

## Marcel Huijser, PhD

### Research Ecologist

#### Qualifications Overview

Marcel Huijser is a research ecologist with 24 years of experience. Specializing in road ecology since 1995, he has conducted research in Europe, North America, South America and Asia. His focus is on the ecological impacts of transportation infrastructure as well as mitigation measures aimed at reducing these impacts. Most of his research relates to reducing large mammal-vehicle collisions, providing safe crossing opportunities for wildlife, and cost-benefit analyses regarding the implementation of mitigation measures. Marcel has taught a road ecology course for MSc and PhD students and has also provided several multiple day courses to various agencies and toll road companies.

Marcel Huijser has led several dozens of road ecology projects, **including a report to U.S. Congress** on reducing wildlife-vehicle collisions (2008), and several handbooks containing practical suggestions on implementing effective mitigation measures aimed at reducing wildlife-vehicle collisions (2008) and providing safe crossing opportunities for wildlife (2011). While mitigation measures may be required based on human safety and biological conservation parameters alone, Marcel also developed a cost-benefit model (2009) that serves as a decision support tool based on economics. While Marcel is an applied research ecologist he also values publishing in peer-reviewed journals.

#### Selected Relevant Project Experience

- Evaluation of wildlife crossing structures and fencing along Hwy 93, Montana.
- Wildlife-vehicle collision reduction study: report to U.S. congress.
- Cost-benefit analyses of mitigation measures aimed at reducing collisions with large ungulates in the United States and Canada: a decision support tool.
- Construction Guidelines for Wildlife Fencing and Associated Escape and Lateral Access Control Measures. NCHRP 25-25 Task 84.
- Testing the reliability of nine animal detection systems from 5 different vendors under similar circumstances (Lewistown, Montana).
- Procedures and tools for wildlife-vehicle collision hotspot analyses; Using Caltrans District 10 as an example.

#### Years of Experience: 24

#### Primary affiliations

- Western Transportation Institute – Montana State University (since 2002)
- MPH:ETC

#### Subject area expertise

- Road ecology
- Ecological impacts infrastructure
- Mitigation measures aimed at reducing large mammal-vehicle collisions and providing safe crossing opportunities for wildlife
- Cost-benefit analyses for wildlife mitigation measures

#### Education

- PhD, road ecology, Wageningen University, The Netherlands
- MSc, ecology, Wageningen University, The Netherlands

#### Key Skills

- Ecology
- Data analyses
- Writing and presentation
- Project management

#### Contact: