

NOTICE 557 OF 2001
SOUTH AFRICAN QUALIFICATIONS AUTHORITY (SAQA)

In accordance with regulation 24(c) of the National Standards Bodies Regulations of 28 March 1998, the Standards Generating Body (SGB) for


Nature Conservation

Registered by NSB 01, Agriculture and Nature Conservation, publishes the following unit standards-based qualifications for public comment.

This notice contains the titles, fields, sub-fields, NQF levels, credits, and purposes of the qualifications, and the titles and specific outcomes of the unit standards upon which qualifications are based. The full qualifications and unit standards can be accessed via the SAQA web-site at www.saqa.co.za. Copies may also be obtained from the Directorate of Standards Setting and Development at the SAQA offices, 659 Pienaar street, Brooklyn, Pretoria.

Comment on the qualifications and unit standards should reach SAQA at the address *below and no later than Monday 2 April 2001*. All correspondence should be marked **Standards Setting – SGB for Nature Conservation** and addressed to

The Director: Standard Setting and Development
SAQA
Attention: Mrs S. Vasuthevan
Postnet Suite 248
Private Bag X06
Waterkloof
0145
or faxed to 012 – 346 5812



SAMUEL B.A. ISAACS
EXECUTIVE OFFICER

NATIONAL CERTIFICATE IN NATURE CONSERVATION

Field: Agriculture and Nature Conservation

Sub-field: Nature Conservation

NQF Level: 2

Credits: 121

Purpose: The qualifying learner is able to perform a multiple set of roles in assisting with the maintenance of the integrity of a conserved area, by integrating operational knowledge and skills.

Learners with this qualification will be able to carry out conservation security practices within a designated conserved area; combat soil erosion and alien invader plant species; gather basic biological data for research purposes; and perform a liaison function with neighbouring communities in terms of raising their awareness of important environmental issues and considerations, as well as what constitutes legal and illegal acts if carried out within a conserved area.

Learners will be able to function within a team and understand and follow instructions clearly.

UNIT STANDARDS TITLES NQF LEVEL 2**Fundamental Learning:**

1. Operate a personal computer system (Registered Unit Standard ID number 7547)
2. Do basic research
3. Understand social issues
4. Operate in a team
5. Apply basic written and oral communication skills
6. Use numeracy for self-organisation
7. Understand and apply personal values and ethics

8. Organise oneself in the workplace
9. Work with people who have special needs

Core Learning:

1. Perform conservation guardianship
2. Understand nature conservation
3. Manage cultural heritage resources in the field
4. Perform basic infrastructural maintenance
5. Demonstrate knowledge of conservation ethics
6. Identify and monitor local wildlife
7. Control problem animals
8. Carry out the harvesting of fauna
9. Carry out the harvesting of flora
10. Handle weapons NQF Level 5
11. Collect field specimens
12. Maintain occupational health and safety
13. Demonstrate an understanding of HIV/AIDS and its implications

Elective Learning:

1. Combat soil erosion
2. Combat problem plants
3. Apply appropriate burning techniques
4. Erect and maintain wildlife fencing

CREDIT COMPOSITION:

| FUNDAMENTAL | | CORE | | ELECTIVE | |
|---|----|---|---|--------------------------------------|---|
| Operate a personal computer | 6 | Perform nature conservation guardianship | 8 | Combat soil erosion | 2 |
| Do basic research | 4 | Understand nature conservation issues | 4 | Combat problem plants | 3 |
| Understand social issues | 4 | Manage cultural heritage resources in the field | 2 | Apply appropriate burning techniques | 3 |
| Operate in a team | 4 | Demonstrate knowledge of conservation ethics | 3 | Erect and maintain wildlife fencing | 4 |
| Apply basic written and oral communication skills | 10 | Identify and monitor local wildlife | 8 | | |
| Use numeracy for self-organisation | 2 | Control problem animals | 4 | | |
| Understand and apply personal values and ethics | 4 | Carry out the harvesting of fauna | 3 | | |

| FUNDAMENTAL | | CORE | | ELECTIVE | |
|---|-----------|---|-----------|--------------|-----------|
| Organise oneself in the workplace | 3 | Carry out the harvesting of flora | 3 | | |
| Work with people who have special needs | 4 | Handle weapons | 4 | | |
| | | Collect field specimens | 2 | | |
| | | Maintain occupational health and safety | 2 | | |
| | | Demonstrate an understanding of HIV/AIDS and its implications | 4 | | |
| TOTAL | 41 | TOTAL | 47 | TOTAL | 12 |

UNIT STANDARDS FOR NATURE CONSERVATION**UNIT STANDARDS TITLES AND SPECIFIC OUTCOMES – NQF LEVEL 2****1. Title: Perform Basic Infrastructural Maintenance**

- Specific outcome 1.1: Identify levels of expected maintenance of infrastructure
- Specific outcome 1.2: Assess existing infrastructure against agreed standards
- Specific outcome 1.3: Carry out continuous maintenance or repairs of infrastructure where authorised and competent to do so
- Specific outcome 1.4: Refer repairs or maintenance where unauthorised or unskilled to deal with them
- Specific outcome 1.5: Make suggestions to improve future maintenance of infrastructure

2. Title: Apply Appropriate Burning Techniques

- Specific outcome 2.1: Initiate a fire to achieve management objectives
- Specific outcome 2.2: Extinguish fires where appropriate to the management objectives
- Specific outcome 2.3: Effectively use fire-fighting equipment
- Specific outcome 2.4: Secure the area after a fire
- Specific outcome 2.5: Produce a report

