

CURRICULUM VITAE: Marcel Pieter Huijser

Home address: 636 Stoddard, Missoula, MT 59802
Tel home: (406)-543-5926
E-mail home: marcel_p_huijser@yahoo.com
Date and place of birth: 22 January 1968, Soest, The Netherlands
Nationality: Dual citizenship: United States, The Netherlands

Career goals

I am a research ecologist with a great interest in applied research and quantitative data analysis. Through my research and other activities I hope to make a contribution to the protection of species as well as the environment in which they live. I have a great passion for fieldwork, ranging from the front country with a relatively high concentration of humans, their transportation systems, and their agricultural practises to more remote or less disturbed ecosystems. I value the publication of scientific articles in peer-reviewed journals, but I find that other publications, specifically those that may be more accessible to the public, are important as well. The same philosophy guides my frequent oral presentations and contacts with the media. Over the next few years, it is my goal to expand my current teaching activities from mentoring students and delivering invited lectures to a more involved role as an academic faculty member.

Specific areas of expertise and interest

Animal ecology (mammals, birds, insects), landscape ecology, vegetation science (especially fresh water wetlands, salt marshes, dry forests, heathlands, and agricultural landscapes), plant-herbivore interactions (cattle, horses, geese and small mammals in grassland-reed ecosystems, and red deer, roe deer and wild boar in forest-heathland). I am an expert on hedgehogs (*Erinaceus europaeus*) and infrastructure-nature issues, which, over the last 15 years, has expanded into being a more general expert in road ecology. I have considerable experience in designing ecological field studies, database management, statistical analysis, capture-mark-recapture techniques and radio-telemetry. I also have experience with fieldwork under difficult and challenging circumstances.

Education

1. PhD at Wageningen University, Wageningen, The Netherlands. Awarded 17 November 2000.
Thesis: "Life on the edge. Hedgehog traffic victims and mitigation strategies in an anthropogenic landscape."
2. M.Sc. at Wageningen Agricultural University, Wageningen, The Netherlands. Biology-C (population/ecosystems). Awarded August 1992. Specialisations: animal ecology, nature conservation, vegetation science. During this study I wrote two Master theses and also completed a field course abroad:
 - a. *Masters Research, 1st thesis (1 September 1989 - 31 May 1990)*
Institute for Forestry and Nature Research, Section: Animal Ecology (now part of Alterra, Green World Research Institute), P.O. Box 47, 6700 AA Wageningen, The Netherlands. Estimated the availability of the natural food for ungulates (red deer (*Cervus elaphus*), wild boar (*Sus scrofa*) and roe deer (*Capreolus capreolus*)) in Forestry Hoog-Soeren (South), Veluwe, The Netherlands. Supervisors: Dr. Geert W.T.A. Groot Bruinderink (Alterra), Jan Bokdam M.Sc. (Department of Terrestrial Ecology and Nature Conservation of the Wageningen Agricultural University).
 - b. *Masters Research, 2nd thesis (1 April 1992 - 31 August 1992)*
Ministry of Transport, Public Works and Water Management, Directorate IJsselmeergebied (formerly Flevoland), Scientific Division, Department of Biology, P.O. Box 600, 8200 AP Lelystad, The Netherlands.
Researched the effects of year-round grazing by Heck cattle (*Bos taurus*) and Koniks (*Equus przewalskii gmelini*) on vegetation-structure and habitat analyses of Heck cattle, Koniks, greylag geese (*Anser anser*), white-fronted geese (*Anser albifrons*) and barnacle

geese (*Branta leucopsis*) in the wetland 'Oostvaardersplassen', The Netherlands. Supervisors: Dr. Theo (J.Th.) Vulink (Directorate Flevoland), Prof.Dr. Rudi H. Drent (Department of Behavioural Biology, University of Groningen).

c. *Field Course / Research assistant (1 May 1991 - 31 August 1991)*

Wyoming Cooperative Fish & Wildlife Research Unit, Department of Zoology and Physiology, University of Wyoming, P.O. Box 3166, Laramie, Wyoming 82071, USA. Habitat use by elk (*Cervus elaphus nelsoni*) in relation to possible timber harvest (Big Horn Mountains, Wyoming) and habitat use by white-tailed deer (*Odocoileus virginianus*) and mule deer (*Odocoileus hemionus*) in relation to agricultural interests (Devils Tower National Monument, Wyoming). Supervisors: Dr. Fred G. Lindzey (Research Unit), Jan G. van der Made (Department of Terrestrial Ecology and Nature Conservation, Wageningen Agricultural University).

Courses

1. Statistics: graduate course. April-June 2001. Centre for Biometry, Wageningen University.
2. Scientific writing and presentation, international workshop. 13-15 June 2001. Lecturer: Michael Grossman, University of Illinois, USA.
3. Certificate introductory course ARCVIEW (Geographical Information System). October 1998. ESRI, The Netherlands.
4. Animal Experiments Course. October 1995. University of Utrecht, The Netherlands. In compliance with the Act on Animal Experiments (1977, 1985), art. 9.
5. Course Project Management. April 2002.
6. Snow tracking course. March 2004, Yellowstone National Park, Instructor: James C. Halfpenny.
7. Human Participants Protection Education for Research Teams online course, sponsored by the National Institutes of Health (NIH), on 25 January 2006.

References from previous work environments

Prof.Dr. Karle V. Sýkora, Wageningen University, Department of Environmental Sciences, Ecological Construction and Management of Infrastructure, Bornsesteeg 69, 6708 PD Wageningen, The Netherlands. e-mail: Karle.Sykora@Staf.TON.WAU.NL

Prof.Dr. Herbert H.T. Prins, Wageningen University, Department of Environmental Sciences, Tropical Nature Conservation and Vertebrate Ecology Group, Bornsesteeg 69, 6708 PD Wageningen, The Netherlands. e-mail: Herbert.Prins@STAF.TON.WAU.NL

Dr. Nigel J. Reeve, Royal Parks London. Holly Lodge, Richmond Park, Surrey, TW10 5SH
T. +44 (0)20 8948 3209 nreeve@royalparks.gsi.gov.uk

Piet J.M. Bergers, M.Sc., Institute for Inland Water Management and Waste Water Management (RIZA), P.O. Box 17, NL-8200 AA Lelystad, The Netherlands. e-mail: p.bergers@RIZA.RWS.minvenw.nl

Dennis Wansink, M.Sc., Vereniging voor Zoogdierkunde en Zoogdierbescherming (VZZ) (Dutch-Belgian mammal society), Oude Kraan 8, NL-6811 LJ Arnhem, The Netherlands, e-mail: zoogdier@vzz.nl

Hans (J.G.) de Vries, B.Sc., Directorate-General for Public Works and Water Management, Road and Hydraulic Engineering Division (RWS-DWW), P.O. Box 5044, NL-2600 GA Delft, The Netherlands, e-mail: J.G.dVries@dww.rws.minvenw.nl

Employment History

Research Ecologist (1 September 2002 – present)

Western Transportation Institute, Montana State University, P.O. Box 173910, Bozeman, MT 59717
Tel: (406) 543-2377, e-mail: mhuijser@coe.montana.edu

Responsibilities as principal investigator or co-principal investigator include(d):

1. Evaluation of two experimental animal detection systems (Yellowstone National Park and Pennsylvania) (phase I and II). Funded by 15 Departments of Transportation, Federal Highway Administration, and US DOT (\$1,380,676; 2002-2008).
2. Evaluation of wildlife crossing structures and fencing along Hwy 93, Montana (pre-construction monitoring safety and habitat connectivity). Funded by Montana Department of Transportation, Federal Highway Administration, and US DOT (\$500,000; 2002-2007).
3. The development of software to record road kill on a pocket PC (prototype, phase I). Funded by US DOT. (\$10,000; 2004)
4. Testing the reliability of nine animal detection systems from 5 different vendors under similar circumstances (Lewistown, Montana). Funded by Montana Department of Transportation, Federal Highway Administration, and USDOT (\$827,000; 2004-2009).
5. Survey for all states and provinces in the US and Canada to document the current practices with the collection, analyses and use of animal-vehicle collision and animal carcass data. National Cooperative Highway Research Program project 20-05 / topic 37-12. Funded by the Transportation Research Board, National Academies (\$30,000; 2005-2007).
6. Implementation plan to reduce animal-vehicle collisions along Hwy 83, Montana. Funded by Montana Department of Transportation and US DOT (\$65,000; 2005-2006)
7. Develop a wildlife-vehicle collision countermeasures toolbox for MT. Funded by Montana Department of Transportation (\$20,000; 2006-2007)
8. Evaluation of an experimental animal detection system (Northern California). Funded by California Department of Transportation (\$280,000; 2005-present).
9. Advice on a project that overlays Bulgaria's ecological network with Bulgaria's road transportation system. This is a joint project with Alterra, Wageningen University and Research Centre (The Netherlands) Funded by European Union (\$10,000; 2006-2008).
10. Explore the feasibility for the installation of an animal detection system along SH 75, Blaine County, Idaho. Funded by Blaine County (\$65,000; 2006-2008).
11. Wildlife-vehicle collision reduction study: report to congress. Funded by Federal Highway Administration (\$185,000; 2006-2009).
12. Compile a literature review and a highway mitigation plan for Hwy 93S in Kootenay National Park, Canada (\$30,000; 2007-2008).
13. Cost-benefit analyses of mitigation measures aimed at reducing collisions with large ungulates in the United States and Canada: a decision support tool. Funded by the Wilburforce Foundation (\$3,000; 2008-2009)
14. Evaluation of an experimental animal detection system (Durango, Colorado). Funded by Colorado Department of Transportation (\$160,000; 2008-2011).
15. Compile an update for a highway mitigation plan for Hwy 93S in Kootenay National Park, Canada (\$5,000; 2009-2010).
16. Developing a regional ecosystem framework for terrestrial and aquatic resources along the I-70 corridor, Colorado. Funded by the Colorado Department of Transportation (through Center for Native Ecosystems) (\$40,000; 2009-2011).
17. Evaluation of wildlife crossing structures and fencing along Hwy 93, Montana (post-construction monitoring safety and habitat connectivity). Funded by Montana Department of Transportation, Federal Highway Administration, and US DOT (\$750,000; 2010-2015).
18. Advice on safe crossing opportunities for wildlife for the Stubbe Canyon wildlife movement corridor, Palm Springs, California. Funded by Friends of the Desert Mountains (\$4k; 2010).

