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RESEARCH IDEA DETAILS

Date Printed: 8/20/2009

ID Title

625 Development of Standards for Materials and Location of Wildlife Fencing along Highways

Focus Area	Status	Cost	Timeframe
Wildlife and Ecosystems	Unmet	Under \$99,000	Under 1 year

Scope

Wildlife / vehicle collision reduction is a primary goal for providing a safe transportation infrastructure on America's highways. At the same time, the landscape level impacts on wildlife habitats adjacent to these transportation corridors has led to a growing discussion of how to maintain habitat connectivity while limiting animal access to traffic lanes. An effective method for obtaining these multiple objectives is to utilize fencing to limit entry onto highway rights of way while directing animal movements to available structures suitable for passage under the roadway. Most often, fencing projects are implemented after a roadway has been in operation and after safety issues involving animal/vehicle collisions become apparent. These fencing installation projects are usually carried out by individual state highway district offices. This can lead to a variety of fence materials and placement strategies that may limit the achievement of the twin goals of improving safety while providing connectivity to available habitat.

Research Objectives:

- Survey State Departments of Transportation offices of construction and maintenance to evaluate the current practices regarding materials and location practices when contracting the installation of wildlife fencing projects. Contact both European and Canadian Province Transportation agencies for similar data.
- Conduct a literature search for available information on current state of the art examples of successful projects that utilize fencing as a deterrent to animal access onto roadways while considering habitat connectivity as an essential element in the design. This should include European and Canadian Province examples.
- Prepare an interim report which will portray the results of the survey and findings of the literature search. The reports should highlight any potential or realized operational conflicts between location and maintenance activities associated with the fencing.
- Distribute and discuss the interim findings with a panel of selected individuals (6-10) familiar with highway construction, maintenance and wildlife passage issues.
- Develop a set of best management practices including policies, procedures, and specifications for materials, location, and maintenance activities associated with the construction

of an effective wildlife fencing project that both meets the safety needs of the highway user while providing a safe passage for wildlife species.

Benefits

The research and resulting policies and design specifications are necessary to address concerns regarding increased safety to the highway user as well as on the movements of wildlife resulting from the fragmentation of their habitats. Commitment to the environment and the safety of the traveling public mandates this research and that the findings be made available for all phases of highway planning, design, operation, and maintenance. The need for this work is urgent and is consistent with the meeting the provisions of SAFETEA - LU. With highway systems being stretched to capacity, highway management agencies must continue to maintain and improve safety while embracing opportunities for environmental stewardship. As such, there is need for a continuing and organized examination of these issues.

Suggested By

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Posting Date

July 30, 2009

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