

the welfare of various types of livestock (see below) whose movements were restricted by disease-control measures. The booklet on sheep covered general guidelines for the management of flock feeding, lambing of ewes away from the farm, regulation of accommodation and stocking rates, humane destruction, and management of non-animal movements (eg deliveries of feedstuff). Although there is some information in these notes that may be of general relevance in dealing with welfare aspects of foot and mouth disease control, the guidelines are very specifically focused on the particular circumstances in the UK during the spring of 2001.

Protecting the welfare of sheep under foot and mouth movement restrictions March 2001. Foot and Mouth Disease Public Information Factsheet 10. Ministry of Agriculture, Fisheries and Food. 8 pp A4. Available from Animal Welfare Division, Area 508, 1a Page Street, London SW1P 4PQ, UK, and also at www.maff.gov.uk. Similar factsheets are available also for beef cattle (Factsheet 7), pigs (Factsheet 8), goats (Factsheet 9), and dairy cattle and growing heifers (Factsheet 11).

Biosecurity

The outbreak of foot and mouth disease in the UK in February 2001, caused by the strain of the virus that has been responsible for epidemics in many countries around the world in recent years, has raised questions about the adequacy of the UK and European defences against exotic livestock infections. The growth in global free trade and the ever-increasing international movement of humans, animals and livestock products present a serious challenge to the maintenance of rigorous biosecurity measures. The introduction of non-indigenous species, whether they be plants, animals, or infectious agents, is known to be a major threat to the conservation of biological diversity and also to the welfare of animals — domestic and/or wild. In New Zealand, this subject has a high public profile and one body, the MAF Biosecurity Authority, is responsible for all of these issues. This authority produces a six-weekly magazine, *Biosecurity* (see below), that covers the fields of biosecurity and animal health, animal welfare, and plant and forest health.

The articles included in the recent (May 2001) issue of this magazine, which include educating people about biosecurity, improving animal health surveillance, reporting on recently discovered non-indigenous organisms and strategies for their control, animal welfare issues, and new phytosanitary requirements for timber imports, emphasise the inter-relatedness of these subjects and the importance of the unifying concept of biosecurity. This contrasts with the situation in the UK and in Europe as a whole, in which animal welfare, domestic animal health, and wildlife and ecosystem conservation tend to be dealt with by separate bureaucracies.

This magazine *Biosecurity* is, so it says inside the front cover, “of special interest to all those with a stake in New Zealand’s agriculture, horticulture, forestry, animal welfare and environment”. It deserves attention, also, outside New Zealand as a model for helping to raise public awareness of the important issues of biosecurity.

Biosecurity May 2001. A magazine published six-weekly by MAF Biosecurity Authority. 23 pp A4 paperback. ISSN 1174-4618. Available from Biosecurity Authority, PO Box 2526, Wellington, New Zealand, and also at www.maf.govt.nz/Biosecurity/index.htm.

Guidelines for nonhuman primate re-introductions

Primate re-introductions are being undertaken with increasing frequency. Some are aimed at restoring primates to their natural habitats as part of a conservation programme, and others are motivated by concerns for welfare of captive animals. These new guidelines — still in draft stage for comment at present — have been developed by the Re-introductions Specialist Group

of the IUCN Species Survival Commission (see below) to help ensure that re-introductions achieve their conservation aims without causing adverse side-effects that outweigh any benefits.

The risks associated with re-introductions are much more widely understood than they were twenty years ago. These guidelines correctly advocate a cautious approach: there is a risk of causing much more harm than good. For this reason, it is stated that the following precautionary principle should be observed in all cases: "If there is no conservation value in releasing primates to the wild, or no management programme exists in which such a release can be undertaken according to conservation guidelines, the possibility — however unlikely — of inadvertently introducing a disease or behavioural or genetic aberration not already present in the environment should rule out returning primates to the wild."

When animals are moved into a new ecosystem, for example when they are brought from the wild into captivity, there is a great likelihood that they will encounter novel infectious agents and a danger that if they are returned to the wild they may take these with them. Although most infectious agents are of little or no significance to welfare or population viability, some can cause catastrophic effects at either or both levels.

These guidelines provide a structured approach to the planning, checks and preparations essential for a re-introduction programme. They prompt critical review of the necessity for re-introduction, of financial and legal constraints, of habitat availability, of the suitability of available stock for release, and so on. Under each heading, key points are listed in a logical and clear way. The guidelines are valuable and fairly comprehensive. Apart from providing an excellent blueprint for planning important conservation programmes, they will help to emphasise the enormity both of organising and financing the task, and of the responsibility for it, to anyone who may be considering re-introductions for trivial reasons.

One omission is that there is no recommendation that the planning should include an ethical review in which the possible conservation benefits of the re-introduction are weighed against possible welfare costs to the animals involved and in which refinements to minimise risks to welfare are addressed.

Guidelines for nonhuman primate re-introductions: Draft document April 2001. Prepared for the Re-introduction Specialist Group of the World Conservation Union (IUCN) Species Survival Commission by Lynne R Baker. 24 pp A4. Available at <http://194.158.18.4/intranet/DocLib/Docs/IUVN978.pdf>.