

special organization to deal with the problems that had emerged as a result of translocations of elephants. The objectives of EMOA are listed at the back of the publication and they include: to advise and assist elephant owners on the appropriate management of their elephants; to initiate, promote and monitor research, technology transfer and data management on elephants; and to advise on and promote welfare issues of elephants. EMOA has accumulated a great deal of information on the translocation and care of elephants, much of which derives from experiences translocating animals from the Kruger National Park as part of the population control programme there. This information has been assembled into this publication which is directed at 'buyers, sellers, managers and owners of elephants'.

The chapters provide an outline of the biology of the African elephant, and cover considerations and prerequisites for acquiring elephants, acquisition, confinement, special considerations for keeping juveniles only, diseases, management of habitat and elephants, and management strategies for controlling population size. Although welfare is rarely mentioned specifically, many of the provisions and recommendations are clearly welfare motivated. EMOA does not support the translocating and keeping only of juveniles. Where translocation is to be used as a method of preventing overpopulation, EMOA is adamant that entire family units should be translocated and that calves should not be separated from their mothers. Where translocations become necessary in order to preserve genetic diversity in small isolated populations, EMOA recommends that for social reasons males should be exchanged, not females.

These guidelines provide a valuable distillation of practical information on aspects of the management of African elephants. Many species of wild animals are translocated or brought into captivity very much more frequently than are elephants and it is regrettable that there are not more books like this to discourage these activities when there is no good justification for them and to provide practical guidance when there is.

Managing African Elephants: Guidelines for the Introduction and Management of African Elephants on Game Ranches. 1999. Edited by Marion E Garai. 72 pp. A4 paperback. Obtainable from the Elephant Managers and Owners Association, PO Box 98, Vaalwater, 0530 South Africa (E-mail:jumbo@emoa.org.za).

Assessing animal welfare at livestock markets

In September 1998, the UK Government launched the *Strategy for the Protection of Animal Welfare at Livestock Markets*. This report details the findings of a series of market inspections by the State Veterinary Service (SVS) to assess the extent of compliance with the current legislation and codes of practice. Carried out in the late autumn and early winter of 1998, almost all livestock markets in Great Britain were visited (484 inspection reports covering 204 markets). Table 1, taken from the report, gives a breakdown of the animals present at inspection.

Table 1 **Number of inspection reports and animals present**

	Cattle	Calves	Sheep/ Goats	Pigs	Rabbits/ Poultry	Horses	Total
<i>Reports</i>	167	73	166	42	14	22	484
<i>Animals present</i>	36 927	8631	215 054	7086	5327	3638	276 663

Factors such as time spent in market (see Table 2), numbers of animals present in markets that were unfit (674 animals out of 276 663), the provision of bedding and water, stocking density and handling (see Table 3) were assessed.

Table 2 Estimated typical time spent by animals in market

	Cattle	Calves	Sheep/ Goats	Pigs	Rabbits/ Poultry	Horses
<i>Mean</i>	5.5h	2.75h	4.5h	3h	2.5h	4.5h
<i>Minimum</i>	0.75h	0.75h	0.75h	0.75h	1h	0.25h
<i>Maximum</i>	2 days	7.25h	1 day	8h	3.5h	8h

Table 3 Incidents of unsatisfactory animal movement or handling

	Cattle	Calves	Sheep/ Goats	Pigs	Rabbits/ Poultry	Horses	Total
<i>Observations</i>	196 042	58 297	1 214 039	41 070	25 519	30 131	1 565 098
<i>Incidents</i>	2225	1369	3508	330	40	662	8134
<i>%</i>	1.13%	2.35%	0.29%	0.80%	0.16%	2.20%	0.52%

Overall the report suggests that '*while there remains room for improvement, and while individual problem cases requiring immediate remedial treatment do continue, standards of animal welfare in markets is generally good*'. Similar audits of all markets will now occur biannually.

The 1998 Strategy for the Protection of Animal Welfare at Livestock Markets: Report on SVS Assessment of Compliance. Ministry of Agriculture, Fisheries and Food. 8pp. Paperback. Obtainable from MAFF Publications, Admail 6000, London SW1A 2XX, UK. Free.