



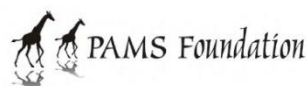
Managing Wildlife Crime in and Around Protected Areas

A Training Guideline for Field Rangers

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Developing capacity for a protected planet



Dedication

This Best Practice Guideline document is dedicated to Mr. Qoqizwe Martin Mthembu, one of the world's greatest ranger trainers. Martin trained well over 1 000 rangers in Angola, Democratic Republic of Congo, Mozambique, South Africa, Swaziland and Tanzania. His passion, commitment, talent and dependability are legendary. As his last ever FaceBook posting said: 'Legends never die!'. May Martin's inspiration and teaching live on forever.



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Intent and objective of the document

The message is educational, and will describe how to improve job effectiveness and safety for field rangers who work in protected areas in which the illegal harvesting, poaching and trade of natural resources occurs and needs to be controlled. The publication will provide a best practice benchmark on the scope, details and standard of training that syllabuses should cover in order to effectively equip field rangers, who are required to control wildlife poaching, to be able to perform their jobs as proficiently and safely as possible. The educational message in this publication, which will assist with the development and refinement of field ranger training material in various countries and regions where illicit activities, inside Protected Areas (PAs), such as illegal killing and trapping is a meaningful problem, is not available elsewhere. Distribution of the document should, as far as practically possible, be restricted in order to help ensure safer operations for field rangers across the board. The primary objective is to improve the effectiveness and safety of field ranger work when conducting anti-poaching patrols and associated activities related to the protection of wildlife and natural resources.

Target Audience

Field rangers (wildlife scouts, forest guards) and protected area managers and agencies are the target audience, as well as training providers, in all areas where anti-poaching work is required, to address the impact of the illegal killing and trading in wildlife and wildlife products at the protected area level.

Executive Summary

The guideline for anti-poaching training for field rangers has been compiled in a consultative manner with subject-matter experts and protected area managers, and provides a benchmark standard of basic best practice for field ranger trainers and training institutions. The document provides a standard for training field rangers that covers the basics of operations and the tactics required for them to successfully carry out anti-poaching and operations in the field. The standard will ensure that anti-poaching training manuals for field rangers may adequately introduce the concepts of law enforcement, tracking, teamwork, conservation and first aid, as well as court procedures to the field ranger. Field ranger basic training is the most important part of the development of the field ranger. It prepares them for the actual circumstances that they will encounter during the day-to-day tasks to be performed once employed as a field ranger.

The document also provides guidelines on how and why to ensure that the functional route and the suite of skills introduced and covered will allow for the maximum safety of field rangers during operations.

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Definitions

Advanced level	Knowledge and skills of field rangers at a high level of competence
Anti-poaching	Countering of poaching
Anti-poaching unit	Law enforcement team of varying size that functions to counter poaching threats in and around protected areas
Best practice guidelines	A set of guidelines or ethics that represent the most efficient and effective course of action
Basic level	A level required for normal day activities of a field ranger
Buddy system	A procedure using officers to provide cover to the contact officer
Command & control	The exercise of lawful command and authority over assigned assets
Covert	'Closed', clandestine, undercover operations conducted with utmost secrecy
Debrief	A report back session where the ranger is expected to give factual information to a superior on a task that he was instructed to carry out. On returning from the assigned task the ranger will report immediately to his superior. A time and place will then be decided on where a debriefing session can be held. Debriefing should be carried out as soon as possible after a mission when details are still fresh in the ranger's memory
Disembarking	The act of going ashore from a vessel on water or leaving an aircraft
Embarking	The act of getting onto a vessel on water or an aircraft
Debussing	The act of exiting a vehicle, be it land, sea, or air
Embussing	The act of boarding a vehicle, be it land, sea or air
Field ranger	An individual responsible for maintaining the integrity of a protected area. This includes rangers, wildlife wardens, forest guards, foresters, scouts, watchers and other frontline field staff (collectively referred as 'rangers' in this document)
High target species	Specific flora or fauna identified as being of high value, and hence targeted by criminal elements
Intermediate level	A level higher than that necessary for a basic, but not yet at the level required for field rangers at an 'advanced' or 'senior' level
Overt	'Open' operations done with usual secrecy but in a visible manner
Protected Area	A clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural value
Protected area manager	The individual with ultimate authority and responsibility for a protected area
Specialist	A field ranger with a certain restricted area skill set
Training service provider	An organization or individual who imparts knowledge through the teaching and development of specific skill sets
Turned	Refers to an individual previously involved in poaching who has been converted, by various means, to support Counter Poaching activities
Unexploded Ordinance	Unexploded, but often armed, military munitions (over .5 calibre)

1. Overview - Training anti-poaching rangers: increasing job effectiveness

It has become increasingly recognized that effective law enforcement requires an increase in the number of well-equipped and well-trained law enforcement officers at key sites, using appropriate tools and techniques. Rangers and others dedicated to protecting wildlife are all too often killed or injured in the execution of their duties.

These realities underline the need for well-trained anti-poaching rangers. Injury or the loss of life, an ever present threat to rangers the world over, could, coupled with the provision of appropriate equipment, be largely addressed through comprehensive and ongoing training cycles. Many governmental institutes concerned with wildlife law enforcement attribute the ineffectiveness of their departments to lack of training, funding and staffing.

Commercial poachers, particularly those of high target species, are becoming increasingly sophisticated and determined, adopting aggressive tactics to fulfil their duties. In the last 20 years, there has been increasing interest in adopting a competence-based approach for protected area staff (Appleton, in prep). To address the need for the improved capacity building of rangers involved in anti-poaching, this document reflects this approach. This document is based on what the rangers can and need to do (skills and contributions), not on who they are, their rank or conventional qualifications.

There is also a need for rangers to have access to structured paramilitary and law enforcement training, up to date intelligence and access to equipment generally reserved for law enforcement and military use. To be effective, efficient and ensure individual rangers' as well as the team's safety, anti-poaching rangers require training in appropriate law enforcement, paramilitary and surveillance related disciplines. On completion of the training, anti-poaching rangers must have achieved the recommended standards and be able to demonstrate a high level of competence in the core disciplines.

Of concern to many agencies, donor bodies and human rights groups is the perceived militant nature of training and operations for rangers who are subsequently entrusted to protect natural resources. The content delivered as part of anti-poaching training should not be diluted. In the past this dilution has seen rangers deployed at levels not adequate for the job they are being asked to do. Subsequently, operations have failed, and rangers have been killed or seriously injured. Anti-poaching, particularly in the defence of high target species, even when steered by an intelligence-led approach, is often primarily a paramilitary-style operation. It involves the defence of assets against armed militia-type units which sometimes cross international borders to conduct their attacks.

To undersell the seriousness of the task faced by anti-poaching rangers, can jeopardize the safety of the rangers and security of a protected area.

Training courses and guidelines for anti-poaching operations should always be developed upon a deep conservation message that runs throughout the training and filtrates into the learner. It is this ongoing message and mindset that will distinguish the anti-poaching ranger from culture engrained in a soldier.

Recruiting, selecting and training the right people for the job is a crucial element in the development of an effective ranger force. A solid foundation needs to be built; this starts at selection and training.

Training and retraining of the anti-poaching ranger force is something that needs to be constantly revised and implemented. Adequate thought must be put into training development. Firstly, one must determine what rangers need to be trained in, by completing a job specification that covers what the ranger is required to do. This is best done once a complete threat assessment for the conservation area in which they work has been carried out. A job analysis is then conducted to determine what level they are up to and the final training solutions are determined from this. Training of the rangers also needs to be assessed in order to determine whether the training outcomes have been achieved.