Research Ecologist (1 July 1999-1 September 2002)

Research Institute for Animal Husbandry (PV-Lelystad), P.O. Box 2176, NL-8203 AD Lelystad, The Netherlands. Duties include:

1. Translating national policy on multifunctional land use into research projects.
2. Carrying out and supervising multidisciplinary studies. These studies focus on the integration of varied uses and functions of agricultural landscapes such as agriculture, nature, recreation and water management. Examples include:
 - a. The response of dragonflies to shallow margins that were created along a waterway through an agricultural area. The shallow margins were designed to achieve an increase in natural values and also allowed for increased water storage during periods with abundant

precipitation.

- b. A study on the possible spread of weeds and small mammals as a result of a change in the management of the ditches that separate production grasslands. The new management of the ditches led to an increase in natural values (e.g. mammals, dragonflies, butterflies). The aim of the weed and mammal studies was to investigate whether possible objections of farmers were justified.
- c. A study on the effect of the application of reed biomass on the weed pressure in maize fields and on maize yield. The biomass that resulted from a nature-oriented ditch management is applied on arable land. Weed control activities provide links to conventional as well as biological farming systems. In the long term, the application of biomass could lead to an increase in the percentage of organic matter in the soil which could benefit agricultural production. The study aims to intertwine nature and agriculture on the level of individual farms and contribute to the design of integrated farming systems.
- d. A plant re-colonisation study in an agricultural landscape. This study investigates whether ditch slopes at intersections (this is where several seed dispersal streams meet, at least theoretically) have higher plant diversity than ditch slopes away from intersections. If this is the case then ditch slopes at intersections should be given priority in efforts to increase plant diversity in agricultural landscapes. This would imply a change in the shape of parcels of agricultural land: rectangular shaped parcels would be transformed into oval-shaped parcels. This could also be economical as it is inefficient for farmers to have some agricultural machines work corners of parcels.

The above-mentioned studies aim to contribute to science through the publication of articles in peer-reviewed journals. Equally important is to provide the Dutch Ministry of Agriculture, Nature Management and Fisheries, farmer organisations and individual farmers with practical advice.

3. Providing advice and assistance with nature management issues on several experimental farms throughout The Netherlands.

Biological Data Editor and Organiser (1 August 1998 - 1 April 1999)

Vereniging voor Zoogdierkunde en Zoogdierbescherming (VZZ), Oude Kraan 8, NL-6811 LJ Arnhem (Dutch-Belgian Mammal Society). Duties included:

1. Providing a database and GIS on the Dutch nature reserves that qualify for the Habitat- and Bird-directives of the European Union. Hired by the Dutch Ministry of Agriculture, Nature Management and Fisheries, Information and Knowledge Centre for Nature Management (IKC-Natuurbeheer), Wageningen. Project leader: Johan Thissen (IKC-Natuurbeheer).
2. Organising a symposium on hedgehogs and infrastructure. Number of people attending: 300. Financed by Ministry of Transport, Public Works and Water Management, Road and Hydraulic Engineering Division (DWW), Taskgroup on Habitat Fragmentation, Delft. The proceedings were published in English as a special issue of 'Lutra' (Lutra 1999, vol. 42, no. 1)
3. Assisting with the final data entry and management of the atlas of European mammals (Mitchell-Jones et al., 2000).

Mammal and Landscape Researcher (1 March 1995 - 1 July 1998)

Vereniging voor Zoogdierkunde en Zoogdierbescherming (VZZ), Oude Kraan 8, NL-6811 LJ Arnhem (Dutch-Belgian Mammal Society). Project financed by Ministry of Transport, Public Works and Water Management, Road and Hydraulic Engineering Division (DWW), Taskgroup on Habitat Fragmentation, Delft. Duties:

Studying the effects of habitat fragmentation and infrastructure on hedgehog (*Erinaceus europaeus*) populations in The Netherlands and the prospects for mitigation. This project eventually became my PhD study.

Study area: 't Harde (Veluwe), and other locations throughout The Netherlands. Advisor: Piet J.M. Bergers, M.Sc., Institute for Forestry and Nature Research (IBN-DLO), Department of Landscape Ecology, P.O. Box 47, 6700 AA Wageningen, The Netherlands; Project co-ordinator DWW: Hans (J.G.) de Vries B.Sc., P.O. Box 5044, 2600 GA Delft, The Netherlands.

Vegetation and Herbivore Researcher (1 December 1992 - 28 February 1995)

Stichting Loopbaancentrum Wageningen, hired by Ministry of Transport, Public Works and Water

Management (RWS), Directorate IJsselmeergebied, Scientific Division, Department of Biology, P.O. Box 600, 8200 AP Lelystad, The Netherlands. Duties included:

1. Studying the vegetation development of the wetland 'Lauwersmeer' 1969-1994 in relation to abiotic environmental factors and management practises. This study made use of existing data (GIS vegetation maps) but included fieldwork also (fixed site relevees, exclosures/references).
2. Studying the effects of year-round grazing of Heck cattle (*Bos taurus*) and Koniks (*Equus przewalskii gmelini*) on reed-grassland vegetation structure in the wetland 'Oostvaardersplassen' and the habitat use of Heck cattle, Koniks, greylag geese (*Anser anser*), white-fronted geese (*Anser albifrons*) and barnacle geese (*Branta leucopsis*).
3. Studying vegetation development in the wetland 'Krammer-Volkerak' 1987-1994 in relation to abiotic environmental factors and grazing by large herbivores. This research included new field work (fixed site relevees).
4. Studying vegetation development in the wetland 'Oostvaardersplassen' after a drawdown as a result of cyclic water level management. This study was based on existing data (GIS maps, fixed site relevees).

Project leaders: Hans J. Drost, M.Sc. (project 1, 3 and 4), Dr. Theo (J.Th.) Vulink (project 2).

Committees

- Member of the committee on Ecology and Transportation ADC30T. Transportation Research Board (TRB), National Research Council (NRC). 20 October 2003 – December 2006 and May 2007 - present.
- Co-chair ANB20 (A3B05) Subcommittee on animals –vehicle collisions. Transportation Research Board (TRB), since 82nd Annual Meeting. January 12-16 2003, Washington, D.C., USA.
- Member of the editorial board of 'Lutra'. Lutra is a Dutch scientific journal for mammalogists and is included in Biological Abstracts and Zoological Records
 1. Regular board member December 1998 - January 2001
 2. Interim chief editor February 2001 - January 2002 and April 2002 – August 2002
 3. Secretary February 2001 – August 2002In 2001 I co-ordinated the implementation of a new policy. This policy is aimed at making the journal more accessible to an international scientific audience, increasing the number of submitted manuscripts and creating a new lay-out for the journal (from 2001 onwards).
- Institute for Nature Conservation and Education (IVN), Chapter Eemland.
 1. Board member March 1990- March 1996.
 2. Co-ordinator of the taskgroup Nature and Environmental Policies, September 1991- August 1997. Co-ordinated the screening of local government plans concerning nature and environmental topics, providing comments and inventories of the flora and fauna of specific (threatened) areas.
 3. Regular guest speaker (approximately six times a year) on environmental program of local radio station (1992-2000).
- Co-founder of the European Hedgehog Research Group with Dr. Nigel J. Reeve (UK) and Beate S. Johansen, M.Sc. (Norway). This group has organised five international workshops thus far: Norway (1996), Austria (1997), United Kingdom (1999), Sweden (2000) and Italy (2002).
- Two M.Sc. (Frouke Hofstede, Bastiaan Meerburg) and three B.Sc. students (Johan Buitenkamp, Anita Dulos, Martin Ellis) successfully completed their thesis under my supervision in The Netherlands.

Additional experience and skills

- Languages: Dutch, English, basic German.
- Experience with PC programs: Windows, WordPerfect, Word, DBASE, Access, Excel, Lotus 1-2-3, Filemaker, Genstat, SPSS, Statistix, TRIM, Stud, Twinspan, Decorana, Powerpoint, Harvard Graphics, Presentations, Slide Write, ARCVIEW.
- Extensive travel throughout southern Chile and Argentina (1996-1997), Costa Rica, Nicaragua and Panama (2000-2001), North-western Mexico (1995), South-western US (1991, 1994, 1995), Northern Rocky Mts. US /Canada (1991, 1999, 2002), Florida (1989, 1991, 1998), Australia

(2001), India (2006), China (2010), various regions throughout Europe, including Scandinavia (1993, 1994, 1996, 2000) and Bulgaria (2007).

