

TREE FELLING PROJECT

Survey Report

18 August 2023



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Introduction

A survey was conducted from 7 to 11 August to gain deeper insights into the challenges faced by Registered Training Organisations (RTOs) in sourcing the required number of trees – four for the basic unit and six for both intermediate and advanced units – to assess an individual's skills in the following units of competency:

- [FWPCOT2274 Fell trees manually \(basic\)](#)
- [FWPCOT3347 Fell trees manually \(intermediate\)](#)
- [FWPCOT3348 Fell trees manually \(advanced\)](#).

The survey was streamlined with a single question.

To capture a comprehensive perspective, all 127 RTOs that have at least one of these units in their scope of registration were invited to participate in the survey.

The survey received responses from 53 individuals, representing 38 organisations. These organisations included 26 private RTOs, 5 Technical and Further Education Institutions (TAFEs), 5 enterprise-government RTOs, 1 industry association RTO, and one employer from the arboriculture sector. One of the 53 respondents remained unidentified.

Most respondents were from NSW (40%) and QLD (30%), with a few from VIC, WA, TAS, and ACT.

Survey results

The survey results provide insights into the challenges that RTOs face in sourcing the required number of trees for training and assessment. Specifically, 68% of respondents reported challenges in obtaining the necessary number of trees but managed to address them and 26% pointed out difficulties in delivering the actual training. In contrast, 30% had no issues finding trees but understood and empathised with the challenges of their peers.

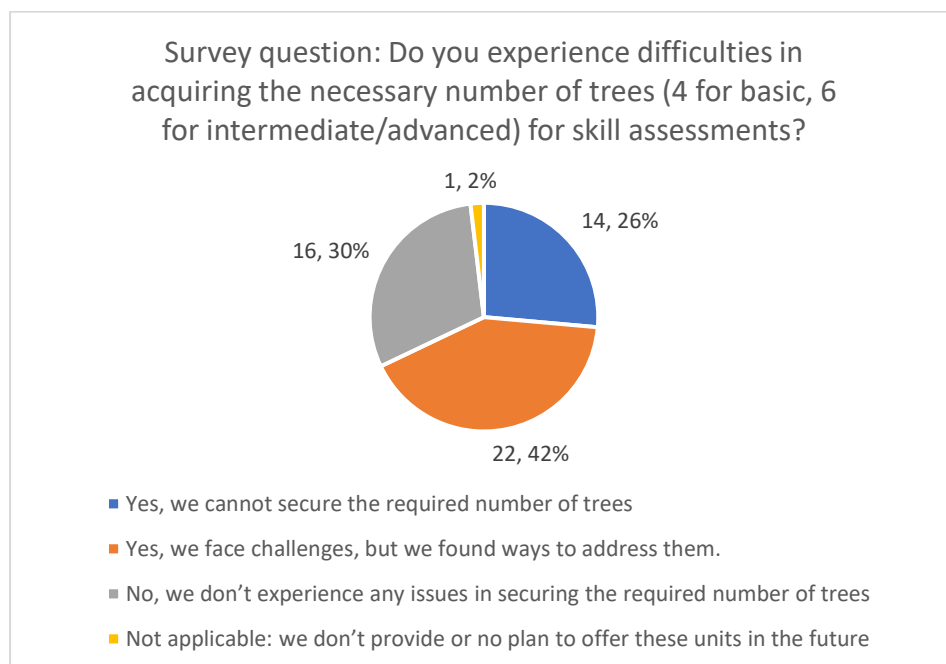


Figure 1: Number and proportion of responses

From the feedback provided, several themes emerged. These are outlined in the following section.

Interestingly, there was a consistent trend in the responses, irrespective of the state or type of RTO. These findings suggest that the challenges are extensive and not necessarily more pronounced in a particular state or RTO type. Diverse feedback was also observed even within a single RTO, highlighting the complexity of the issue.

Both Appendix 1 and 2 offer a more detailed look at the compiled survey data and highlight the main feedback from participants.

Survey themes

1. Tree requirements vs realities:

- Challenges in sourcing: Respondents identify difficulties in acquiring the needed number and types of trees for training, leading often to termination or refusal of training requests.
- Impact on large courses: Securing trees for substantial courses like the Certificate III in Arboriculture becomes increasingly problematic.

