

<b>Training Package</b>	<b>Rural Production (RTE03)</b>	<b>HSC Requirements and Advice</b>
<b>Title</b>	<b>Collect and record production data</b>	
<b>Unit code</b> <b>RTE2902A</b>	<p>This competency standard covers the process of collecting and recording agricultural or horticultural production data obtained from a variety of sources, such as stock counts, vaccination or medication records, germination rates, quantities harvested.</p> <p>Collecting and recording production data is likely to be carried out under routine supervision with intermittent checking. Responsibility for some roles and co-ordination within a team may be required. Data collection and recording activities are usually carried out within established routines, methods and procedures. Competency at this level requires the application of knowledge and skills to a range of data collection and recording tasks and roles.</p>	<b>HSC Indicative Hours</b>  <b>10</b>

### Evidence Guide

#### What evidence is required to demonstrate competence for this standard as a whole?

Competence in collecting and recording production data requires evidence that accurate and timely counts of livestock, plant or other items or materials, can be made consistently to meet enterprise requirements.

The skills and knowledge required to collect and record production data must be **transferable** to a different work environment. For example, counting different species of livestock in paddocks or in pens, counting seedlings or saplings at different stages of growth.

<b>What specific knowledge is needed to achieve the performance criteria?</b>	<b>What specific skills are needed to achieve the performance criteria?</b>	<b>Are there other competency standards that could be assessed with this one?</b>	<b>Assessment guide</b>	<b>HSC Requirements and Advice</b>
<p>Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:</p> <ul style="list-style-type: none"> <li>• enterprise recording methods</li> <li>• purposes for which the recorded data might be used</li> <li>• software programs used for recording or storing data.</li> </ul>	<p>To achieve the performance criteria, some complimentary skills are required. These skills are:</p> <ul style="list-style-type: none"> <li>• counting moving animals in paddocks, pens or in races</li> <li>• operating data loggers</li> <li>• entering data accurately into specified written or electronic/computerised formats</li> <li>• calibrating tools and equipment.</li> </ul>	<p>This competency standard <u>could</u> be assessed on its own or in combination with other competencies relevant to the job function.</p>	<p>There is essential information about <b>assessing this competency standard for consistent performance and where and how it may be assessed</b>, in the Assessment Guidelines for this Training Package. All users of these competency standards must have <b>access</b> to the <b>Assessment Guidelines</b>. Further advice may also be sought from the relevant <b>Sector Booklet</b>.</p>	<p><b>Key Terms and Concepts</b></p> <ul style="list-style-type: none"> <li>• collecting and recording data</li> <li>• communication</li> <li>• format</li> <li>• materials and tools for data collection</li> <li>• personal protective equipment (PPE)</li> <li>• presenting and storing data</li> <li>• production data</li> <li>• production data sheets</li> <li>• quarantine area</li> <li>• quarantine status and procedures</li> <li>• Standard Operating Procedures (SOP)</li> <li>• types of data.</li> </ul>

Element	Performance Criteria	Range of Variables	HSC Requirements and Advice
1 Identify <b>data</b> to be collected	1.1 Specific requirements of the data to be collected are determined by discussion with the supervisor or by reading work instructions.	<p>The Range of Variables explains how this competency standard can be used in rural production or horticultural enterprises.</p> <p>The variables chosen in training and assessment will depend on the work contexts.</p> <p>What types of <b>data</b> might need to be collected and what are some typical sources of production data?</p> <p>Data may be obtained from a variety of sources, such as counting stocks of animals or plants/crops at particular stages of growth, those with particular characteristics or at specified locations, feeding rates and mixes, application of fertiliser, chemicals or medications, inventories of stock feed ingredient and mixes, livestock marking systems, reproductive data and medications administered.</p>	<p><b>Learning experiences for the HSC must address:</b></p> <p>Types of data to be collected including:</p> <ul style="list-style-type: none"> <li>• counting stocks of animals or plants/crops <ul style="list-style-type: none"> <li>- at particular stages of growth</li> <li>- those with particular characteristics</li> <li>- in specified locations</li> </ul> </li> <li>• feeding rates and mixes</li> <li>• application of fertiliser and chemicals</li> <li>• inventories of stock feed ingredient and mixes</li> <li>• livestock marking systems</li> <li>• reproductive data</li> <li>• medications administered.</li> </ul> <p>Purposes for data collection including:</p> <ul style="list-style-type: none"> <li>• long-term records for comparison</li> <li>• cost analysis</li> <li>• usage predictions</li> <li>• communication between workers and supervisor</li> <li>• monitoring implemented management strategies.</li> </ul>
	1.2 <b>Materials or tools</b> required for data collected are obtained, and where necessary, calibrated.	<p>What <b>materials and tools</b> could be needed to collect data?</p> <p>Materials and tools may include paper, pens, tally forms, data loggers, and bar code scanners.</p>	<p><b>Learning experiences for the HSC must address:</b></p> <p>Range of materials and tools for data collection including:</p> <ul style="list-style-type: none"> <li>• paper</li> <li>• pens</li> <li>• tally forms</li> <li>• data loggers</li> <li>• barcode scan</li> <li>• computers and associated relevant software packages</li> <li>• cameras</li> <li>• scales.</li> </ul>
	1.3 Difficulties that may be encountered in collecting the data are identified and advice sought from the supervisor if needed.		<p><b>Learning experiences for the HSC must address:</b></p> <p>Difficulties in collecting data including:</p> <ul style="list-style-type: none"> <li>• accurately counting moving animals</li> <li>• poorly maintained and/or calibrated equipment.</li> </ul>

