

-SQA-SCOTTISH QUALIFICATIONS AUTHORITY

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NATIONAL CERTIFICATE MODULE DESCRIPTOR

-Module Number-	0088157	-Session-1988-89
-Superclass-	SG	
-Title-	TREE CLIMBING AND RESCUE TECHNIQUES	
-DESCRIPTION-		
Purpose	The purpose of this module is to enable the student to acquire the knowledge and skills needed to climb trees safely and to carry out rescues.	
Preferred Entry Level	No formal entry requirements.	
Learning Outcomes	The student should: 1. select, prepare and maintain tree climbing equipment; 2. climb trees using recommended techniques and equipment; 3. carry out rescue procedures.	
Content/ Context	Safety regulations, safe working practices and procedures and legal requirements should be observed at all times. <u>Corresponding to Learning Outcomes 1-3:</u> 1. Selection of equipment for - seed, scion and cone collection; - research investigations; - mensuration; - rigging cable cranes and spar trees; - tree surgery.	

Preparation of ropes, slings, strops. Seizing of rope ends; back splice, whipping, tape. Manufacture strops using eye splice, tape knot. Tie and know the use of: bowline, running bowline, prussic. figure of eight, taut line hitch, Clove hitch, sheet bend, reef, double carters hitch, marlin spike sheepshank.

Coiling of ropes, slings. Storage methods. Daily inspection, recognition of faulty equipment.

2. Safety equipment necessary, and how worn. Safety procedures and precautions. Role of groundman. Climbing aids. Attaching harnesses, ropes. Procedures/techniques for safe climbing, moving in trees, descending. Methods to be adopted for conifers, broadleaved, large trees.
3. Dangers of vertigo/freezing, rotten branches, "impossible" situations, injury. Rescue methods in different situations (size of team, type/size of tree, physical stations of rescue, direct and descendeur methods, etc.)

Suggested Learning and Teaching Approaches

Relating to the Learning Outcomes:

1. Demonstration and practice in a workshop situation.
2. Climbing should start in a gymnasium, using the wall bars, to accustom students to techniques and working at heights. Students should then progress first to conifers, then to broadleaved trees, provided satisfactory standards of proficiency and safety are reached at each stage.
3. Practical exercises, after LO2 has been achieved.

Assessment Procedures

Acceptable performance in the module will be satisfactory achievement of the all performance criteria specified for each Learning Outcome.

The following abbreviations are used below:

LO Learning Outcome
IA Instrument of Assessment
PC Performance Criteria

LO1

SELECT, PREPARE AND MAINTAIN TREE CLIMBING EQUIPMENT

PC The student:

- (a) selects appropriate items of equipment;
- (b) correctly prepares rope ends including simple whipping and eye splicing;

- (c) correctly ties knots including bowline, prussic, figure of eight to form a taut line hitch;
- (d) assesses the serviceability of equipment;
- (e) correctly coils and stores ropes;
- (f) cleans, dries and stores all other ancillary equipment;
- (g) observes faults in equipment accurately and takes appropriate action for fault observed.

IA Practical Exercise

The student will be presented with a practical exercise which tests the ability to select tree climbing equipment, prepare for a given task and maintain equipment.

The student should select equipment from the following list: climbing irons, descendeurs, ascendeurs, karabiner, helmets, harnesses, straps and gloves.

The exercise will be carried out in conjunction with an observation checklist.

Satisfactory achievement of the Learning Outcome will be based on the student attaining all of the Performance Criteria.

LO2

CLIMB TREES USING RECOMMENDED TECHNIQUES AND EQUIPMENT

PC The student in each case:

- (a) observes all safety precautions;
- (b) correctly uses harness and ropes;
- (c) complies with correct climbing procedures.

IA Practical Exercise

The student will be presented with a practical exercise which tests the ability to climb a conifer and/or a broadleaved tree using climbing irons, ring strops, ascendeurs, taut line hitch and strops.

The exercise will be carried out using an observation checklist.

Satisfactory achievement of the Learning Outcome will be based on the student attaining all the Performance Criteria.

LO3

CARRY OUT RESCUE PROCEDURES

PC The student:

- (a) selects the most appropriate rescue method for the situation;
- (b) correctly identifies hazards;

- (c) complies with correct rescue procedures.

IA Practical Exercise

The student will be presented with an exercise which tests the ability to carry out a rescue of a person from a tree.

The exercise will be carried out in conjunction with an observation checklist. The student will be required to carry out two simulated tree rescues. The following methods will be used:

- (i) taut line hitch;
- (ii) descendeur.

In each case the person to be rescued should be secured at least 8 metres above the ground in a tree.

Satisfactory achievement of the Learning Outcome will be based on the student returning the rescue safely to the ground.