

CHAPTER 8

NATURAL DISASTERS

Introduction

8.1 Droughts, floods and fires ravage the Australian landscape irregularly but frequently, such that they must be considered an inevitability for the landowner and be planned for accordingly. Some regions are more prone to one of these natural disasters than the others. The eastern tablelands, for example, have a one in five chance of a potentially serious fire season each year. Disasters are also frequently interlinked, with major flooding often following the breaking of a drought or fire breaking out early in a drought, when pasture growth or undergrowth has dried off.

8.2 Given the inevitability of these natural disasters, it might be assumed that mechanisms for dealing with them and their consequences had been perfected over the years. Natural Disaster Relief Arrangements (NDRA) have provided assistance by all States and the Commonwealth, on slightly varying terms and conditions. In general, low interest rate loans provide carry-on finance and funds for restocking purposes. Fodder, water cartage and stock transport subsidies may also be available.² From 1 July 1989, however, drought provisions have been removed from the NDRA scheme, pending the final representation of the Drought Policy Review Task Force.

8.3 Longer-term preventive measures, such as farm water supply works, erosion control measures and fodder conservation are also generally supported at State level by low interest loans of around 4.5 per cent, with varying eligibility criteria,

repayment terms and required security.³ In New South Wales, for example, farmers of "moderate means" can obtain loans of up to \$3000 at 4.5 per cent for fodder conservation purposes through the Rural Industries Agency of the State Bank, with repayment terms up to 15 years and on security of the farm mortgage.

8.4 This support, while valuable to the farmer in the longer term, is rarely of immediate benefit to burnt, stranded or starving sheep. The Committee accepts that the majority of farmers does consider the welfare of stock in such emergencies. It further acknowledges that there may well be, for example, farmers who are still paying off debts incurred in 1982-83 when they chose to feed their sheep during the drought.⁴ Nevertheless, the Committee concludes that more can and should be done to ensure the welfare of sheep before, during and immediately after natural disasters.

Bushfires

8.5 In bad fire seasons, the extent of damage caused to the Australian environment and to its wildlife, stock animals and humans by bushfires is horrendous. In the 1974-75 fire season, 15.2 per cent of the land area of this continent was burnt, including over 60 million hectares of pastoral land. The cause, in the majority of cases, was a lightning strike.⁵ In more recent times, the Ash Wednesday fires in south-eastern Australia in 1983 caused the loss of 71 human lives, the loss of 334 500 sheep⁶ and damage estimated at \$400 million.⁷

8.6 There is often insufficient warning of bushfires for sheep to be moved out of danger, although if that is an option, it should be taken. Following a fire, burnt stock need to be inspected as quickly as possible, divided into groups according

to the severity of their burns and dealt with appropriately. The State Departments of Agriculture produce and update guidelines concerning burn injuries and their treatment and may also provide local officers to assess stock.⁸

8.7 The most severely burnt sheep need to be euthanased where they lie and their carcasses disposed of. To spare the sheep further suffering, this task should be done immediately. An acceptable method of euthanasia is a shot to the centre front or back of the skull with a .22 rifle at close range. In moderately closely settled areas, sufficient competent volunteers can generally be found to perform this task promptly. The Committee is concerned that in the thinly settled pastoral zone, and particularly following an extensive fire, sheep must frequently linger unaided until death supervenes.

8.8 Sheep which can still walk but which are unlikely to recover from their burns are sometimes transported to an abattoir. While sympathising with the farmer in his intent to minimise his losses, the Committee accepts this as an option only if the abattoir is not too distant and can accept the sheep at once. The Committee notes the advice tended by the Victorian Department of Agriculture and Rural Affairs to the effect that abattoir salvage of sheep should occur within 24 hours and preferably within 12 hours.⁹ The Committee recommends that more specific guidelines on acceptable parameters for the transport of burnt stock be devised and incorporated in the codes of practice on road transport of livestock.

8.9 Treatment of burnt sheep should be undertaken only if the sheep have a good chance of recovery and can be adequately fed and watered until pasture growth resumes. A sheep which is severely burnt through the skin of the legs below the knees or hock joints is unlikely to survive longer than a couple of weeks and should be humanely slaughtered. Burns to bare-skinned areas other than the legs are more likely to heal and the sheep should recover with no long-term loss in productivity.

8.10 Perhaps the most important issue in post-fire sheep care is regular, at least daily, surveillance to ensure that all animals are responding to treatment, and that their weeping wounds do not become flystruck. If unfamiliar rations need to be provided, all sheep must be watched to ensure that they are eating. There is some evidence to suggest that it would be helpful if all sheep were introduced briefly to grain as lambs, as they readily learn to consume grain at a young age and retain a willingness to accept it when necessary later in life.¹⁰

8.11 A major welfare issue, especially following widespread fires such as those of Ash Wednesday, is the provision of fodder, as reserves in the district may have been destroyed. The Committee received no evidence to indicate that the co-ordinating arrangements by the State departments of agriculture for emergency fodder provision were inadequate.

