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Subject: PABIODIV: Coyotes

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The presence of predators among us is always a contentious issue, and one that raises a great deal of personal interest. Which to a certain extent is part of the problem. While there will be lots of anecdotal accounts on the affects of coyotes, there is little concrete data available regarding the behavior of coyotes in the newer parts of its range, i.e. east of the Mississippi. Most of the scientific data available deals with behavior of Western coyotes well away from people, although there is starting to be some data regarding suburban behavior in California. There is also some good research being done on coyotes on Cape Cod, a highly suburbanized landscape and even some Boston data (http://www2.bc.edu/~wayio/). Numerous complex questions are raised. For us in PA there seem to be two separate issues; how will/are coyotes affecting the ecology of natural areas, and how will/are coyotes interacting with suburban and urban areas. For example, do coyotes kill white-tail deer that are already slated for mortality by winter condition, disease, etc. in compensatory mortality, or will they increase white-tail mortality (additive mortality)? Will covotes will have a much needed benefit to North Eastern habitats by limiting other mesopredators such as raccoons, opossums, and foxes, thus helping our nesting song birds, or will they contribute to nesting bird predation? In sub/urban areas how much predation on domestic animals will there be? To address Roy's questions, I think coyotes are much too adaptable to end up being linked to a single prey source, such as white-tailed deer. The lynx example is valid for a close predator prey relationship-but you aren't going to find a lynx taking advantage of a trash bag or squirrels in a city cemetery either. There is some pretty good documentation on the variation in kill and feeding behavior of different animals from out West, where livestock predation is closely studied. Certainly PA has a significant coyote population, probably across our whole landscape spectrum. Given that Coyotes are highly territorial, its likely that they will have a self stabilizing population level, which will probably be independent of any particular control methods, given their good breeding success and high dispersal rates. But these level could vary widely across the landscape, from higher densities in more natural areas, and lower densities in suburban and even urban settings. In Dave Borneman's case, even if they removed this specific covote, if the habitat is good, there is likely to be another coyote waiting to take its place. The Wildlife Conservation Society (http://www.wcs.org) commissioned an excellent working paper; "The Ecology of Northeast Coyotes" which gives an excellent summary of many of these issues, and has an extensive citation list for more information.

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