

Biological Survey of Amphibians and Reptiles at Brick Pond Park

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Amphibians and reptiles are an integral part of ecosystems along the Savannah River. A biological survey of the newly constructed Brick Pond Park in North Augusta, South Carolina was conducted to determine the diversity of the amphibious and reptilian species present. The nine-month study was conducted using various passive capture techniques such as; drift fences with pitfall traps, cover boards, and baited hoop nets (turtle traps). Some active capture techniques were employed as well, such as netting and hand-catching. Along with the biological survey, an efficacy study was conducted to determine which capture methods were most effective. Each specimen was identified, measurements recorded, and then released. Data was compiled as to which species were present and which method of capture was used for each. The species collected are consistent with a typical piedmont forest ecoregion.

Analysis of Turtle Population Characteristics at Brick Park Pond

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The study involved data collection on species of freshwater turtles at Brick Pond Park in North Augusta, SC. The purpose of this study was to evaluate population demographics (population size, sex ratio, body size, and home range) of freshwater turtles. The techniques employed included: turtle trapping, weighing, tagging and radio tracking. Trapping occurred during the fall of 2009 using three hoop traps baited with sardines. The length and width of each turtle was measured to calculate the turtles' size; the gender of each turtle was also recorded. The size and weight of each turtle was then compared on a basis of species and gender. All turtles were immediately released at the site of capture. The turtles were then classified based on gender and species along with the average calculations of weight and size. A T-test was done to compare the size of the female turtles to the male turtles. Four turtles were tagged and their movements were monitored from August to mid December 2009. The movements may be correlated to the availability of food and the diversity of predators. Samples were collected from the turtle scutes and claws; future research will involve mercury analysis of turtles inhabiting Brick Park Pond. (Word count: 200)