



Wildlife Underpasses

In 2015, two wildlife underpass structures were constructed along Monkton Road to provide a safe crossing route for amphibians. This project was designed to reduce road mortality and improve habitat connectivity.

A Conservation Success

Key Outcomes:

- 80% reduction in total amphibian mortality.
- 94% decrease in mortality for non-climbing amphibians.
- 73% decrease in mortality for climbing amphibians.
- Demonstrates that underpasses are an effective conservation strategy.

How You Can Help

- Support wildlife crossing projects in your area.
- Advocate for amphibian-friendly road planning.
- Donate to conservation organizations and efforts.
- Volunteer for wildlife monitoring efforts.

Want to Learn More?

Visit:

<https://www.lewiscreek.org/monkton-wildlife-crossing>

or

<https://www.researchsquare.com/article/rs-5551430/latest>

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The folks who made this happen

Monkton Conservation Commission, VTrans, Vermont Reptile & Amphibian Atlas, Lewis Creek Association, VTFW, Davis Conservation Foundation, Defenders of Wildlife/TransWild Alliance, the local community, and various local organizations.

Together, we can build roads that work for both people and wildlife!



Saving Amphibians

Reducing Road Mortality in Vermont





Amphibians at Risk

Roads pose a serious threat to amphibians, cutting off access to breeding and feeding grounds. In Vermont, thousands of amphibians are killed annually while crossing roads, threatening population survival.

Over 1,000 Dead in Just 2 Nights!

Biologists identified a segment of Monkton Road in Monkton, Vermont as an important and vulnerable amphibian crossing. During the spring of 2006, they counted over 1,000 dead amphibians in just 2 nights!

Project Details

- **Location:** Monkton Road, Vermont
- **Construction Year:** 2015
- **Study Duration:** 5 years pre-construction, 7 years post-construction
- **Project Cost:** \$342,397
- **How were funds raised?** Grants and community partnerships

Underpass Design

The underpass structures consist of two tunnels built under a 1.3 km stretch of Monkton Road. Each tunnel is paired with guiding wing walls that funnel amphibians toward the safe passageways. Wing walls extend outward from the tunnels to encourage amphibians to enter rather than bypass the structures.

Study Methodology

- **Survey Period:** Amphibian populations were monitored for 12 years.
- **Data Collection:** Researchers conducted nighttime road surveys during peak migration, documenting mortality rates and environmental conditions.

Findings

- **Non-climbing amphibians** used the tunnels extensively, leading to a dramatic decline in mortality.
- **Climbing species**, such as spring peepers and gray treefrogs saw a decrease in mortality, though some bypassed the underpasses.

More Than Amphibians

The underpasses not only protect amphibians but also benefit other wildlife, including mammals, reptiles, and birds. Integrating underpasses into transportation planning helps safeguard biodiversity while maintaining road safety.

Why it Matters

- Supports ecosystem health.
- Reduces vehicle collisions with wildlife.
- Provides a model for future road projects.
- Shows that grassroots conservation movements can make a difference.

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