



# Hoosier National Forest Happenings



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## **VERNAL WETLAND DEVELOPMENT PROGRAM ON THE HOOSIER NATIONAL FOREST**

### **What are vernal wetlands?**

Vernal wetlands are shallow wetlands generally without inlet or outlet, and not likely to retain water year round. They do not support fish populations but are an ideal habitat for a variety of aquatic species, such as dragonflies, grey tree frogs, and salamanders.

### **Program Goals**

The goal of the vernal wetland development program is to correct continuing erosion associated with illegally used and abandoned roads. Another goal may be to create wildlife habitat. On the Hoosier National Forest, the approach used is to obliterate old roads by inundation to create vernal wetland habitats in locations with severe erosion. Consequently, a situation negatively affecting soil and water resources turns into benefits for several wildlife species. Currently on the Hoosier, over 100 vernal wetlands have been created, providing habitat for Eastern forest bats, reptiles and amphibians, curtailing existing erosion, and limiting illegal ATV use.

### **Creating a vernal wetland**

The vernal wetland construction process includes:

- Site walk-through where design is discussed and determined
- Obliteration of the existing entrenched roadbed
- Recontouring to the road bed to form vernal pools
- Seedbed preparation, seeding, and mulching

A wide-track, narrow blade, low ground pressure bull dozer is used to construct roadbeds; the operator is constrained to operate only within the existing roadbed to ensure the protection of cultural resources. Pools are constructed to retain as many existing natural features as possible, tree removal is also constrained. Typically, a site involving the construction of 10 pools requires approximately three days of heavy equipment use and 60 labor hours. Construction is relatively rapid and cost effective. On the Hoosier National Forest, cost of construction, including equipment rental, materials, and personnel time, averages less than \$200.00 per vernal pool.

### **Partnerships**

The program is a result of an on-going partnership between the Hoosier National Forest and the Indiana Department of Natural Resources – Division of Fish and Wildlife. For over 50 years, the two agencies have worked together combining resources to improve wildlife habitat.

For additional information on vernal wetlands, contact Clark McCreedy, Hoosier National Forest wildlife biologist at 812-547,7051, [cdmccreedy@fs.fed.us](mailto:cdmccreedy@fs.fed.us).

Valeene Vernalis – Patoka Watershed - Hoosier National Forest



Road Obliteration & Rehab – New Properties

Valeene Vernalis – Hoosier National Forest

Revegetation – 14 months after construction

