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CONTROLLING WHITE-TAILED DEER INTRUSIONS WITH ELECTRIC FENCE AND MAT

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Abstract

White-tailed deer (*Odocoileus virginianus*) pose a significant threat to human health and safety. During 1990-2003, the average cost of a deer/aircraft collision was \$38,000. Various methods of fencing and gating exist to reduce deer intrusions onto airports. We tested one style of electric fence (ElectroBraid) and an electric mat in separate tests on free-ranging deer in northern Ohio by measuring deer intrusions and corn consumption at 10 sites. The fence reduced mean daily deer intrusions by 88-99 % in each test when the fence was powered. When power was turned on and off within a four-week period, intrusions decreased 57%. Mean corn consumption differed between treated (< 2-6.4 kg/day) and control sites (15-32 kg/day). In the electric-mat test, deer intrusions at treated sites decreased 95% for the six-week treatment period. Control site intrusions initially decreased by 60%, but returned to pretreatment levels by week 3. Mean corn consumption was similar between treated (16.2 kg/day) and control sites (15.7 kg/day). Results suggest that the electric fence and electric mat, under the conditions of the tests, may significantly reduce deer intrusions.

Biographical Sketch: Thomas W. Seamans is a certified wildlife biologist for the USDA/Wildlife Services/National Wildlife Research Center field station in Sandusky, Ohio. Tom has spent the last 18 years conducting research focused on finding biologically sound solutions to conflicts between people and wildlife. He received a B.S. degree in wildlife science from Cornell University and a M.S. in wildlife management from Ohio State University.