

Herpetofaunal and Small Mammal Assemblages Along a Terrestrial Moisture Gradient in Northern Virginia

Joseph C. Mitchell¹

Florida Museum of Natural History
University of Florida
Gainesville, Florida 32611

Christopher A. Pague

The Nature Conservancy
2424 Spruce Street
Boulder, Colorado 80302

ABSTRACT

We studied the composition of terrestrial amphibian, reptile, and small mammal assemblages in five types of forested habitats in Prince William Forest Park (PWFP) in northern Virginia ranging from hydric to xeric moisture regimes. We used drift fences and pitfall traps to capture 1,099 individuals representing seven species of anurans, seven salamanders, three lizards, four snakes, four shrews, and four rodents. The wetter floodplain and mesic sites supported significantly higher numbers of amphibians than the three drier sites (mixed, oak, pine). Numbers of *Plestiodon fasciatus*, the only reptile captured in abundance, were not significantly different among all five sites. Number of captures of three species of mammalian insectivores documented at all five sites did not differ significantly. No rodent species was abundant on these sites, although more *Peromyscus leucopus* were captured than other species; it occurred most often in the mesic site. The pine (xeric) site had the fewest species and the lowest number of individuals of all the vertebrate groups. The regenerated forest in PWFP should allow long-term persistence of the herpetofauna and small mammals characteristic of this region.

Key words: Amphibians, community ecology, forest ecology, reptiles, restoration, small mammals, Virginia.

¹Corresponding author: dr.joe.mitchell@gmail.com