



Jochen Langbein calls for more help with recording deer accidents on Britain's roads

# Collision Course

In the seven years that have passed since the setting up of the national Deer Vehicle Collisions (DVC) project in January 2003, over 300,000 deer will have been killed or maimed on Britain's roads. As if not already shocking enough, that figure is based merely on the conservative end of a range of estimates arising from our research, suggesting a likely average annual toll of between 42,500 and 74,000 DVCs, which cause over £17m worth of damage to vehicles and from 400 to 700 human injuries each year<sup>1</sup>. At the time of writing, only a few days have elapsed since the tragic news of a further fatal road accident; this time in East Sussex, in which a deer hit by one vehicle was thrown through the windscreen of another, killing the driver. Many will say that this was a freak accident but unfortunately it is not the first time that same scenario has been reported to the study, nor is it likely to be the last.

My own involvement with DVCs began over 25 years ago when leading the North Staffordshire Deer (Accident) Survey for the BDS Midlands Branch<sup>2</sup>. Even then, 65 DVCs per year were already being logged in the south of the county at Cannock Chase and increasing numbers of accidents were beginning to be noted further north around the Potteries and in many other parts of the country. The study highlighted the coincidence of fallow accident peaks in autumn with increased movement of deer at times of highest daily traffic flows<sup>2</sup>. Interestingly in the present context, recommendations made included, aside from specific local roadside measures, calls for a fuller nationwide assessment of the scale and factor affecting DVCs. A further decade went by before the Highways Agency commissioned an initial brief nationwide assessment, which I undertook with Graham Smith at SGS Environment<sup>3</sup>. That study was based on

collation of any records which could be provided by various organisations including the Forestry Commission, county road departments, RSPCA and BDS branches. However, most were at the time found to keep only quite sparse and incomplete records. The main 1995/6 study year was based on only around 1,750 records but tentative extrapolations indicated that the true annual toll of DVCs for Britain was unlikely to lie below 20,000 and was possibly already nearer 40,000 by the mid 1990s. UK Estimates from subsequent studies of DVCs have continued to be revised upwards rather than downwards<sup>4,5</sup>, and reflect very similar trends recorded in many other countries<sup>6,7</sup>. In Germany for example, estimates of 120,000 during 1995 have been revised to 220,000, while figures for the US 15 years ago stood at 500,000<sup>8</sup>, but DVCs there are now believed to have reached an extraordinary 1,500,000<sup>9</sup>. The precise level of such headline-grabbing



available for any specific road sections or wider areas can already be made available to roads departments on request, and plans are afoot to make increasing amounts of the information also available more widely online at the [www.deercollisions.co.uk](http://www.deercollisions.co.uk) and/or [www.deeraware.org.uk](http://www.deeraware.org.uk) websites.

One drawback of our present deer road casualty data is that road safety spending is generally prioritised on consideration of known human injury accidents alone, which for those involving deer unfortunately also remain among the most difficult records for us to obtain consistently across all counties and police regions. That difficulty arises in the first instance as there is no

nationwide estimates are less important than the underlying trends, which clearly suggest that the situation is likely to continue to worsen for some time yet in the UK unless much more is done to tackle the problem.

The ongoing national DVC monitoring project, administered via The Deer Initiative with financial support from the Highways Agency in England and, since 2008, the Deer Commission in Scotland, has now been able to accumulate a database of over 52,000 reported DVCs. National mapping of this data (see figure 1, overleaf) underlines in the first instance that the highest numbers of DVCs overall occur mostly around major centres of human population where traffic volumes are highest and where deer as a consequence are at far greater risk of being hit when crossing roads. More importantly at a local level the information can now help identify where and when highest levels of DVCs are occurring. The data have already been used to inform many individual road improvement schemes, and we hope they will be used increasingly by road safety personnel and others to help target the scarce resources available for preventative action. Information

dedicated code on forms used by police for compiling official injury records to state the animal type involved, and even when an animal is known to have contributed in some way either as a live hazard or other factor, not all police forces are readily able to search out these incidents. Such information can, however, now be obtained for a high proportion of police forces, including most in East Anglia and South East England. As illustrated overleaf (Figure 2) within those two regions alone, information on between 80 to 120 DVCs causing human injury can be retrieved from police records each year. These are of course merely minimum figures, as in many fatal incidents the reason why a driver may have swerved and driven off the road or into traffic will not be known, and other injury accidents where reports merely state that an animal of unknown type was involved are not included. The individual counties with consistently highest recorded numbers of human injury DVCs are Hampshire, Suffolk,