- Environmental considerations: Environmental and heritage restrictions, and concerns over tree felling have resulted in strict policies against non-hazardous tree felling by many organisations and governments.

2. Re-certification and training impacts:

- Potential barriers: Tree challenges may deter individuals from signing up or re-certifying, diminishing the overall tree felling service capability.
- Employer affiliation: Training non-affiliated individuals is more challenging than training existing employees.

3. Consideration of competency:

- Opinions vary on the tree requirement, with some considering it excessive and others arguing that a reduction could lower skill levels.
- Feedback indicates that after a few failed attempts, increasing the number of trees for training does not necessarily enhance skill acquisition.

4. Proposed solutions and alternatives:

- Respondents suggest a blend of approaches to overcome limitations, such as partnerships and simulations, emphasising training quality and efficiency in tree usage. Further details are provided in the following section.

5. Issues of equity and inclusivity:

- Avoiding bias: Caution is advised against solutions favouring those with easier access to tree as this could lead to inefficiency and not guarantee better outcomes. It is essential to ensure equitable (training accessible to a broader audience) and quality training without wasteful practices.

Proposed solutions

1. Developing partnerships for sourcing trees

Objective: Establish robust relationships with a variety of stakeholders to source trees identified as hazardous or marked for removal.

Stakeholders: Forestry companies, councils, landowners, national parks, and wildlife services.

Method: Enhance relationships to identify trees that can be utilised for training purposes. This could include trees marked for removal along public forest trails for fuel reduction burns or trees from specific initiatives, such as removing invasive species from neighbouring state forests and reserves.

2. Extensive practice in simulated environment before cutting real trees

Objective: Implement comprehensive training in simulated environments before permitting real tree cutting as part of the assessment process.

Method:

- Simulated Practice: Students practice cuts on secured short logs and large limbs until proficient.

- Real Tree Cutting: Only those demonstrating proficiency proceed to cut real trees.

Benefits: Ensures trainee safety and minimises actual tree cutting by using a) Controlled practice environments. b) Familiarisation with procedures. c) Simulating the experience without cutting living trees.

3. Team-based training

Objective: Foster peer learning and collaboration through different roles in tree-felling tasks.

Method: Students work in groups of three, each performing distinct roles such as making the initial cut, crafting the scarf, modifying a standard scarf to a V-shape, or making the back-cut.

Benefits: Enhances training experience and encourages collaboration.

4. Consideration of historical competency threshold

Suggestion 1: Three trees approach

- Historical context: Traditionally, felling three trees correctly has been sufficient for demonstrating competence.
- Note: Simply increasing the number of trees does not necessarily improve competency outcomes.

Suggestion 2: Different tree numbers based on unit level

- Requirements: Basic and intermediate levels may require two trees; advanced levels may require more, based on individual assessments.

5. Blend assessment

Objective: Combine practical and theoretical skills assessment, considering environmental stewardship.

Method:

- Assess six trees per student on felling methods, physically felling only two.
- Resulting in a total assessment of six trees, with only two actually being felled.

