

Overview

This standard covers planning, managing and evaluating animal breeding programmes, taking into account the reason for breeding, ethical and legal considerations, animal welfare requirements, selection of breeding stock, breeding technology and genetic considerations, as well as the destination of the young. This includes fertilisation of animals through natural methods or by artificial insemination (AI).

You must maintain the health and welfare of the animals used in the breeding programme.

This standard is suitable for those with responsibility for planning and managing animal breeding programmes.

Performance criteria

You must be able to:

1. maintain a high level of professional competence and ethics, and work within the limits of your own authority, expertise, training, competence and experience
2. plan a responsible animal breeding programme to meet a clearly defined purpose
3. assess the needs of the animals and how they may be addressed or affected throughout the breeding programme
4. communicate the breeding programme to those who will be involved with its implementation
5. seek and evaluate specialist advice where required
6. manage the selection of breeding stock in accordance with the breeding programme and, where possible, screen stock to minimise known genetic weaknesses
7. manage the assessment of the health and behaviour of the potential breeding stock to confirm that they are suitable
8. confirm that pre-mating health checks, and, where required, prophylactic treatments, are carried out in accordance with the breeding programme, specialist advice and relevant codes of practice
9. plan and implement mating/artificial insemination from chosen parents, matching breeding objectives
10. monitor and evaluate the implementation of the animal breeding programme, and where necessary take action to amend the plan
11. confirm facilities, supplies, equipment and any other resources required (including staffing) are available for the successful implementation of the animal breeding programme
12. confirm that records relating to the breeding of animals are maintained and that the data required is retained and reported, where appropriate
13. confirm that animal breeding programmes are developed in accordance with relevant animal health and welfare legislation, codes of practice and organisational requirements
14. confirm that working methods maintain health and safety and are consistent with relevant legislation, codes of practice and organisational requirements

Knowledge and understanding

You need to know and understand:

1. your professional and ethical responsibilities, and the need to maintain professional competence
2. what to consider when planning and managing an animal breeding programme
3. where to obtain, and how to interpret, genetic information on parents – this may include pedigree data and performance records
4. the genetic principles covering the laws of inheritance
5. how to calculate potential genetic merit and inherent risks of planned matings
6. the desirable and undesirable physical and behavioural traits in the animals you wish to breed, which are specific to their purpose
7. the implications of inbreeding, non-inbred line breeding, crossbreeding and resultant hybrid vigour
8. the health and welfare implications (short- and long-term) of breeding on the parents
9. the ethical and practical issues regarding what to do with surplus animals
10. the importance of briefing and maintaining communications with those involved in the implementation of the animal breeding programme
11. the factors affecting the intended purpose/s of the animal breeding programme
12. the factors affecting rates of genetic gain and performance
13. how technologies can influence animal breeding decisions such as sexed semen, embryo transfer and crossbreeding
14. the pre-mating health tests that are used
15. the prophylactic treatments that can be given to both parents prior to mating and during gestation
16. the effects of nutrition, husbandry and environment on the animal breeding programme
17. the importance of establishing and maintaining breeding records in line with current legislation, codes of practice, animal welfare and organisational requirements
18. the current legislation, regulations, codes of practice, animal welfare and ethical considerations linked to breeding programmes
19. the requirements for breeding of non-inbred (random or outbred)

stocks

20. the importance of evaluating and revising the animal breeding programme to ensure it continues to meet objectives
21. the policies regarding selling/transfer and tracking of progeny and breeding stock
22. your responsibilities under relevant environmental and health and safety legislation, codes of practice and organisational requirements

Scope/range related to knowledge and understanding

What to consider when planning and managing an animal breeding programme:

- intended purpose
- intended destination of any offspring produced
- objectives
- ethical considerations
- compliance with legal requirements
- compliance with codes of practice
- selection of breeding stock
- genetic considerations
- use of breeding technology
- care of the young
- socialisation and habituation requirements
- vaccination requirements
- the criteria for retiring breeding animals

Glossary

Current animal welfare legislation:

- England and Wales, Animal Welfare Act 2006
- Scotland, Animal Health and Welfare Act 2006
- Northern Ireland, Welfare of Animals Act (Northern Ireland) 2011

Plan, manage and evaluate animal breeding programmes

Developed by	Lantra
Version Number	2
Date Approved	January 2018
Indicative Review Date	January 2023
Validity	Current
Status	Original
Originating Organisation	Lantra
Original URN	LANCS67
Relevant Occupations	Animal Care; Animal Facility Manager; Farmer; Farm Manager; Unit Manager
Suite	Animal Technology; Animal Care and Welfare; Livestock Production; Agricultural Management
Keywords	animal; livestock; breeding; programme