The Capacity Development Stream at the Vth IUCN World Parks Congress in 2003 recommended that the World Commission on Protected Areas should move towards common standards of competency by:

- Agreeing on generic global competency standards for protected areas staff, which can be adapted at local, regional and national levels.
- Encouraging and enabling use of standards and self-assessments to support improved effectiveness of protected area staff and training.

The Global Partnership for Professionalizing Protected Area Management has been working towards these objectives by developing a global set of competences for protected area staff along with guidelines for certification assessments, and an open-source body of knowledge, curricula and courses. The competence register by Appleton (2014) is the result of that work. This guideline for the training of rangers in anti-poaching is aligned with the applicable principles and competences in the competence register. Of the typical sets of skills outlined in the document by Appleton (in prep), anti-poaching rangers require specialist technical skills from 4 of the 13 categories required in protected area work, namely from: Upholding Laws and Regulations; Biodiversity Conservation; Local Communities and Cultures; and Field Craft and Site Maintenance.

A brief description of these categories from Appleton (2014) is as follows:

- a. Upholding Laws and Regulations: ensuring that laws, regulations, and rights affecting the protected area are upheld (through enforcement, prevention and encouraging compliance);
- b. Biodiversity Conservation: ensuring the maintenance of the ecological values of the protected area through management and monitoring of species, their habitats and ecosystems, and natural resource use;
- c. Local Communities and Cultures: establishing a cooperative and wherever possible mutually beneficial relationship between the governance and management of the protected area and the people who live in and around it; and
- d. Field Craft and Site Maintenance: conducting field work and practical tasks correctly and safely.

With regard to the first two categories above, and where applicable to the anti-poaching rangers job description, he or she should be able to: conduct supervised prevention, enforcement and

compliance activities according to legally defined norms and procedures (category a); and conduct basic planned field activities for the implementation of biodiversity recording, monitoring and conservation programmes (category b).

The means of checking rangers for particular competences will comprise a combination of a range of assessment mechanisms including:

- Practical test, observation and simulation in which the candidate performs the task in a real or realistically simulated situation;
- Demonstration of supporting knowledge in which the candidate shows in the course of completing a task that they have the required knowledge and skill;
- Feedback from others including supervisors, supervised personnel, participants in event and stakeholders;
- Oral or written tests of knowledge;
- Completion of a specified record or written procedure, for example completing a field notebook or using a handheld electronic device; and
- Undertaking an interview to test knowledge and depth of understanding.

2. Pre-training

2.1 Identifying training needs

The following methods can be used by a protected area manager to assess what training is needed for their staff:

- Analyse current poaching activity and future trends, both locally and regionally;
- Analyse the protected area's specific issues, i.e. size, terrain, access, mobility, avenues of approach, population centres, targeted species, etc.;
- Evaluate current protection plan and capabilities; and
- Determine number of additional staff required (if necessary) and necessary skill sets.

Apart from conducting basic initial employment training and promotional leadership training, training may be needed and initiated for the following reasons:

- A change or restructure in government law, law enforcement agencies or policies that impacts the protected area;
- A revised threat assessment, or a new project commencement, that impacts on protection requirements;
- The introduction of a new capability or new equipment, the emergence of new technology, or more efficient procedures;
- A preliminary analysis of a deficit performance situation;
- A post-activity report; and
- The report of an accident or important problem.

Due to the nature of their work anti-poaching rangers must meet certain minimum criteria:

- Pass a standard medical examination;
- Be physically and mentally fit and able to pass a field selection process;
- Have a clean criminal record¹;
- Be of sober habits;
- Have a bush craft foundation;
- Be willing to work long and erratic hours in physically demanding environments;
- Have an interest in, and understanding of conservation; and
- Be able to read and write².

Basic training courses provide the bare minimum skill set required to conduct anti-poaching activities safely and effectively. They are designed to transform a civilian into a functioning member of a paramilitary unit.

Advanced courses should expand on the concepts that have been learnt in the basic training. These courses can be subject specific and should provide for a more in-depth understanding of the concepts and applications of the subject. This training, as for the basic training courses, should be largely field based. Advanced courses not only provide for advanced skill learning but also ensure rangers maintain currency and professionalism in their field.

The head of protection should schedule team and section training on a monthly basis. Even if only for one day, there should be revision of tactical drills, procedures, first aid and the like, ensuring the training remains exciting and varied to keep the rangers interested.

An example of a train needs analysis is shown in Appendix 1.

2.2 Training providers

The training provider should be a subject matter expert in anti-poaching and wildlife law enforcement. The trainer should be certified with a recognized organization (governmental, professional association or institute of higher learning). It should be noted that many countries have yet to establish standards for trainers in anti-poaching and wildlife law enforcement. In this case, it is recommended that the trainers have a reference-able career within the conservation services, military or police services. The trainer will be required to have a solid background in developing and facilitating training courses and provide appropriate references to verify their background. In time, training providers and trainees can be certified against this International Union for Conservation of Nature and International Ranger Federation best practice standard.

¹ This can be exempt under special circumstances where poachers are turned and join the ranks of the anti-poaching staff. In the absence of the availability of a Criminal Clearance Certificate, or the unavailability or

² This can be exempt in countries where the education standard is low or non-existent and bush craft and local knowledge carries more weight.

Block periods for training may not always be available; therefore, in house on-the-job training should also be conducted. This would normally occur at team or section level, where the team leader trains new members on the basic team procedures and tactics. Prior to going on a patrol, new members should be familiar with all the operational procedures, drills and actions.

2.3 Pre-selection

Pre-selection is advisable in areas where there is the possibility of widespread interest in employment as a ranger. As it is logistically challenging to have several hundred candidates on a selection course, a pre-selection allows a much larger group of people a chance at involvement.

Pre-selection is by necessity a brief exercise, and can involve the following:

- A frank and direct briefing on what to expect during selection, training, and employment.
- A brief medical examination to rule out those with Tuberculosis, extreme high or low blood pressure, or any other chronic ailments that would preclude employment.
- A physical exercise, such as a 15km run, to rule out those with further undisclosed chronic injuries, ailments or physical challenges.
- Interaction with the candidates individually and collectively including, where possible, a brief interview and presentation of references and criminal clearance* with an eye to general discipline, intelligence, and suitability.

N.B. As per above and in the preceding section 2.1 (see footnote 1), the employment of previous poachers as rangers is quite common from various parts of the world including in Africa and in China. In China, apparently more than 60% of anti-poaching rangers were poachers and it is believed to be effective for anti-poaching and encouraged that as many of them as possible are converted to join conservation work (pers comm).

2.4 Selection

Selection of suitable individuals for anti-poaching duties is a criterion that, if followed, will ensure that rangers chosen for the new positions have the correct physical, mental, and moral fortitude to endure the stresses and hardships that such a career demands. The selection course should be designed to examine the qualities required of a ranger, and be of sufficient length that sustained deception becomes extremely difficult. Selection can also fulfil the dual role of helping to establish the training camp. Selection should end with an exercise simulating some of the hardships a ranger may be expected to encounter: sleep deprivation, rapid route marches, stretcher carries, etc. over a number of days.

While it is not advisable to conduct any actual training during a selection, due to the possibility of a failed candidate taking certain skills back to civilian life, some techniques that require repetition to build muscle memory can be included, such as drill and fire and movement. Some aspects to be assessed include:

- Stamina: physical strength is important and a weak candidate can be made stronger through training. A candidate must demonstrate the ability to continue their task even when at the limits of exhaustion.
- Obedience: a candidate must exhibit instant obedience to any given instruction or order.
- Knowledge retention - a candidate must demonstrate the ability to acquire a skill and then recall that knowledge at a later date, especially when under physical and mental strain, e.g. learning specific knots and then demonstrating that knowledge during sleep deprivation phase.
- Team skills: it is important that the candidate be able to form part of a close knit team and be able to work effectively as a group.
- Resourcefulness: a ranger will often be called upon to make snap decisions on their own, and a successful candidate must demonstrate initiative and innovation, without direct supervision.
- Moral Fortitude: a great deal of trust is placed in a ranger, and a candidate must demonstrate that this trust will be well placed. In addition they must possess the courage, self-discipline, and self-belief to see their task through under the most difficult circumstances.