Attachment 1: Survey aggregated data

Figure 2: Number of survey responses by state

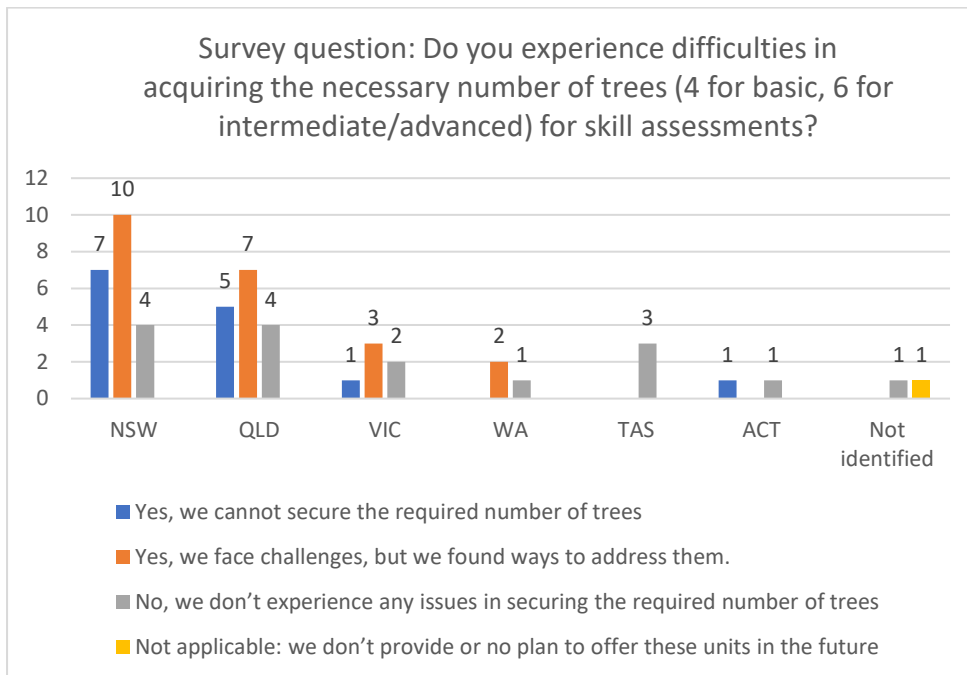


Figure 3: Number of survey responses by type of training organisation

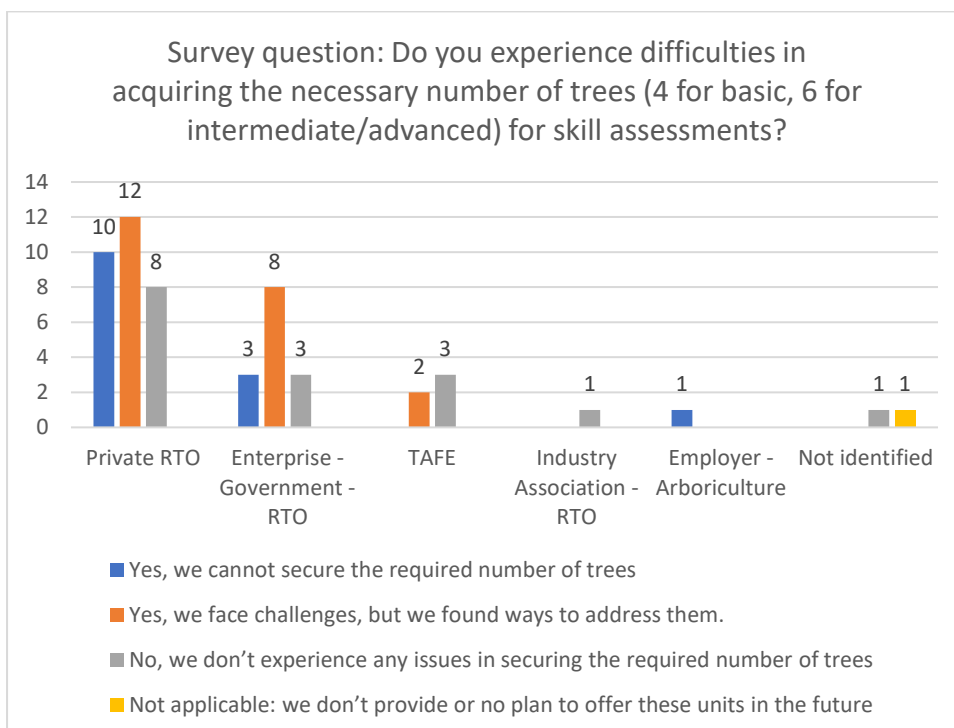


Table 1: Participant organisations and number of respondents for each organisation