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	1.4 <b>Advice</b> about proposed data collection is communicated to others as required.	Who else might need to be <b>advised</b> about the production data collection activity?  Other employees working with the stock or materials may need to be advised so that the activity can proceed smoothly and stock is not moved or regrouped before data collection is complete.	<b>Learning experiences for the HSC must address:</b>  Purposes for providing advice including: <ul style="list-style-type: none"> <li>• workers able to prioritise and plan activities to work around data collection</li> <li>• activity can proceed smoothly</li> <li>• stock not be moved or regrouped before completion of activity.</li> </ul> Persons to be advised including: <ul style="list-style-type: none"> <li>• manager</li> <li>• supervisor</li> <li>• colleagues.</li> </ul> Communication methods including: <ul style="list-style-type: none"> <li>• verbal</li> <li>• written.</li> </ul>
	1.5 Suitable <b>personal protective equipment (PPE)</b> is selected, used and maintained where required.	What <b>personal protective equipment</b> may be required when carrying out production data collection activities?  PPE may include hat, boots, overalls, gloves, apron, waterproof clothing, spray clothing, goggles, respirator or face mask, face guard, hearing protection, sunscreen lotion and hard hat.	<b>Learning experiences for the HSC must address:</b>  Selection, use, maintenance and storage of personal protective equipment (PPE) appropriate to work task.  A range of PPE including: <ul style="list-style-type: none"> <li>• footwear</li> <li>• head protection – hard hat, sun hat and helmet</li> <li>• gloves</li> <li>• overall</li> <li>• apron</li> <li>• respirator</li> <li>• face mask</li> <li>• hearing protection</li> <li>• eye protection – goggles, safety glasses and face guard</li> <li>• sunscreen</li> <li>• waterproof clothing.</li> </ul> Importance of correct fitting PPE.  Maintenance of PPE according to manufacturer’s instructions and Standard Operating Procedures (SOP): <ul style="list-style-type: none"> <li>• cleaning and decontamination</li> <li>• correct storage</li> </ul>

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	<p>1.6 Checks are made to determine whether notices relating to site quarantine are in effect and, where required, site quarantine procedures are followed.</p>		<ul style="list-style-type: none"> <li>• regular checks for damage</li> <li>• repair/replacement of worn, malfunctioning or damaged equipment/parts</li> <li>• disposal of single-use equipment.</li> </ul> <p><b>Learning experiences for the HSC must address:</b></p> <p>Identification of quarantine status through:</p> <ul style="list-style-type: none"> <li>• supervisor instructions</li> <li>• enterprise diary</li> <li>• identification of quarantine signs and/or barriers.</li> </ul> <p>Awareness of quarantine procedures including:</p> <ul style="list-style-type: none"> <li>• proximity of stock to quarantined area</li> <li>• movement of stock into/out of quarantined area</li> <li>• personnel movements into/out of quarantined area</li> <li>• PPE required when within quarantined area</li> <li>• hygiene policy for personnel entering or leaving quarantined area.</li> </ul> <p>Notification of quarantine status:</p> <ul style="list-style-type: none"> <li>• informing relevant authorities including <ul style="list-style-type: none"> <li>- Department of Agriculture, Fisheries and Forestry</li> <li>- NSW Agriculture</li> <li>- NSW Health</li> <li>- local council</li> <li>- Rural Lands Protection Board</li> </ul> </li> <li>• application of signage consistent with requirements of relevant authority.</li> </ul>
2	Record production data	<p>2.1 Production data is recorded in the correct <b>format</b> and to meet specific requirements.</p> <p>What might be the <b>formats</b> for recording and presenting data?</p> <p>Data may be recorded and presented in specified written or electronic/computerised formats. Results may be presented orally to supervisors and/or work groups.</p>	

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	2.2 Records are legible, accurate and complete.	What types of <b>data</b> might need to be collected and what are some typical sources of production data?  Data may be obtained from a variety of sources, such as counting stocks of animals or plants/crops at particular stages of growth, those with particular characteristics or at specified locations, feeding rates and mixes, application of fertiliser, chemicals or medications, inventories of stock feed ingredient and mixes, livestock marking systems, reproductive data and medications administered.	<b>Learning experiences for the HSC must address:</b> Appropriate industry-specific terminology for use in record keeping.
3 Present and store production data	3.1 Production data is presented in the correct format and to meet specific requirements.		<b>Learning experiences for the HSC must address:</b> Presentation of data including: <ul style="list-style-type: none"> <li>oral presentation</li> <li>electronic/audio visual</li> <li>written report.</li> </ul>
	3.2 Production data sheets are stored according to enterprise procedures.		<b>Learning experiences for the HSC must address:</b> Storage of data including: <ul style="list-style-type: none"> <li>archiving</li> <li>electronic filing</li> <li>manual filing.</li> </ul>
	3.3 Production data is downloaded or entered into a computer where required, using specified formats and applications.		<b>Learning experiences for the HSC must address:</b> Software programs used for recording, storing, manipulating and retrieving data.

### What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the **key competencies**, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where

0 = not required      1 = perform the process      2 = perform and administer the process      3 = perform, administer and design the process

1. How can <b>communication of ideas and information (1)</b> be applied?	Presenting data in the required format.
2. How can <b>information be collected, analysed and organised (1)</b> ?	Collecting production data from required sources.
3. How are <b>activities planned and organised (1)</b> ?	Sequencing activity to meet required timeframe.
4. How can <b>team work (1)</b> be applied?	Working with others to minimise disruption to routine production activities and to the data collection.
5. How can the use of <b>mathematical ideas and techniques (1)</b> be applied?	Counting individual items/animals and groups of items according to requirements.
6. How can <b>problem-solving skills (1)</b> be applied?	Rearranging data collection activities to fit in with other planned or unplanned production activities.
7. How can the <b>use of technology (1)</b> be applied?	Using data loggers and personal computers to record and store data.