2.5 Funding

Often the biggest challenge with regard to training rangers is finding funding for it. Funding may need to be secured internally through one's own organisation, or may need to be sourced from external donors and funding grants. The amount of money available is unfortunately often a limiting factor, and restricts how many rangers can be trained and over what time period. However, where possible, training should be planned and implemented based on needs and training schedules rather than being reactively arranged based on funding availability or, as is often the case, on the lack of proper motivation for training being included as a priority annual budget requirement.

2.6 Logistics

During the implementation phase it is important that the majority of training is conducted in the work place of the ranger, which is in field locations. The training should be developed to be as realistic as possible and must include as much hands on practical training as possible. Prior to conducting a training course, trainers must make provisions to ensure the following is planned and done:

- Location Identification: the venue selected must have sufficient space for accommodation; suitable place for conducting exercises; access to a clean water source; a firing range, etc.
- Pre-selection: a warning order should be issued through the community liaison team; a test day set in each regional centre; prospective trainees vetted (physical and background); and a limited number of candidates accepted to undergo selection.
- Selection: a two week period, often conducted at the training venue, is implemented to identify individuals most suitable for training.

3. Training – module guidelines

The best practice training module guidelines are comprised of the modules below. Each module should cover the recommended learning outcomes as listed. Assessment criteria are provided against the outcomes to enable the protected area manager to make an informed assessment as to whether the standards obtained will ensure the ranger is competent in each module.

3.1 Policy, principles and philosophy

3.1.1 Values and ethics

Recommended minimum time allotment	
Theory: 1 hour	Practical: Reinforced throughout training course

Overview

Values are those ideas and concepts within each of us that we deem important. They help us decide right from wrong, and help define who we are and what we stand for. They originate from our families, traditions, religion, elders, and friends. They are formed early in life, and reinforced by our life experiences. It is important to develop a set of personal values but it is even more important to understand that values can change throughout your life. Understanding your own values should keep oneself open to understanding and respecting the values of others. Understanding and being open and accepting of the values of others discourages conflicts based on misunderstanding.

Ethics is defined as the ‘standards of conduct and moral requirements’ necessary to function within an organization or profession. The protection of biodiversity has the unique responsibility within an organized society. Few other groups of people within society have a mission as specific as a ranger, which requires them to protect and defend wilderness areas at ground level. Because rangers are entrusted with this important and fundamental authority, this lawful duty must be exercised with restraint and within high ethical standards.

Core Competencies:

On completion of the module the ranger must have learnt:

- What values and ethics are;
- The factors that shape an individual’s values;
- The difference between individual and organizational values;
- How ethics affect the way rangers do and should behave;
- What corruption and abuse of authority are;
- The differences between professional, personal and work ethics;
- Various examples of appropriate work ethics; and
- How values affect decision-making.

Assessment Criteria:

- Explain what values and ethics are;
- List four factors which shape an individual's values;
- List four characteristics which would be deemed universally as being good values;
- Explain the difference between individual and organizational values;
- Give an example of corruption or abuse of power;
- Discuss the difference between professional, personal and work ethics;
- Participate actively in group discussion about examples of appropriate work ethics; and
- Explain how values affect decision-making and about what we regard as right and wrong.

3.1.2 Criminal threats to natural resources in and around protected areas

Recommended minimum time allotment	
Theory: 1 hour	Practical: Reinforced throughout training course

Overview

The first step before developing the protection strategy for any protected area is to identify the threats it faces. This can be very specific such as a targeted high value species, or as broad as national and regional conflict. This module covers the main principles of identifying threats and opponents of a protected area.

Core Competencies

On completion of the module the rangers must have learnt:

- How to identify threats to the protected area;
- Different types and extent of relevant threats (including immediate threats, criminal and organized crime);
- Who the possible attackers or intruders are;
- What areas of the protected area are most under threat and how they can be reached by the opposition; and
- The importance of:
 - Spatial and temporal distribution of threats,
 - Historical data, and
 - Drawing specific mitigation strategies for specific threats.

Assessment Criteria

- Explain the process of identifying threats to a protected area;
- Explain the different threats to your protected area and who the possible attackers and intruder groups are;
- Identify at-risk and high priority locations within your protected area; and
- Explain the basic process for developing a protection strategy for the threats identified.

3.1.3 Roles and responsibilities

Recommended minimum time allotment	
Theory: 1 hour	Practical: Reinforced throughout training course

Overview

Trainees must understand the role and responsibilities of an anti-poaching field ranger.

Core Competencies

On completion of the module the rangers must have learnt the:

- Role of the ranger in conservation;
- Reasons for:
 - Setting objectives,
 - Team and personal targets,
 - Prioritizing,
 - Time setting,
 - Teamwork, and
 - Good leadership;
- Aim of regular patrols and area coverage;
- Aim and importance of patrol reports;
- Importance of personal note books and recording observations at the time of events;
- Importance of maintaining equipment;
- Reasons for personal neatness and discipline;
- Need for regular and accurate up-line reporting; and
- How their organization fits into the countries' conservation network

Assessment Criteria

- Explain the role of the organization worked for in the greater conservation scene;
- Explain the primary role of rangers;
- Give the reasons for:
 - Setting objectives,
 - Team and personal targets,
 - Prioritizing,
 - Time setting,
 - Teamwork, and
 - Good leadership;
- Explain the aim of patrols and area coverage;
- Explain the aim and importance of patrol reports;
- Explain the importance of personal note taking of observations made at the time of events;
- Explain the importance of maintaining equipment;
- Give the reasons for the requirement of personal neatness and discipline; and
- Explain the need for regular and accurate up-line reporting.

3.1.4 Teamwork

Recommended minimum time allotment	
Theory: 0.25 hours	Practical: Reinforced throughout training course

Overview

Teamwork is the process of working collaboratively with a group of people in order to achieve a goal. Teamwork is a crucial part of a ranger's job, as it is necessary for fellow rangers to work well together and try their best in any circumstance. Good teamwork can provide collective strength and staying power for ranger teams. It means that rangers will try to cooperate, use their individual skills and provide constructive feedback, despite any personal conflict between individuals. Good leadership is essential to ensure proper teamwork.

Core Competencies

On completion of the module the rangers must have learnt:

- The importance of and the basic principles of teamwork;
- Why proper discipline is necessary to ensure teamwork;
- The nature, purpose and structure of a working team and the individual requirements which contribute to its success (e.g. reliability, flexibility, commitment, open communication and willingness to listen, respecting fellow team members, effective collaboration, problem solving and working towards a common goal);
- The importance of leadership and its role in ensuring proper teamwork; and
- How to use 'buddy systems' in armed contact and in casualty evacuations.

Assessment Criteria

- Explain the principles of teamwork and the basic requirements of a successfully functioning team using practical examples;
- Explain the importance of discipline in any team effort;
- Explain the importance of leadership in facilitating teamwork; and
- Explain the application of teamwork in armed contact and casualty evacuation situations.

N.B. With modules including the above, where it is only covered in theory, the principles and competencies learnt should be integrated into other modules which have practical components and in which they can be reinforced and demonstrated.

