## **Assessment Guide**

Domain Forestry > Forest Foundation Skills

Unit 22998 v4 Demonstrate knowledge of pruning planation trees and prune planation trees under supervision

Level 2 Credits 10

### **Entry information**

There are no pre-requisite requirements for this unit.

| Candidate to complete   |  |  |
|---|--|--|
| Name  | Company                                      |  |
| NSI No.   | Email / phone                                |  |
| Pre-assessment confirmation   |  |  |
| <ul> <li>I, the candidate,</li> <li>☐ Understand the assessment process and assessment requirements for this unit.</li> <li>☐ Understand the appeals and resubmission processes.</li> <li>☐ Believe I have the skills and knowledge to successfully complete the assessment.</li> </ul> |  |  |
|   |  |  |
| Assessor to complete  |  |  |
| Name  | Company                                      |  |
| Email / phone   |  |  |
| Pre-assessment confirmation   |  |  |
| ☐ I, the <b>assessor</b> , can confirm the candidate  | has achieved any pre-requisite requirements. |  |

### **Assessment instructions**

#### You will need to be able to show you can:

- Demonstrate knowledge of pruning plantation trees.
- Demonstrate knowledge of equipment used for pruning plantation trees.
- Demonstrate knowledge of pruning faults.
- Prune plantation trees under supervision.

#### Important information

- Carefully read through the rest of this Assessment so you know exactly what is expected.
- All evidence you provide for this assessment must be your own work.
- Clearly name and label all attached evidence.

#### What you need to do



**Question Set 1 - Pruning** 



Question Set 2 - Equipment



Question Set 3 - Hazards



### **Observation Checklist**

Be observed pruning plantation trees.

#### You will need to:

- Identify specific tree characteristics.
- Identify faults in a pruned stand.
- Select and use PPE and pruning equipment.
- Identify hazards.
- Determine pruning height.
- Open up the trees and carry out low and medium height pruning operations.
- Tally and report pruned trees.



#### **Worksite Verification**

A worksite verifier must confirm your skills, knowledge and/or work.

You can also attach additional evidence which shows you have the required skills and knowledge, e.g. photos, worksite documents, checklists, work samples, videos.



# **?** Question Set 1 – Pruning

These questions are about pruning plantation trees.

Use your own words. Your assessor may ask you more questions to check your understanding.

1. Define the following pruning terms.

| Term                      | Definition |
|---------------------------|------------|
| Bark damage               |            |
| Branch stub               |            |
| Clear wood                |            |
| Coat hanger               |            |
| Crown depth               |            |
| Diameter over stubs (DOS) |            |

| Form pruning               |   |  |
|----------------------------|---|--|
| Gauge                      |   |  |
| Lift                       |   |  |
| Regime                     |   |  |
| Spacing                    |   |  |
| Variable lift              |   |  |
| What is the main pur crop? | pose of pruning and how does pruning affect the final |  |

| Describe each tree characteristic. |             |  |
|------------------------------------|-------------|--|
| Characteristic                     | Description |  |
| Branch collar                      |             |  |
| Branch size and angle              |             |  |
| Crown shape and density            |             |  |
| Defect core                        |             |  |
| Dominance                          |             |  |
| Epicormic                          |             |  |
| Internodal length                  |             |  |

| Multi-leader                           |                             |
|--|-----------------------------|
| Ramicorn                               |                             |
| Tree form                              |                             |
| Whorl                                  |                             |
|  |                             |
| 4. Briefly describe each               | pruning lift.               |
| 4. Briefly describe each  Pruning lift | pruning lift.   Description |
| 2.10.1, 4000.120 040.                  |                             |
| Pruning lift                           |                             |

