

Deer/Vehicle Collisions and Road Safety Workshop

9th July 2004, The Verderer's Court,
Lyndhurst, Hants.

Talk 1 :
The National Deer Collisions Project 2003-5
Presented by Dr J Langbein

DI/HA Deer Collisions / Road Safety Workshop - Langbein, Putman & Hooton, July 2004

National Deer Collisions Project 2003 - 2005

Jochen Langbein
Rory Putman
David Hooton

(www.deercollisions.co.uk)



HIGHWAYS
AGENCY

SCOTTISH EXECUTIVE

WOODLAND
TRUST

The Deer Study &
Resource Centre



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Groot Bruinderink & Hazebroek (1996) estimated

- Over 500,000 collisions with ungulates in Europe (excluding Russia)
- Resulting in 300 people killed
- 30,000 people injured
- \$ 1,000,000,000 material damage

(based on Road Kill data from 8 countries with available records
Including among others :

Germany : 120,000 roe; 6500 wild boar; 2800 red & fallow;
Sweden: 50,000 roe; 4000 moose;
Austria: 35,000 roe; 400 red deer ; 150 boar
Denmark: 10,000 roe; 100 red deer

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Preliminary Surveys & Reviews based on collation of historical data

- Highways Agency 1996/7
(SGS Environment, 1998)
- Deer Commission for Scotland 2000/1
(Staines, Langbein & Putman, 2001)
- Both found only limited reliable past records
- But suggested estimate >20,000 to 42,000 deer/vehicle collisions likely to be conservative figure for mainland Britain.

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The Deer Initiative

A Partnership Organisation
encompassing:

- Private Land Management organisation
- Animal Welfare organisation
- Field sports organisations
- Government Agencies

Deer Collision Project :

Dr Jochen Langbein (Consultant)
Prof Rory Putman (Consultant)
David Hooton (DI Liaison Officer)

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Deer Initiative Partnership Members:

- Association of Chief Police Officers
- British Association for Shooting and Conservation
- British Deer Society
- Country Land & Business Association
- Countryside Council for Wales
- DEFRA
- English Nature
- Forestry & Timber Association
- Forestry Commission (England)
- Forestry Commission (Wales)
- Game Conservancy
- Highways Agency
- National Farmers' Union
- National Forest Company
- National Gamekeepers Organisation
- National Trust
- North West Association of Deer Management Groups
- Royal Society for the Prevention of Cruelty to Animals
- Union of Countryside Workers
- Woodland Trust
- Wye Valley AONB

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Deer-Collisions Project 2003-5 - main aims :

- to build for the first time a National Database of Road Traffic Collisions involving Deer in Britain
- assess accident factors, and related aspects of deer behaviour and management
- identify accident hot-spots
- Investigate effectiveness and design of measures aimed at preventing such accidents



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Please DO report ALL Deer/Vehicle collisions or dead deer seen at roadsides throughout 2004/5

either on-line to:

www.deercollisions.co.uk

or

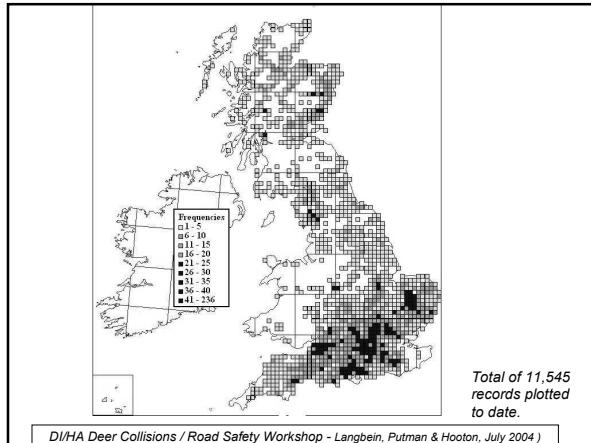
info@deercollisions.co.uk

Or by post to:

"DeerCollisions"

PO BOX 465, Bury St Edmunds, IP28 6XD

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Fallow Deer



Although in many of the forests represented Fallow are the main deer species of concern re RTAs...

Roe Deer



...for UK as whole Roe Deer are the species most commonly involved in traffic collisions.

