SOUTHEASTERN UNITED STATES

by Michael L. Kennedy

In the last 20 years (especially during the last decade), reports of coyote-like wild canids have increased steadily in the southeastern United States. These canids have apparently become well established in many parts of the Southeast. Taxonomically, the coyote-like animal could represent coyote (Canis latrans), red wolf (C. rufus), gray wolf (C. lupus), domestic dog (C. familaris), or hybrids of these taxa. There has been wide speculation (especially among the general public) in some areas as to the taxonomic status of wild canids. General references to wild "coy-dogs" (coyote x domestic dog cross) have become increasingly numerous in the popular and semipopular press. There has been suspicion of potential massive introgression of domestic dog genes into wild canid population resulting in a highly modified canid population. Perhaps part of this speculation has resulted from the hybridization of coyotes and red wolves in portions of the Southeast. However, at this time. it is relatively clear that there is little basis for fear of massive coyote and dog hybridization or the stabilization of hybrid populations in the Southeast.

Several means of distinguishing canid groups are available. However, some are more convenient to employ than others. The application of discriminant function analysis to skull characters has been the most widely utilized procedure for separating or identifying wild canids. Using this multivariate statistical procedure, known groups (those of certain identification) have been shown to

cluster distinctly and hybrids to group intermediately among or between knowns. Such techniques will no doubt continue to be useful in assessing canid populations in the Southeast. However, when employing such methods. investigators should consider which canid groups to include in analyses. Since there is no evidence that C. lupus existed in the southeastern United States in the 20th century, the gray wolf need not be considered in most systematic studies. Additionally, since wild populations of red wolves are not in existence (and have been absent from some regions for several decades), there may be no need to include this species in studies conducted in some regions. Yet. it should be remembered that coyote populations occurring in the Southeast probably have stemmed largely from C. 1. frustror; this taxon has been significantly influenced by red wolf genes. However, in many cases. taxonomic questions in the Southeast best relate to coyotes and domestic dogs.

Presently several studies have assessed the taxonomic status of wild canids. Hybridization between covotes and domestic dogs was noted as early as 1885. All indications are that hybrids between these two species are found in the wild, but, in general, the percentage is low. Studies in southeastern states have indicated that domestic dogs occur in many regions and offer an opportunity for hybridization with coyotes. However, there is little statistical evidence of blending with coyotes. All indications are that dog genes do not filter significantly into wild canid stocks in North America; the population of wild Canis in the Southeast has not been influenced significantly by hydridization with C.

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familiaris. Fears of massive introgression from the domestic dog into wild canid populations have not been realized, and stabilized populations of coyote and domestic dog hybrids are apparently unlikely in the future. There is substantial evidence that the predominant wild canid occurring in the Southeast is coyote, <u>C. latrans</u>.