- Fieldwork: extensive experience with vegetation, insect and mammal studies. I have considerable backpacking experience in remote regions and also know how to ride a horse.
- Publications: I am capable of meeting deadlines within a given financial budget, and find it relatively easy to write reports and articles within a short period (see list of publications).
- Media: I create favourable media attention for various projects as illustrated by dozens of newspaper articles (local, regional and national newspapers, e.g. NRC, Telegraaf, Washington Post, New York Times, USA Today, The Guardian), magazine articles (Reader's Digest), dozens of radio interviews (local, regional and national stations, e.g., Radio 1, Radio 3), and several television appearances (regional and national stations, e.g. Twee Vandaag, RTL4, RTL5).
- I was one of the characters in a documentary on road-kill and the automobile culture. CAUGHT IN THE HEADLIGHTS, 53 minutes, 2006, http://www.highplainsfilms.org/fp_caught.html. March 5, 2006. High Plains film by C. Wolf Drimal and Margot Higgins.
- I provided advise for a documentary on habitat fragmentation and roads. DIVISION STREET, 63 minutes, 2008, <http://www.divisionstreetmovie.com>, Frogpondia films by Eric Bendick.

Professional memberships

Vereniging voor Zoogdierkunde en Zoogdierbescherming (Dutch-Belgian Mammal Society), Mammal Society (UK), Nederlands-Vlaamse Ecologen Vereniging (Dutch-Flemish Ecological Society).

Scientific presentations

I have given presentations for a scientific audience at numerous national and international conferences. The list includes presentations from 1995 onwards but excludes presentations I was only mentioned as a co-author.

Austria

- Do roads and traffic affect hedgehog population density? Oral presentation at the second International Hedgehog Workshop of the European Hedgehog Research group. 18-19 August 1997, Vienna, Austria.
- Hedgehog young in The Netherlands. Oral presentation at the second International Hedgehog Workshop of the European Hedgehog Research group. 18-19 August 1997, Vienna, Austria.
- How to analyse dependent telemetry data? Oral presentation at the second International Hedgehog Workshop of the European Hedgehog Research group. 18-19 August 1997, Vienna, Austria.

Belgium

- Overview of animal detection and animal warning systems in North America and Europe. Oral presentation at the International Conference on Habitat Fragmentation due to Transport Infrastructure & Presentation to the COST341 action, 13-15 November 2003, Brussels, Belgium.

China

- The reliability of animal detection systems and reliability norms. Oral presentation at China Academy of Transportation Sciences, 17 September 2010, Beijing, China.

Bulgaria

- The effects of roads and traffic on the natural environment. Oral presentation at the opening seminar Restoring Ecological Networks across Transport Corridors in Bulgaria. 26 April 2006, Bulgarian Academy of Sciences, Sofia, Bulgaria.
- Highway mitigation in North America; how does it happen? Oral presentation at the end seminar Restoring Ecological Networks across Transport Corridors in Bulgaria. 5 June 2008, Sofia, Bulgaria.

Canada

- The location of hedgehog traffic victims in relation to landscape features. Oral presentation,

September 1999, for research staff at Banff National Park, Canada.

- Highway mitigation and sustainable landscapes. Oral presentation at “Wildlife Crossing Structure Field Course”, Canmore, Canada, 9-12 September 2002.
- Motorist safety and wildlife-vehicle collision reduction measures. Oral presentation at the training course “ Mitigating transportation impacts on wildlife & fisheries”, October 12-13, 2006, Banff, Canada.

France

- Nature-oriented ditch management and the possible spread of weeds into adjacent grasslands. 27-30 May 2002, at the 19th general meeting of the European Grassland Federation Conference, La Rochelle, France.

Germany

- Hedgehogs and traffic - the effect of traffic on hedgehog populations. 26-27 May 2001, at the hedgehog conference 'Rund um den Igel', 2. Fachtagung. Münster, Westfalen, Germany. Organised by Pro Igel e.V.

Hungary

- The reliability of animal detection systems and reliability norms. Oral presentation at Infra Eco Network Europe meeting, 27 September – 1 October 2010, Velence, Hungary.

The Netherlands

- The mortality rate in a hedgehog population: the relative importance of road kills. Poster presentation at the conference 'Habitat fragmentation, infrastructure and the role of ecological engineering, 17-21 September 1995, Maastricht/The Hague, The Netherlands. Organised by Ministry of Transport, Public Works and Water management, Road and Hydraulic Engineering Division, Delft, The Netherlands.
- How to estimate the mortality rate in a hedgehog population? Oral presentation at a symposium for young researchers, 21 February 1996, University of Groningen, Haren, The Netherlands.
- The hedgehog project. Oral presentation, 16 July 1996. Institute for Forestry and Nature Research (IBN, now Alterra, Green World Research Institute), Wageningen, The Netherlands.
- How do hedgehogs move about in the landscape? Implications for mitigation measures. 17 July 1996, Utrecht. For the Ministry of Transport, Public Works and Water management, Road and Hydraulic Engineering Division, Delft.
- What do your data show? Oral presentation at the annual hedgehog workshop for employees of wildlife hospitals, 21 March 1998, Amstelveen, The Netherlands.
- Hedgehogs and traffic: effects on individuals, populations and the species. Oral presentation, 26 March 1999 at the symposium 'Hedgehogs on the road', Utrecht, The Netherlands. Organised by the VZZ (Dutch-Belgian Mammal Society), Arnhem, The Netherlands.
- Green-Blue vein networks in agricultural landscapes. Poster presentation at open day of the experimental farm Aver Heino, 17 February 2000, Heino, The Netherlands.
- Hedgehogs and traffic: effects on individuals, populations and the species. Oral presentation, 29 February 2000, for the Department of Nature Conservation and Plant Ecology, Wageningen University, Wageningen, The Netherlands
- Small mammals in a large scale agricultural landscape. Oral presentation, 27 March 2000, for Research Institute of Animal Husbandry, Lelystad, The Netherlands.
- Hedgehog traffic victims and mitigation strategies in an anthropogenic landscape. Oral presentation at PhD ceremony, 17 November 2000. Wageningen University, Wageningen, The Netherlands.
- Small mammals in a large scale agricultural landscape. Oral presentation, 22 November 2000, at symposium 'herbivores and reed vegetation', plant-animal interactions series. The Netherlands Institute of Ecology (NIOO), Nieuwersluis, The Netherlands.
- Multifunctional landscapes. Oral presentation, 17 May 2001, experimental farm Nagele, for the commission for Multifunctional Agriculture, installed by the Ministry of Agriculture, Nature Management and Fisheries.

- Multifunctional landscapes and integrated farming systems. Oral presentation, 23 May 2001, guest lecture, Department of Animal Production Systems, Wageningen University, Wageningen, The Netherlands.
- Multifunctional landscapes. Oral presentation, 25 September 2001 at the experimental farm Nij Bosma Zathe, Leeuwarden, The Netherlands, for a group of German representatives from organisations involved with agriculture and nature management.
- Hedgehogs and traffic: prospects for mitigation. Oral presentation, 19 October 2001, at Alterra, Wageningen, The Netherlands, for a group of US representatives from organisations involved in wildlife - transportation issues.
- Safe and healthy food, at what price? Workshop, 13 March 2002, student conference at Wageningen University, Wageningen, The Netherlands.
- Green vein network research at the experimental farm 'De Waiboerhoeve'. Oral presentation, 10 April 2002, at the experimental farm 'De Waiboerhoeve', Lelystad, The Netherlands for a regional directive of the Dutch Ministry of Nature Management and Fisheries (LNV-NW).
- Evaluation of wildlife crossing structures along Hwy 93, MT. Oral presentation for Alterra, Wageningen University. Wageningen, The Netherlands. 17 November 2003.

Norway

- Demographic variables of a hedgehog population and road mortality. Oral presentation, at the first International Hedgehog Workshop, Arendal, Norway, 25-28 April 1996.
- Habitat use of hedgehogs in a small scale agricultural landscape. Oral presentation, at the first International Hedgehog Workshop, Arendal, Norway, 25-28 April 1996.
- Does road mortality affect the population size of hedgehogs? Oral presentation, at the first International Hedgehog Workshop, Arendal, Norway, 25-28 April 1996.

Sweden

- Human impact on populations of hedgehogs through traffic and changes in the landscape: a review. Oral presentation at the fourth International Hedgehog Workshop of the European Hedgehog Research group. 28-29 January 2000, University of Lund, Lund, Sweden.
- Can cars drive over hedgehogs without hitting them?. Oral presentation at the fourth International Hedgehog Workshop of the European Hedgehog Research group. 28-29 January 2000, University of Lund, Lund, Sweden.
- Hedgehogs and traffic: effects on individuals, populations and the species. Oral presentation, February 2000, for the research staff of the Grimsö Wildlife Research Station, Swedish University of Agricultural Sciences, Grimsö, Sweden.

