

Working Groups 1, 2, 3 & 4 Workshop

PROOF OF CONCEPT DEVELOPMENT & FUTURE FUNDING

Hosted by BTO Scotland at Stirling Court Hotel, University of Stirling Campus, Stirling,
Scotland (UK)

2.2

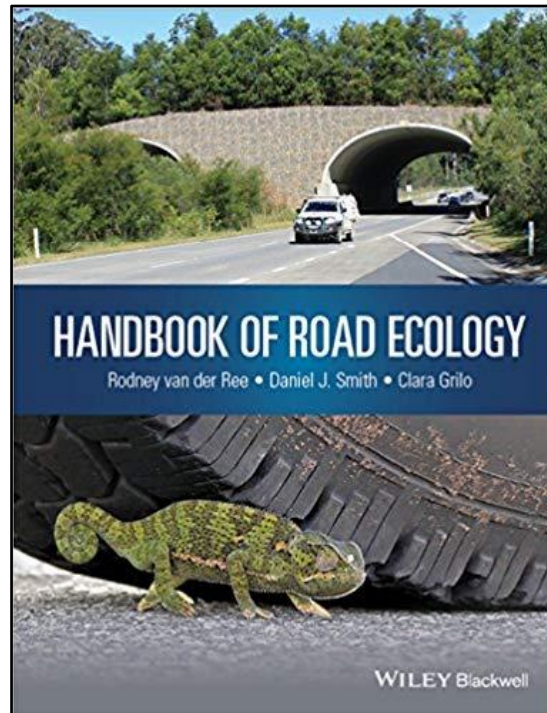
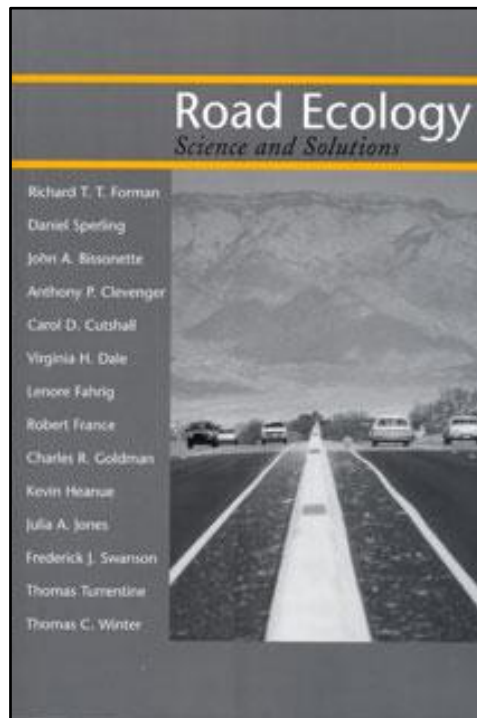
Additional ideas on use of road-kills / Road Ecology network

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IDAEA-CSIC
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Road Ecology is the study of the interactions
among roads/traffic and organisms/environment

Most of them are negative impacts → **Road-kills**
Fragmentation
Disturbance
Biological invasions
Pollution

...





Barn owl *Tyto alba* is the most road-killed raptor

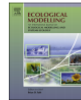
Ecological Modelling 276 (2014) 29–37



Contents lists available at ScienceDirect

Ecological Modelling

journal homepage: www.elsevier.com/locate/ecolmodel



Modeling the impact of road mortality on barn owl (*Tyto alba*) populations using age-structured models



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J. Raptor Res. 32(3):229–232

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HIGHWAY MORTALITY OF BARN OWLS IN NORTHEASTERN FRANCE

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Perfluoroalkyl substances in soft tissues and tail feathers of Belgian barn owls (*Tyto alba*) using statistical methods for left-censored data to handle non-detects

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AVIAN CONSERVATION
& ECOLOGY

VOLUME 13, ISSUE 2, ARTICLE 2

De Jong, J. A. van den Burg, and A. Looij, 2018. Determinants of traffic mortality of Barn Owls (*Tyto alba*) in Friesland, The Netherlands. *Avian Conservation and Ecology* 13(2):2. <https://doi.org/10.5751/ACE-01201-130202>. Copyright © 2018 by the author(s). Published here under license by the Resilience Alliance.

Research Paper

Determinants of traffic mortality of Barn Owls (*Tyto alba*) in Friesland, The Netherlands

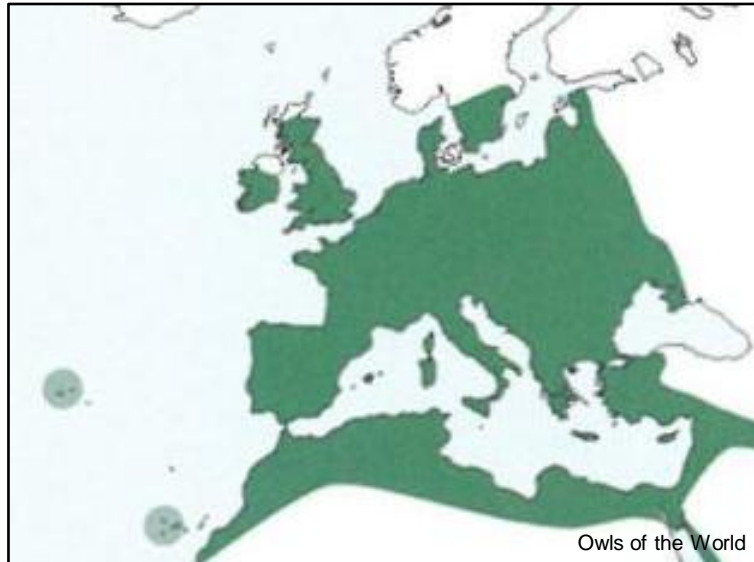
Johan de Jong¹, Arnold van den Burg^{2,3} and Allan Looij⁴

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Barn owl *Tyto alba*

Frequently road-killed
Widely distributed
Relatively common
Listed as Least Concern
(Rodent eater)
(Mainly farmland)



Case study for Proof of Concept:

Road-killed barn owls

Concerns:

- Distribution: only Barn owl vs. Rodent-eater owls?
- Tissues: Liver? (Necropsies? Videos?)
- Compounds: Rodenticides?
- Number of samples: Rafa → 1 bird/10000km²
(1080 Europe, 439 EU, 51 Spain, 24 UK...)?
- Time for survey?
- Economic and legal issues related to sample transport?
- Motivation for field collectors? Publication?
- Procedures: only 1 Lab vs. 1 Lab for geographic area?
- Funding?
- Integrate road-killed owls with other surveys?
- Network of road ecologists? → → →

Networks of road ecologists:



Transport Working Group
Connectivity Conservation Specialist Group
IUCN



IENE
Infra Eco Network Europe



Editor
of the Topical Collection on Road Ecology
on European Journal of Wildlife Research

Ascensão, Barrientos, Gortázar, D'Amico (in press).
Calling for data papers in Road Ecology: road-kills
and other mortality along linear infrastructures.
EJWR.