

HATCH POULTRY EGGS

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UNIT DESCRIPTION:

This unit specifies the competencies required to hatch poultry eggs. It involves setting poultry eggs, monitoring egg hatching, transfer of hatched chicks and entry of hatchery records.

ELEMENTS AND PERFORMANCE CRITERIA

ELEMENT	PERFORMANCE CRITERIA
These describe the key outcomes which make up workplace function.	These are assessable statements which specify the required level of performance for each of the elements. <i>Bold and italicized terms are elaborated in the range.</i>
1. Set poultry eggs	1.1 <i>Personal Protection Equipment and Apparel (PPEs)</i> are identified and donned in accordance with <i>poultry production manual (PPM)</i> and work place procedures 1.2 Hatchery biosecurity measures are observed and adhered to according to PPM guidelines and work place procedures 1.3 Hatching eggs are retrieved from cold store into the egg traying room using recommended <i>hatching egg handling regulations</i> 1.4 <i>Incubation chamber parameters</i> are set according to incubator manufacturers guidelines, PPM regulations and hatchery SOPs 1.5 Hatching eggs are transferred into setting trays with broad ends facing up following recommended hatching egg handling regulations 1.6 Setting trays with hatching eggs are loaded onto setting trolleys following recommended hatching egg handling regulations 1.7 Loaded setting trolleys or trays are driven / pushed into incubation chamber and locked in for incubation.
2. Monitor egg hatching	2.1 Eggs are removed from the incubation chamber on the 18 th day post setting as per hatching egg handling regulations

	<p>2.2 Eggs are candled to remove non-fertile ones and those with dead embryos in accordance with procedures in the PPM</p> <p>2.3 Fertile eggs with developing embryos are transferred into hatching baskets in accordance with procedures in the PPM</p> <p>2.4 Loaded hatching baskets are transferred into hatching chamber/machine according to procedures in the PPM</p> <p>2.5 Hatching process is monitored from the 20th day onwards for about 33 hours in accordance with procedures in the PPM</p>
3. Transfer hatched chicks	<p>3.1 Hatching baskets with chicks, un-hatched eggs and hatching debris are pulled from the hatching chamber/machine on the 21st day according to procedures in the PPM</p> <p>3.2 Hatched, dry and healthy chicks are removed from the hatching baskets and transferred to chick cartons/crates as per procedures in the PPM</p> <p>3.3 Hatchery wastes are disposed according to <i>environmental protection regulations</i> and work place procedures</p>
4. Enter hatchery records	<p>4.1 Number of eggs set and candled are entered into the hatchery inventory records in accordance with work place procedures</p> <p>4.2 Number of fertile and rejected eggs are entered into the hatchery inventory record in accordance with work place procedures</p> <p>4.3 Dates of setting, candling and transfer to hatching chamber are recorded in accordance with work place policy</p>

RANGE

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environment and situations that will affect performance.

Variable	Range
1. PPEs may include but not limited to:	<ul style="list-style-type: none"> • Overalls • Gumboots • Nose and mouth mask

	<ul style="list-style-type: none"> • Goggles • Gloves • Head gear
2. Poultry production manuals (PPM) may include but not limited to:	<ul style="list-style-type: none"> • National Poultry Development Programme Manual • Breeder's manuals by breeders like Cobb and Issa Brown
3. Hatching egg handling guidelines may include but not limited to:	<ul style="list-style-type: none"> • Hand sanitization or wearing gloves whenever handling eggs • Free from communicable diseases • Handling eggs with care • Avoiding wetting the eggs
4. Incubation chamber parameters may include but not limited to:	<ul style="list-style-type: none"> • Temperature • Humidity • Air quality and flow • Egg inclination
5. Environmental protection regulations may include but not limited to:	<ul style="list-style-type: none"> • Public Health Act • EMCA 1999 • OSH Act 2007

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit of competency.

Required skills

The individual needs to demonstrate the following skills:

- Chick handling
- Cleaning
- Communication
- Egg handling
- Observation
- Operation of incubation and hatching machines
- Record keeping

Required knowledge

The individual needs to demonstrate knowledge of:

- Chick development

- Chick environmental physiology
- Chick weighing
- Chick welfare
- Cleaning, sanitization and disinfection procedures
- Egg candling techniques
- Egg handling
- Egg incubation technology
- Egg turning
- Hatchery air conditioning
- Hatchery biosecurity measures
- Hatchery record keeping
- Hatching egg sorting
- Hatching process
- Heat transfer
- Incubator environment
- Waste disposal maceration and rendering techniques
- Occupational safety and health
- Personal hygiene and public health
- Types of cleaning agents, sanitizers and disinfectants
- Types of hatchery records

EVIDENCE GUIDE

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range

1. Critical Aspects of Competency	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1 Implemented hatchery biosecurity measures according to standard operating procedures (SOP) 1.2 Handled eggs according to hatching egg handling regulations 1.3 Set and monitored the correct incubator parameters according to the PPM and manufacturer's guidelines 1.4 Handled chicks safely in accordance with PPM guidelines 1.5 Disposed hatchery waste following recommended environmental protection regulations 1.1 Entered recommended hatchery records accurately according to work place procedures
2. Resource	The following resources MUST be provided:

Implications	2.1 Assessment location / workplace 2.2 Personal Protective Equipment and Apparel 2.3 Assessment materials
3. Methods of Assessment	Competency may be assessed through: 3.1 Observation 3.2 Written tests 3.3 Oral questioning 3.4 Third party report
4. Context of Assessment	Competency may be assessed on the job, off the job or during industrial attachment. Off the job assessment must be undertaken in a closely simulated workplace environment.
5. Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job roles is recommended.

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