| 5. | Describe <b>two</b> factors that affect the timing of pruning.            |  |
|----|---|--|
|    |   |  |
|    |   |  |
|    |   |  |
|    |   |  |
|    |   |  |
| 6. | Answer questions 6a – 6b about the impact of pruning on other operations. |  |
|    | a. How does first lift pruning affect other pruning lifts?                |  |
|    |   |  |
|    |   |  |
|    |   |  |
|    |   |  |
|    | b. How does pruning affect thinning operations?                           |  |
|    |   |  |
|    |   |  |

| 7. Describe the type of final crop desired for each pruning regime (objective). |                                 |  |
|---|---------------------------------|--|
| Pruning regime  | Type of final crop desired      |  |
| Fixed height  |                                 |  |
| Variable height   |                                 |  |
| 8. How can pruning  | faults affect final crop value? |  |

| 9. Describe how ear   | i U                  |             |            |  |
|---|----------------------|-------------|------------|--|
| Incorrect pruning result  | Effect on final crop | quality     |            |  |
| Collar damage   |                      |             |            |  |
| Coat hangers  |                      |             |            |  |
| Epicormic   |                      |             |            |  |
|   |                      |             |            |  |
| Assessor – record key points from candidate's verbal answers as accurately and fully as possible. |                      |             |            |  |
| These answers were writt  | en by:               | ☐ Candidate | ☐ Assessor |  |
|   |                      |             |            |  |



These questions are about equipment used for pruning plantation trees.

Use your own words. Your assessor may ask you more questions to check your understanding.

| 1. | Name five items of equipment used for pruning. | For each explain what it is |  |
|----|--|-----------------------------|--|
|    | used for.                                      |                             |  |

| Equipment | Use |
|-----------|-----|
|           |     |
|           |     |
|           |     |
|           |     |
|           |     |
|           |     |
|           |     |
|           |     |
|           |     |
|           |     |
|           |     |
|           |     |
|           |     |
|           |     |
|           |     |
|           |     |
|           |     |
|           |     |
|           |     |
|           |     |

| 2. Briefly describe how each factor can affect your choice of equipment.                          |                         |             |            |
|---|-------------------------|-------------|------------|
| Factor  | Effect on equipment che | oice        |            |
| Pruning lift  |                         |             |            |
| Stand factors   |                         |             |            |
| Assessor – record key points from candidate's verbal answers as accurately and fully as possible. |                         |             |            |
| These answers were  | written by:             | ☐ Candidate | ☐ Assessor |

# **?** Question Set 3 – Hazards

These questions are about pruning hazards and controlling associated risks.

Use your own words. Your assessor may ask you more questions to check your understanding.

| Give <b>one</b> example for each type of hazard.  For each example, explain the risk and how you would control it. |  |
|--|--|
| Overhead hazard  |  |
| Example  |  |
| The risk   |  |
| How I control it   |  |
| Underfoot hazard   |  |
| Example  |  |
| The risk   |  |
| How I control it   |  |

| Weather                  |
|--------------------------|
| Example                  |
| The risk                 |
| How I control it         |
|                          |
| Other forest operations  |
| Example                  |
|                          |
| The risk                 |
|                          |
| How I control it         |
|                          |
|                          |
| Slash/logs on the ground |
| Example                  |
| The risk                 |
|                          |

| How I   | control it   |
|---------|--|
|         |  |
|         |  |
| Worki   | ing at heights   |
| Exam    | ple  |
|         |  |
|         |  |
| The ris | sk   |
|         |  |
| How I   | control it   |
|         |  |
|         |  |
|         |  |
|         |  |
| 0       | NA/love in it improved and for language independing a still and sink and sink and a second to the second |
| 2.      | Why is it important for hazard identification and risk assessment to be an on-going process?             |

| hazardous when pruning.   |             |            |  |
|---|-------------|------------|--|
| Weather   |             |            |  |
|   |             |            |  |
|   |             |            |  |
|   |             |            |  |
|   |             |            |  |
|   |             |            |  |
| Terrain   |             |            |  |
|   |             |            |  |
|   |             |            |  |
|   |             |            |  |
|   |             |            |  |
| Hindrance   |             |            |  |
|   |             |            |  |
|   |             |            |  |
|   |             |            |  |
|   |             |            |  |
|   |             |            |  |
|   |             |            |  |
|   |             |            |  |
| Assessor – record key points from candidate's verbal answers as accurately and fully as possible. |             |            |  |
| These answers were written by:  | ☐ Candidate | ☐ Assessor |  |

Explain how each factor can create a new hazard or make work more

3.

