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# Buffers may need to be much wider to help nesting birds

If conservation buffers are meant to be truly valuable to birds, they may need to be much wider than many existing buffers, a study at the U.S. Geological Survey (USGS) Patuxent Wildlife Research Center and U.S. Department of Agriculture (USDA) Agricultural Research Center (ARS) near Beltsville, Maryland, suggests.

Researchers found little difference in numbers or species of birds in newly established buffers that were 50 feet wide and those that were twice that wide.

“The data were too variable, and too few birds were observed to draw any conclusions,” says Matthew Perry of USGS. “We found bird use, but no nesting in either the 50- or 100-foot-wide grass strips. When we observed buffers on a limited basis in strips 130 feet to more than 200 feet wide, however, we found nesting pairs in most of those buffers.”

Perry says there were actually more birds sighted in the 50-foot-wide strips (187 individuals) than in the 100-foot-wide strips (151 individuals).

While the study was inconclusive on bird use of buffers at more narrow buffer widths, researchers believe related observations did produce evidence that there is a minimum width for buffers—about 150 feet—that two grassland obligate species will accept as nesting habitat.

“The restricted number and distribution of our study sites, confined to a small part of the Maryland coastal plain, leads to an expectation for nesting of the grasshopper sparrow and eastern meadowlark in wider buffers,” Perry says.

“If our range had been extended farther north or west, we would have encountered more species, and more sites might have allowed us to compare very sparsely distributed birds like vesper sparrow and dickcissel.”

Perry says many of the typical grassland species may not have established populations in the buffers because they were newly established.

Charlie Rewa, a biologist with the USDA Natural Resources Conservation Service (NRCS) in Beltsville, Maryland, who facilitated the study, indicated the limited study didn’t provide enough information to advise field conservationists on minimum buffer widths needed to attract grassland birds.

It did, however, lead to a second study in Maryland. NRCS is developing management recommendations from that study on an interim basis.

Funding for the project was provided by the NRCS Agricultural Wildlife Conservation Center (AWCC), formerly the Wildlife Habitat Management Institute.

The AWCC, located in Madison, Mississippi, is a fish and wildlife technology development center.



Narrow buffer (100 ft) (top); Wide buffer (150 ft) (bottom)

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