3.1.5 Operational security

Recommended minimum time allotment	
Theory: 1 hour	Practical: 1 hour

Overview

Operational Security (OPSEC) is the continual act of protecting items of information from becoming available to opposing forces (poachers). Examples include upcoming patrol plans, locations of current patrols, names of informers, and any insider information that could benefit a poacher. OPSEC is maintained through the use of the 'need-to-know' principle, compartmentalization, and

self discipline. Individual security is also vitally important, as rangers can easily become targets due to the nature of their work. The ranger requires a basic understanding of reporting suspicious behaviour to senior staff and identifying such activity.

Core Competencies

On completion of the module the ranger must have learnt:

- What critical information is;
- The goal of OPSEC;
- Who we are concerned about;
- Who is responsible for OPSEC;
- The need-to-know principle;
- To identify the number one threat to an operation; and
- To identify suspicious behaviour that could be a threat to individual security.

Assessment Criteria

- Demonstrate a thorough understanding of OPSEC;
- Describe who is responsible for OPSEC;
- List ways in which OPSEC can be achieved; and
- Undertake a workplace assessment outlining critical information, threats, risks, vulnerabilities and counter-measures.

3.1.6 Human rights

Recommended minimum time allotment	
Theory: 1 hour	Practical: Reinforced throughout training course

Overview

The term ‘human rights’ incorporates a group of ideas and concepts that have the essential belief that all persons are born free and entitled to basic standards of life, liberty and security from oppression or arbitrary harm by organizations or individuals. Human rights also encompasses the principles of the right to equal protection of the law and freedom from discrimination or mistreatment based upon racial, national, ethnic, religious, or political differences. Law enforcement services of every nation are responsible for protecting individuals from human rights abuses and may not engage in any sort of illegal violation of human rights.

Rangers are often expected to confront and arrest potentially dangerous suspects. The interaction can result in physical efforts to detain and/or restrain the suspect. This interaction can result in grievous bodily harm to either the poacher or ranger. The physical and psychological pressures that rangers face today are increasing and at times emotions can run high and suspects may be treated with force or what courts may term as excessive force.

Rangers must be sensitized to human rights and how to work within the framework of the various bills, regulations and guidelines that govern the right of humans to life and dignity as recognized in a civilized society. To ensure that human rights and humane conduct is practised, rangers will need not

only education and training but rigorous monitoring. All ranger forces should have human rights as a foundation to their standards.

Core Competencies

On completion of the module the ranger must have learnt:

- What human rights are, how they are established and how they apply in the rangers workplace;
- What the categories and characteristics of human rights are;
- Approaches and guidelines relating to human rights as outlined under the International Bill of Human Rights, The Universal Declaration of Human Rights, United Nations Code of Conduct for Law Enforcement Officers and United Nations Office of the High Commissioner for Human Rights;
- The importance of human rights and humane conduct;
- The regulations pertaining to torture, cruel and degrading behaviour and detention;
- Dealing with women, children and the elderly; and
- The procedures for a reporting a human rights violation.

Assessment Criteria

- Demonstrate a clear understanding of what human rights are, how they are established and how they apply to the rangers working environment;
- Demonstrate a clear understanding of the bills, regulations and guidelines that impact human rights;
- List or name at least one category and two characteristics of human rights;
- Explain the importance of human rights and humane conduct;
- Demonstrate a clear understanding of the regulations pertaining to torture, cruel and degrading behaviour and detention;
- Explain the protocols for dealing with women, children and the elderly; and
- Explain the procedures for reporting a human rights violation.

3.1.7 Use of force

Recommended minimum time allotment	
Theory: 1 hour	Practical: Reinforced throughout training course

Overview

Rangers function as law enforcers and are bound by local and international laws. For this reason they must be able to respond to incidents in a manner befitting someone of such responsibility. During the course of their normal duties, any law enforcement officer will experience various levels of offender resistance. The reasons for this resistance vary with each incident and may be physical, verbal, and even psychological in nature.

Rangers are at risk of being killed or injured as part of an apprehension. In fact many of the injuries sustained by rangers are a result of some form of confrontational encounter. Being able to effectively control a resistive subject or offender with minimal potential injury to either party is of

paramount concern. Additionally, rangers need to be trained in effective methods of preventing and controlling physical attacks upon their person with techniques that will produce confidence, as well as, minimize injury.

Being able to correctly demonstrate an appropriate level in the use of force throughout all duties as a ranger is a critical function. It will reduce the risk of injury, maintain workplace values and comply with laws and standards.

Core Competencies:

On completion of the module the ranger must have learnt:

- When force is required;
- The concept of using minimum force;
- Which national and International Laws regulate and guide the degree of force for specific threat levels;
- What the various levels of force are;
- How to interpret and implement the force continuum;
- When lethal or deadly force is necessary and lawful;
- The differences between presence, verbal and physical control;
- What intermediate weapons are and when they can be utilized; and
- The various levels of resistance that rangers may experience during an arrest.

Assessment Criteria:

- Explain when force is required;
- Explain what minimum force is and when it should be used;
- Demonstrate a clear understanding of the national and international laws that regulate and govern the use of force;
- Explain and demonstrate the various levels of force;
- Practically demonstrate a clear understanding of the force continuum model through the varying levels of threat escalation (Command presence, Verbal and non verbal interaction, Physical control, Aerosol gas, Electrical devices, Impact weapons, Deadly force – Appendix 2)
- Explain when lethal or deadly force is necessary and lawful;
- Explain and demonstrate the difference between presence, verbal and physical control;
- Identify, explain and demonstrate what intermediate weapons are and when they can be utilized; and
- Explain, demonstrate and counter the various levels of resistance that rangers may experience during an arrest.

3.1.8 Concepts and principles of conservation and ecology

Recommended minimum time allotment	
Theory: 8 hours	Practical: 4 hours

Overview

Rangers are the custodians and protectors of wildlife and the natural environment they operate in. It is therefore important that they understand the concepts and principles of nature conservation, basic ecology and wildlife management. This module aims to make rangers aware of our reliance on the natural resources and processes, and that without conservation and careful regulation, our continued behaviour is having a negative impact on our future.

Core Competencies

On completion of the module the ranger must have learnt:

- The meaning of nature conservation;
- The importance of rangers and their role as protectors of wildlife and the natural environment;
- To identify the common plants, vertebrates and invertebrates within the field the ranger works;
- The basics of ecology, which should include:
 - The main processes that shape the ecology of the relevant ecosystems where the rangers work,
 - What is a habitat and niche,
 - Understanding a food chain and how the existence of one species is important to others, and,
 - The role certain species play in maintaining and changing a landscape;
- What threats exist to these ecological processes or particular wildlife and plants;
- The concepts and types of sustainable utilization within the protected area context;
- The fundamentals of wildlife care and how to deal with injured or snared animals;
- The definition and types of human-wildlife conflict (crop raiding, livestock predations, etc.) and the various preventive and mitigating factors that can be used to manage it; and
- The necessary know how of animal behaviour to minimize disturbance to wildlife and ensure ranger safety when working in the field.

Assessment Criteria

- Explain the meaning of nature conservation and the roles of rangers in protecting wildlife and the natural environment;
- Describe a few key ecological processes;
- Define sustainable utilisation and give an example;
- Explain what to do in the event of finding an injured animal;
- Explain what to do in the event of human wildlife conflict situations;
- Explain how to minimise disturbance to wildlife and maximise ranger safety in the field with regard to dangerous animals; and
- Identify common plants, animals and invertebrates.

3.1.9 Community Collaboration

Recommended minimum time allotment	
Theory: 1 hour	Practical: 0 hours

Overview

Community collaboration is often a key element of successful anti-poaching efforts. It is important that rangers understand the main principles of community based natural resource management and good community cooperation.