# Observation Checklist 1

You must be observed pruning plantation trees.

#### You will need to:

- Complete Part A of the checklist. Your assessor will complete Part B.
- Identify specific tree characteristics.
- Identify faults in a pruned stand.
- Select and use PPE and pruning equipment.
- Identify hazards.
- Determine pruning height.
- Open up the trees and carry out low and medium height pruning operations.
- Tally and report pruned trees.
- Attach any other evidence that shows your ability to prune plantation trees such as photos or worksite documents you prepared or completed.

You may be asked additional questions to check your knowledge and may need to demonstrate skills and/or carry out tasks more than once.

#### Note to the assessor

- Only tick off each task when satisfied the candidate can do it safely and consistently.
- All tasks must be carried out following accepted industry practice and worksite procedures.
- Where prompted, please record details of what you observed, e.g. comments about the candidate's performance, what the candidate did or said, and specific questions and responses.
- Attach any other evidence that shows what you observed and/or that supports your decision for the candidate's competency in the tasks, e.g. photos or worksite documents.
- Check the candidate has completed Part A and has attached any required evidence.



| Part A: Candidate to complete  |                     |                                |  |  |  |
|--|---------------------|--------------------------------|--|--|--|
| Your name  |                     |                                |  |  |  |
| Worksite / company   |                     |                                |  |  |  |
| Stand / block ID   |                     |                                |  |  |  |
|  |                     |                                |  |  |  |
| Part B: Assessor to c  | •                   | 20                             |  |  |  |
| For each statement be When preparing to pr   |                     |                                |  |  |  |
| Selects and uses appropriate personal protective equipment (PPE).  Record the PPE the candidate uses. May include: |                     |                                |  |  |  |
| ☐ Gloves.  |                     | ☐ Leggings                     |  |  |  |
| ☐ Wet weath  | ier gear.           | ☐ High visibility clothing.    |  |  |  |
| ☐ Safety boo   | ots.                | ☐ Hard hat.                    |  |  |  |
| ☐ Harness.   |                     | ☐ Other (please write):        |  |  |  |
|  |                     |                                |  |  |  |
| 2. Selects and use   | es appropriate prur | ning equipment.                |  |  |  |
| Record the pru   | ning equipment the  | e candidate uses. May include: |  |  |  |
| ☐ Loppers.   |                     | ☐ Chains.                      |  |  |  |
| ☐ Epicormic  | tool.               | ☐ Jack saw.                    |  |  |  |
| ☐ Callipers a  | and/or gauge.       | ☐ Steps.                       |  |  |  |
| ☐ Ladder.  |                     | ☐ Water supply.                |  |  |  |
| ☐ Height pol   | e.                  | ☐ Spare parts.                 |  |  |  |
| ☐ Other (plea  | ase write):         |                                |  |  |  |
|  |                     |                                |  |  |  |
|  |                     |                                |  |  |  |