United Kingdom

- The effect of roads and traffic on hedgehog populations. Oral presentation, 27 March 1998, Roehampton Institute London, University of Surrey, London, United Kingdom.
- The location of hedgehog traffic victims in relation to landscape features. Oral presentation at the third International Hedgehog Workshop of the European Hedgehog Research group. 29-30 January 1999, Roehampton Institute London, London, United Kingdom.
- The sex and age of hedgehog traffic victims. Oral presentation at the third International Hedgehog Workshop of the European Hedgehog Research group. 29-30 January 1999, Roehampton Institute London, London, United Kingdom.
- Mammal in large scale agricultural landscapes. Poster presentation at the conference 'Farmers and mammals', 20-21 November 1999. Organised by the Mammal Society and the Linnean Society, London, United Kingdom.
- Hedgehog traffic victims and mitigation strategies in an anthropogenic landscape. Oral Presentation, November 2003, at Roads and Mammals conference, the annual autumn symposium of the Mammal Society held jointly with the Highways Agency, London, United Kingdom.

United States

- Hedgehog traffic victims: how to quantify effects on the population level and the prospects for mitigation. Oral presentation at the International Conference on Wildlife Ecology and

Transportation, 10-12 February 1998, Ft. Myers, Florida. Organised by: Florida Department of Transportation, Tallahassee, Florida, USA.

- The location of hedgehog traffic victims in relation to landscape features. Poster presentation at the Third International Conference on Wildlife Ecology and Transportation, 13-16 September 1999, Missoula, Montana. Organised by: Florida Department of Transportation, Tallahassee, Florida, USA.
- The location of hedgehog traffic victims in relation to landscape features. Oral presentation, September 1999, for research staff at Yellowstone National Park (USA) and the department of Wildlife Management and Nature Resources of the University of Idaho (USA).
- Habitat linkage characteristics in Dutch agricultural landscapes. Oral presentation at the conference Collaborative planning for the metropolitan landscape, Regional strategies for smart growth – When City and Country Collide. Bellingham, Washington, USA, 20-22 June 2002.
- Habitat linkage characteristics in Dutch agricultural landscapes. Oral presentation, 3 July 2002, for research staff at Western Transportation Institute. Montana State University, Bozeman, Montana, USA.
- Habitat linkage characteristics in Dutch agricultural landscapes. Oral presentation at “Conservation Area (Reserve) Design Workshop, Craighead Environmental Research Institute, B-Bar Ranch, Emigrant, Montana, USA, 21 October 2002.
- Habitat linkages and road networks in Dutch agricultural landscapes. Oral presentation at “Ecology and Transportation: Wildlife Linkages” session at Transportation Research Board (TRB), 82nd Annual Meeting. January 12-16 2003, Washington, D.C., USA.
- Challenges of advanced signing technology applications. Oral presentation at Deer-Vehicle Crash Information Clearinghouse Workshop, Midwest Regional University Transportation Center, Madison, Wisconsin, USA., 4 February 2003.
- Wildlife-Transportation Interactions: effects and mitigation measures. Oral presentation for “Mountains and Minds” lecture series, Big Sky Institute, Big Sky, Montana, USA., 12 February 2003.
- Overview of animal detection and animal warning systems in North America and Europe. Oral presentation at the International Conference on Ecology & Transportation (ICOET), 24-29 August 2003, Lake Placid Resort, Lake Placid, New York, USA.
- Overview of animal detection and animal warning systems in North America and Europe. Oral presentation at the 83rd annual meeting of the Transportation Research Board of the National Academies. 11-15 January 2004 Washington DC, USA.
- Proposal. Comparison of animal detection systems in a test-bed. Oral presentation for Montana Department of Transportation, Helena, MT, USA. 24 February 2004.
- Proposal. Implementation plan for animal-vehicle collisions along Hwy 83 in the Seeley-Swan. Oral presentation for Montana Department of Transportation, Helena, MT, USA. 29 April 2004.
- Overview of animal detection and animal warning systems in North America and Europe and the status of the animal detection system along Hwy 191 in Yellowstone National Park. Oral presentation for representatives of Yellowstone National Park, Mammoth, WY, USA.
- Overview of animal detection and animal warning systems in North America and Europe. Oral presentation at the 83rd annual meeting of the Western Association of State Highway and Transportation Officials (WASHTO). 18-21 July 2004, Kalispell, MT, USA.
- Transportation and ecology: effects and potential avoidance, mitigation and compensation strategies. Oral presentation for course “ Conservation & Community in the Yellowstone to Yukon Region. Wild Rockies Field Institute. 21 July 2004, Swan Valley, MT, USA.
- Overview of animal detection and animal warning systems in North America and Europe. Oral presentation (teleconference) for FHWA Rural ITS Workgroup. 29 July 2004.
- Wildlife and transportation: effects and mitigation measures. Oral presentation for Lolo Watershed Group, Lolo, MT, USA. 20 October 2004.
- Road Ecology Course part 2: Accidents with wildlife: Desperately seeking solutions. Oral presentation for Spring Engineering Festival, Department of Civil Engineering, Montana State University, 3 and 4 March 2005.
- The reliability of the animal detection system along US Hwy 191 in Yellowstone National Park, Montana, USA. Oral presentation at the International Conference on Ecology and Transportation (ICOET), 29 August – 2 September 2005, San Diego, CA, USA.

- Software for Pocket PC to Collect Road-Kill Data. Poster presentation at the International Conference on Ecology and Transportation (ICOET), 29 August – 2 September 2005, San Diego, CA, USA.
- The reliability of the animal detection system along US Hwy 191 in Yellowstone National Park, Montana, USA. Oral presentation at the Craighead Environmental Research Institute (CERI) B-Bar Meeting/workshop on Conservation Area (Reserve) Design: October 8-12 2005, B-Bar ranch, MT, USA.
- Animal-vehicle collisions along MT Hwy 83 in the Seeley-Swan. Oral presentation at the Craighead Environmental Research Institute (CERI) B-Bar Meeting/workshop on Conservation Area (Reserve) Design: October 8-12 2005, B-Bar ranch, MT, USA.
- Current road ecology research at WTI-MSU. Oral presentation at the “Deer-vehicle crash reductions: setting a strategic agenda” conference: 24-25 October 2005, Madison, WI, USA.
- The reliability of the animal detection system along US Hwy 191 in Yellowstone National Park, Montana, USA. Oral presentation at the 85th annual meeting of the Transportation Research Board of the National Academies. 22-26 January 2006 Washington DC, USA.
- The reliability of the animal detection system along US Hwy 191 in Yellowstone National Park, Montana, USA. Oral presentation at the NW Transportation Conference, February 7-9, 2006, Oregon State University, Corvallis, Oregon, USA.
- Animal-vehicle collisions and habitat connectivity along MT Hwy 83, Seeley-Swan. Oral presentation at the Clearwater Resource Council meeting, February 28, 2006, Seeley Lake, Montana, USA.
- The reliability of the animal detection system along US Hwy 191 in Yellowstone National Park, Montana, USA. Oral presentation at the National Rural ITS (NRITS) Conference, August 13-16, 2006, Big Sky, Montana, USA.
- Results from NCHRP Project 20-05, Study Topic 37-12: Animal-Vehicle Collision Data Collection (P07-0349). Oral presentation at the 86th annual meeting of the Transportation Research Board of the National Academies. 21-25 January 2007 Washington DC, USA. 22 January 2007.
- Motorist safety and wildlife-vehicle collisions reduction measures. Non-Profit Conservationists and Transportation: New Intersections Workshop. Hosted by American Wildlands (AWL), Wildlife Conservation Society (WCS) and the Yellowstone to Yukon Conservation Initiative (Y2Y). Bozeman, Montana, USA, March 28-30, 2007.
- Animal-Vehicle Collision Data Collection throughout the United States and Canada. Oral presentation at the International Conference on Ecology and Transportation (ICOET), 20-25 May 2007, Little Rock, AR, USA.
- Current Road Ecology Research at MSU's Western Transportation Institute. Ecology Seminar. 18 October 2007, Department of Ecology, Montana State University.
- Current Road Ecology Research at the Western Transportation Institute. Oral presentation at the Deer-Vehicle Crash Reduction Symposium, 29 October, 2007, Schenectady, NY, USA.
- Road Ecology and Restoration. Guest lecture for course “fourteen experiments in ecological restoration”, FOR 195, 15 February 2008, Instructor Dr. Cara Nelson, University of Montana, Missoula, MT, USA.
- Wildlife use of two existing bridges and citizen documentation of wildlife sightings, S.H. 75, ID. Oral presentation at the 2008 Montana Chapter The Wildlife Society Annual Conference, 25-29 February 2008, Missoula, MT, USA.
- Road ecology. Oral presentation for the Five Valleys Pachyderm Club, 14 March 2008, Missoula, MT, USA.
- Deer- and Elk-Vehicle Collisions and Potential Solutions, Along S.H. 75, ID. Oral presentation for the public, 29 May 2008, Hailey, ID, USA.
- Habitat and corridor function of rights-of-way. Oral presentation for TRB Summer Meeting of the Environmental Analysis in Transportation Committee (ADC10), Ecology and Transportation Committee (ADC30), and Transportation Needs of National Parks and Public Lands Committee (ADA40). July 28 - July 31, 2008, Denver, Colorado, USA.
- The reliability of animal detection systems and reliability norms. Oral presentation at the National Rural ITS (NRITS) Conference, September 3-5, 2008, Anchorage, Alaska, USA.