Core Competencies

On completion of the module the ranger must have learnt:

- The importance and principles of community based natural resources management, especially on community lands adjoining protected areas; and
- The importance of good community relations and how it may influence improved anti-poaching, negatively if neglected and positively if appropriately practised.

Assessment Criteria

- Explain the importance and principles of community based natural resource management on land neighbouring protected areas; and
- Explain the importance of good community relations and give examples of how it can be applied to influence improved anti-poaching, and of how it could impact negatively to worsen the poaching problem if neglected.

3.2 Protecting and maintaining area security

3.2.1 Mental and Physical Fitness

3.2.1.1 Drill and discipline

Recommended minimum time allotment	
Theory: 2 hours	Practical: 0.5 hours per day

Overview

Discipline is the backbone of a command structure. Irrespective of rank held within the overall command structure, each individual has a responsibility to characterize and understand the elements and principles of discipline.

Drill and discipline assists in integrating the rangers into a well-disciplined and cohesive unit. This can lay the foundations for morale and belief in what they do. Drill encourages responses to be automatic, so team members are able to rely on each other to react in an expected manner for a given situation. However, in some parts of the world there is much less, and in places no, emphasis

on drill and rangers are not expected to parade. Furthermore, most Special Forces units globally are not expected to drill yet have exceptional levels of discipline. Therefore, training should be open to include alternate proven approaches of instilling the elements and principles of discipline that will achieve the same aim and readiness.

The aim is for leaders to understand the principles of discipline and how to apply those principles in developing the rangers attached to a wildlife protection outfit. This state of mind produces a readiness for willing and intelligent obedience and appropriate conduct.

Core Competencies

On completion of the module the ranger must have learnt:

Drill and discipline

- The historical context behind modern military drill;
- The principles and aim of drill and discipline;
- How to execute the various drill procedures with and without firearms competently; and
- The advantages of working in a team while focused on their self discipline.

Chain of command

- The chain of command as described in their respective organizational charts;
- The function of each level of command;
- The flow of information between the various levels;
- Grievance procedures as applicable to the respective organizations; and
- The principle and importance review and self improvement.

Assessment Criteria

The graduate trainee must function as a well disciplined and proud member of a ranger force. To achieve these objectives students must be able to:

Drill

- Explain the aim of drill;
- Where drill is applied, execute the following drill movements on the halt:
 - Form up,
 - Dressing,
 - Right and left turn,
 - Quick march and halt,
 - About turn,
 - Open and close order,
 - Saluting to front, and
 - Attention, stand at ease, and stand easy;
- Execute the following movements on the march:
 - Marching on the double,
 - Halt on double time,
 - Right and left turn,

- About turn,
- Eyes right and left, and
- Right and left salute;
- Execute the following movements with issue rifle:
 - Attention,
 - Shoulders arms,
 - Order arms,
 - Saluting,
 - For inspection present arms,
 - National salute present arms, and
 - Safety precautions.

Discipline

- State the definition of discipline;
- Define the role of reward and punishment;
- State the purpose of discipline;
- State and explain the types of discipline;
- Discuss the elements of effective discipline;
- Discuss evidence of discipline;
- Demonstrate each movement as an individual and as part of a parade; and
- Demonstrate command of a parade formation.

Chain of command

- Correctly name the different positions within the chain of command and name the individuals in those positions;
- Describe the function of each level of command;
- Demonstrate a thorough understanding of the path way that information needs to follow through the chain of command; and
- Describe the procedures that need to be followed if there is a grievance.

3.2.1.2 Musketry

Recommended minimum time allotment	
<u>Standard Issue</u>	
Theory: 3 hours	Practical: 0.5 hours per day. Observed continually throughout training course
<u>Specialist Firearms</u>	
Theory: 1 hour per weapon system	Practical: 1 hour per weapon system

Overview

Musketry is the knowledge and safe use of firearms. Many rangers will be issued firearms in order to carry out their duties. All anti-poaching rangers that are issued firearms should be able to handle them in a safe, efficient, legal, responsible and competent manner. In addition, a ranger may come across various firearm makes and models within their area of responsibility, and must be able to render them safe once captured.

Core Competencies

On completion of the module the rangers must have learnt:

Basic - using a standard issue firearm

- The legalities relating to the use of firearms (e.g. carry, storage);
- How to handle firearms safely, efficiently and responsibly. This must include:
 - Firearm safety precautions,
 - Load, unload and make safe on handing over or receiving the rifle (the stages of weapon readiness -Appendix 3),
 - Strip, clean, assemble and test the rifle,
 - Prepare firearms for shooting in all conditions e.g. heat, cold, dry, wet, etc.,
 - Clean, handle and store ammunition and firearms safely and correctly,
 - Check all the settings on his rifle prior to shooting,
 - To complete the sight picture for open 'V' rear sight, peep sight (rear) and shotgun sight,
 - Fill magazines correctly
 - To safely travel with a firearm in all applicable forms of transport, e.g. vehicle, vessel, aircraft, horseback, and
 - Fire the weapon appropriately from different positions (standing, kneeling, lying down);
- Vital targets for dangerous game in the area of operation, e.g. elephant, hippo and buffalo;
- How to execute 'shoot to kill' or 'quick kill' exercises with firearms (instinctive shooting);
- How to fire ones weapon correctly from behind cover or concealment;
- How to execute reloading, malfunction and stoppage drills quickly and correctly;
- To prepare webbing to accommodate the firearm, ammunition, water bottle and utility pouches;
- To make safe any captured firearms and operate if required; and
- The correct procedures for field stripping, cleaning and maintaining firearms.

Specialist – uncommon weapon systems that may be required to be operated from time to time, e.g. sniper rifle, hunting rifle, hand gun

- All of the above basic competencies with regard to the specific specialist firearm(s).

Assessment Criteria

Basic - standard issue

- Demonstrate a competent knowledge of the legal use, transport and storage of firearms;
- Demonstrate how to handle firearms safely, efficiently and responsibly. This must include:
 - Firearm safety precautions,
 - How to load, unload and make safe on handing over or receiving the rifle (knowing the stages of weapon readiness),
 - How to strip, clean, assemble and test the firearm in a confident and timely manner in daylight or in darkness,
 - How to clean, handle and store ammunition and firearms correctly,
 - How to check all the settings on the rifle prior to shooting,
 - How to complete the sight picture for open 'V' rear sight, peep sight (rear), shotgun sight,
 - How to fill magazines correctly, and

- How to fire the weapon accurately from different positions (standing, kneeling, lying down);
- Demonstrate vital targets for dangerous game in the area of operation, e.g. elephant, hippo and buffalo;
- Explain the meaning of 'centre mass';
- Explain the legal implications of 'shoot to kill' versus 'shoot to stop';
- Demonstrate how to execute 'shoot to kill' or 'quick kill' exercises with firearm;
- Demonstrate how to fire ones weapon correctly from behind cover or concealment;
- Demonstrate the execution of reloading, and firearm malfunction and stoppage drills quickly and correctly; and
- Demonstrate how to prepare webbing to accommodate the rifle, ammunition, water bottle and utility pouches.

Specialist – uncommon weapon system that individuals/teams may be required to operate from time to time e.g. sniper rifle, hunting rifle, hand gun

- Demonstrate all of the above criteria with regard to the specific specialist firearm(s).

3.2.1.3 Physical training

Recommended minimum time allotment	
Theory: 1 hour	Practical: 1 hour per day

Overview

The duties of a ranger can be dangerous and physically demanding. Physical Training promotes good health and enables a ranger to carry out their duties more effectively. It is for this reason that each individual must maintain a high level of fitness. The assessment criteria given below represent the minimum fitness required for a ranger to be able to effectively carry out their duties in an operational environment. It is highly encouraged that a ranger strives to exceed these.

