
PART FOUR

THE WAY FORWARD

CHAPTER 14

STOCKMANSHIP, EDUCATION AND TRAINING

Introduction

14.1 One of the important processes of animal domestication is adaptation to man. The progress achieved in this process can be judged from the substantial difference that exists between domestic stocks of animals and their wild counterparts in their flight distance to humans. With the development to intensification of production systems a higher level of contact with humans has been imposed on the animal than that which normally occurs in the traditional extensive system of production. In the modern systems there are considerable opportunities for periods of intense interaction between stockpersons and their stock.¹

14.2 Although little is known of the human factors which may influence this interaction there is evidence that the relationship can affect productivity and physiology and hence the welfare of farm animals.² As Werribee researchers have noted some of the behavioural patterns of humans involved in routine husbandry may be threatening and when regularly imposed may produce a chronic stress response. Whenever a sustained elevation of free corticosteroids occur both the productivity and welfare of the animal may be compromised.³

14.3 Evidence received by the Committee from all sources suggest that high standards of stockmanship are essential to the welfare of animals in intensive systems. Dr Wirth, President of the Royal Society for the Prevention of Cruelty to Animals Australia, among others, argued that stockmen play the "key role" in any production system.⁴ The RSPCA also noted that the influence of poor stockmanship on the welfare of animals in an

intensive production system is well recognised and is more damaging than in an extensive system because of the greater number of animals involved. Alternatively, a good stockman will dramatically improve the welfare of animals even where there are poor facilities.⁵

14.4 Dr Cutler from the Department of Agriculture and Rural Affairs also argued that a good stockman can make a terrible system work effectively for the welfare of the animal and a poor stockman can make the best system in the world work appallingly for the animal. He and other Departmental representatives emphasised the importance of 'stock sense'.⁶

14.5 The Codes of Practice for the welfare of the pig and the domestic fowl refer in their respective introductions to the need for responsible management and day-to-day care and note that:

The importance of competent stockmanship in animal welfare cannot be over-emphasised and those responsible should seek expert opinion when fowls [pigs] are in ill-health. Managers are encouraged to treat their animals efficiently and with consideration.⁷

14.6 Given its importance in intensive systems there should be more than just introductory emphasis in the Codes of Practice.

14.7 Stockmanship involves stock sense (a knowledge of, rapport with and ability to observe animals) and skill in stock tasks (the practical aspects of handling, care and manipulation of animals). A good stockperson should be observant, patient, informed about animals and their needs, skilful in stock tasks, able to recognise health and disease states, and be knowledgeable about the workings of mechanised feed and water systems and environmental control equipment and the measures to take when they fail.⁸

Poultry

14.8 The Australian Veterinary Association emphasised that good stockmanship was essential to poultry welfare. The Association argued that people responsible for the care of poultry must be well-trained, experienced and dedicated. They must know and understand the normal appearance and behaviour of their flocks and the physical needs of the birds. Ignorance, inexperience or indifference can result in management practices detrimental to the welfare of poultry.⁹

14.9 Poultry researcher Dr Linda Murphy submitted that:

The human operator - the stock person - is without doubt the single most important factor in the birds' environment influencing their welfare. People design, construct, maintain and operate (or fail to maintain and operate) the building, equipment and any outside areas where the birds live. People control the conditions of temperature, humidity, light, noise, dust and ammonia that birds are exposed to and determine the quantity and quality of feed and water they receive. People physically handle birds and have to recognise ill-health or injury. They decide whether or not to treat the birds and in what way.¹⁰

14.10 Some evidence received by the Committee suggested there were deficiencies in the standards of poultry stockmanship in Australia.

14.11 Dr Murphy argued that in Australia people with no practical experience or formal training in either animal or technical skills may start up a livestock production unit.¹¹ She suggested this was particularly serious in the layer industry because:

... it is up to the individual farmer. In the layer industry there is no competition. There is a wide range of levels of efficiency and management in the layer industry, and some people are content not to do so well. There is no pressure on them at the moment whatsoever to do any better.¹²

14.12 Dr Murphy noted that improvements to the standards of stockmanship could be made by having people assessed for their knowledge of birds' basic physiology, anatomy, and behaviour as well as their suitability for working with stock assessed.¹³ In some European countries attention is being given to improving the skills of stockmanship. For instance, in Denmark, a potential poultry farm buyer must have certain educational qualifications.¹⁴

14.13 Dr Murphy also suggested that many of the alternative housing systems for poultry (e.g. aviary systems) currently being developed have tended to give inadequate attention to the needs of those who work in these systems. This may be potentially a serious problem for if the people find the environment unpleasant or awkward to work in they are unlikely to perform as efficiently and conscientiously as they otherwise might.¹⁵

14.14 There are many opportunities for people to learn the theoretical and practical skills which are necessary to look after poultry properly. Commercial poultry companies generally employ well-trained and experienced supervisors, provide in-house training for their own staff, and demand competence and dedication from their staff and contractors. Hatcheries and feed mills offer professional advisory and backup services for their clients. State Departments of Agriculture and Primary Industries provide advisory extension and veterinary services, husbandry courses and seminars, and technical bulletins. Several magazines covering local and overseas trends and techniques in poultry production are available by subscription to poultry farmers.

14.15 Some who gave evidence to the Committee suggested the training and support services for poultry operators was adequate.