- Wildlife-vehicle collisions; impacts and mitigation measures. Seminar for University of Montana, 7 November 2008, Missoula, MT, USA.
- Wildlife-vehicle collisions; impacts and mitigation measures. Guest lecture for Road Ecology course, Montana State University, 20 November 2008, Bozeman, MT, USA.
- Wildlife-vehicle collisions; impacts and mitigation measures. Invited speaker at Montana Fish Wildlife and Parks meeting, 4 March 2009, Kalispell, MT, USA.
- Design and implementation of selected mitigation measures and cost-benefit analysis. Webinar, 12 May 2009, Transportation Research Board, Washington D.C., USA.
- Wildlife-vehicle collisions; impacts and mitigation measures. Invited speaker at the Colorado premiere of "Division Street", 30 June 2009, Durango, CO, USA.
- The reliability of animal detection systems and reliability norms. Oral presentation at the International Conference on Ecology and Transportation (ICOET), 13-17 September 2009, Duluth, MN, USA.
- Cost-benefit analyses of mitigation measures. Oral presentation at the International Conference on Ecology and Transportation (ICOET), 13-17 September 2009, Duluth, MN, USA.
- Wildlife-vehicle collisions: impacts and mitigation measures. Guest lecture for University of Montana, 5 October 2009, Missoula, MT, USA.
- Highway mitigation plan Kootenay National Park. Guest speaker for Kootenay National Park, 20 October 2009, Radium Hot Springs, British Columbia, Canada.
- Wildlife-vehicle collisions: impacts and mitigation measures. Guest speaker for Monforton School, 6 January 2010, Four Corners, MT, USA.
- Wildlife-vehicle collisions: impacts and mitigation measures. Guest speaker for Ninemile Wildlife Workgroup, 18 February 2010, Ninemile Ranger Station, Huson, MT, USA.
- A quantitative assessment of the reliability of two new animal detection systems and recommended requirements for system reliability. Oral presentation at the National Rural ITS (NRITS) Conference, September 1-4, 2010, Huntington, West Virginia, USA.
- Effects of roads and traffic on wildlife and mitigation measures. Invited speaker at Stubbe wildlife movement corridor stakeholder's workshop. 27 October 2010. Friends of the Desert Mountains, Palm Springs, CA, USA.
- Wildlife-vehicle collisions: impacts and mitigation measures. Ecology Seminar. 4 November 2010, Department of Ecology, Montana State University.

MSc students, summer research program, field excursions and internships for students (just for 2010)

- MSc student Tiffany Holland Allen (2008-present). Department of Ecology, Montana State University, Bozeman, MT, USA.
- MSc student Jeremiah Purdum, (2010-present). Environmental Studies, University of Montana, Missoula, MT, USA.
- Undergraduate Research Experience Program Ashleigh Dupree and Isabella DiMambro. Development of Mitigation Options for Bison-Vehicle Collisions on US 191, Western Transportation Institute at Montana State University, Bozeman, MT, USA (July-August 2010).
- Excursion US Hwy 93 mitigation measures. 15 October 2010. Wilderness and Civilization Field Studies class (RSCN 273), about 25 students, Wilderness Institute, College of Forestry and Conservation, University of Montana, Missoula, MT, USA.
- Internship Fernanda Delborgo Abra, Laboratório de Ecologia de Paisagens e Conservação (LEPaC), Departamento de Ecologia - Instituto de Biociências, Universidade de São Paulo, Brazil (July 2010).
- Internship Madara Blumberga, intern with Federal Highway Administration, Civil Engineering senior Syracuse University, New York, USA (July 2010).

PUBLICATIONS

Peer-reviewed journals, books, book chapters and conference proceedings

Huijser, M.P. & B.A. Nolet. 1991. [In Dutch with English summary: First observation of a beaver

- Castor fiber* in Belgium since 1848]. Eerste waarneming van een Bever *Castor fiber* in België na 1848. *Lutra* 34(1): 43-44.
- Huijser, M.P., H.J. Drost & Y.J.B. Röling. 1995. [In Dutch with English summary: Vegetation development and cyclic water level management in the Oostvaardersplassen]. *Vegetatieontwikkeling en cyclisch waterpeilbeheer in de Oostvaardersplassen*. *De Levende Natuur* 1995 (6): 213-222.
- Huijser, M.P. & M. Roos. 1996. [In Dutch with English summary: Dragonflies, butterflies and bumblebees in vegetation types characteristic for Flevoland (Odonata; Lepidoptera: Rhopalocera; Hymenoptera: Apidae)]. *Libellen, dagvlinders en hommels in voor Flevoland karakteristieke vegetatietypen (Odonata; Lepidoptera: Rhopalocera; Hymenoptera: Apidae)*. *Entomologische Berichten* 56 (11): 161-169.
- Huijser, M.P. & P.J.M. Bergers. 1997. The mortality rate in a hedgehog population: the relative importance of road kills: 98-103. In: K. Canters, A.A.G. Piepers & D. Hendriks-Heersma (eds.). *Habitat fragmentation and infrastructure: Proceedings of the symposium Habitat fragmentation, infrastructure and the role of ecological engineering, 17-21 September 1995, Maastricht/The Hague, The Netherlands*. Ministry of Transport, Public Works and Water management, Road and Hydraulic Engineering Division, Delft.
- Huijser, M.P., P.J.M. Bergers & J.G. de Vries. 1998. Hedgehog traffic victims: how to quantify effects on the population level and the prospects for mitigation: 171-180. In: G.L. Evink, P. Garrett, D. Zeigler & J. Berry (eds.). *Proceedings of the International Conference on Wildlife Ecology and Transportation, FL-ER-69-98*. Florida Department of Transportation, Tallahassee, Florida.
- Huijser, M.P., E.A. van der Grift & G.J. Bekker. 1999. Habitat fragmentation and infrastructure: a review of the proceedings of a European and a North American conference. *Lutra* 41: 43-54.
- Huijser, M.P. 1999. Human impact on populations of hedgehogs *Erinaceus europaeus* through traffic and changes in the landscape: a review. *Lutra* 42: 39-56.
- Reeve, N.J. & M.P. Huijser. 1999. Mortality factors affecting wild hedgehogs: a study of records from wildlife rescue centres. *Lutra* 42: 7-24.
- Huijser, M.P. & P.J.M. Bergers. 2000. The effect of roads and traffic on hedgehog (*Erinaceus europaeus*) populations. *Biological Conservation* 95: 111-116.
- Huijser, M. 2001. [In German with English summary: Hedgehogs and traffic - the effect of traffic on hedgehog populations]. *Igel und Verkehr - Einfluss des Verkehrs auf Igel-Populationen: 11-21*. In: M. Neumeier & U. Seewald (eds.). *Rund um den Igel. Dokumentation 2. Fachtagung. Münster, Westfalen, 26. und 27. Mai 2001*. Pro Igel e.V., Neumünster, Germany.
- Huijser, M.P., B.G. Meerburg, B. Voslamber, A.J. Remmelzwaal & R. Barendse. 2001. Mammals benefit from reduced ditch clearing frequency in an agricultural landscape. *Lutra* 44: 23-40.
- Huijser, M.P., B.G. Meerburg, B. Voslamber & A.J. Remmelzwaal. 2002. Nature-oriented ditch management and the possible spread of weeds into adjacent grasslands: 928-929. In: J.-L. Durand, J.-C. Emile, C. Huyghe & G. Lemaire (eds.). *Multi-function grasslands. Quality forages, animal products and landscapes*. Proceedings of the 19th general meeting of the European Grassland Federation Conference, La Rochelle, France 27-30 May 2002.
- Huijser, M.P. & E.A. van der Grift. 2002. Habitat linkage characteristics in Dutch agricultural landscapes: 103 (full article on CD-rom). *Proceedings Fourth International Conference on Multiple Use of Land. Collaborative planning for the metropolitan landscape. Regional strategies for smart growth – When City and Country Collide*. International Studygroup on Multiple Use of Land (ISOMUL), Bellingham, Washington, USA, 20-22 June 2002.
- Huijser, M.P. & P.T. McGowen. 2003. Overview of animal detection and animal warning systems in North America and Europe. Pages 368-382 in: C.L. Irwin, P. Garrett, and K.P. McDermott (eds.). *2003 Proceedings of the International Conference on Ecology and Transportation*. Center for Transportation and the Environment, North Carolina State University, Raleigh, NC, USA. Available from the internet. URL: <http://www.itre.ncsu.edu/cte/icoet/03proceedings.html>
- Hardy, A. A.P. Clevenger, M. Huijser & G. Neale. 2003. An overview of methods and approaches for evaluating the effectiveness of wildlife crossing structures: emphasizing the science in applied science. Pages 319-330 in: C.L. Irwin, P. Garrett, and K.P. McDermott (eds.). *2003 Proceedings of the International Conference on Ecology and Transportation*. Center for Transportation and the Environment, North Carolina State University, Raleigh, NC, USA. Available