Core Competencies

On completion of the module the ranger must have learnt:

- The importance of achieving and maintaining a high standard of fitness; and
- Field expedient methods of exercising.

Assessment Criteria

- Achieve 40 push ups, 8 pull ups, 40 sit ups, and 60 leg extensions;
- Complete a 100m firefighter's carry in under 1 minute;
- Complete a 2.4km run in physical training gear in under 12 minutes;
- Complete a 2km run in patrol order in under 12 minutes; and
- Complete an 8km run in physical training gear in under 50 minutes.

3.2.2 Field craft

3.2.2.1 First aid

Recommended minimum time allotment	
<u>For rangers</u>	
Theory: 12 hours	Practical: 12 hours & reinforced throughout training course
<u>For team leaders</u>	
Theory: 20 hours	Practical: 20 hours & reinforced throughout training course

Overview

The ability to render medical aid to oneself and team members is a valuable life skill, and crucial to the ongoing success of operations. It is also a skill that enables a ranger to assist family and friends, and the wider community in general.

Core Competencies

On completion of the module the ranger must have learnt:

- The concept of providing care under fire, and self aid;
- How to conduct a primary survey - level of consciousness, airway, breathing, circulation;
- Secondary survey - head to toe examination;
- Cardiopulmonary resuscitation (CPR);
- Treatment of:
 - Shock,
 - Wounds and severe bleeding,
 - Fractures,
 - Spinal injuries,
 - Burns,
 - Foreign object in the eye, ear, and nose,
 - Chest injuries,
 - Bites and stings, including snake bites,
 - Hyperthermia, heat injuries, and dehydration,
 - Hypothermia, and
 - Frostbite;
- Movement of a patient;
- General health, including foot care, and hygiene in the field;
- The causes, spread, prevention and control of HIV/AIDS and other sexually transmitted illnesses; and
- The importance and management of antiretrovirals (ARVs).

In addition team leaders must have learnt:

- Assessing, opening, and maintaining an airway; and
- Intravenous administration of fluids.

Assessment Criteria

Rangers

- Demonstrate a primary and a secondary survey;
- Demonstrate the correct procedures for CPR;
- Demonstrate the different methods of controlling bleeding (direct and Indirect pressure);
- Demonstrate treatment of fractures (spinal, cranial, limbs, torso);
- Explain how to treat:
 - Shock,
 - Burns,
 - A foreign object in the eye, ear or nose,
 - Chest injury,
 - Bites and stings (including snake bites),
 - Hyperthermia,
 - Heat injury,
 - Dehydration,
 - Hypothermia, and
 - Frostbite;
- Explain the causes, spread, prevention and control of HIV and AIDS; and
- Explain the importance and management of ARVs.

Team leaders

- Demonstrate assessing, opening, and maintaining an airway; and
- Demonstrate intubation and setting an intravenous line.

3.2.2.2 Bushcraft

Recommended minimum time allotment	
Theory: 8 hours	Practical: 8 hours & reinforced throughout training course

Overview

A ranger's place of work is in the field. Situations which threaten survival usually occur unexpectedly. With basic knowledge of survival skills the ranger can cope with most situations. It is not always possible to predict when life threatening situations will occur but in the ranger profession the chances of such situations occurring are very high indeed. Any patrol or field operation can be a potential disaster if rangers are unaware of the possible dangers and how to cope in a survival situation.

Understanding the basic principles of survival is more important than learning specific techniques *per se*, particularly since most techniques require modification every time they are used. Nothing is easy, no matter how well trained you may be, but if rangers learn the basics, they should be able to adapt to a variety of situations.

Core Competencies

On completion of the module the ranger must have learnt:

- The concept of PRWF (Protection, Rescue, Water, Food) or PLAN (Protection, Location, Acquisition, Navigation);
- The correct use of clothing for protection;
- How to create shelters from man-made or improvised materials and the principles of the correctly locating shelters with regard to terrain and weather;
- The importance of fire, the ability to create fire from a variety of methods and sources, and how to avoid getting burnt and how to survive a wildfire;
- The importance of how to keep warm and stay out the cold, anti-slip methods and importance of battery terminal preservation (applicable for cold climates);
- Basic rescue signals applicable on land and at sea (including use of mirrors, fires, smoke, fluorescent strips, whistles, and flare guns);
- A basic knowledge of navigation including navigating with instruments (compass, Global Positioning System (GPS)), without instruments (sun, stars, prevailing wind, topography), how to locate the cardinal points and how to navigate using streams and rivers;
- The importance, and effects, of water on the human body;
- To identify and locate sources of water and methods to extract it;
- The purification of water by various methods including boiling, filtering, use of water purification tablets, and the dangers of not doing so;
- To locate and identify food sources including wild edibles;
- To improvise traps, and to prepare food for immediate use and for longer term storage;
- River and dangerous obstacle crossings; and
- Wildlife behaviour of species in their area of operation, from a survival perspective, e.g. how to avoid dangerous situations, how to use wildlife to help find water or food.

Assessment Criteria

- Explain what is meant by the PRWF or PLAN;
- Explain the correct use of clothing for protection;
- Demonstrate the creation of various shelters from man-made (poncho lean-to, beach flotsam), or improvised materials (vegetation, rock, snow) and explain the principles of the correct location of the shelters with regard to terrain and weather;
- Explain the principles of the importance of fire, demonstrate the ability to create fire from a variety of methods and sources (e.g. flints, fire bows, fire ploughs, batteries, chemicals, cartridge propellants and fire pistons) and how to avoid getting burnt and survive a wildfire;
- Explain the principles of how to keep warm and stay out the cold, anti-slip methods and principles of battery terminal preservation (applicable for cold climates);
- Demonstrate the basic rescue signals for use on land (and at sea) and demonstrate examples of such methods including the use of signal mirrors, signal fire pillars, smoke (dark and light), fluorescent strips, whistle blasts, flare guns;
- Demonstrate a basic knowledge of navigation including navigating with instruments (for example compass or GPS); navigating without instruments (using the sun, stars, prevailing wind, or by topographical features); locating the cardinal points and the use of proceeding downstream to locate rivers and following rivers to towns;

- Explain the importance, and effects, of water on the human body, and the lack thereof leading to dehydration and death;
- Demonstrate how to identify and locate sources of water and methods to extract it;
- Give examples of methods of water purification including boiling, filtering, use of water purification tablets, and the dangers of not doing so;
- Explain how to locate and identify food sources including wild edibles;
- Explain how to improvise traps, e.g. deadfall, spring snare, and explain how to prepare food for immediate use and for longer term storage;
- Demonstrate how to cross rivers and other dangerous obstacles applicable to work area; and
- Explain how knowledge of the behaviour of different species of wildlife is important from a survival perspective.

3.2.2.3 Equipment use and maintenance

Recommended minimum time allotment	
Theory: 1 hour	Practical: 2 hours & an additional 15 minutes per equipment item

Overview

While the most important asset in an anti-poaching unit is the rangers, appropriate equipment can allow the rangers to perform their duties to a higher standard. This is due to better capabilities, motivation and increased confidence in their equipment. This is only possible however if the equipment is used correctly and well maintained. An example of equipment lists is displayed in Appendix 4.

Core Competencies

On completion of the module the ranger must have learnt:

Basic

- Use and maintenance of issued:
 - Uniform and personal items, e.g. uniform, boots, webbing;
 - Basic field equipment, e.g. backpacks, tents; and
 - Basic electronic and optical field equipment, e.g. camera, binoculars, phones.

Specialist

- Use and maintenance of issued:
 - Specialist field equipment, e.g. night patrol aids such as night vision goggles (NVGs) and thermal imaging optics, GPS tracking devices, ballistic body armour, body worn recording devices.

