

If You Build it, Will They Come? Success of a Wetland Restoration as Wildlife Habitat

Abstract

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Big Spring Run, a headwater system located in Lancaster County, was restored in 2011 through an innovative restoration process that converted this meandering stream with steep banks into a wetland ecosystem. One of the many variables monitored at the restoration site is amphibian diversity, specifically of salamanders and frogs. There were two species of amphibians present in Big Spring Run pre-restoration: the northern two-lined salamander (*Eurycea bislineata*) and the northern red salamander (*Pseudotriton ruber*). Post-restoration, it is possible that a greater diversity of amphibians inhabit Big Spring Run. In order to detect the presence of salamanders in Big Spring Run, three techniques, kick nets, dip nets, and litter bags, were used. These methods confirmed the existence of the northern two-lined salamander (*Eurycea bislineata*) and the northern red salamander (*Pseudotriton ruber*) in Big Spring Run. Detection of frogs was done by analyzing daily audio recordings that were taken for a half hour from March 18-July 31, 2014. The presence of green frogs (*Lithobates clamitans*) was confirmed by both audio and visual evidence.