

## LETTERS

### **Badgers: sociobiology and sett protection**

Sir, One of the most surprising aspects of legislation for wildlife protection, is that although the crucial importance of nest sites has long been recognized in bird legislation, it is only belatedly being incorporated in the protection of mammals such as badgers and otters. Even now, only five European countries incorporate it in legislation: Albania, Belgium, Holland, Ireland and UK.

There are only about a dozen instances of badgers breeding above ground (Hancox 1993b,c) and badger sociality is beautifully adapted to ensuring a structured population centred on main underground breeding setts with predictable spacing (Hancox 1989), and latrine marking of boundaries. Within a clan, unity is maintained by mutual musking and multiple-mating bonding (as in apes, naked or otherwise), with a clear social order.

Setts are the result of co-operative effort by the whole clan – excavating many tonnes of soil and jointly providing nest bedding – which is so crucial to neonate survival as well as to adults overwintering. There is also co-operation in scent marking of territory, mainly by boars, and defence against predators, including the occasional infanticidal badger. Sows share the care of young and there are even reports of shared lactation, as in lionesses.

Sociality is the key survival factor in badgers, based on the communal sett, and membership of a clan promotes both individual and group survival.

In relation to badger welfare, it is rather absurd that the *Badgers Acts 1973* and *1992* are so much of a compromise. Setts are beautifully designed to ensure air flow through complex tunnel/entrance

systems, as was clearly shown by early attempts at making artificial setts; these lacked adequate air flow and resulted in bedding material becoming mouldy. Allowing hunts to stop up setts is an anomaly and a prosecution in Avon in 1993 succeeded because hard stopping led to the suffocation of a whole badger clan. Also of concern is the new Ministry of Agriculture, Fisheries and Food (MAFF) live trap/test cull of badgers to try to reduce cattle tuberculosis; surely, holding lactating sows in the breeding season will put the cubs underground at risk (Hancox 1993a). Straying dogs are also probably a major hazard to young cubs that is unrecognized by pet owners.

In conclusion, it is rather surprising that old brock, despite being one of the most popular British mammals and a symbol of various conservation bodies, is nevertheless only imperfectly protected under current legislation. Few people are aware of the pivotal importance of the main breeding sett in badger distribution, sociality and survival. One crucial improvement in the legal protection would be to formally recognize a mandatory period of non-interference during the breeding season from December to June, even for MAFF licensed control activities where badgers are regarded as a problem.

### **References**

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Hancox M 1993b Badgers breeding above ground. *Small Carnivore Conservation* 9: 10  
Hancox M 1993c Badger sociobiology. *Ratel* 20: 153-155  
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