Assessment Criteria

- Demonstrate a thorough inspection of all issued field equipment, and individual adjustments, and maintenance, e.g. how to take a photograph, the use of needle and thread to repair uniforms;

- Demonstrate a personally adjusted and correctly packed webbing and backpack;
- Demonstrate inspection and erection of a shelter, e.g. tent, hammock;
- Demonstrate correct maintenance procedure for electronic equipment, e.g. dry wipe, inspection, check threads;
- Demonstrate how to focus and clean optical equipment, e.g. binoculars and spotting scopes; and
- Demonstrate the correct use of electronic aids, e.g. GPS, camera, and satellite phones.

3.2.2.4 Camouflage and concealment

Recommended minimum time allotment	
Theory: 1 hour	Practical: 5 hours of which 1 hour is after dark

Overview

In certain situations rangers may require knowledge and skills in camouflage and concealment.

Core Competencies

On completion of the module the ranger must have learnt:

- Principles of camouflage and concealment (choice of position, camouflage discipline);
- Methods of camouflage and concealment (hiding and blending); and
- Geographic and climatic factors affecting camouflage and concealment.

Assessment Criteria

- Explain and demonstrate an operation needing camouflage and concealment.

3.2.2.5 Radio communications

Recommended minimum time allotment	
Theory: 1 hour	Practical: 1 hour per communication system & reinforced throughout training course

Overview

Effective radio and telephonic communications are essential to successful law enforcement. Rangers must know whether, when and how to share information, request assistance, or evacuate a casualty. Rangers must be able to reliably and competently make contact with their headquarters. The types of communications in this module do not include public relations and external reporting, but rather the operational and routine job functional communications that rangers are required to know.

Core Competencies

On completion of the module the ranger must have learnt:

- To work competently with all the different radio models used by their organization;
- How to operate radios on the correct frequencies;
- To care for, and carry out basic fault finding and maintenance on radios;

- How to communicate using a hand-held, vehicle or base station radio using the correct voice procedures and etiquette;
- The phonetic alphabet;
- The importance of radio security and techniques used for maintaining radio security;
- How to operate and transmit over a satellite phone; and
- Ground to air communications.

Assessment Criteria

- Correctly name and demonstrate the function of all the dials and buttons on a radio;
- Demonstrate the correct procedure to raise communications, transmit a message and end a conversation with use of the phonetic alphabet,
- Demonstrate accepted standard speech abbreviations and correct pronunciation;
- Demonstrate how to relay and receive a message in an emergency;
- Explain the strengths and weaknesses of satellite communications and demonstrate a call; and
- Demonstrate ground to air communications.

3.2.2.6 Hand signals

Recommended minimum time allotment	
Theory: 1 hour	Practical: 1 hour & reinforced throughout training course

Overview

To operate effectively, patrols should move as silently as possible through the field. Talking should be kept to a minimum and if it is necessary only by whispering. Silent communication by hand signals is always recommended. Some of the standard and most common commands used on a patrol, for which hand signals should be known by all, are indicated below.

Core Competencies

On completion of the module the ranger must have learnt:

- The principles governing the use of hand signals; and
- Twenty five of the most common/universal hand signals (e.g. you, me, move up, come here, listen, look, hurry up, stop, freeze, rally point, fall in on me, crouch, move forward, call patrol commander, poachers seen, snares located, binoculars needed, trap located, single file formation, search line abreast formation, arrow formation, vehicle heard, vehicle needed, understand, do not understand).

Assessment Criteria

- Demonstrate multiple hand signals to convey a message.

3.2.2.7 Orienteering and navigation

Recommended minimum time allotment	
Theory: 8 hours	Practical: 8 hours & reinforced throughout training course

Overview

Effective patrolling and planning of anti-poaching operations requires a thorough knowledge of the terrain the ranger will be working in. The correct use of maps and navigational aids allows the rangers to operate effectively in the field and provide valuable information to managers. This information may be used for law enforcement (patrol coverage, poaching intensity, poaching locality, etc.) and also to gather biological data (wildlife distribution patterns, vegetation assessments, fire monitoring, etc.).

Core Competencies

On completion of the module the ranger must have learnt:

- What a map is and how to orientate a topographical map for navigation;
- The meaning of the 'three norths';
- Grid systems including latitude and longitude and locally used grid reference;
- How a map represents an area including the interpretation of the symbols, e.g. rivers, hills, valleys, roads, and contours;
- How to locate ones present position on a map using topographical features and using grid lines;
- How to locate a given position and patrol route on a map;
- How a compass works, how to compensate for compass error and how to set a compass heading;
- How to walk on a compass bearing and to use 'dead reckoning' in unfamiliar terrain;
- How to use a protractor for navigating with back bearings;
- How to use a GPS to navigate and collect data; and
- The basics of downloading and recording the data on a GPS.

Assessment Criteria

- Demonstrate and describe how to find a location on a correctly orientated map;
- Identify large features on the ground, e.g. hill, valley, saddle, streams, and correlate them onto the map; and
- Demonstrate and explain, using the different navigation aids available, how to plan a patrol route and how to accurately navigate the route.

3.2.2.8 Tracking

Recommended minimum time allotment	
<u>Basic</u>	
Theory: 3 hours	Practical: 40 hours spread throughout the training course
<u>Intermediate</u>	
Theory: 1 hour	Practical: 20 hours spread throughout the training course
<u>Advanced</u>	
Theory: 1 hour	Practical: 20 hours spread throughout the training course

Overview

A ranger is highly likely to encounter a poacher's spoor (tracks) while on patrol. Tactical tracking allows rangers to pursue and capture poachers wherever they might be.

Core Competencies

On completion of the module the ranger must have learnt:

Basic

- The importance of being in good physical condition to be a competent tracker;
- To identify both animal and man-made spoor and sign within their areas;
- The principles of tracking;
- To track a person and an animal through varying terrain;
- The different tracking techniques including those for relocating lost spoor;
- Tactically correct tracking formations;
- The principles and techniques of anti-tracking;
- To define a search area and use track traps to gather information and sign;
- To identify the right spoor in a contaminated environment;
- The principles and techniques to leapfrog and deploy multiple tracking teams along a track; and
- Tracking procedures with K9 support (where relevant).

Intermediate

- To track a person and an animal through increasingly challenging terrain (grassland and hard ground) and interpret the age of the spoor, direction of travel, speed of travel, distinguishing track characteristics, numbers of suspects and the motivation and intentions of the suspects;
- To identify both animal and man-made ground and aerial spoor and sign within their areas; and
- To define a search area and use track traps to gather information and sign at a crime scene.

Advanced

- To track a person and an animal through any terrain (rocky or very hard ground) and interpret the age of the spoor, direction of travel, speed of travel, distinguishing track characteristics, numbers of suspects and the motivation and intentions of the suspects;

- The advanced principles and techniques to leapfrog and deploy multiple tracking teams along a track;
- The principles and techniques of counter-tracking;
- Conduct advanced scene of crime management and evidence collection;
- Tracking procedures with K9 support (where applicable).

Assessment Criteria

Basic

- Demonstrate the ‘cross grain’, ‘box’ and ‘360°’ methods of tracking;
- Explain how environmental factors such as sun, terrain, wind, rain, etc. can influence the spoor (sign aging);
- Analyse spoor found and determine numbers, footwear, speed, etc.;
- Demonstrate the Y-formation, offset formation;
- Demonstrate predictive ability and leapfrogging;
- Demonstrate techniques used to relocate lost spoor;
- Search an area using track traps to locate prime areas where there is a high probability of spoor occurring; and
- Demonstrate the techniques and principles of tracking with K9 support (where applicable).