Essex and the Thames Valley police region, but others such as Hertfordshire, Sussex and Bedfordshire also tend to record around five to eight every year. Nevertheless, for most of these counties these incidents known to involve deer make up only around 0.5% of all road traffic collisions that cause human injury. This highlights our continuing difficulty in ensuring that deer accidents are considered as fully as they should be in decisions on road safety spending.

The need for improvement in how DVCs are recorded is not restricted to human injury accidents. Monitoring of DVCs via the present project seems likely to continue at least at some level for several more years. However, with reduced resources available for data collation the project has since 2006 focused mostly on collection of records from a slimmed down subset of those sources which can between them both provide a good national overview and monitor hotspots and trends across years. Currently this encompasses records of requests to RSPCA and SSPCA to attend live road casualties, other local deer dispatch schemes, records from Forestry Commission rangers and other deer managers of major community forests, police human injury records, carcass uplifts by trunk road maintenance agents and records from one or two major insurance companies. In addition some records are obtained from local roads departments, police control rooms and the public. While sampling rather than complete recording is a necessary and well-accepted method in any such large



An accident at Cannock Chase in October 2009. The driver in this incident fortunately escaped with cuts and bruises.

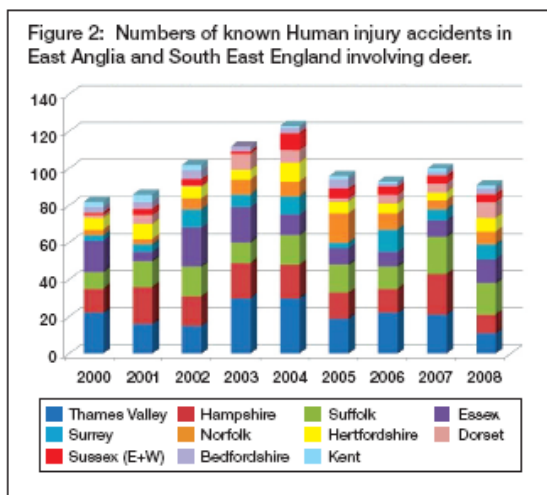
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scale study, we have very limited information from which to assess what proportion of all actual incidents each sample is likely to capture. For example, while increasingly records of comparable quality are available to us annually from most of the various trunk road maintenance companies in England as well as all in Scotland (providing in total around 1,200-1,500 records a year), it remains difficult to get a real handle on how many more road casualty deer on those same roads go unreported. Similarly, even forest rangers in some of the major community forests have suggested to me that they doubt that their own records make up more than around 60% of all deer road casualties that occur, as even among those they are called out to, many disappear by the time they are able to attend.

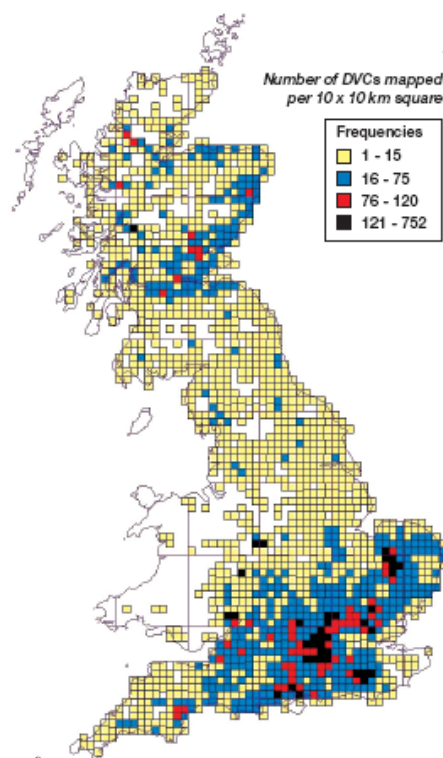
To help assess more systematically the actual level of under-recording associated with our various major national sources of data I am hoping therefore to recruit a team of around 50 to 100 volunteers (hopefully all members of BDS and hence able to provide more reliable information on deer species involved) who are each willing to provide standardised records, submitted on a simple spreadsheet template, throughout at least one or more full year for any deer road casualties that they come across whilst travelling. The idea being that these deer casualties would mostly be left in situ, unless it was felt necessary to move them to the side of the road for safety reasons, and then remain available to be recorded also by some of our other data source organisations. These 'select-recorder' data will help not only in obtaining better detail on the species and sex of animals involved in different areas but enable us to put a more objective figure on the maximum proportion of incidents likely to be captured by our various major data sources; and in turn provide us with a firmer foundation also for estimating the true toll of DVCs in differing regions as well as nationally. Any individuals or BDS branches willing to help with this scheme – including but not