Organisation	Type	State	Total
AB Quality Homes	Private RTO	QLD	1
Admire Workplace Safety	Private RTO	NSW	1
All High Risk Training	Private RTO	NSW	1
Arbortrim Australia	Private RTO	VIC	1
Australian Institute of Arboriculture	Private RTO	QLD	1
Axiom College	Private RTO	QLD	1
CLIMB HIGH TREE SERVICES	Private RTO	ACT	1
Department of Biodiversity Conservation and Attractions	Enterprise -Government -RTO	WA	1
Department of Energy, Environment and Climate Action	Enterprise -Government -RTO	VIC	1
Department of Regional NSW - Tocal College	Enterprise -Government -RTO	NSW	1
FITEC (NTHA Training)	Industry Association - RTO	QLD	1
Glenn Groves	Private RTO	QLD	1
GUINEA ENTERPRISES /Narbil Training	Private RTO	QLD	1
Interlink Training / Chalcedony Investments	Private RTO	QLD	4
Ladtan /Trustee for the Cassimaty Family Trust	Private RTO	QLD	1
Lee's Tree Services	Employer - Arboriculture	NSW	1
Lemke Timber Training	Private RTO	ACT	1
Lowry, Ernest George	Private RTO	VIC	1
LT TRAINING ENTERPRISES PTY LTD	Private RTO	QLD	2
National Workplace Services Group Pty Ltd	Private RTO	VIC	1
NOMBAY PTY. LTD.	Private RTO	QLD	1
NSW Rural Fire Service	Enterprise -Government -RTO	NSW	11
PST Australia Pty Ltd	Private RTO	QLD	1
Risk, Response and Rescue Pty Ltd	Private RTO	NSW	1

RTO Partner	Private RTO	TAS	1
RTO Partner (MTO Group)	Private RTO	QLD	1
Southern Training Organisation Pty Ltd	Private RTO	NSW	1
TAFE Gippsland	TAFE	VIC	1
TAFE NSW	TAFE	NSW	1
Tas TAFE	TAFE	TAS	1
THOUGHTPLANTERS (AUSTRALIA) PTY LTD	Private RTO	NSW	1
Timber Training Pty Ltd - RTO partner	Private RTO	NSW	1
Towie Timber Training - RTO Partner (South Regional TAFE)	TAFE	WA	1
Training Services Tasmania Pty Ltd	Private RTO	TAS	1
VS & R	Private RTO	NSW	1
WA College of Agriculture - Denmark	Private RTO	WA	1
Wodonga Institute of TAFE	TAFE	VIC	1
Not Identified	Not Identified		2
Total			53

Attachment 2: Summary of key points from survey comments

Participants who responded are unable to secure the required number of trees

- 1**
 - Courses typically have 12 students for both certification and re-certification.
 - Proposed standards would necessitate least 72 trees for every course.

- 2**
 - Level 1 trees are generally accessible; landowners often cooperate.
 - Level 2 trees can be found but often not in quantities needed for full training and assessment.
 - Level 3 trees are particularly difficult to find in sufficient quantities, posing a significant challenge for Chainsaw Training.

- 3**
 - Increasing difficulty in securing accessible trees close to training venues.
 - Training progresses until the candidate demonstrates proficiency to the standard required for assessment. At that time assessment takes place. If a candidate cannot demonstrate competency after being assessed on three trees, increasing this number to six won't necessarily improve the competency outcome.
 - Increasing the number of assessable trees strains resources and reliance on landholders.
 - Without sustainable resources, there may be a reduction in numbers undertaking and recertifying, leading to decreased capability.
 - Suggests the possibility of a partnership with forestry to secure resources.

- 4**
 - Client on Lord Howe Island where felling four trees is not feasible due to heritage/environmental restrictions.
 - Belief that four trees are excessive for the given context.

- 5**
 - Intermediate and Advanced levels present the most difficulty in securing trees.
 - Struggle with Basic level, but generally able to secure the required trees.

- 6**
 - Students must practice proper tree falling techniques four times on short logs held in stump holders.
 - Competence in this practice is mandatory before moving to the forest to cut real trees.
 - Strict adherence to this protocol.

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- 7**
- Candidates may need to fell at least four trees for training, plus a further six for assessment (10 in total).
 - Historically, the assessment has required a minimum of three trees to be felled.
 - Three trees felled correctly, along with practice, should be considered sufficient for showing competence.

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- 8**
- Some companies have environmental policies restricting tree cutting unless it poses a hazard.
 - Courses have been canceled when the required number of trees for felling is unavailable.

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- 9**
- Training newcomers is challenging; training is feasible at an employer's site for existing workforce.
 - Suggested solutions include having students assess and explain how they would fell required trees, then actually fell only one or two, or using simulations for practice.

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- 10**
- The course cannot be run unless the client provides land and trees for felling.

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- 11**
- Basic trees are generally accessible, while intermediate ones are increasingly hard to secure.
 - Approached forestry/logging companies, but their trees don't suit all needs; efforts to approach councils and landowners have met with some success.
 - Current approach: students must provide suitable sites, often ending the training request.
 - Reducing the number of trees for assessment might facilitate securing sites but could detriment student competency due to limited demonstration.

