

Erelli, Mark (1994). "Amphibians in the BMMCA: Biodiversity and Utilization of Five Woodland Pools".

The Bates-Morse Mountain Conservation Area is a 600 acre nature reserve located approximately 20 miles south of Bath, Maine (USA). Searches of preferred amphibian habitats were conducted from 25 April through 25 May, in an attempt to generate a species list which catalogs the amphibian biodiversity of the reserve area. Only 6 of the 15 species of amphibians suspected of living in the reserve were discovered during the course of the study. This discrepancy is likely a function of the duration and the time of year the study was conducted. In addition to the generation of a species list, five woodland pools were studied in order to document the extent to which they are utilized by amphibians. Physical parameters (i.e. temperature, pH) were recorded, as well as pool characteristics such as percent canopy, bottom type, depth, and shoreline and emergent vegetation. Egg mass placement of the spotted salamander (*Ambystoma maculatum*) was also measured, with respect to the dimensions of egg masses, and their position in relation to the surface and the shore of the pond. There was a high amount of variation in the physical parameters of the pools, with some being warmer or more acidic than others. Amphibian utilization of each pool also differed, with some supporting larger breeding populations of spotted salamanders and wood frogs (*Rana sylvatica*) than others. Future studies should work to establish long-term amphibian population monitoring, and focus on regular collection of physical data in order to assess and account for any fluctuations in the reserve's amphibian populations.