

The Deer Initiative

Deer, Habitats and Impacts Conference March 2007

Trends in deer distribution and abundance?

Dr Alistair Ward – Central Science Laboratory

Abstract

Standardised, robust monitoring data on national deer populations do not exist for England and Wales. Predictions of future distribution and abundance patterns rely on the quality and quantity of similar information from the present and past. Estimates of deer range expansion over the past 30 years will be presented. Data on national and regional abundance are of lower quality and do not readily lend themselves to comparisons between time periods but are nonetheless presented, with extreme caution. It is concluded that all wild deer species are likely to expand in distribution and abundance in the future, with non-native species spreading and growing at higher rates than natives.

Deer species	Rate of change
Red	0.3%
Fallow	1.8%
CWD	2.0%
Roe	2.3%
Sika	5.3%
Muntjac	8.2%

Ref: Ward (2005) *Mammal Review* **35** (2): 165-173.

Population estimates

Red

Location	Number of deer	Harris <i>et al.</i> (1995)
England	18,700 (16,000-21,300)	12, 500
Scotland	381,600 (360,400-404,300)	347, 000
Wales	220 (100-400)	<50
Total:	400,500 (376,400-426,000)	360, 000

Roe

Location	Number of deer	Harris <i>et al.</i> (1995)
England	95,000 (88,400-102,800)	150, 000
Scotland	>200,000* (185,500-214,000)	350, 000
Wales	3,600 (2,500-4,700)	<50
Total:	298,600 (276,400-321,500)	500, 000

Reeve's muntjac

Location	Number of deer	Harris <i>et al.</i> (1995)
England	97,800 (87,900-108,300)	40, 000
Scotland	0	<50
Wales	5,800 (3,700-8,100)	<250
Total:	103,600 (91,600-116,700)	<u>40, 000</u>

Fallow

Location	Number of deer	Harris <i>et al.</i> (1995)
England	142,100 (127,700-156,700)	95,000
Scotland	20,700 (15,600-26,600)	<4,000
Wales	>1000*	<1,000
Total:	163,800 (144,300-184,400)	<u>100,000</u>

Japanese sika

Location	Number of deer	Harris <i>et al.</i> (1995)
England	2,600	2,500
Scotland	25,000	9,000
Wales	>1*	0
Total:	26,600	11,500

Chinese Water Deer

Location	Number of deer	Harris <i>et al.</i> (1995)
Woodwalton Fen	200	100-200
Woburn	300	200-300
Whipsnade	600	400-600
Norfolk Broads	1,000	300
Total:	2,100	1,130 max.
	(Free living: 1,500)	(650)

Conclusion

Species	2005 range (%)	2015 range (%)	2005 abundance	2015 abundance
----------------	-----------------------	-----------------------	-----------------------	-----------------------

Red	35	36	400, 500	412, 700
Roe	61	77	298,600	374, 800
Fallow	22	26	163, 800	195, 800
Muntjac	18	40	103, 600	227, 800
Sika	13	21	26, 600	44, 600
CWD	2	3	1, 500	1, 800

But there is a note of caution: distribution and density are uncertain and density is also variable.

So how do we improve our knowledge?

- New BDS survey
- Tracking Mammals Partnership
- Cull returns?
- Volunteer/professional surveys?

And is this important for:

- Local management?
- Research?
- Policy advice?
- Education/publicity?

YES!

Speaker's Biography

Alastair gained his PhD on the ecology and management of roe deer, in 2001. He currently works as a behavioural ecologist at the Central Science Laboratory. He specialises in scientific research seeking to resolve conflicts between wildlife and humans in new and improved ways. From 2003-2006 Alastair worked at CSL's research station at Woodchester Park, Gloucestershire, where he managed projects on the risks of disease transmission from wildlife to livestock. From 2000 to 2002 he worked full time for the British Deer Society as their Conservation and Information Officer.

Alastair I. Ward, Central Science Laboratory, Sand Hutton, York, YO41 1LZ.

E-mail: a.ward@csl.gov.uk