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THE RETURN OF THE EASTERN RACER TO VERMONT; SUCCESSFUL CONSERVATION THROUGH PROACTIVE PROJECT DEVELOPMENT AND INTERAGENCY COLLABORATION

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Abstract: During fieldwork for the Vermont Reptile and Amphibian Atlas Project, a population of Eastern Racers (*Coluber constrictor*) was found utilizing a parcel of state land managed by the Vermont Agency of Transportation (VTrans) in southeastern Vermont along Interstate 91. This species was thought to have been extirpated from Vermont for nearly 20 years. Until 2003, the last positively identified Racer in Vermont was a road-killed specimen in Putney in 1985. But the recent discovery along I-91, resulting in the species being listed as State Threatened in Vermont, proves that a few hardy individuals are making their way back to the northern fringes of their geographic range. To date, a minimum of eight individuals have been identified in Vermont, and researchers feel that this is a very encouraging sign that the Racer is making a comeback in Vermont.

Introduction

The discovery site has been scheduled for reconstruction as a truck weigh station. This puts the snakes' habitat on a collision course with the bulldozers. Taking a proactive approach to this potentially contentious situation, VTrans has been working closely with the Vermont Department of Fish and Wildlife (VDF&W) and the Vermont Department of Forest and Parks to develop an advance habitat-mitigation plan for these snakes.

All stakeholders involved feel that the collaborative approach taken here is an example of how multiple state agencies can work together as partners to protect the needs of a State Threatened Species while keeping an important transportation project on schedule.

The following objectives were set by VTrans and VDF&W:

- Identify common goals for VTrans and VDF&W.
- Formalize an agreement between state agencies to work collaboratively.
- Monitor snakes to determine habitat functions of VTrans site and population size.
- Develop a plan to replace habitat impacted by the VTrans project.
- Continue to manage and maintain the VTrans site without harming snakes.
- Create new habitat to compensate for habitat taken for re-development project.



Eastern Racer Description

The Eastern Racer is a very charismatic, strikingly attractive, and sleek creature. It is a large, strong, and active snake, well known for its feisty disposition and surprising speed. The smooth black scales of adult Racers are somewhat iridescent and can have a bluish tint. Juveniles have a pronounced dorsal pattern on a grayish or brownish background. The Eastern Racer is not venomous, but will almost always try to defend itself vigorously by biting and thrashing if handled. Given the choice, a Racer, almost without exception, will flee when confronted by a perceived threat or remain still if it thinks it is hidden. Racers have been known to charge toward humans when they feel threatened. However, sometimes a run for known cover can be misinterpreted as a charge if the observer is between the snake and its intended destination. Racers rely heavily on their vision for hunting and defense and will hold their head up several inches off the ground to facilitate their view (Harding 1996).

Methods

VTrans hired a herpetologist to guide the Agency through the process of considering the habitat needs of a State Threatened Species while planning and designing this transportation project. To meet the needs of the project and the needs of the VDF&W, the following steps were undertaken:

- A study funded by VTrans and FHWA has been undertaken to determine the function and importance of the habitat at the re-development site.
- Two large adult Racers were captured and implanted with radio transmitters so that their movements could be monitored on a weekly basis (during their active season) for two years.
- Passive integrated transponders have been implanted into all known Racers from this population.
- Open and frequent communication, as well as regular meetings between VTrans and VDF&W, are essential components of this joint effort.



Results

Since the initial discovery of this population of Racers, VTrans has continued to maintain an aggressive schedule for the re-development of this site. VTrans and VDF&W agree that both the project schedule and the welfare of this population of snakes are important. Both agencies anticipate that the proactive effort put into the habitat issues will keep this project on schedule and ensure that the habitat needs of the snake are met before, during, and after construction of the new truck weigh station. The accomplishments are encouraging.

- An interagency Memorandum of Understanding (MOU) was developed between VTrans and VDF&W to outline an advance mitigation plan and detail VTrans' responsibilities while re-developing the project site.
- Mowing and maintenance protocol has been adopted by the VTrans District 2 Maintenance staff to protect the safety of the Racers during scheduled maintenance activities.
- Mapping of habitat mitigation area has begun.
- In addition to answering some very pragmatic questions related to the development of the VTrans weigh station project, the study of this small group of snakes is providing new information on the behavior and habitat needs of Eastern Racers.



Biographical Sketches: Chris Slesar is an environmental specialist at the Vermont Agency of Transportation. He has an M.A. in environmental studies from Antioch University Seattle.

Jim Andrews is a research herpetologist at Middlebury College. He serves as chair of the Vermont Reptile and Amphibian Scientific Advisory Group and is coordinator of the Vermont Reptile and Amphibian Atlas.

Reference

Harding, J. H. 1996. *Amphibians and Reptiles of the Great Lakes Region*. The University of Michigan Press, Ann Arbor, Michigan.