Floods

8.12 Flooding is an irregular but frequent occurrence, particularly in the eastern States. It may take the form of a broadscale though shallow inundation of the floodplains of the inland river systems, or flash coastal floods.

8.13 Floods are arguably the least threatening of natural disasters for sheep welfare. Enough warning of the danger of flooding is usually given so that sheep can be moved to higher ground if this is available. However, problems of feeding isolated stock until the floodwaters recede can be immense and the exercise is inevitably costly. In certain areas, sheep may be marooned for months, during which time they must subsist on airlifted hay or provisions and medications conveyed by boat. Nevertheless the Committee is of the opinion that if sheep are raised in an area which is prone to flooding, adequate provision must be made for them during and following floods.

8.14 No specific cases of cruelty to, or neglect of, flood-bound sheep were presented to the Committee. However, it is certain that many sheep die in floods and it seems probable that many others suffer partially avoidable food deprivation and disease following floods. The Committee stresses the responsibilities of owners to ensure that, as the Victorian code of accepted farming practice for the welfare of sheep recommends, "reasonable steps should be taken for stock to be attended to promptly after either fire or flood".¹¹ Given the variety of flood situations, it is hard to be more precise than this.

8.15 Flood relief finance is provided through the States to landowners under similar terms and conditions to bushfire relief.

Drought

8.16 Drought is, and will in all probability continue to be, a prominent feature of Australian life. Since the 1860s there have been nine major droughts and six other droughts of a lesser degree of intensity, but nevertheless causing appreciable losses in large areas of several States.¹² There are rarely any periods in which some part of Australia, however small, is not drought-declared.

8.17 There are significant problems associated with objectively defining drought, establishing criteria for its onset and declaring it ended, none of which is within the Committee's remit to consider. However, the ramifications of drought declaration are of particular importance for the sheep producer, for until an area is drought-declared by the local Pastures Protection Board in New South Wales or its equivalent in the other States, financial assistance in the form of water cartage or fodder subsidies is unavailable. Until that assistance is forthcoming, some producers seem to be unable or unwilling to feed or water their stock adequately.

8.18 Producers' obligations to their sheep are spelt out in the Victorian Government's 1982 code of accepted farming practice for the welfare of sheep and reiterated in the national draft model code of practice being developed by the Sub-committee on Animal Welfare of the Standing Committee on Agriculture. The Victorian code states unequivocally "Sheep should not be allowed to starve to death" and "Sheep should not be allowed to die of thirst".

8.19 While such provisions might appear self-evident and even superfluous to the majority of sheep farmers, the need for them was amply demonstrated during the 1982-83 drought. ANZFAS has calculated that, on the basis of available figures from the Department of Agriculture and Rural Affairs, 769 000 sheep deaths were recorded in Victoria between September and March.¹³ Dr Harrison, a Principal Veterinary Officer with the Department, indicated that Departmental officers had to shoot 160 000 unwanted and unsaleable sheep during 1982-83 rather than allow them to continue suffering.¹⁴ Dr Harrison further pointed out that the majority of prosecutions launched by the Department concerning the maltreatment of sheep was on the grounds of failure to feed correctly in a drought situation.¹⁵

8.20 The Committee accepts that in most cases, sheep owners are not guilty of wilful acts of cruelty towards their animals in a drought. Owners are themselves the victims of the drought, as Dr Meischke pointed out.¹⁶ They may well be put in the invidious position of not being able to buy feed because it is unavailable. Further, when they make the decision to sell their stock, there is no guarantee that even many trips to the saleyard will ensure a buyer, or that the local abattoir will be able to cope with the supply.

8.21 Droughts are relatively unpredictable phenomena, although the Bureau of Meteorology is engaged in international data exchange with the World Climate Programme in the hopes of being able to assess the likelihood of major anomalies in

rainfall patterns over Australia well in advance.¹⁷ However, as Professor Egan of the University of Melbourne's Department of Agriculture pointed out, when a farmer mates his animals, he is committed to "an entrained programme of events progressing into an unpredictable future environment".¹⁸ When feed deficiencies then occur, decisions have to be made about taking actions which are not routine. The heart of the welfare issue then becomes the timeliness of the decisions. Professor Egan summed up the position as follows:

While most farmers act in time to take reasonable action, they differ in their optimism, in their knowledge of the costs and benefits of the options available and in their ability to make the committing decisions.¹⁹

8.22 Other witnesses were more critical of the actions or inaction of sheep owners during drought periods. Mrs Townend outlined the following scenario:

During times of drought the television screen shows the dogged farmer doing the rounds with the rifle, and placing a bullet through the skull of his emaciated animals. The distressed viewer is led to believe that this unavoidable suffering is a natural result of the climate and there is no other way of dealing with droughts. Unfortunately there are two fallacies about the myth of the shooting farmer. The first is that he ... may well not shoot his animals, but allow them to live as long as possible in the hope that rain will come. The second fallacy is that drought must bring starvation of stock. Good farmers begin to sell animals when they know that they can no longer feed them properly. They do not overstock in the good years, and ensure thereby that their property has maximum feed to carry them through the bad times.²⁰

Mrs Townend further reported cases in which sheep were reputedly bought for next to nothing in drought sales and "put out into the bush somewhere" with no care or attention, in the hopes that some would survive and be profitable for the speculative buyer.²¹

8.23 The Committee was unable to determine if such reprehensible conduct occurred, and if so, with what frequency. The Committee believes that the wilful neglect of the nutritional needs of sheep is rare, but when it occurs, the provisions of State prevention of cruelty to animals laws are theoretically sufficient to deal with the owner. As far as the unfortunate animals are concerned, the Committee considers that the most promising approach is the education of the farming community as to its responsibilities to report cases of neglect to the relevant authorities, if informal approaches to their neglectful colleague bear no result.

8.24 A number of acceptable welfare options are open to a sheep farmer in a drought, some of which were outlined by Mrs Townend above. Stock may be sold, fed or agisted. In welfare terms, feeding is probably the number one choice. It may consist of protein or energy supplements to available pasture, such as urea, grain or hay; or it may consist of complete survival feeding. Advice is readily available from veterinarians, State departments of agriculture and other extension services on bodyweight at which survival feeding should begin, quantities of food which should be provided and the economics of feeding. The New South Wales Department, for example, suggests that feeding should commence when weights fall to 45 kg for British breed sheep, 40 kg for large-framed Merinos and 35 kg for small-framed Merinos.²²

8.25 If prolonged feeding of stock is uneconomic, or if feed is not readily available, agistment may be an option for the sheep producer. In welfare terms, this has the disadvantage of involving sheep in lengthy road or rail transport. Also not all sheep adapt well to different terrain, feed and water. On the positive side, the sheep can generally continue producing at a reasonable level and breeding programmes can continue. In a widespread drought, however, agistment is unlikely to be available except at a considerable distance and even with 50 per cent transport subsidies may be uneconomic.

8.26 A third option in a drought is the sale of part or all of the stock. To avoid the pitiable spectacle of emaciated sheep being dragged from one saleyard to the next, the decision to sell should be made before the sheep are in really poor condition. The Committee recommends that guidelines be established by the State departments of agriculture concerning the bodyweight and/or condition score below which the different breeds of sheep should not be permitted to be sold in saleyards. Sale by computer-aided systems such as CALM would still be an option for those sheep, but would spare them the stresses of transport and saleyard.

8.27 Current governmental provisions for drought relief were criticised by many of the witnesses who appeared before the Committee. AFWA suggested that fodder subsidies in fact rewarded the improvident and that farmers who put away fodder reserves were disadvantaged.²³ Dr Meischke pointed out that fodder subsidies in effect advantaged those who had fodder, not those who had stock.²⁴ Dr Barton, President of the Australian Veterinary Association, commented on the problem of farmers who overstocked in the expectation of being "bailed out" by subsidies in a drought situation.²⁵

8.28 Whether sheep producers should conserve fodder or conserve cash was questioned by Mr Bowman, representing the Wool Council of Australia. He pointed out that no farmer could have been expected to provide the fodder requirements needed during the 1982-83 drought and that even if it had been attempted, the fodder would have deteriorated.²⁶ Mr Bowman concluded that incentives to preserve cash were preferable, combined with an assurance from the Australian Wheat Board that it keep contingency stock on hand at all times to cover expected requirements during drought. The Wheat Board has no formal brief to do this, but apparently there is an unwritten understanding that it does so.

8.29 Incentives to preserve cash exist in the form of the Income Equalisation Deposits (IED) Scheme. This encourages farmers to build up cash reserves by putting aside money in good years for use in bad years, thus reducing income fluctuations. The scheme lost favour somewhat after 1983, when its tax-deductibility provisions were removed. The Federal Government accepts that some incentive is justified to encourage farmers to provide for income fluctuations. It therefore proposes to introduce a tax-linked IED Scheme for primary producers from 1 July 1989, in which deposits will be tax deductible in the year of deposit and assessable in the year of withdrawal and interest will be paid at the appropriate Government bond rate.²⁷

8.30 The Committee accepts that drought relief is a most difficult issue, given the problems of resolving the competing and at times conflicting requirements of industry survival, stock survival and producer survival. Nevertheless, the Committee holds that the stock should not perpetually come out second or third best.