just those who have submitted records during past years of the study – please do drop me an e-mail at [jangbein@deercollisions.co.uk](mailto:jangbein@deercollisions.co.uk), to receive further details.

I'll conclude with another rather depressing statistic. Among the total number of deer 'culled' in Britain each year, for about 1 in 5 the initial weapon used is a motor vehicle. Close to one third of all deer hit by vehicles are not killed outright but are left so badly injured that they usually require dispatch at the roadside once a suitably qualified person can be summoned, and many others run off to die of their injuries elsewhere. In terms of animal suffering, DVCs are the single most extensive welfare issue faced by deer in Britain. All of us should take at least some responsibility to address this, by driving with greater care where incidents are most likely and educating others to the very real risks to themselves and the deer. In addition, landowners or holders of shooting leases in areas where deer are maintained in relatively high numbers, possibly as an asset for stalking or public amenity, must do their part to ensure populations are not left to rise to levels where they become out of control. This also applies to managers of public land and others who may shy away from their responsibility for managing deer numbers for fear of negative public reaction. However, lack of proactive management, particularly in areas with high traffic flows, will in many cases result in an increase in deer-vehicle collisions and lead overall to poorer welfare for the deer as well as greater risk to public safety.



**Figure 1: Relative Frequency of Deer Vehicle Collisions for Great Britain Reported to the DI National Deer Vehicle Collisions Project between January 2003 and December 2008 (based on 34,026 records with adequate location details).**



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#### REFERENCES

- LANGBEIN, J. 2007a. National Deer-Vehicle Collisions Project: England 2003-2005. Final Report to the Highways Agency. The Deer Initiative, Wrexham.
- LANGBEIN, J. 1985. *North Staffordshire Deer Survey 1983-1985. I. Research and Development*. British Deer Society: Fordingbridge, UK.
- SGS Environment 1998. (eds. G. SMITH & J. LANGBEIN). *The Prevention of Wildlife Casualties on Roads Through the Use of Deterrents: Prevention of casualties among deer populations*. Report to UK Highways Agency SW335/V3/11-98
- STAINES, B.W., LANGBEIN, J. AND PUTMAN, R.J. 2001. *Road Traffic Accidents and Deer in Scotland*. Report to the Deer Commission, Scotland.
- Deer Initiative 2007. *Deer on our Roads: Counting the Cost*. 6pp brochure publ. The Deer Initiative, Wrexham.
- GROOT BRUINDERINK, G.W.T.A. AND HAZEBROEK, E. 1996. Ungulate Traffic Collisions in Europe. *Conservation Biology* 10, 1059-67.
- LANGBEIN, J., PUTMAN, R.J., AND POKORNY, B. 2010. Road traffic accidents involving ungulates and available measures for mitigation. In: *Ungulate Management in Europe: Problems and Practices* (eds. R.J. PUTMAN, M. APOLLONIO AND R. ANDERSEN), Cambridge University Press, *in press*.
- ROMIN, L.A. AND BISSONETTE, J.A. 1996. Deer-vehicle collisions: status of state monitoring activities and mitigation efforts. *Wildlife Society Bulletin* 24, 276-83.
- State Farm 2009. *Deer-Vehicle Collision Frequency Jumps 18 Percent In Five Years*. Press Release, State Farm Insurance, Bloomington, Illinois.