- from the internet. URL: <http://www.itre.ncsu.edu/cte/icoet/03proceedings.html>
- Huijser, M.P. 2003. Animal detection systems: research questions, methods and potential applications: 9 p. Proceedings of Infra Eco Network Europe (IENE) conference. Habitat Fragmentation due to Transport Infrastructure & Presentation of the COST 341 action, 13 - 15 November 2003, Brussels, Belgium. CD-ROMs with the proceedings can be ordered from the internet. URL: <http://www.iene.info/> Accessed 27 September 2004.
- Huijser, M.P., B.G. Meerburg & G. Holshof. 2004. The impacts of ditch cuttings on weed pressure and crop yield in maize. *Agriculture, Ecosystems & Environment*. 102 (2): 197-203.
- Huijser, M.P. & A.P. Clevenger. 2006. Habitat and corridor function of rights-of-way. Pages 233-254 in: J. Davenport & J.L. Davenport (Eds.): *The ecology of transportation: managing mobility for the environment*. Series: Environmental Pollution, Vol. 10. Springer, The Netherlands.
- Huijser, M.P., W. Camel & A. Hardy. 2006. The reliability of the animal detection system along US Hwy 191 in Yellowstone National Park, Montana, USA. Pages: 509-523 in: C.L. Irwin, P. Garrett and K.P. McDermott (eds.). *Proceedings of the 2005 International Conference on Ecology and Transportation*. Center for Transportation and the Environment, North Carolina State University, Raleigh, NC, USA. Available from the internet: URL: http://www.icoet.net/ICOET_2005/05proceedings_directory.asp
- Huijser, M.P., D.E. Galarus & A. Hardy. 2006. Software for Pocket PC to Collect Road-Kill Data. Page: 640 in: C.L. Irwin, P. Garrett and K.P. McDermott (eds.). *Proceedings of the 2005 International Conference on Ecology and Transportation*. Center for Transportation and the Environment, North Carolina State University, Raleigh, NC, USA. Available from the internet: URL: http://www.icoet.net/ICOET_2005/05proceedings_directory.asp
- Huijser, M.P., M.E. Wagner, A. Hardy, A.P. Clevenger & J.A. Fuller. 2007. Animal-Vehicle Collision Data Collection throughout the United States and Canada. Pages 387-391 in: C.L. Irwin, D. Nelson and K.P. McDermott (eds.). *Proceedings of the 2007 International Conference on Ecology and Transportation*. Center for Transportation and the Environment, North Carolina State University, Raleigh, NC, USA.
- Huijser, M.P., J.W. Duffield, A.P. Clevenger, R.J. Ament, and P.T. McGowen. 2009. Cost-benefit analyses of mitigation measures aimed at reducing collisions with large ungulates in the United States and Canada; a decision support tool. *Ecology and Society* 14(2): 15. [online] URL: <http://www.ecologyandsociety.org/viewissue.php?sf=41>
- Beckmann, J.P., A.P. Clevenger, M.P. Huijser & J.A. Hilty (eds.). 2010. *Safe Passages. Highways, Wildlife, and Habitat Connectivity*. Island Press. Washington D.C., USA.
- Huijser, M.P., T.D.H. Allen, M. Blank, M.C. Greenwood & S. Wang. 2010. A quantitative comparison of the reliability of animal detection systems and recommended requirements for system reliability.. Pages: 592-602 in: P. Wagner, D. Nelson and E. Murray (eds.). *Proceedings of the 2009 International Conference on Ecology and Transportation*. Center for Transportation and the Environment, North Carolina State University, Raleigh, NC, USA. Available from the internet: URL: http://www.icoet.net/ICOET_2009/downloads/proceedings/ICOET2009-Proceedings-Complete.pdf
- Huijser, M.P., J.W. Duffield, A.P. Clevenger, R.J. Ament & P.T. McGowen. 2010. Cost justification and examples of cost-benefit analyses of mitigation measures aimed at reducing collisions with large ungulates in the United States and Canada. Pages: 625-639 in: P. Wagner, D. Nelson and E. Murray (eds.). *Proceedings of the 2009 International Conference on Ecology and Transportation*. Center for Transportation and the Environment, North Carolina State University, Raleigh, NC, USA. Available from the internet: URL: http://www.icoet.net/ICOET_2009/downloads/proceedings/ICOET2009-Proceedings-Complete.pdf
- Huijser, M.P., A.P. Clevenger, P.T. McGowen, R.Ament, A. Hardy & M. Gray. 2010. New FHWA manuals for mitigation measures aimed at reducing wildlife-vehicle collisions and providing safe crossing opportunities for wildlife. Pages: 819-820 in: P. Wagner, D. Nelson and E. Murray (eds.). *Proceedings of the 2009 International Conference on Ecology and Transportation*. Center for Transportation and the Environment, North Carolina State University, Raleigh, NC, USA. Available from the internet: URL: http://www.icoet.net/ICOET_2009/downloads/proceedings/ICOET2009-Proceedings-Complete.pdf
- Kociolek, A.V., M.P. Huijser, D. Galarus, D.W. Taylor & J. Kintsch. 2010. Motorists as citizen

scientists: the benefits of a wildlife reporting website. Pages: 116-129 in: P. Wagner, D. Nelson and E. Murray (eds.). Proceedings of the 2009 International Conference on Ecology and Transportation. Center for Transportation and the Environment, North Carolina State University, Raleigh, NC, USA. Available from the internet: URL:

http://www.icoet.net/ICOET_2009/downloads/proceedings/ICOET2009-Proceedings-Complete.pdf

MacKay, P., R. A. Long, J.S. Begley, A.P. Clevenger, M.P. Huijser, A.R. Hardy & R.J. Ament. 2010. The importance of pre-construction data for planning and evaluating wildlife crossing structures. Pages: 839-840 in: P. Wagner, D. Nelson and E. Murray (eds.). Proceedings of the 2009 International Conference on Ecology and Transportation. Center for Transportation and the Environment, North Carolina State University, Raleigh, NC, USA. Available from the internet: URL: http://www.icoet.net/ICOET_2009/downloads/proceedings/ICOET2009-Proceedings-Complete.pdf

Paul, K., J. Graham, L. Broberg, M.S. Quinn & M. Huijser. 2010. Can citizen science represent wildlife activity along highways? Validating a monitoring program. Pages: 130-131 in: P. Wagner, D. Nelson and E. Murray (eds.). Proceedings of the 2009 International Conference on Ecology and Transportation. Center for Transportation and the Environment, North Carolina State University, Raleigh, NC, USA. Available from the internet: URL: http://www.icoet.net/ICOET_2009/downloads/proceedings/ICOET2009-Proceedings-Complete.pdf

van der Grift, E.A., V. Biserkov, V. Simeonova & M.P. Huijser. 2010. Restoring ecological networks across transport corridors in Bulgaria. Pages: 552-566 in: P. Wagner, D. Nelson and E. Murray (eds.). Proceedings of the 2009 International Conference on Ecology and Transportation. Center for Transportation and the Environment, North Carolina State University, Raleigh, NC, USA. Available from the internet: URL: http://www.icoet.net/ICOET_2009/downloads/proceedings/ICOET2009-Proceedings-Complete.pdf

Paul, K.S., J. Graham, L. Broberg, M.S. Quinn & M.P. Huijser. In prep. An evaluation of citizen science data for monitoring wildlife along a highway right-of-way.

Huijser, M.P., P.J.M. Bergers, B.A. Nolet & L.T.J. Meuwissen. Draft. Sex-dependent seasonal mortality in a hedgehog (*Erinaceus europaeus*) population.

Huijser, M.P. & E.A. van der Grift. Draft. Habitat linkage characteristics and road networks in Dutch agricultural landscapes.

Huijser, M.P., B. Voslamber & A.J. Remmelzwaal. Draft. Increasing dragonfly and butterfly species richness and abundance in an agricultural landscape.

Huijser, M.P. Draft. Vehicle clearance from a hedgehog's view.

Huijser, M.P., J.A. Buitenkamp, A.C. Dulos & M.P.A. Lips. Draft. Habitat use of hedgehogs in a small scale agricultural landscape.

Huijser, M.P., P.J.M. Bergers & C.J.F. Ter Braak. Draft. Road, traffic and landscape characteristics of hedgehog traffic victim sites.

Popular journals

Grift, E.A. van der & M.P. Huijser. 1991. [In Dutch: Mast is a very important food source for big game]. Mast is een zeer belangrijke voedselbron voor grofwild. *Het Edelhart*. 26(3): 19-23.

Huijser, M.P. & P. Keijzer. 1994. [In Dutch: Application of historical satellite images: vegetation monitoring in the Lauwersmeer area]. Toepassing van historische satellietbeelden: vegetatiemonitoring in het Lauwersmeergebied. Ministerie van Verkeer en Waterstaat. Meetkundige Dienst. GIS Nieuwsbrief RWS. 1994-1: 4-10.

Huijser, M.P. & E.A. van der Grift. 1995. [In Dutch: Mammals at 'De Stompert']. *Zoogdieren op 'De Stompert'*. *Pitymys* 1995 (2): 23-27.

Huijser, M.P. 1997. [In Dutch: How many young do hedgehogs get?]. Hoeveel jongen krijgen egels? *Zoogdier* 8(1): 7-10.

Huijser, M.P. & P.J.M. Bergers. 1998. [In Dutch: Counting flat hedgehogs: results of a VZZ action plan]. Platte egels tellen: resultaten van een VZZ actie. *Zoogdier* 9(2): 20-25.

Huijser, M.P., N. Kooyman & E.A. van der Grift. 1998. [In Dutch: Red deer outside the 'Oostvaardersplassen'?!]. Edelhart ook buiten de Oostvaardersplassen?! *Zoogdier* 9(3-4): 3-6.

Huijser, M.P. 1999. Europe's best known traffic victim: the hedgehog. *The Road-RIPorter* 4(6):

12-14.

