COYOTES IN THE EASTERN US: STATUS AND IMPLICATIONS

--Damage Problems and Economic Losses from Coyotes in the Northeastern U.S.--

by Dennis Slate 1/

Losses of livestock to coyotes (Canis latrans) have historically been a matter of concern to ranchers and Animal Damage Control personnel in the western US. With range expansion of the coyote into the eastern US, coyote depredations on domestic stock and fowl appears to be emerging as an issue that will deserve to be more fully addressed by researchers, policy makers and management personnel in this region of the US. This portion of the panel presentation will review and discuss damage problems and losses from coyotes in the northern states of the Eastern Animal Damage Control (ADC) Region.

Information for this presentation was obtained through responses to a mail questionnaire provided to U.S. Department of Agriculture, Animal and Plant Health Inspection Service, ADC State Directors in the northeastern states and northern tier of states extending from Ohio to Minnesota; 18 states were included in the survey. The questionnaire was composed of a series of questions under four main headings: 1) coyote population status and distribution; 2) coyote depredations; 3) domestic and feral dog depredations; and 4) livestock production. State Directors were requested to contact agencies (State Departments of Agriculture and Fish and Game Departments) in their respective states for responses to questions they were unable to specifically address. Follow-up phone calls were made to state agencies or State Directors when it was necessary to obtain clarification on a particular response or supplemental information.

Coyotes were reported to be present in all 18 states except Delaware. Recent annual coyote take or harvest estimates ranged from 4 in Rhode Island to 12,500 in Minnesota; these should only be interpreted as a very crude index of the range of coyote abundance for the states in the survey. States with reported annual harvests in excess of 1,500 coyotes include: Maine - 1,900, New York - 2,213, Indiana - 2,235, Wisconsin - 2,865, Michigan - 5,600, Illinois - 8,600, and Minnesota - 12,500. Coyote populations were reported as still increasing in 12 of the states surveyed.

Quantitative information on coyote depredations to livestock, fowl and cultivated fruits and vegetables were generally lacking for those states surveyed. Only 7 of 18 states had recent records, surveys or survey estimates of sheep and lamb losses to coyotes. Four states (NJ, RI, VT and WV) in which records of coyote depredations are kept by Fish and Game or Agriculture Departments reported sheep and lamb losses to coyotes ranging from 2 (NJ) to 190 (WV) for 1986. There was some level of field verification to determine the depredating species in VT and WV. Ninety-seven coyote kills of sheep have been verified in Ohio from March to mid-July 1987, through a state-wide indemnification program that is being conducted by Ohio Department of Agriculture to compensate producers for losses to coyotes. In New Hampshire, 20 sheep kills by coyote have been verified by ADC personnel on six farms from January to September 1987. New Hampshire ADC has also conducted two damage surveys since 1980 through a questionnaire distributed by the Cooperative Extension Service and NH Farm Bureau. Reported sheep losses were 11 and 96 in 1980 and 1985, respectively. These surveys did not, unfortunately, attempt to sample non-respondents to the questionnaire. New York is the only state in the northern part of the Eastern ADC Region that is currently utilizing January livestock surveys conducted

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by the Agricultural Statistical Service in the state as means of ascertaining losses of sheep and lambs to predators. State-wide estimates of coyote depredations on sheep and lambs in NY were 1,037 and 1,907 for 1985 and 1986, respectively.

When asked if they suspected or were aware of other types of coyote damage in their state, five states responded that there was damage to other crops and livestock. Blueberries (ME), pigs and melons (IL and IN), and range turkeys and calves (MN) were cited as other types of damage; New York indicated the occasional loss of calves. None of the states had quantitative information on these crop losses to coyotes.

Eleven of the respondents indicated depredations caused by domestic and/or feral dogs were a serious problem in their state. In all states surveyed except Minnesota, there is a system at either the municipal, county or state level to compensate producers for livestock losses to dogs. Funds for these programs are generally raised through dog licensing fees. Dog damage compensation programs may produce economic incentive for attributing at least some coyote depredations to dogs, in view of the general lack of programs to identify the responsible predator species.

Range expansion of the coyote into many areas in the eastern US was a relatively recent event. The significance of its impact to agriculture in this region is not clear at this time. There is generally little existing quantitative information on coyote depredations in the east. The existing data have been collected by a variety of methods among those states surveyed and are therefore not readily comparable. Potential dog damage payment and reporting biases have not yet been adequately addressed for those states in the survey. At this juncture, we know only that livestock losses to coyotes can be a hardship to individual producers. If a clearer understanding of the current and future impact of the coyote to the agricultural community in the eastern region is to be realized, a scientifically designed survey should be conducted in several sample states. The survey should be standardized among the states sampled, have a built-in capacity to identify and account for biases, and have the ability to be easily conducted at appropriate time intervals in the future so as to provide trend analyses.