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Reeve's Muntjac



Red Deer



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Sika



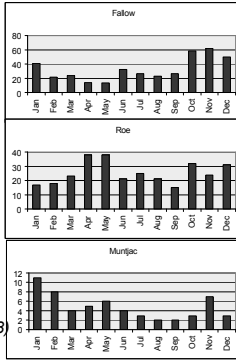
Chinese Water Deer



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Seasonal Variation in Deer / Vehicle Collisions

e.g. data from
Fallow
(Ashridge 2000-3)



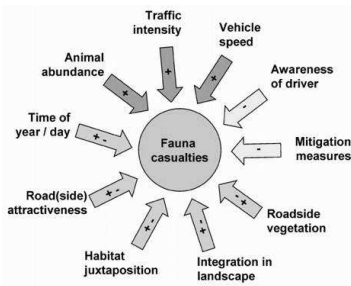
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Deer RTA Peaks:
May/June & Oct/Nov.

and ..watch out:
There are often more than one !



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Factors influencing the number of wildlife traffic accidents
(based on Cost341, IEENE, 2003)

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Road Accidents with Deer : What are the costs ?

- How many Human injuries caused ?
- Cost of Damage to Vehicles?
- Carcass Collection & Env. Disposal ?
- Despatch or First Aid for Live casualties?
- Lost revenue (incl. stalking/venison)
- What cost Animal Welfare ?

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How many Human Injuries ? Cost to Economy?



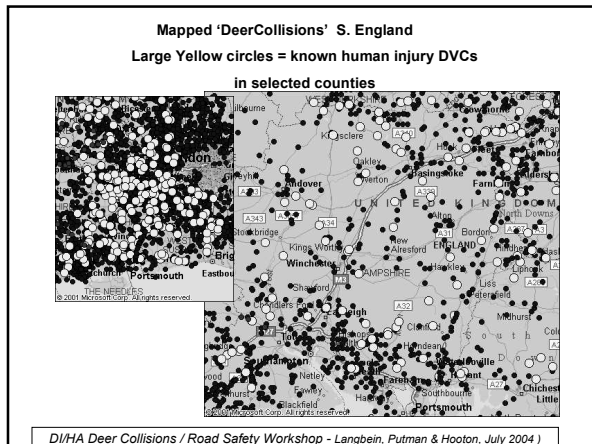
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*Deer/Vehicle Collisions (DVC) leading to human injury (preliminary data from 24 Counties – making up c.55% land area of England)

Deer - past 5yrs (County) J98-03	Nos. Injury RTAs	Number of Casualties				Ann. Mean
		Slight	Serious	Fatal	Total	
Hampshire	94	108	21	0	129	25.8
Bucks/Berks/Ox.	84	106	15	(1)1	122	24.4
Suffolk	54	55	9	0	64	12.8
Essex	51	56	17	(1)1	73	14.6
Sussex(E+W)	41	40	7	0	47	9.4
Surrey	32	32	7	0	39	7.8
Norfolk*2yr	35	30	7	(2)2	37	7.4
Devon	29	31	1	(2)3	32	6.4
Hertfordshire	27	29	7	2	38	7.6
Glos(+SGlos)	22	24	4	0	28	5.6
Dorset	21	25	3	0	28	5.6
Bedfordshire	20	16	3	(1)2	19	3.8
Cambs*4yr	20	21	5	0	26	5.2
Somerset	18	21	2	(2)2	23	4.6
Wiltshire	18	18	3	0	21	4.2
Lincolnshire	17	14	2	1	17	3.4
Warcs	14	12	6	0	18	3.6
Lancashire	6	4	1	(1)1	6	1.0
Kent	5	5	0	0	5	1.0
Cornwall	0	0	0	0	0	0.0
Total	608	647	120	(1)14	771	154

(past records for fatal deer RTAs not reliable ie () = all in 2002/3)

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Overall Preliminary Minimum Estimate of numbers of Injury RTAs involving Wild Mammals in Britain

	No. Human Injury RTAs	Number of Casualties		
		Slight	Serious	Fatal
ENGLAND				
Deer	264	276	53	11
All Wild Mammals	549	610	82	13
England, Scotland & Wales (??)				
Deer	330	345	66	13
All Wild Mammals	687	762	103	16

Note – UK-wide figure conservatively estimated on basis of Scotland and Wales making up merely 20% of UK total animal RTAs [from Langbein, 2003]

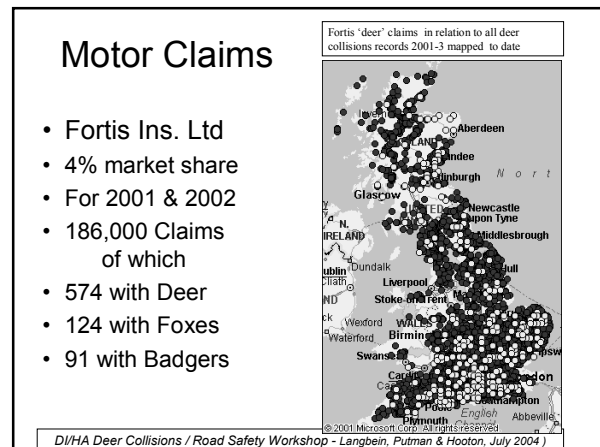
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UK Highways Economic Note 1: (at 2001 cost)