14.16 Dr Sheldon representing Australian Federation for the Welfare of Animals told the Committee that he believed the training systems were adequate and that there were good courses available at the University of Western Sydney's Hawkesbury campus, at Gatton College in Queensland and at a variety of other agricultural colleges around Australia.¹⁶

14.17 Other evidence, however, suggested there was a need for improvement in some areas. The Australian Veterinary Association argued that some poultry producers, particularly those involved in smaller commercial operations were not aware of or did not take advantage of the opportunities that currently existed to improve their stockmanship.¹⁷

14.18 Dr Murphy suggested that the courses currently existing in poultry husbandry do not put any emphasis on stockmanship and there are no traineeships in the poultry industry. Citing the example of beak trimming she noted that the people teaching others to become beak trimmers were:

Presumably the people already doing it. That is a good case in point: that is a procedure which can be done well and it can be done badly, and it does happen both ways. There is no-one looking over it to see how well it is done.¹⁸

Pigs

14.19 Evidence and research on intensive pig production stressed that as pigs are intelligent and responsive a good attitude in the stockperson is important. Industry studies of the human factors responsible for increasing the level of fear have found very strong relationships between the attitude of the stockperson towards pigs and the behaviour of the stockperson towards pigs. It is the attitude towards the pig that predominantly determines how the stockperson will behave.¹⁹

14.20 Research has shown that if pigs react in an adverse way to stockpersons caring for them their reproductive performance will fall.²⁰ Stereotypic behaviour increases when there is poor stockmanship.²¹

14.21 AFWA submitted that research in this area has been extended to the commercial situation to examine the practical implications of high levels of fear of humans by commercial pigs.

... In a recent study of 19 commercial farms in Australia (Hemsworth, Barnett, Coleman & Hansen, 1989) the relationships between behaviour of the stockperson towards female pigs around the time of mating, the level of fear of humans and productivity of pigs were examined. The level of fear of humans by pigs at some commercial farms was similar to the level resulting from aversive handling in controlled experiments, and this finding has serious implications for the productivity and welfare of pigs in the industry. In fact, as in a previous study (Hemsworth, Brand & Willems, 1981b), it was found that highly significant negative correlations between the level of fear of humans by sows and the reproductive performance of the farm: Sows displayed a decreased approach to the experimenter (i.e. higher fear) at farms where reproductive performance was low. These findings indicate there may be considerable potential to improve productivity and perhaps welfare in the industry by reducing the pig's level of fear of humans.²²

14.22 Clearly there are two important components in good pig stockmanship. The first is technical skills and knowledge of the stockperson and the second aspect is stock-sense or empathy concerning the animals being managed.²³

14.23 The Australian Pig Industry Policy Council advised in evidence that people employed in the industry received on the job training and that this was seen by everyone as an important aspect of employment. It was agreed that some people are naturally gifted in terms of stock-sense but through education most people can improve their awareness and competency in handling pigs.

Conclusion

14.24 The Committee is convinced that humane stockmanship is a key ingredient in intensive production systems and that better education and training of stockpersons are likely methods that could be employed in the future to avoid risks to welfare. There is an obvious need to continue research in this area and to develop training programs based on a deeper understanding of animal behaviour.

The Committee therefore **recommends**:

- (a) that the subject of animal behaviour be recognised as an integral component of the curriculum in agricultural and veterinary colleges in Australia, especially as a component of welfare;
- (b) the development of certificate training courses for stockpersons in the pig and poultry industries by Technical and Further Education and agricultural college courses;
- (c) funding initiatives be developed to support skills training of stockpersons unable to gain access to formal training courses; and
- (d) the Pig Industry Research Council, the Chicken Meat Research Council and the Egg Industry Research Council give greater priority to welfare-related stockmanship research.

14.25 The Committee also **recommends** that the Codes of Practice be revised to take account of advances in the understanding of the importance of stockmanship in the welfare of animals in intensive systems.

ENDNOTES

1. P.H. Hemsworth and J.L. Barnett, 'The Human-Animal Relationship and Its Importance in Pig Production', Pig News and Information, 1987, Vol. 8, No. 2, p. 133.
2. P.H. Hemsworth, J.L. Barnett and C. Hausen, 'The Influence of Handling by Humans on the Behaviour, Reproduction and Corticosteroids of Male and Female Pigs', in Applied Animal Behaviour Science, Vol. 15, 1986, p. 303.
3. *ibid.*, p. 312.
4. Evidence, Royal Society for the Prevention of Cruelty to Animals Australia, p. 9592.
5. *ibid.*, p. S9100.
6. Evidence, Victorian Department of Agricultural and Rural Affairs, p. 9406.
7. Australian Bureau of Animal Health, 1983, Model Code of Practice for the Welfare of Animals 1. The Pig, p. 2 and 2. Domestic Fowl, p. 2.
8. R. Ewbank, 'Animal Welfare', in Management and Welfare of Animals: The UFAW Handbook, Balliere Tindall, London, 1988, p. 8.
9. Evidence, Australian Veterinary Association, p. S8768.
10. Evidence, Dr L. Murphy, Poultry Researcher, p. S8960.
11. *ibid.*, p. S8966.
12. *ibid.*, p. 9548.

13. ibid.
14. ibid., p. S8966.
15. ibid.
16. Evidence, Australian Federation for the Welfare of
Animals, p. 9531.
17. Evidence, Australian Veterinary Association, p. 8769.
18. Evidence, Dr L. Murphy, Poultry Researcher, p. 9549.
19. Evidence, Australian Pig Industry Policy Council, p. 9449.
20. Evidence, Australian Veterinary Association, p. 9566.
21. Evidence, Australian Pig Industry Policy Council, p. 9424.
22. Evidence, Australian Federation for the Welfare of
Animals, pp. S8939-S8940.
23. Evidence, Australian Pig Industry Policy Council, p. 9448.
24. ibid., p. 9447.
25. ibid., p. 9448.