

# Flat-spired three-toothed Snail

## *Triodopsis platysayoides*

Life on this planet is so rich and varied that it can be difficult to even imagine the many forms it takes. When we read of endangered species, we tend to think of tigers and whales, which do merit our concern and protection. But many of the smallest creatures also need help. The Endangered Species Act currently protects 35 snail species. The flat-spired three-toothed snail, known locally as the Cheat threetooth, is one of the world's rarest land snails. The U.S. Fish and Wildlife Service considers this snail "threatened."

The flat-spired three-toothed snail is found only in West Virginia, in a restricted area of the Cheat River Gorge with sandstone cliffs, outcroppings and large boulders. The snail lives in cracks and crevices in the rocks and surrounding leaf litter. We know little about the life of this animal, but the state's captive breeding program and past survey efforts provide some information.

Like other land snails, the flat-spired three-toothed snail has a calcium carbonate shell to protect its soft body and internal organs and prevent them from drying out. Mature snails are hermaphroditic (both female and

male). A mating pair will cross-fertilize, and each individual may lay eggs. They bury the eggs in soil or leaf litter. Once hatched, young snails grow rapidly and can reach maturity within their first summer. Adults are a bit less than an inch across, or a little smaller than a quarter.

Because of its limited range, this snail is especially vulnerable to natural or human-caused incidents that could destroy most or even all of its populations. Hikers inadvertently disrupt the leaf litter cover and crush snails. Rock climbers, too, have killed snails and destroyed their habitat unknowingly. Activities such as timbering, housing developments and forest fires all alter the environmental conditions the flat-spired three-toothed snail needs to survive.

Recovery efforts for this animal have included fencing occupied habitat and land acquisition of approximately 1,100 acres of snail habitat. Currently the of West Virginia Division of Natural Resources is working with the U.S. Fish and Wildlife Service to develop a Safe Harbor Agreement for the snail on their properties. Additionally, they are working



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with private landowners to encourage protection of the snail in designing timber management guidelines. All these partners, the state of West Virginia, the Nature Conservancy, private landowners and the U.S. Fish and Wildlife Service, share this effort to prevent the flat-spired three-toothed snail from forever sliding away.



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