

exclusion devices, insight into ecological factors that attract unwanted wildlife, videos demonstrating proper trapping techniques, and contact information for professionals within the state of Alabama that offer nuisance animal removal services. The purpose of the website is to help bridge the gap between the services that our citizens request and those that the state can actually provide.

Behavioral Ecology and Management of Suburban Coyotes in Westchester County, New York

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The coyote (*Canis latrans*) is now established as a relatively common inhabitant of nearly all landscapes in the northeastern United States. However, the ecology and management of this larger, mid-sized carnivore in urban areas is poorly understood, and creates much uncertainty for residents and wildlife managers alike. Detailed behavioral ecology studies are important to understand the role of the coyote in urbanized landscapes and their interactions with humans. We are studying the behavioral ecology of coyotes in Westchester County, N.Y., a predominantly urban county directly north of New York City. We investigated the diet of coyotes through trail-based fecal collections to identify potential anthropogenic food items that could lead to negative human-coyote interactions. Concurrently, we examined the spatial ecology of coyotes using both VHF- and GPS-based telemetry. Preliminary results from the diet analysis indicated that >50% of the scats collected contained white-tailed deer (*Odocoileus virginianus*) remains. Other natural food items accounted for most of the remaining food items. No domestic dog remains have been identified in scats and only 4 scats contained domestic cat remains—3 of which were collected during the same day along the same collection trail. Spatial ecology data indicated that coyote home ranges ($n = 26$) averaged $5.53 \text{ km}^2 \pm 3.18 \text{ SD}$, and ranged from $1.16\text{--}12.02 \text{ km}^2$. Habitat use revealed that 71% of coyote locations ($n = 1,987$) were in natural lands, and 28% were in residential, recreational and agricultural areas. While these findings indicated the risk for negative interactions was lower than for other areas of the U.S., potential does remain for conflicts to occur. Overall, resident coyotes appear to be living natural lives and remain embedded in natural processes, while avoiding human interactions in developed landscapes.

Managing Meadow Vole Damage on a Natural Area Restoration Site

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Meadow voles (*Microtus pennsylvanicus*) can cause extensive damage to nursery and orchard plantings when food is scarce. Historically, significant research has been devoted to managing vole populations in agricultural or horticultural settings. Restoration of a former New York City municipal landfill to a native ecosystem has been hampered due to expanding vole populations.

Due to location and sensitivity of the site, traditional methods of managing vole populations were restricted. In the fall of 2008 zinc phosphide-treated oats were applied to the site using PVC bait stations. Snap-trapping efforts indicate that the use of bait stations and zinc phosphide grain baits can greatly reduce vole populations in urban environments. Follow-up applications of diphacinone bait will be applied in the winter of 2008–2009. Results from the diphacinone treatment as well as additional management efforts will be presented.

Genetic Analysis of Population Dynamics of the Southeastern Coyote (*Canis latrans*)

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Coyotes (*Canis latrans*) have been extremely successful in dispersing and expanding their range that now includes all fifty states of the United States in addition to Canada and parts of Central America. These animals have generally been considered a pest species due to their adaptive ability, high reproductivity, and impact as a top predator on commercial agricultural business. Population dynamics of coyotes is still poorly understood, yet such knowledge would be beneficial to management of coyotes in all areas. The goal of this study is to determine population structure in Alabama by using microsatellite DNA markers. In addition we plan to examine patterns of gene flow across an urban to rural gradient. This research is extremely applicable in urban coyote management as we will be able to describe gene flow between and among population of coyotes. Information gained about population structure among coyotes in east-central Alabama could be informative about populations across the southeastern region. It is our expectation that such biological data will be consolidated with the vast knowledge of the ecology of the southeastern coyote gathered to date to inform and aid management plans and decisions across the region. Approaching both conservation and management issues with a more unbiased view of the ecology of coyote populations will allow greater effectiveness in management practices for this species.

Native and Naturalized Turf Species Suitable for Use on Airfields Managed for Wildlife Hazards in the Northeast

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Habitat management is an important component of an integrated approach for reducing wildlife hazards on airfields. This research examines alternative turf species that are either native or naturalized in the northeastern United States. Many native turf species tend to not be attractive to wildlife due to their low palatability and seed production. These species may have uses on airfields, golf courses and in residential areas where geese and other wildlife are in conflict with humans. While the low seed productivity in some native species is a wildlife deterrent, this same