- Huijser, M.P. & J.G. de Vries. 1999. [In Dutch: Hedgehogs on the road]. Egels onder Weg. Land+Water, no. 3: 36-38.
- Grift, E.A. van der & M.P. Huijser. 2000. [In Dutch: Hedgehog research in Europe]. Egelonderzoek in Europa. Zoogdier 11 (2): 12-17.
- Huijser, M.P. 2000. [In Dutch: Hedgehogs, roads and traffic]. Egels, wegen en verkeer. Duin: 23 (1): 8-9.
- Huijser, M.P. 2000. [In Dutch: Farmers and mammals: a conference report]. Boeren en zoogdieren: een congresverslag. Zoogdier 11 (1): 17-20.
- Huijser, M.P. 2000. [In Dutch: Less mowing, more nature: ditch management in large scale agricultural areas]. Minder maaien, meer natuur. Kavelslotenbeheer in grootschalige landbouwgebieden. Praktijkonderzoek 4: 36-37.
- Huijser, M., R. Goutbeek, R. Hoeve, J. Reinhold & R. de Wijs. 2000. [In Dutch: Hibernation sites for bats at the Waiboerhoeve and Aver Heino meet basic requirements]. Vleermuisverblijven Waiboerhoeve en Aver Heino geschikt voor bewoning. Praktijkonderzoek 5: 25-27.
- Huijser, M.P. 2000. [In Dutch: New experimental farm. Agriculture as partner of water and nature]. Nieuwe proefboerderij. Landbouw als partner van water en natuur. Veeteelt, October 2000: 59.
- Huijser, M.P. 2001. [In Dutch: Fewer hedgehog traffic victims through smart landscape planning]. Minder doodgereden egels door een uitgekiende inrichting landschap. Inzicht in Natuur 13 (2): 9.
- Huijser, M., B. Meerburg, B. Voslamber, A. Remmelzwaal & R. Barendse. 2001. [In Dutch: An increase of mammals as a result of a reduced mowing frequency of ditch slopes]. Meer zoogdieren bij minder vaak maaien van slootkanten. Praktijkonderzoek 14 (5): 23-25.
- Huijser, M.P. 2004. Evaluation of Wildlife Crossing Structures on US Highway 93 in Montana. Task Force on Ecology and Transportation Newsletter. Transportation Research Board Task Force ADC30T Spring 2004. p.4.
- Huijser, M.P. 2004. Software for pocket PC to collect road-kill data. Task Force on ecology and transportation. Newsletter Transportation Research Board Task Force ADC30T, fall 2004. p. 3.
- Huijser, M.P. & D. Galarus. 2004. Software for pocket PC to collect road-kill data. TRB A1F02 Newsletter, Environmental Analysis in Transportation, November 2004. p. 9.

Scientific reports

- Grift, E.A. van der & M.P. Huijser. 1991. [In Dutch: Estimating the availability of the natural food for large ungulates]. Kwantificering van het voedselaanbod voor grofwild. Intern rapport 91/3 Rijksinstituut voor Natuurbeheer Arnhem / Doctoraalverslag Vakgroep Natuurbeheer Landbouwuniversiteit Wageningen.
- Huijser, M.P. 1992. Big game studies in Wyoming: elk in the Big Horn Mountains and white-tailed deer and mule deer on Devils Tower National Monument. Department of Nature management. Report P/144. Wageningen Agricultural University.
- Huijser, M.P. 1992. [In Dutch: The vegetation of "De Paltz" and the effects of possible sand mining activities]. De vegetatie in "De Paltz" en de effecten van een eventueel uit te voeren ontgronding. Rapport 1992/1. IVN-Eemland. Vereniging voor Natuur- en Milieueducatie. Soest.
- Huijser, M.P. & Y.J.B. Röling. 1994. [In Dutch: The GIS of the Lauwersmeer area]. Toelichting bij het GIS Lauwersmeergebied. Intern rapport 1994-14 Lio. Ministerie van Verkeer en Waterstaat. Rijkswaterstaat Directie Flevoland. Lelystad.
- Huijser, M.P. & Y.J.B. Röling. 1994. [In Dutch: Vegetation research in the Lauwersmeer area based on fixed site relevee data from 1980, 1987 and 1993]. Vegetatieonderzoek in het Lauwersmeergebied op basis van opnamen van permanente kwadraten uit 1980, 1987 en 1993. Intern rapport 1994-22 Lio. Ministerie van Verkeer en Waterstaat. Rijkswaterstaat Directie Flevoland. Lelystad.
- Huijser, M.P. & Y.J.B. Röling. 1994. [In Dutch with English summary: Effects of grazing by large herbivores on the vegetation in the 'Lauwersmeer' area]. Effecten van begrazing door grote herbivoren op de vegetatie in het Lauwersmeergebied. Flevobericht nr. 366. Ministerie van Verkeer en Waterstaat. Rijkswaterstaat Directie IJsselmeergebied. Lelystad.

- Huijser, M.P., J.T. Vulink & M. Zijlstra. 1996. [In Dutch: Grazing in the Oostvaardersplassen: effects on the vegetation structure and the habitat use of large ungulates and geese]. Begrazing in de Oostvaardersplassen: effecten op de vegetatiestructuur en het terreingebruik van grote herbivoren en ganzen. Intern rapport 1996-5 Li. Ministerie van Verkeer en Waterstaat. Rijkswaterstaat Directie IJsselmeergebied. Lelystad.
- Rooij, S.A.M. van, H.J. Drost & M.P. Huijser. 1996. [In Dutch with English summary: Vegetation. In: The Lauwersmeer area, 25 years of research serving nature development and nature management]. Vegetatie. In: S.A.M. van Rooij & H.J. Drost (eindredactie). Het Lauwersmeergebied, 25 jaar onderzoek ten dienste van natuurontwikkeling en beheer. Flevovericht nr. 387. Ministerie van Verkeer en Waterstaat. Rijkswaterstaat Directie IJsselmeergebied. Lelystad.
- Huijser, M.P. & P.J.M. Bergers (red.). 1997. [In Dutch with English summary: Hedgehogs and traffic: effects of roads and traffic on hedgehog populations]. Egels en verkeer: effecten van wegen en verkeer op egelpopulaties. Mededeling 35 van de VZZ / DWW-Ontsnipingsreeks deel 35. Vereniging voor Zoogdierkunde en Zoogdierbescherming (VZZ) (In opdracht van Rijkswaterstaat, Dienst Weg- en Waterbouwkunde, Delft), Utrecht.
- Huijser, M.P., B.S. Johansen & N.J. Reeve (eds.). 1998. Proceedings of the second international hedgehog workshop of the European Hedgehog Research Group (EHRG): 18-19 August 1997, Vienna. Vereniging voor Zoogdierkunde en Zoogdierbescherming (VZZ), Utrecht.
- Huijser, M.P., P.J.M. Bergers & C.J.F. ter Braak. 1998. [In Dutch with English summary: The location of hedgehog traffic victims in relation to landscape features]. De locatie van doodgereden egels in relatie tot de samenstelling van het landschap. Mededeling 42 van de VZZ / DWW-Ontsnipingsreeks deel 37. Vereniging voor Zoogdierkunde en Zoogdierbescherming (VZZ) (In opdracht van Rijkswaterstaat, Dienst Weg- en Waterbouwkunde, Delft), Utrecht.
- Griff, E.A. van der, G.J. Bekker & M.P. Huijser. 1998. [In Dutch: Conference report: Wildlife and Transportation]. Congresverslag Wildlife Ecology and Transportation. Holland Railconsult, Utrecht.
- Huijser, M.P. 2000. Life on the edge. Hedgehog traffic victims and mitigation strategies in an anthropogenic landscape. PhD thesis, Wageningen University, Wageningen. Available from the internet. URL: <http://library.wur.nl/wda/dissertations/dis2890.pdf>
- Huijser, M.P., G. Migchels & G.J. Holshof. 2001. Reshaping agriculture for the 21st century: implications for the research and research facilities of Wageningen University and Research Centre. Essay, May 2001.
- Vulink, J.T., M.P. Huijser, P. Cornelissen & M. Zijlstra. 2001. Greylag geese *Anser anser* fattening up in a managed wetland: do grazing regimes influence habitat selection?: 221-237. In: J.T. Vulink. Hungry Herds. Management of temperate lowland wetlands by grazing. PhD thesis, Rijksuniversiteit Groningen, Groningen.
- Huijser, M.P. & G. Migchels. [In Dutch: land-city Lelystad]. Landstad Lelystad: een verkenning. Praktijkonderzoek Veehouderij, Lelystad.
- Huijser, M.P. & K.E. Gunson & C. Abrams. 2006 Animal-Vehicle Collisions and Habitat Connectivity along Montana Highway 83 in the Seeley-Swan Valley, Montana: a Reconnaissance. Report No. FHWA/MT-06-002/8177. Western Transportation Institute – Montana State University, Bozeman, MT, USA. Available from the internet: http://www.mdt.mt.gov/research/docs/research_proj/seeley/final_report.pdf
- Huijser, M.P., P.T. McGowen, W. Camel, A. Hardy, P. Wright, A.P. Clevenger, L. Salsman & T. Wilson. 2006. Animal Vehicle Crash Mitigation Using Advanced Technology. Phase I: Review, Design and Implementation. SPR 3(076). FHWA-OR-TPF-07-01, Western Transportation Institute – Montana State University, Bozeman, MT, USA. Available from the internet: http://www.oregon.gov/ODOT/TD/TP_RES/ResearchReports.shtml
- Hardy, A.R., J.Fuller, M. P. Huijser, A. Kociolek, M. Evans. 2007. Evaluation of Wildlife Crossing Structures and Fencing on US Highway 93 Evaro to Polson. Phase I: Preconstruction Data Collection and Finalization of Evaluation Plan. Final Report. FHWA/MT-06-008/1744-1. Western Transportation Institute, College of Engineering, Montana State University, Bozeman, MT, USA. Available from the internet: http://www.mdt.mt.gov/research/projects/env/wildlife_crossing.shtml
- Hardy, A.R. and M. P. Huijser. 2007. US 93 Preconstruction Wildlife Monitoring Field Methods Handbook. FHWA/MT-06-008/1744-2. Western Transportation Institute, Montana State University, Bozeman, MT, USA. Available from the internet: http://www.mdt.mt.gov/research/projects/env/wildlife_crossing.shtml