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- 11**
- While trees have been found for current needs, a looming challenge exists.
 - Approximately 400 students enrolled in Cert III Arboriculture will require 2,400 trees for intermediate felling, and it's becoming increasingly difficult to find them.

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- 12**
- Sees current requirements as wasteful and considers cutting down 10 trees for a seemingly unnecessary need as excessive.
 - Suggests reducing the requirement to 2 trees for basic and intermediate levels, while advanced may require more.
 - Acknowledges difficulty in accessing trees and glad that Arboriculture Australia is recognising this issue.
 - Emphasises the importance of simplifying the unit rather than making it unnecessarily complex.
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- Raises concern about delivering courses off-site, clean-up, and the competitive advantage that might be given to those with access to many trees.
 - Requests avoid leaning towards the views of a minority with abundant resources or those who deliver units over extended periods
 - Calls for a more environmentally friendly approach, as the current practice offers only marginal improvement in training outcomes.
-

Participants who responded are challenged to secure the required number of trees but found solutions

- 1**
 - Uses only 2 of the 3 levels of felling: intermediate and advanced.
 - Intermediate level is a prerequisite for advanced, with previous assessment in place.
 - Main concern is for trimmed fell trees, rather than felling itself.
 - Suggests potential wording changes at basic and intermediate levels to include trees and/or totems.
 - Mentions need to appreciate the availability of native vs. plantation trees, and specific requirements for various services like National Parks, Bush Fire services, and Forestry entities.
 - 2**
 - Has limited access to timber on private land owned by brigade members in their district, acquired in an approved manner.
 - 3**
 - Collaborates with landowners for marked trees.
 - Extends from basic to intermediate levels when possible.
 - Uses stockpiled tree barrels and limbs for simulated tasks.
 - Uses detached barrels for scarf cutting.
 - Conducts team-based falling operations.
 - Insists on at least one complete falling operation to a high standard.
 - Falls multi-trunked trees as individual trees.
 - Asserts that safe and competent operators can be assessed with fewer trees if used in conjunction with other strategies and options.
 - 4**
 - Suggests an assessment method where 2 trees are cut and 4 additional trees are assessed on how they would be felled, totalling an assessment of 6 trees with only 2 actually felled.
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- 5**
- Difficulty in finding suitable trees for intermediate level, compared to advanced.
 - Availability of some private properties and pine trees in national parks and wildlife services land, but not an endless supply.
 - Constantly seeking areas with suitable trees, mainly from RFS volunteers who assist with requests.
 - Post-19-20 fires, sites are assessed for suitability, including tree selection, risk, environmental considerations like access, habitat, seed trees, and soil erosion.
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- 6**
- Difficulty in accessing trees in various locations, and foreseeing problems in the future.
 - Use of private or forestry lands for trees, with sourcing becoming harder.
 - Emphasis on the need for reassessments, particularly for National Parks NSW and forestry, to keep operators' skills up for fire-fighting capabilities. Just another problem this presents.
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- 7**
- Approach of forming relationships with private landowners and government agencies, although opportunities are becoming scarce.
 - Consideration of possibly removing chainsaw units from scope of registration due to increasing challenges.
 - Highly experienced trainer/assessors are concerned about reducing the number of trees required but acknowledge they can often assess competence early in training.
 - Emphasis on the need for quality trainer/assessors who understand assessment.
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- 8**
- Secured a local property to meet tree requirements.
 - Identifying suitable properties becomes extremely difficult when required to travel.
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- 9**
- Coordination with local council for available trees; course enrolments restricted to council employees.
 - In some western and far western centers, very few trees available; reliance on councils to identify trees.
 - Challenges in getting required trees for classes of 4 or more students.
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- 10**
- Emphasis on assessing competence rather than meeting a fixed number of trees.
 - As an assessor, the task is to observe and evaluate.
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- 11**
- Generally, the employer is responsible for providing suitable sites and trees.
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- Training is facilitated at the trainee's work site and involves on-site assessments and continuous evaluation.
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- 12**
- Government landowners often disallow tree felling due to liability risks.
 - Utilisation of privately owned forest timber, though limited.
 - Emphasis on maintaining standards with a certain number of trees to be felled.
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- 13**
- Challenges in finding sites with with the required quantity of trees and securing approvals regarding the protected status of trees.
 - Collaboration with external stakeholders helps in accessing suitable sites temporarily.
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- 14**
- Training is only provided to clients that can provide trees for the course.
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- 15**
- Training is only provided to companies that can supply the required number of trees for felling.
 - A significant drop in the number of clients able to meet this requirement.
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- 16**
- Finding suitable trees has been a persistent challenge for 20 years.
 - Tafe Gippsland 's training coupe was closed due to a court injunction by Vic Forests.
 - Signed a contract with DEECA for hazardous tree removal along public forest roads in preparation for fuel reduction burns
 - Emphasis on comprehensive training and assessment including environmental hazards.
 - On average, a student enrolled in the tree-falling course will fell between 25 to 30 trees over the span of a five-day course, maintaining a 4-to-1 student-to-instructor ratio.
 - Provides training to an average of 100 industry participants and first responders per year.
 - Will always conduct assessments on six standing trees, and never utilise sample stumps or photos in the evaluation process.
 - Stump presentation is a critical part of the assessment and is considered as important, if not more so, as recognising environmental hazards. These hazards can include a variety of factors such as limb entanglement, tree defects, hanging limbs, and other similar risks
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- 17**
- Reliance on contacts to locate suitable trees.
 - Vulnerability to potential loss of the current site.
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- 18**
- Trees sourced from the college's farm, which has a growing forestry program.
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- Increased popularity of the basic tree-felling unit.
 - Concerns about running out of suitable trees and the need for a formalized management plan.
 - Emphasis on systematic management to sustain demand.
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- 19**
- Challenges stemming from declines in native forest harvesting.
 - Agreements made to utilise trees of exotic species planted for experiments.
 - Collaborates with Parks and Visitors Service to use trees identified as hazardous during Visitor Risk Inspections.
 - Uses trees identified as hazardous by firefighters or as burn security for intermediate and advanced practice and assessment.
 - Established a program to remove wildling pines from State Forest and Reserves around plantations for training at intermediate level.
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Participants who responded are not challenged to secure the required number of trees