| Identifies hazards associated with pruning and effectively controls associated risks. <b>Six</b> hazards must be identified. |   |   |
|--|---|---|
| ☐ Stand or block hazards.  | ☐ Working at heights.   |   |
| ☐ Use of tools.  | ☐ Slash.  |   |
| ☐ Other workers.   | ☐ Surrounding vegetation.   |   |
| ☐ Terrain.   | ☐ Ground conditions.  |   |
| ☐ Overhead hazards.  | ☐ Weather conditions.   |   |
| ☐ Other (please write):  |   |   |
| Record how the candidate effectively of hazard identified.   | controls risks associated with each   |   |
|  |   |   |
| Identifies pruning faults in a pruned sta<br>rectify each pruning fault. May include   | and and explains how to prevent and/or :  |   |
|  |   |   |
| rectify each pruning fault. May include  | :   |   |
| rectify each pruning fault. May include  Collar damage.  | :<br>□ Coat hangers.  |   |
| rectify each pruning fault. May include  ☐ Collar damage.  ☐ Epicormics.   | :  ☐ Coat hangers. ☐ Height.  |   |
| rectify each pruning fault. May include  ☐ Collar damage.  ☐ Epicormics.  ☐ Over pruning.                                    | <ul><li>:</li><li>□ Coat hangers.</li><li>□ Height.</li><li>□ Under pruning.</li></ul>  |   |
| rectify each pruning fault. May include  ☐ Collar damage.  ☐ Epicormics.  ☐ Over pruning.  ☐ Bark damage.                    | <ul> <li>□ Coat hangers.</li> <li>□ Height.</li> <li>□ Under pruning.</li> <li>□ Branches remaining.</li> </ul>   |   |
|  | risks. Six hazards must be identified.  Stand or block hazards.  Use of tools.  Other workers.  Terrain.  Overhead hazards.  Other (please write):  Record how the candidate effectively of | risks. Six hazards must be identified.  Stand or block hazards. |

| 5.            | Determines pruning height. May include:                           |                         |
|---------------|---|-------------------------|
|               | ☐ Crown is visually measured.                                     |                         |
|               | ☐ Calliper is used to determine pruned height.                    |                         |
|               | ☐ Reach of equipment is estimated.                                |                         |
|               | ☐ Other (please write):   |                         |
|               |   |                         |
| 6.            | Opens up tree for low pruning. Must include:                      |                         |
|               | ☐ Removing branches that block access.                            |                         |
|               | ☐ Pruning from bottom up.   |                         |
|               | ☐ Circling the tree once.   |                         |
| 7.            | Opens up tree for medium pruning. Must include:                   |                         |
|               | ☐ Checking for overhead hazards.                                  |                         |
|               | ☐ Correct ladder placement.                                       |                         |
| 8.            | Please comment on the candidate's ability to prepare for pruning. |                         |
|               |   |                         |
|               |   |                         |
|               |   |                         |
|               |   |                         |
|               |   |                         |
|               |   |                         |
|               |   |                         |
|               |   |                         |
| \ <b>A</b> // |   |                         |
|               | pruning plantation trees, the candidate:                          | $\overline{\mathbf{V}}$ |
| 9             | Prunes tree using ergonomic techniques. May include:              |                         |
|               | ☐ Correct body position.  |                         |
|               | ☐ Correct ladder placement.                                       |                         |
|               | ☐ Other (please write):   |                         |
|               |   |                         |

| 10. | Cuts branches flush with the branch collar.                                    |  |
|-----|--|--|
| 11. | Removes epicormics safely and correctly. Must include:                         |  |
|     | ☐ Using correct tools.   |  |
|     | ☐ Leaving no scarring.   |  |
|     | ☐ Using correct techniques.  |  |
|     | ☐ Using correct body position.   |  |
|     | □ Double cut / scarf.  |  |
|     | □ No draw wood.  |  |
| 12. | Removes large branches safely and correctly. Must include:                     |  |
|     | ☑ Double cut.  |  |
|     | ☑ Scarf cut.   |  |
|     | ☑ No tearing.  |  |
|     | ☑ No draw wood.  |  |
| 13. | Tallies pruned trees correctly. Record number tallied.                         |  |
| 14. | Reports pruned trees to supervisor.  Record name of supervisor.                |  |
| 15. | Please comment on the candidate's ability to carry out low and medium pruning. |  |

