LETTERS

Deer hunting and welfare

Sir,

Bradshaw and Bateson (2000a) wrote 'overall we judge that the welfare costs associated with hunting red deer were higher than those associated with stalking and reducing the welfare costs associated with hunting was much less feasible than reducing those associated with stalking'. Others have reached the opposite conclusion (eg Harris *et al* [1999]; Wise [1999]; and submissions by Geist, Denny and Marriage to the Burns Inquiry and recorded in the CD published with Burns *et al* [2000]). Savage *et al* (1993) concluded that the communal hunting methods which regard the deer as a valued and respected quarry species, should lie at the heart of the management of the herds.

Both methods have positive and negative physiological and psychological effects on the deer. An assessment of welfare impact can be made by multiplying the severity and duration of the problem (Broom & Johnson 1993). I have argued elsewhere that, based on a comparison of the short-duration, low degree, and reversible stress of hunting, with the long-duration, severe and irreversible suffering of mis-shot deer, hunting methods are kinder by a factor of at least 10. Head and neck shots are not recommended because of the risk of non-fatal wounding and body-shot deer do not die instantly. Many take several minutes to insensibility and death (Green 1992).

The wounding rates quoted by Bradshaw and Bateson (2000b) were 'optimistic in the sense that they represented a best case scenario'. My own enquiries and analysis suggest that a figure of 15 per cent walking wounded is more realistic. This is confirmed by studies of casualties found by the hunts (Wise 1999; White 2000). Deer wounding rates have been variously estimated at 8 per cent, 26 per cent and 42 per cent in USA (Nobel 1974; McCaffery 1984; Gladfelter 1985). In 1984 the Farm Animal Welfare Council reported concern that in the field slaughter of farmed deer, one shot accuracy ranged from 75 per cent to 100 per cent.

Batchelor (1968) showed the effects of stalking as a form of damaging harassment, causing deer to become nervous, nocturnal, less visible and to seek refuge in poorer quality areas, where they shrank in body size, reduced reproduction, declined in numbers and, for some time, stayed faithful to the poor habitat without colonising the good habitat. Erlandson (personal communication 2000) illustrated that rifles are unknown in the evolutionary development of deer. These negative physiological and psychological effects were not allowed for by Bateson (1997).

Those interested in the sound management and welfare of the West Country's deer herds should be aware of the consequences, listed below, of the bans on deer hunting that have been imposed by the National Trust and the Forestry Commission following the publication of Bateson's (1997) report.

1. The number of deer killed on the National Trust's Holnicote Estate have more than doubled, according to the Trust's stalker Mr Charles Harding, who wrote in his testimony to the Burns Inquiry (recorded in the CD published with Burns *et al* [2000]) explaining the complex factors which have brought about this situation as follows[1]:

   'The deer on the Holnicote Estate are no longer being dispersed by the Staghounds, consequently the tenants are experiencing serious deer damage problems. The deer are ruining their crops and hedges. Without hunting the only way to deal with this problem is to shoot the deer. In 1998 I shot 83 deer on the Estate, the figure for

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1999 was 34 deer, for this current season my projected cull is about 40 deer. The ten years prior to the ban when the deer management was carried out by the Devon and Somerset staghounds, I only shot 10–15 deer each year on the Estate. During this period there was far less deer damage, and what there was tolerated to a far greater degree not only because of the tradition, popularity and most importantly the underlying social cohesion but the tenants also knew the hounds would be back regularly to disperse the deer over nine months of the year'.

'The National Trust has no deer management co-operation with its neighbours, in the past the Devon and Somerset Staghounds have always provided a comprehensive Deer Management Service, however, now when the deer go over the Estate boundaries they are legally shot or taken by poachers. More often it is the stags that are killed. Up until the ban we have always had a lovely bunch of stags on my ground, now we have none, they have all been legally shot whilst on neighbouring ground or poached. The bottom line, in welfare terms for the deer, on the Holnicote Estate, is that they are considered a greater pest than before; they are worth far more money dead than alive and, to some people paradoxically, now that they are no longer under the Staghounds Deer Management umbrella they are dying in far greater numbers. If the Government bans deer hunting, the Red Deer of the West Country will suffer immeasurably and the social cohesion of a unique area will be destroyed; what a most dreadful, dreadful thought.'

2. As a result of increased shooting, the herd appears to have become more nervous and difficult to see.

3. It is feared that the deer will come to be considered a greater pest and, subject to commercial exploitation and uncontrolled shooting, numbers will decline.

4. Without hunting, during which hounds and staff gain the necessary experience, access rights and local knowledge, the free deer casualty service, which both the National Trust and Forestry Commission have used to dispatch sick or injured deer, would not operate.

5. The number of casualty deer found and dealt with by the hunt services has declined because of restrictions on where the hunt can go, It seems likely that more casualties now suffer lingering deaths. The timely resolution of casualty problems has always laid beyond the scope of stalking and the stalker's dogs, which unlike deer hounds, are not bred and trained to search for and bring to bay distressed deer.

6. A ban on hunting would deprive many of these magnificent creatures with a sporting chance of escape and the dignity of the best prospect of an instantaneous death on their own favourite territory away from the herd. They have no premonition of death and have become, over their lives, familiar with the hounds. Provided they are not diverted from the routes they know and choose, they remain calm and in control of the situation, choosing when to stand at bay or to remain in a resting or hiding position. The highest quality glycogen-depleted venison is then fairly distributed to the farmers who tolerate high levels of damage, feed the deer and accept high numbers.

7. The hunt bans threaten many associated rural industries, including tourism. It is estimated that deer hunt supporters contribute over, 4 million to the rural economy (Centre for Rural Studies 1993).

The hunts are run by farmers for farmers, to meet their responsibilities in caring for the herds of wild red deer, as

they would care for their herds of domesticated animals. Despite claims to the contrary, there is no comparable alternative to this superb example of species management.

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Dr Bradshaw and Professor Bateson reply:

Edmund Marriage raises three main concerns about the welfare implications of stalking: specifically, the proportion of deer that escaped injured, the length of time taken to die by body-shot deer, and the effect of disturbance on the behaviour of deer.

No one would dispute that careful management of stalking is important from the point of view of welfare (Bateson 1997; Bradshaw & Bateson 2000a, b). We estimated, from retrospective and current cull records, that 2 per cent of deer culled by rifle by professional stalkers escaped wounded. This percentage is bound to be higher where culling is carried out by inexperienced or incompetent individuals. Training schemes, such as those provided by the British Deer Society, proficiency in the use of firearms and an adequate shooting protocol are important in preventing unnecessary injury and suffering (FAWC 1985; Agricultural Departments 1989; Green 1992).

How much deer suffer when fatally shot in the heart, spine, liver or lungs is hard to ascertain. Loss of consciousness will not be instantaneous as with head and upper-neck shot deer. It should not be assumed, however, that all body-shot deer will feel pain. In studies on humans, initial freedom from pain was reported in one-third of