

## Traffication: How Cars Destroy Nature and What We Can Do about It.

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—James Rebanks, author of the Shepherd's Life and English Postoral

TRAFFICATION
HOW CARS DESTROY NATURE
& WHAT WE CAN DO ABOUT IT



**PAUL F. DONALD** 

Few people seem to realize that not so long ago the world was without combustion-powered vehicles. Horses were in vogue then, causing their own problems in cities (fodder, manure and cracking whips, the latter driving Schopenhauer crazy). Roads were usually unpaved and the countryside was – at least compared to the present day – an oasis of calm and quiet. This

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pre-car era is described with gusto, as is the initially slow introduction of motorized vehicles, whose terrible speeds (30 km/h at most) and frightening noise horrified rural people, even leading to stoning events. The rural population of The Netherlands was recorded in 1905 as hating vehicles fanatically. How times have changed; presently billions of km are travelled annually by car in The Netherlands alone, the countryside being swamped in a permanent drone from traffic and heavy farming machinery.

The saga of traffication in the past century is unprecedented. It is a relentless tale of take-over and domination of the world (not a little orchestrated, manipulated and perpetuated by industrial powers), in its wake death, noise, pollution and habitat destruction of epic proportions. Where most people know a little of road kills and traffic accidents (not least from own experience), the actual scope of the death toll is quite something. In Europe alone, estimates indicate an annual kill of 200 million birds and 30 million mammals; nobody even tried to guess casualties among arthropods. Staggering numbers, but rarely in itself leading to population declines except locally (toads, for example). But this is just part of the story. Motorized vehicles make noise, and many vehicles produce a lot of noise, to the point of damaging immune systems, causing insomnia, altering behaviour, in short, persistently undermining the health of wild animals including two-legged primates. The present density of roads in the industrialized world is such that the roar of traffic is heard anywhere, either full on or as a persistent background rumble. Apart from noise caused by combustion, cars produce even more noise via their tires (motorcycles vice versa), and the heavier and faster the car, the more noise. Top speed has gradually increased from 30 to 190 km/h between 1900 and 2020, sloping off in the last couple of decades. On average half of car drivers exceed speed limits (even more for motorcyclists), bad news for pollution and casualties which increase exponentially with speed. To make matters worse, tires are composed of synthetic polymers. A car tyre sheds around 1 kg of microplastics during its lifetime on the road (a truck tyre eight times more), which may seem peanuts but multiplies to 60,000 tonnes of pollution per year in just the UK.

Road and traffic density are, furthermore, constantly increasing, causing huge problems in terms of habitat fragmentation, first and foremost for creeping, hopping and walking creatures, but also for birds which prefer not to nest too closely to roads. Roads are barriers to many organisms and have negative effects on dispersal and genetic diversity. For others, they are

the opposite, i.e. conduits for moving along into hitherto unoccupied territories, a biological land-grab perfected by many non-native plants and animals (like the Cane Toad in Australia). And that's not all. Roadsides are repositories of heavy metals and other pollutants from cars and tarmac, not to mention salt used against snow and ice. Their negative effects are strongest within 100 m of roads but detectable depending on whether or not gaseous - for 300 m or more (and for salt much wider, polluting complete freshwater ecosystems). A single look at a road map suffices to learn that very few areas escape the barrage of traffic pollution. This leads to the devastating conclusion that although roads cover just 1% of the land, their impact on wildlife is all encompassing (with farming machinery contributing not a little).

Donald took great effort to collate the vast but fragmented science of road ecology, focusing on "the environmental costs and benefits of roads and their traffic". It is not a vendetta against the car, as evident from the suggestions for de-traffication. Some of those are within the grasp of any car-driver, such as: keep your speed down, avoid driving in darkness where possible, clean your car before driving off-road (to prevent seeds invading new areas), keep tires correctly inflated and wheels properly aligned, join a car-sharing scheme, and best of all – drive less. (Or even better: switch from car to bicycle, and not from conventional car to electric vehicle because the latter is as damaging as combustion-powered cars in terms of production and of tire noise and abrasion – if not more – and not a panacea for people or wildlife.) Such simple behavioural changes in the driver's attitude will not solve the problems as outlined, particularly not in the face of pro-car developments in the near future all over the world, but it is something. If not convinced of the necessity to do that little something, read this book. Apart from very well researched and annotated, it is also very well written. Donald has a way with words and a choice of examples that made the heavy subject a joy to read. I was much impressed, even when biased as not being a car-driver myself.

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