- 1**
- Utilises recycled timber logs from removed trees for training.
 - Maintains original number of trees for training to preserve competence and experience.
 - Disagrees with the reduction in the number of trees for training content.
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- 2**
- Participants typically fell between 10 and 15 trees during training.
 - Individuals may actually fall more than 20 trees throughout the entire course.
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- 3**
- Native forest logging to cease at the end of 2023 in Western Australia.
 - Expect difficulties in accessing advanced native forest trees from 2024, limiting choices to blue gum, pine plantations, and private property.
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- 4**
- Increasing difficulties within the business/department (public forest estates) in felling trees.
 - More bureaucratic "red tape" is affecting the process.
 - Sympathises with private providers who may face similar or even more stringent challenges.
 - Open to further discussions on the subject.
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- 5**
- No issues in obtaining the necessary number of trees for training.
 - Collaboration with site management and/or Forestry units/private sites when conducting offsite training.
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Additional responses received by email

- 1**
- Increasing difficulty in felling trees due to increased "red tape."
 - Sympathises with private providers struggling to locate trees.
 - Regular requests from stakeholders (e.g., TAFEs) for tree access.
 - The loss of Vic Forest Coupes has impacted the access to trees.
 - Interest in Virtual Reality and Simulators for Immersive Learning, despite skepticism from experienced tree fallers.
 - Possibility of a side project involving a simulator for tree falling developed previously.
 - Willingness to share videos and materials to demonstrate the potential of the technology.
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- 2**
- Observation of dangerous habits and attitudes among chainsaw operators.
 - Emphasises teaching from a safety perspective, using quantitative situational assessments.
 - Concern over the term "Basic" for the initial felling course leading to overconfidence.
 - Suggestion to rename levels to numeric values (1,2,3) to adjust attitude and ease training.
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- 3**
- Disagreement with the one-size-fits-all policy regarding tree felling requirements.
 - Concern that the policy does not consider varying levels of learner experience.
 - Utilisation of a business model that trains existing workers only, minimising risk.
 - Specification to employers regarding training package requirements, ensuring they source appropriate trees.
 - Acknowledgment that the current model does not facilitate entry for inexperienced individuals into the industry.
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