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| Domain | ANIMAL HUSBANDRY | Unit ID: | 1350 |
| Title: | Carry out basic breeding of common livestock species | | |
| Level: 2 | | Credits: 2 | |

Purpose

This unit standard specifies the competencies required to:

- Describe common breeds of livestock
- Identify livestock on heat
- Facilitate mating of animals
- Identify breeding failure
- Report on breeding operation.

This unit standard is intended for people working in agriculture and other occupations that work with farm animals.

Special Notes

1. Entry information:

Prerequisite:

- *Unit 1357 - Handle farm animals*

2. This unit standard is to be delivered and assessed in the context of agricultural operations and can be assessed in conjunction with other relevant technical unit standards.

3. The evidence required to demonstrate competency in this unit must be relevant to workplace operations.

4. Assessment evidence may be collected from a real workplace or an appropriate simulated environment in which agricultural operations are carried out.

5. Assessment of practical application to breeding livestock is performed on a minimum of one livestock species as relevant to this unit standard.

6. All inspection, operation and maintenance procedures associated with the use of tools and equipment shall comply with manufacturers' guidelines and instructions.

7. Glossary of terms

- '*Livestock species*' include: sheep, cattle, goats, pigs, poultry, horses and support animals.
- '*Workplace procedures*' may include but are not limited to work notes, farm management plans, product labels, manufacturer's specifications, operator's

- manuels, safety plans, fire control, waste disposal, recycling, re-use guidelines and supervisors oral or written instructions.
 - ‘*Hazards*’ for people may include but are not limited to livestock movement and handling, livestock handling facilities, manual handling, solar radiation, noise, dust, equipment and tools, moving machinery and vehicles.
 - ‘*Safety requirements*’ may include but are not limited to safe systems and procedures for handling livestock, hazard and risk control, safe use of hand tools and equipment, manual handling, outdoor work and the use of personal protective equipment.
 - ‘*Personal protective equipment (PPE)*’ may include but is not limited to boots, overalls, gloves, protective eyewear and respirator or face mask and sun protection.
8. Regulations and legislation relevant to this unit standard include but are not limited to the following:
- Labour Act No. 11, 2007
 - Regulations relating to the Health and Safety of employees at work, 1997
 - Animal Health Act 2011
 - Animal Protection Act of 1962
 - Prevention of Undesirable Residue in Meat Act, 1991
 - FANMeat standards for producers 2010
 - Fertilisers, farm feeds and agriculture and stock remedies Act No. 46, 1998
 - Biosafety Act No. 7 of 2006
 - Standards Act, 2005, Standards Regulations: Standards Act, 2005 and relevant Namibian Standards as established
 - Livestock Improvement Act 25 of 1977 and all subsequent amendments to any of the above.
 - All current sets of Good Agricultural Practices to which Namibia subscribes and that regulate agricultural products entering a country to which Namibian producers may export.

Quality Assurance Requirements

This unit standard and others within this subfield may be awarded by institutions which meet the accreditation requirements set by the Namibia Qualifications Authority and the Namibia Training Authority and which comply with the national assessment and moderation requirements. Details of specific accreditation requirements and the national assessment arrangements are available from the Namibia Qualifications Authority on www.namwa.org.na and the Namibia Training Authority on www.nta.com.na.

Elements and Performance Criteria

Element 1. Describe common breeds of livestock

Range

Main external features include but are not limited to coat colour patterns, horns, hump, comb, plumage, ears and skin cover.

Purpose or use include but are not limited to dairy, beef, draught, broiler, layer, mutton, fibre and pelt.

Common breeds of livestock include at least 3 breeds of farm animals from each of the indicated livestock species commonly found or bred in Namibia.

Performance Criteria

- 1.1 Common breeds of livestock are visually identified.
- 1.2 Main external features that distinguish one breed from another within livestock species are described.
- 1.3 Breeds of animals according to purpose or use in the animal industry are classified.

Element 2. Identify livestock on heat

Range

Signs of oestrus in female mammalian animals include but are not limited to signs of standing heat, excessive nervousness, and hyperactivity, constantly riding others, a swollen vulva and thick clear mucus discharge from the vulva.

Heat detection aids include but are not limited to observation, chin-ball markers on vasectomized bulls, tail-head chalking and pedometers.

Performance Criteria

- 2.1 External and internal reproductive organs of at least three livestock species and their basic functions are described.
- 2.2 The length of oestrous cycle in different three livestock species and its significance to the production process is described.
- 2.3 Suitable personal protective equipment is selected, used and maintained according to industry standards.
- 2.4 Safety requirements are followed in accordance with safety plans and policies.
- 2.5 Breeding animals are approached in a calm and safe manner and according to regulations and workplace procedures.
- 2.6 Signs of oestrus are recognised using heat detection aids where appropriate to supplement visual observation techniques as required.

Element 3. Facilitate mating of animals

Range

Equipment may include but are not limited to chin ball and breast markers.

Mating procedures may include but are not limited to sex ratios, placements, single and multi-sire herds, hand mating.

Performance Criteria

- 3.1 Hazards are continually identified when working with livestock, risks are assessed and suitable controls implemented.
- 3.2 Livestock is prepared for mating.
- 3.3 Handling facilities and equipment are prepared according to workplace procedures.
- 3.4 Mating procedures and handling techniques that minimise stress and discomfort to livestock and adhere to safety requirements are selected and used.
- 3.5 Animals showing signs of heat are moved to a separate pen or camp for mating and reported according to workplace procedures.
- 3.6 Mating is observed and deviations are reported.
- 3.7 Mating facilities are cleaned according to work place procedures.
- 3.8 Records are kept according to workplace procedures.

Element 4. Identify breeding failure

Range

Breeding failure includes failure to come on heat, mating failure for both sexes and unsuccessful conception, resorption and abortion.

Performance Criteria

- 4.1 Female livestock are monitored for signs of repeated heat cycle and reported to the supervisor.
- 4.2 Possible causes of breeding failure for each repeat breeder are identified.

Element 5. Report on breeding operation

Range

A repeat breeder is any breeding female that has failed to conceive after successful service within a heat cycle specific to the livestock species.

Performance Criteria

- 5.1 The date and time of mating taking place is recorded.
- 5.2 Records of the ID of female breeding animals and the bulls that mounted the identified females are taken.
- 5.3 Repeat breeders are recorded.

Registration Data

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| Date first registered: | 25 November 2015 |
| Date this version registered: | 25 November 2015 |
| Anticipated review: | 2020 |
| Body responsible for review: | Namibia Training Authority |