

Western Ecological Research Center

Publication Brief for Resource Managers

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Hunting Vulnerability of Dabbling Ducks to Spinning-wing Decoys Varies among Species and Locations

Mechanical spinning-wing decoys are strong attractants to ducks and increase harvest rates over traditional decoying methods. However, it is unknown whether all duck species are attracted similarly to spinning-wing decoys and whether the effectiveness of these decoys changes with latitude. Few scientific data have been available to guide management decisions regarding the use of these decoys. USGS scientist Dr. Josh Ackerman and twelve other collaborators from around North America investigated the effectiveness of spinning-wing decoys during experimental hunts at 6 study sites in the United States and Canada and reported their results in a recent issue of the *Journal of Wildlife Management*. This study provides a broad perspective by integrating the results of several studies throughout North America to draw general conclusions about effectiveness of these decoys and to examine potential differences among species of dabbling ducks in their response to this new technology.

The authors examined the effectiveness of spinning-wing decoys for 9 species of dabbling ducks during 545 hunts in California (1999–2000), Minnesota (2002), Manitoba (2001–2002), Nebraska (2000–2002), Missouri (2000–2001), and Arkansas (2001–2003). During each experimental hunt, they systematically alternated between 2 paired decoying treatments every 15–30 minutes (depending on study site): traditional decoys only and traditional decoys with a spinning-wing decoy. Overall, 70.2% (n = 1,925) of dabbling ducks were harvested (shot and retrieved) when spinning-wing decoys were turned on, ranging from 63.6% in Missouri to 76.4% in Minnesota. Effectiveness of spinning-wing decoys increased with latitude of study sites, suggesting that naïve ducks in the north either became

Management Implications:

- Our results indicate that the effectiveness of spinning-wing decoys differs among duck species and changes with latitude. Consideration of these effects may be warranted when setting harvest regulations and methods of take.

less responsive with increased exposure to spinning-wing decoys as they migrated south during the fall and winter or were harvested from the population at more northern latitudes.

Proportions of ducks shot when spinning-wing decoys were turned on differed among species, from a low of 50.0% for cinnamon teal to a high of 79.0% for American wigeon. Longer-lived species (larger ducks such as American wigeon and mallard) were affected relatively more by the novel decoy than shorter-lived species (small ducks such as cinnamon teal and American green-winged teal). Within a species, age or sex did not influence the decoy's effectiveness.

Ackerman, J. T., J. M. Eadie, M. L. Szymanski, J. H. Caswell, M. P. Vrtiska, A. H. Raedeke, J. M. Checkett, A. D. Afton, T. G. Moore, F. D. Caswell, R. A. Walters, D. D. Humburg, and J. L. Yee. 2006. Effectiveness of spinning-wing decoys varies among dabbling duck species and locations. Journal of Wildlife Management 70:799–804.