Average value of Accident Prevention per casualty by severity -

• Fatality :	£ 1,185,190
• Seriously Injured:	£ 133,178
• Slightly injured:	£ 10,269
• Average per casualty:	£ 37,412
• Average per Accident:	£ 53,902

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Likely number of significantly Damaged Vehicles (ie. above Insurance excess)

• Deer - 8470	@ avg. cost £1320 = £ 11.2 Million in UK	of which c. 15% in Scotland = 1.7 M
• Foxes + Badgers 3175	@ Est. avg. cost £1000 = £ 3.2 M in UK	

[from Langbein, 2003]

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Deer Collisions in Britain Preliminary Costs as Estimated

- Human injury RTAs:
 - 28 M
- Vehicle (claim) Damage :
 - >11 M
- Collection & Disposal :
 - 0.75 M
- Lost venison
 - c. 1.0 M

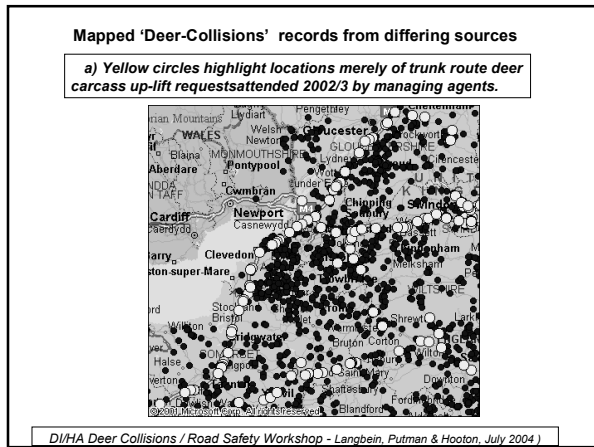
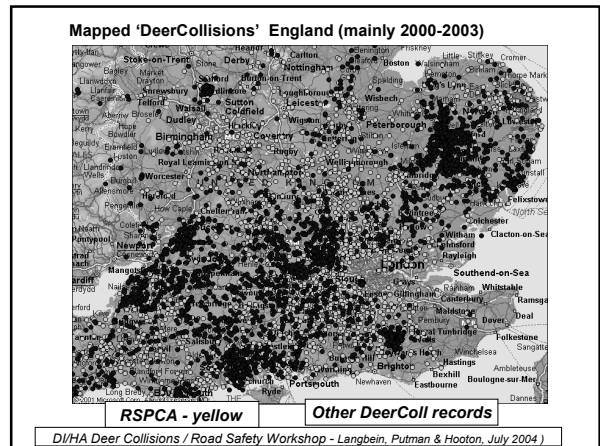
Mitigation can be costly

Dynamic, animal activated Signage

'Green' bridge

....but, if effective, can make sound economic sense

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Wildlife warning reflectors are widespread. But there is little evidence for the effectiveness of these reflectors. Further behaviour research is needed .

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Examples of joint use accommodation structures

M25 Bridge & tunnel used by fallow and muntjac

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Also plan to investigate Usage & Characteristics of good Existing passages.

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Locations of Forests represented at workshop



Deer Road Kills recorded since 1990 in these nine Forest alone exceeds > 11,000 animals !!!

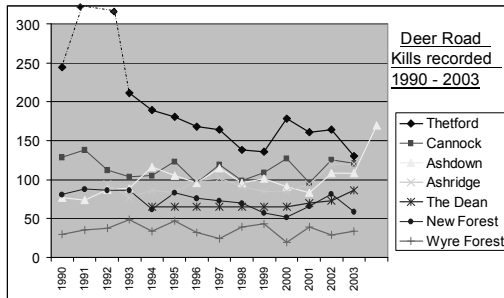
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Deer Species and approx. numbers present

Forest Name	Fallow	Roe	Muntjac	Red	Sika	Average Ann. RTA Toll
Thetford	500	6000	6000	400	nil	154
Cannock	500	rare	100	200	nil	115
Ashdown	1000	50	rare	nil	20	114
Ashridge	800	rare	200	nil	nil	101
The Dean	800	400	200	12	nil	72
New Forest	1600	400	rare	116	108	63
Wyre	300	rare	rare	nil	nil	33

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Changes in Annual Number of Deer Collisions



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PLEASE Slow down for Wildlife



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