3. Title: Combat Problem Plants

- Specific outcome 3.1: Identify target species
- Specific outcome 3.2: Operate and maintain equipment
- Specific outcome 3.3: Safely use the appropriate control methods
- Specific outcome 3.4: Map treated areas
- Specific outcome 3.5: Carry out follow-up procedures
- Specific outcome 3.6: Keep an attendance register

UNIT STANDARDS TITLES AND SPECIFIC OUTCOMES – NQF LEVEL 2**4. Title: Combat Soil Erosion**

- Specific outcome 4.1: Identify erosion sites
- Specific outcome 4.2: Identify the causes of erosion
- Specific outcome 4.3: Control erosion through taking appropriate remedial action in the long and short term
- Specific outcome 4.4: Maintain management systems
- Specific outcome 4.5: Evaluate actions taken and identify possible areas for self-improvement

5. Title: Perform Conservation Guardianship

- Specific outcome 5.1: Collect and interpret information about the status of activities in an area, using patrolling, observation and detection
- Specific outcome 5.2: React appropriately within the law and according to procedure, in order to counter any illegal activities
- Specific outcome 5.3: Collect information in order to be able to prosecute a suspect and present evidence in a court of law
- Specific outcome 5.4: Effectively communicate information gathered by various methods

6. Title: Collect Field Specimens

- Specific outcome 6.1: Use prescribed method of collection for specific species
- Specific outcome 6.2: Locate the appropriate or specified area
- Specific outcome 6.3: Collect the required specimens
- Specific outcome 6.4: Transport specimens and report to the place where they will be handed over

7. Title: Carry out the Harvesting of Fauna

- Specific outcome 7.1: Carry out checks on equipment and methods used
- Specific outcome 7.2: Collect and record basic biological data

UNIT STANDARDS TITLES AND SPECIFIC OUTCOMES – NQF LEVEL 2

Specific outcome 7.3: Carry out and / or monitor appropriate harvest product processing according to the use and local veterinary, legal and quality assurance requirements.

Specific outcome 7.4: Record and report on the harvest

8. Title: Carry out the Harvesting of Flora

Specific outcome 8.1: Locate the harvest site

Specific outcome 8.2: Identify the species to be harvested

Specific outcome 8.3: Supervise the harvesting process

Specific outcome 8.4: Record the harvest

Specific outcome 8.5: Report on the harvest

Specific outcome 8.6: Evaluate the efficiency and effectiveness of the harvesting process and methods

9. Title: Demonstrate Knowledge of Conservation Ethics

Specific outcome 9.1: Demonstrate respect for others, their possessions and the environment taking into account cultural protocols

Specific outcome 9.2: Articulate different cultural interests and values with regard to the environment

Specific outcome 9.3: Explain which interactions between humans and the natural environment will achieve a successful environment

10. Title: Identify and Monitor Local Wildlife

Specific outcome 10.1: State the purpose and principles of monitoring used

Specific outcome 10.2: Identify local plants and animals species including their sign, spoor and habitat

Specific outcome 10.3: Count plants and animals accurately

Specific outcome 10.4: Determine sex and age of relevant species

UNIT STANDARDS TITLES AND SPECIFIC OUTCOMES – NQF LEVEL 2

Specific outcome 10.5: Specify the locality of animals / plants / abiotic elements

Specific outcome 10.6: Record information on species observed

11. Title: Manage Cultural Heritage Resources in the Field

Specific outcome 11.1: Define basic cultural heritage resource management

Specific outcome 11.2: Recognise local cultural heritage practices, traditions and sites.

Specific outcome 11.3: Monitor cultural heritage sites

Specific outcome 11.4: Demonstrate a working knowledge of relevant cultural heritage legislation.

12. Title: Control Problem Animals

Specific outcome 12.1: Identify any given non-dangerous animal

Specific outcome 12.2: Assist in control measures that may be necessary involving non-dangerous species

Specific outcome 12.3: Carry out skinning procedures which may be necessary as a result of the control of non-dangerous animals as well as assist in the disposal of carcasses

Specific outcome 12.4: Assist in employer – community interactions in addressing problem animal incidents adjacent to protected areas

13. Title: Understand Nature Conservation Issues

Specific outcome 13.1: Broadly explain the concept and principles of nature conservation

Specific outcome 13.2: Explain the history of nature conservation and how it impacts upon the present situation

Specific outcome 13.3: Explain the relevance of nature conservation principles to society

Specific outcome 13.4: Explain the inter relatedness within ecosystems

Specific outcome 13.5: Identify locally scarce plants and animals according to the IUCN (the World Conservation Union) categories

Specific outcome 13.6: Explain the necessity of environmental impact assessment

UNIT STANDARDS TITLES AND SPECIFIC OUTCOMES – NQF LEVEL 2**14. Title: Erect And Maintain Wildlife Fencing**

Specific outcome 14.1: Erect and dismantle a fence of specified standard on a prescribed line

Specific outcome 14.2: Prepare an area for fencing

Specific outcome 14.3: Monitor the fence for effectiveness once erected

Specific outcome 14.4: Monitor any impact of animals on communities

Specific outcome 14.5: Patrol and maintain the fence on a regular basis

Specific outcome 14.6: Repair broken fences

Specific outcome 14.7: Construct fences at river crossings