| Throughout   | the observation, th   | ne candidate:   |                        |            |          | $\overline{\checkmark}$ |
|--|-----------------------|-----------------|------------------------|------------|----------|-------------------------|
| 16. Comp   | oletes all the above  | tasks in accord | dance with:            |            |          |                         |
| □ \  | Norksite procedures   | S.              |                        |            |          |                         |
|  | Job prescription requ | uirements.      |                        |            |          |                         |
|  | Machine and equipn    | nent manufactı  | urer's requirements.   |            |          |                         |
|  | Accepted industry p   | ractice.        |                        |            |          |                         |
| Please providunder superv  |                       | s on the candi  | date's ability to prun | e plantati | on trees |                         |
| I confirm that   |                       |                 |                        |            |          |                         |
| <ul> <li>I confirm that:         <ul> <li>I have observed the candidate carry out all the above tasks to the standard required.</li> <li>The candidate has demonstrated competency in pruning planation trees under supervision.</li> <li>□ Yes</li> <li>□ No</li> </ul> </li> </ul> |                       |                 |                        |            |          |                         |
| Assessor name  |                       | Signature       |                        | Date       |          |                         |



#### Note to the worksite verifier

- The assessor **takes this form into account** when making their decision about the candidate's competency. It helps provide further evidence of the candidate's skills and knowledge beyond what the assessor can directly observe or where worksite requirements may vary.
- This form must be completed by someone who:
  - Has been approved by the assessor.
  - Has expertise in the assessed tasks (see Observation Checklist for details) Regularly supervises or manages the candidate in their worksite or operation.
- In-house and/or provider assessors are not required to complete this form but may ask another suitable verifier to complete it if further evidence of competency is required.

| Worksite verifier to complete   |   |  |                    |                    |                         |  |
|---|---|--|--------------------|--------------------|-------------------------|--|
| I confi   | rm that                                 |  |                    | :                  | $\overline{\checkmark}$ |  |
| 1.  | Has pruned plantation trees, including: |  |                    |                    |                         |  |
|   | _                                       | knowledge of pruni<br>on trees under sup |                    |                    |                         |  |
|   |   | ——————————————————————————————————————   | ei visioi i.       |                    |                         |  |
| 2.  | Can consistently and                    | d safely do the abo                      | ve to the standard | of this operation. |                         |  |
| Met worksite and operational requirements.  |   |  |                    |                    |                         |  |
| 4. Completed any attached documentation to worksite / operational requirements.       |   |  |                    |                    |                         |  |
| Please comment on the candidate's ability to prune planation trees under supervision. |   |  |                    |                    |                         |  |
|   |   |  |                    |                    |                         |  |
|   |   |  |                    |                    |                         |  |
|   |   |  |                    |                    |                         |  |
| Verifier name and title Signature   |   |  |                    |                    |                         |  |
| Phone / email Date  |   |  |                    |                    |                         |  |

## **Assessment result**

| Post-assessment feed  | dback                 |                 |        |            |
|---|-----------------------|-----------------|--------|------------|
|   |                       |                 |        |            |
| Assessor judgement  |                       |                 |        |            |
| <ul> <li>I, the assessor, have reviewed the candidate's evidence for Unit Standard 22998 v4 and judge that it is sufficient and authentic.</li> <li>I confirm the candidate can competently:</li> <li>Demonstrate knowledge of pruning plantation trees.</li> <li>Demonstrate knowledge of equipment used for pruning plantation trees.</li> <li>Demonstrate knowledge of pruning faults.</li> <li>Prune plantation trees under supervision.</li> </ul> |                       |                 |        |            |
| Assessment result   |                       |                 |        |            |
| ☐ I, the assessor, confirm the candidate has achieved this unit standard. Stamp   |                       |                 |        |            |
| Signature   |                       | Date            |        | r          |
|   |                       |                 |        |            |
| Candidate response  |                       |                 |        |            |
| I, the candidate:   | ☐ Agree with the asse | essment result. | ☐ Wish | to appeal. |
| Signature   |                       |                 | Date   |            |