

## **THE ECONOMIC VALUE OF REPTILES AND AMPHIBIANS INHABITING THE CHARLOTTE-METROPOLITAN AREA OF NORTH CAROLINA**

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Anthropogenic habitat modification often detrimentally impacts reptile and amphibian populations. Determining the economic loss suffered from herpetofaunal extirpations is an important first step in understanding the value of natural resources and the mitigation process. Assigning a commercial value is difficult for amphibians and reptiles because knowledge of their population status is unknown. Additionally, if commercial values are available, it is debatable whether this is equivalent to a species' ecological value. This study was undertaken to determine the economic value of reptiles and amphibians within the Charlotte-Metropolitan area of North Carolina. Evaluations were based on species known to occur in this region, as well as those that potentially inhabit the area. We used current commercial values and available densities to estimate the economic value of amphibians and reptiles inhabiting various habitats in the region. Internet searches were conducted to determine commercial values and densities were obtained from the literature and unpublished data. Densities were multiplied by the area of the habitat likely inhabited by the species to determine the number of individuals within particular areas. The calculated number of animals was then multiplied by the commercial cost of the species to determine each species economic value. The total commercial value of all reptiles and amphibians inhabiting and potentially inhabiting various habitats in the Charlotte-Metropolitan area was determined by adding all individual species' values. These results provide a mechanism for placing a quantitative economic value on an important natural resource that can be used to mitigate for anthropogenic impacts.