninckx, of a "methodological tangle [giving] rise to a

debate regarding the variable boundaries of an emerging community of field listeners" (25). The lines between practitioner knowledge, field experience, and laboratory study became ever more blurred with each advance in recording technology, and many discoveries emerged. Birdsongs revealed interspecies relationships, including regional accents, as well as human–avian conflicts such as ecosystem degradation and noise pollution.

The focus on expert communities and the evolution of recording technologies in *Listening in the Field* has specific relevance for readers of *Human–Wildlife Interactions*. Studies such as Patricelli, Blickley, Hooper's (2013) analysis on "Recommended management strategies to limit anthropogenic noise impacts on greater sage-grouse in Wyoming" highlights the role of noise pollution and Bruyninckx's focus on bioacoustics to study wildlife populations. Also, like the tensions surrounding the politics of conservation and wildlife management described in Feldman's (2007) "Public opinion, the Leopold Report, and the reform of federal predator control policy," *Listening in the Field* illustrates how formal and informal approaches to birdsong recordings helped remake environmental science policies throughout the twentieth century. "Against the background of field biology's professionalization, the question of who could listen authoritatively and in what way was negotiated largely through sound recordings…recordings acted as concrete technologies of education and attention, training ears and sensibilities of fieldworkers and others" (169). Indeed, wildlife management science—its discoveries and ongoing tensions—shares much with birdsong science, including that "the production and legitimization of scientific records have almost invariably also depended on their distribution as objects of popular instruction, amazement, and joy" (172).

Literature cited

Feldman, J. W. 2007. Public opinion, the Leopold Report, and the reform of federal predator control policy. Human–Wildlife Interactions 1:112–124.

Patricelli, G. L., J. L. Blickley, and S. L. Hooper. 2013. Recommended management strategies to limit anthropogenic noise impacts on greater sage-grouse in Wyoming. Human–Wildlife Interactions 7:230–249.

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