8.31 The problem of the timing of drought declarations should not be underestimated. Pockets of drought can exist in non-declared areas and vice versa. Climatic drought and agricultural drought may or may not coincide. The Committee understands that the bulk of research into drought declaration and the use of drought relief provisions has been done on New South Wales data. Hence it will consider the findings of that research on the assumption that it is not atypical of the situation in Australia generally.

8.32 In New South Wales, a Pasture Protection District can request to be drought-declared, but this request must be independently recommended by a veterinary inspector of the Board or a Regional Director of Veterinary Services of the Department

of Agriculture and Fisheries, and the final decision rests with the Minister for Agriculture. For a district to be drought-declared, 50 per cent of it must be drought-affected, as determined by the need for survival feeding of stock.²⁸

8.33 In practice, for the period between 1957 and 1981, the probability of a given New South Wales district being drought-declared in any given month was 20 per cent, and one district was drought-declared for 44 per cent of the time. Such high frequencies are clearly inconsistent with the normal definition of a natural disaster and many such droughts should be considered as forming an integral part of farm management.²⁹

8.34 Disaster relief payments have been shared equally by States and the Commonwealth up to 0.225 per cent of each State's annual revenue, thereafter the Commonwealth contributes 75 per cent.³⁰ In the case of particularly severe disasters, the Commonwealth has provided additional financial aid, as in the case of the *Drought Relief (Primary Producers) Act 1982*, which extended subsidies for the cost of purchasing fodder for producers in drought-declared areas.

8.35 Drought relief assistance has been routinely available to primary producers in the form of concessional loans for carry-on, restocking and repair purposes; 50 per cent freight rebates on the transport of fodder or stock; and assistance to State and local authorities for the disposal of helpless or unsaleable stock, and assistance with water provision.³¹

8.36 An analysis of the drought relief subsidies for 1972-73 (a year of widespread drought) for New South Wales revealed that the average payment was \$203. Total payments amounted to \$305 566 for 1508 claims from 1092 producers. Individual claims ranged from a high of \$3375 to a low of \$1. Eighty-four per cent of claims were for transport subsidies. The number of producers who lodged claims for subsidies was only a small proportion of those farming in drought-declared areas.³²

8.37 A further analysis of drought relief payments in five New South Wales districts over the years 1976-87 showed that the average payment amounted to \$551. Over 80 per cent were for transportation of stock or fodder. Fifty-eight per cent of individual claims were for less than \$500, and again, only about 20 per cent of individual producers in drought-declared districts claimed relief.³³

8.38 The conclusion which must be drawn from the above studies is that efficient farm managers operating in appropriate areas do not need and do not apply for drought relief subsidies. Any sheep producer whose viability depends on a \$500 subsidy should clearly not be in the business of raising sheep and should not be supported by the Australian taxpayer to do so. The inequity of a situation in which financial support is available for the improvident is untenable.

8.39 The Committee learnt anecdotally of instances of abuse of drought relief assistance, but received no firm evidence that it occurs, and if so, with what frequency. The Committee notes, however, that overall drought relief subsidies are not high, so that abuse of the scheme, if it does occur, must do so on a relatively small scale.

8.40 The Committee is aware of the at times conflicting needs of soil conservation authorities and primary producers. At the onset of a drought, the former would like to see all stock agisted elsewhere to limit the extent of soil degradation⁴³ yet the latter may not be convinced of the need for urgent action, particularly if the timing coincides with shearing or lambing.

8.41 In considering the question of drought relief, the Committee feels it lacks the hard evidence necessary to make recommendations which go well beyond the specific ambit of sheep welfare. The Committee nevertheless believes that in the

long-term interest of sheep welfare, there is no place for marginal producers in the more arid areas, and the removal of drought relief subsidies might be one way of achieving this.

8.42 The Committee puts forward the following suggestions to the Drought Policy Review Task Force, which is currently investigating alternative arrangements relating to the future involvement of the Commonwealth in providing assistance for drought:

- . no drought relief subsidies should be available until drought conditions have persisted for longer than six months.
- . the monies thus saved be put towards the employment of more inspectors under the prevention of cruelty to animals acts, to ensure that no sheep are being adversely affected; that overstocking is not permitted.
- . no drought relief subsidies should be available in areas drought-declared more than 25 per cent of the time over the last ten years.

8.43 The Australian Soil Conservation Council (ASCC) has recommended that optimum stock-carrying capacities should be determined for each region³⁵ and the information disseminated by the State agricultural authorities. The Committee considers this recommendation has some merit and believes that any producer who exceeded those optimum capacities should then be ineligible for drought relief subsidies or concessional loans.

8.44 The Committee recommends that joint guidelines be devised by the Australian Soil Conservation Council, the State departments of agriculture and forestry and the National Farmers Federation on conservation farming techniques which would benefit both sheep and the environment.