- Huijser, M.P., A. Kociolek, P. McGowen, A. Hardy, A.P. Clevenger & R. Ament. 2007. Wildlife-Vehicle Collision and Crossing Mitigation Measures and Associated Costs and Benefits: a Toolbox for the Montana Department of Transportation. FHWA/MT-07-002/8117-34. Available from the internet: http://www.mdt.mt.gov/research/projects/env/wildlife_crossing_mitigation.shtml
- Huijser, M.P., J. Fuller, M.E. Wagner, A. Hardy, & A.P. Clevenger. 2007. Animal-vehicle collision data collection. A synthesis of highway practice. NCHRP Synthesis 370. Project 20-05/Topic 37-12. Transportation Research Board of the National Academies, Washington DC, USA. Available from the internet: http://www.trb.org/news/blurb_detail.asp?id=8422
- Huijser, M.P., T.D. Holland & M. Blank. 2007. The Comparison of Animal Detection Systems in a Test-Bed: A Quantitative Comparison of System Reliability and Experiences with Operation and Maintenance. Interim Report. 4W0049 interim report, Western Transportation Institute – Montana State University, Bozeman, Montana, USA. Available from the internet: <http://www.coe.montana.edu/wti/wwwshare/4W0049%20Interim%20Report/>
- Huijser, M.P., P. McGowen, J. Fuller, A. Hardy, A. Kociolek, A.P. Clevenger, D. Smith & R. Ament. 2007. Wildlife-vehicle collision reduction study. Executive Summary. U.S. Department of Transportation, Federal Highway Administration, Washington D.C., USA.
- Huijser, M.P. & K.J.S. Paul. 2008. Wildlife-vehicle collision and crossing mitigation measures: a literature review for Parks Canada, Kootenay National Park. Report 4W1929 A, Western Transportation Institute – Montana State University, Bozeman, Montana, USA. Available from the internet: <http://www.wti.montana.edu/RoadEcology/Projects.aspx?completed=1>
- Huijser, M.P., K.J.S. Paul, L. Oechsli, R. Ament, A.P. Clevenger & A. Ford. 2008. Wildlife-vehicle collision and crossing mitigation plan for Hwy 93S in Kootenay and Banff National Park and the roads in and around Radium Hot Springs. Report 4W1929 B, Western Transportation Institute – Montana State University, Bozeman, Montana, USA. Available from the internet: <http://www.wti.montana.edu/RoadEcology/Projects.aspx?completed=1>
- Huijser, M.P. & A.V. Kociolek. 2008. Wildlife-Vehicle Collision and Crossing Mitigation Measures: A Literature Review for Blaine County, Idaho. Report 4W1403A, Western Transportation Institute – Montana State University, Bozeman, Montana, USA. Available from the internet: <http://www.wti.montana.edu/RoadEcology/Projects.aspx?completed=1>
- Huijser, M.P., A.V. Kociolek, L. Oechsli & D. E. Galarus. 2008. Wildlife Data Collection and Potential Highway Mitigation along State Highway 75, Blaine County, Idaho. Report 4W1403B, Western Transportation Institute – Montana State University, Bozeman, Montana, USA. Available from the internet: <http://www.wti.montana.edu/RoadEcology/Projects.aspx?completed=1>
- Huijser, M.P., Duffield, J.W., Clevenger, A.P., Ament, R.J. & P. T. McGowen. 2008. Cost-benefit analyses of mitigation measures aimed at reducing collisions with large ungulates in North America; a decision support tool. WTI-MSU Technical Report REP-08-01; Western Transportation Institute – Montana State University, Bozeman, MT, USA.
- Huijser, M.P., P. McGowen, J. Fuller, A. Hardy, A. Kociolek, A.P. Clevenger, D. Smith & R. Ament. 2008. Wildlife-vehicle collision reduction study. Report to Congress. U.S. Department of Transportation, Federal Highway Administration, Washington D.C., USA. Available from the internet: <http://www.fhrc.gov/safety/pubs/08034/index.htm>
- Huijser, M.P., P. McGowen, A. P. Clevenger, & R. Ament. 2008. Best Practices Manual, Wildlife-vehicle Collision Reduction Study, Report to U.S. Congress. Federal Highway Administration, McLean, VA, USA. Available from the internet: <http://www.fhwa.dot.gov/environment/hconnect/wvc/index.htm>
- Huijser, M.P., T.D. Holland, A.V. Kociolek, A.M. Barkdoll & J.D. Schwalm. 2009. Animal-vehicle crash mitigation using advanced technology. Phase II: system effectiveness and system acceptance. SPR3(076) & Misc. contract & agreement no. 17,363. Western Transportation Institute – Montana State University, Bozeman, MT, USA. Available from the internet: http://www.oregon.gov/ODOT/TD/TP_RES/docs/Reports/2009/Animal_Vehicle_Ph2.pdf
- Huijser, M.P., T.D. Holland, M. Blank, M.C. Greenwood, P.T. McGowen, B. Hubbard & S. Wang. 2009. The Comparison of Animal Detection Systems in a Test-Bed: A Quantitative Comparison of System Reliability and Experiences with Operation and Maintenance. Final report. FHWA/MT-09-002/5048. Western Transportation Institute – Montana State University, Bozeman, MT, USA. Available from the internet: http://www.westerntransportationinstitute.org/documents/reports/4W0049_Final_Report.pdf

- Clevenger, T. & M.P. Huijser. 2009. Handbook for Design and Evaluation of Wildlife Crossing Structures in North America. Department of Transportation, Federal Highway Administration, Washington D.C., USA. Available from the internet:
http://www.westerntransportationinstitute.org/documents/reports/425259_Final_Report.pdf
- Huijser, M.P. 2010. Update for Wildlife-Vehicle Collision and Crossing Mitigation Plan for Hwy 93S in Kootenay and Banff National Park. Report 433308. Available from the internet:
http://www.westerntransportationinstitute.org/documents/reports/4W1929_Final_Mitigation_Report_Update.pdf
- Huijser, M.P. & L. Hayden. 2010. Evaluation of the reliability of an animal detection system in a test-bed. Final report. Report 4W0848. Western Transportation Institute – Montana State University, Bozeman, Montana, USA.
- Huijser, M.P., T.D.H. Allen & W. Camel. 2010. US 93 Post-Construction Wildlife-Vehicle Collision and Wildlife Crossing Monitoring and Research on the Flathead Indian Reservation between Evaro and Polson, Montana. Annual Report 2010. Western Transportation Institute College of Engineering Montana State University, Bozeman, Montana, USA. Available from the internet:
http://www.mdt.mt.gov/research/projects/env/wildlife_crossing.shtml
- Huijser, M.P., T.D.H. Allen & W. Camel. 2010. US 93 Post-Construction Wildlife-Vehicle Collision and Wildlife Crossing Monitoring and Research on the Flathead Indian Reservation between Evaro and Polson, Montana. Annual Report 2010. Western Transportation Institute College of Engineering Montana State University, Bozeman, Montana, USA. Available from the internet:
http://www.mdt.mt.gov/research/projects/env/wildlife_crossing.shtml
- Huijser, M.P., C. Haas & K.R. Crooks (eds.). The Reliability and Effectiveness of an Electromagnetic Animal Detection and Driver Warning System. 2009 Annual Report. Western Transportation Institute College of Engineering Montana State University, Bozeman, Montana, USA.

Flora and fauna inventories

- Huijser, M.P. 1993. [In Dutch: Inventory nature and landscape values Koninginnelaan-Praamgracht Soest]. Inventarisatie natuur- en landschapswaarden Koninginnelaan-Praamgracht Soest. Rapport 1993/1. IVN-Eemland. Vereniging voor Natuur- en Milieueducatie. Soest.
- Huijser, M.P. & E.A. van der Grift. 1994. [In Dutch: Inventory nature values 'De Stompert', Soest]. Inventarisatie natuurwaarden 'De Stompert' Gemeente Soest. Voortgangsrapport. Rapport 1994/1. IVN-Eemland. Vereniging voor Natuur- en Milieueducatie. Soest.
- Huijser, M.P. 1995. (In Dutch: The vegetation composition on the former alfalfa fields (Ez 22, 23 and 24) in the Oostvaardersplassen in 1994]. De vegetatiesamenstelling op de voormalige Luzernekavels (Ez 22, 23, en 24) in de Oostvaardersplassen in 1994. Intern rapport 1995-2 Lio. Ministerie van Verkeer en Waterstaat. Rijkswaterstaat Directie IJsselmeergebied. Lelystad.
- Huijser, M.P. & E.A. van der Grift. 1995. [In Dutch: Inventory nature values 'De Stompert', Soest. Progress report 2]. Inventarisatie natuurwaarden 'De Stompert' Gemeente Soest. Voortgangsrapport 2. Rapport 1995/1. IVN-Eemland. Vereniging voor Natuur- en Milieueducatie. Soest.