

Natural Resource Preservation Brief #2

Woodchuck Management

A great deal of time is spent by the park's Natural Resources Management staff focusing on the prevention or mitigation of resource problems. The issue which best typifies this function is the prevention of the extinction of a plant or animal. Here at Antietam our resource problems are of a slightly different nature. Because this is an historic site, our focus must be on cultural resources. However, there is a very definite tie between the cultural and natural resources of the park.

The Woodchuck (*Marmota monax monax* L.) is an excellent example of the relationship between cultural and natural resources.

Here at Antietam, we have an abnormally high population of woodchucks. This is caused by:

- 1) Ample food sources
- 2) Lack of predation by wild and domestic animals
- 3) Ideal burrow locations

In a sense the situation is aggravated by the management of the area by the NPS. We do not allow hunting or trapping, an activity which keeps populations in check on private lands, and most of our historic structures are unoccupied, which encourages the woodchucks to use them.

Why are we concerned about the woodchucks?

Many of our historic structures are deteriorating because of woodchuck burrowing. Foundations have been undermined. Some foundations are used as burrows themselves. In other cases, wood siding has been knawed away by the woodchucks to allow their passage. The situation is aggravated by other wildlife species who use the burrows once the woodchucks have left.

In some instances, the holes created by woodchuck burrowing are a safety hazard to both visitors and agricultural cooperators.

So what is being done to protect our cultural resources?

In 1984 the Natural Resource Management staff submitted an action plan to control the woodchucks to the Regional office. It is still in the review process.

In the meantime, we have actually initiated a control program using the following strategies:

- 1) Reduce Attractiveness of Structures as Habitat - generally clean things up.
- 2) Burrow Gassing - Population reduction with specially designed gas cartridges.
- 3) Live Trapping and Gassing - The gas cartridges mentioned above can not be used near structures. Therefore, we live trap the woodchucks with Havahart traps and put them down with carbon monoxide.
- 4) Structural Repairs - As money is provided for Cultural Resource Preservation, repairs are made to structural foundations.

- 5) Exclusion - If sufficient funds are given to the park, concrete and hardware cloth barriers will be buried around structures to prevent burrowing.

Why don't we trap and relocate the woodchucks?

Woodchucks are universally considered to be a pest. No one else wants our problem. Relocation elsewhere on the battlefield does not appear to be feasible either. Our gassing and trapping program has shown that new individuals move into the area very shortly after control measures. Although trapped individuals which are relocated somewhere else on the battlefield may never return to the trap location, they certainly put pressure on the population and cause a bump effect.

Since work has just begun on this project, it is anticipated that flexibility in the program will be necessary for success.

At this point, however, we believe we have come up with the most cost effective, the least disruptive, and most successful solution.

The Natural Resource Management Staff