Intermediate

- Identify both animal and man-made ground and aerial spoor and sign;
- Demonstrate how to track and perform an analysis of spoor found and determine the age of the spoor, direction of travel, speed of travel, and distinguish track characteristics, numbers of suspects and the motivation and intentions of the suspects in increasingly challenging terrain (including grassland and hard ground); and
- Conduct a basic crime scene evidence collection.

Advanced

- Demonstrate how to track and perform an analysis of spoor found and determine the age of the spoor, direction of travel, speed of travel, and distinguish track characteristics, numbers of suspects and the motivation and intentions of the suspects, in any terrain (including rocky or very hard ground);
- Demonstrate predictive ability and advanced leapfrogging techniques;
- Conduct management of an advanced crime scene including evidence collection;
- Demonstrate the ability to recognize when anti-tracking techniques have been used and the techniques and procedures to relocate the track.

3.2.3 Legal

3.2.3.1 Wildlife protection legislation and court procedure

Recommended minimum time allotment	
Theory: 8 hours	Practical: 2 hours

Overview

Rangers must know the legal framework that regulates their profession as well as the criminal legislation of their respective countries. This enables them to conduct their work effectively and efficiently and helps them achieve results-oriented objectives. The relevant laws and regulations of each country should be covered in the training module to ensure that rangers understand and comply with them. This should cover wildlife and forest crimes legislation, court procedure, law enforcement, and relevant wildlife and protected area legislation.

Core Competencies

On completion of the module the ranger must have learnt:

- Relevant laws and regulations that pertain to the protection of wildlife and their habitat in the country;
- The court hierarchy and the criminal system in the country;
- The definition of criminal law and its principles;
- The elements of a crime (*actus reus, mens rea*);
- The modes of criminal liability (planning, ordering, inciting, organizing a group, perpetration, co-perpetration, aiding and abetting);
- Which conducts are typified as wildlife crimes in the country's legislation;
- The role and responsibilities of rangers in criminal investigations and court procedures (judicial powers);
- Stages of the criminal process and the role of the judge, prosecutor, defence council and witnesses;
- Powers and limitations of all enforcement officers in natural resource protection;
- Documentation requirements and how to process the relevant forms; and
- The laws and regulations for the carriage and use of firearms as a ranger.

Assessment Criteria

- List the different laws and articles pertaining to wildlife protection and law enforcement in the country;
- Explain how the court hierarchy and criminal system operates in the country;
- Define criminal law and list the country's wildlife crimes;
- Explain, through an example, the elements of a crime;
- Explain, through an example, the mode of criminal liability;
- Explain, through a case study and court hearing simulation, how criminal investigations and trials are conducted;
- Explain the role, powers and limitations of a ranger in a criminal investigation and trial;
- Explain the challenges and ways of applying the laws relevant to anti-poaching;
- Demonstrate the ability to identify when a crime or an attempt to commit a crime occurs and take appropriate action;
- Demonstrate the capacity to process case-related documentation;
- Demonstrate the ability to identify the illegal possession of an object and take the appropriate action;
- Demonstrate the ability to apply wildlife legislation in a working environment; and

- Explain the law applicable for the use of firearms.

3.2.3.2 Evidence

Recommended minimum time allotment	
Theory: 4 hours	Practical: 4 hours

Overview

Evidence is the essential element to uncover the truth in a criminal investigation and ensure that perpetrators of wildlife crimes face justice. Evidence is anything that provides information on the events being investigated. It allows judges to determine if a crime has been committed and, if so, impose the appropriate sanctions. In order to support investigations, rangers must know how to identify, collect, preserve and present relevant evidence, which can be used effectively to prosecute wildlife crimes.

Core Competencies

On completion of the module the ranger must have learnt:

- What evidence is, its various forms and sources (physical objects, ranger's observations, witnesses and suspects' testimony, documents, scientific analysis, etc.);
- Different types of evidence (direct and indirect, physical, testimonial and documentary);
- The principles regarding the admissibility of evidence (relevance, direct vs hearsay evidence, authenticity, reliability);
- The role of a ranger in assisting wildlife crimes investigations and collecting evidence;
- How to identify, document, collect, preserve and present evidence;
- The rules and procedures regarding the collection of evidence;
- When and how to accept evidence that is provided confidentially;
- The chain of custody of physical evidence and authentication of documentary evidence; and
- The importance of trying to link evidence to senior indirect perpetrators.

Assessment criteria

- In a mock wildlife crime scenario, identify various forms of evidence and classify it according to its relevance and reliability;
- Demonstrate the ability to implement protocols for ensuring the chain of custody of evidence;
- Explain the role of a ranger in assisting wildlife crimes investigations and collection of evidence;
- Demonstrate the capacity to identify, document, collect, preserve and present evidence; and
- Demonstrate the ability to link evidence to senior indirect perpetrators where possible.

3.2.3.3 Witnesses

Recommended minimum time allotment	
Theory: 2 hours	Practical: 3 hours

Overview

Witnesses play a fundamental role in prosecuting wildlife criminals and on many occasions their testimonies have been the basis of effective convictions. Dealing with witnesses, in particular when they are victims, is a very sensitive matter and utmost care should be given to their protection. Rangers are the persons first confronted with witnesses so they should be properly trained to deal with them in a way that respects their dignity and ensures their effective collaboration with justice. Finally rangers can themselves be witnesses in trials and should be trained in how best to perform their duties should this situation arise.

Core Competencies

On completion of the module the ranger must have learnt:

- How to deal with witnesses so as not to endanger them or subject them to undue pressure or trauma;
- How to safely establish and maintain contact with witnesses;
- The protective measures for witnesses inside and outside criminal proceedings, including protection of confidentiality and identity;
- How to conduct a witness threat assessment;
- How to write or take a witness statement and the elements it should contain;
- How to prepare and give testimony in court and be examined and cross-examined; and
- How to deal with fear.

Assessment criteria

- In a mock exercise, demonstrate capacity to deal with a fearful witness while ensuring respectful treatment;
- List the main protective measures available to victims inside and outside the court procedures;
- Conduct a threat assessment based on a mock exercise;
- Demonstrate the ability to write a witness statement with all essential elements included; and
- Give testimony in a mock hearing and be subject to a mock examination and cross-examination.

3.2.3.4 Arresting procedures

Recommended minimum time allotment	
Theory: 1.5 hours	Practical: 4.5 hours

Overview

Successfully bringing poachers to justice is one of the most important responsibilities possessed by a ranger. Arresting procedures bring the ranger into direct confrontation with a criminal, and the associated dangers. Correct arresting techniques are essential to protect oneself, the team members, and the case.

Core Competencies

On completion of the module the ranger must have learnt:

- The powers of arrest, search, and seizure;
- The procedures for correctly arresting a suspect;
- The basic concepts related to human rights and the different laws governing human rights as applicable to arresting procedures;
- The importance of observing the principles of human rights when arresting a suspect;
- The legal procedures for searching a person, vehicle, premises or area;
- Tactically correct options for 'contact and cover' while controlling, restraining, searching and processing a suspect;
- The procedures for opening a case file (docket) and how the information it contains can influence the prosecution of the case; and
- The correct suspect interviewing procedures.

Assessment Criteria

- Explain the concepts related to human rights, the importance of observing human rights, the different laws governing human rights and basic human rights abuses, as applicable to arresting procedures;
- Explain the procedures involved with the use of search warrants;
- Demonstrate the correct procedures of arrest and describe the implications if these procedures are not followed;
- Demonstrate the correct techniques for a bodily search of a detainee;
- Demonstrate the actions for handling a suspect, which need to include: search, silence, segregate, safeguard, speed (back to HQ), and tag; and
- While observing suspects' rights, demonstrate effective interviewing techniques (who, what, when, where, how, why?).

3.2.4 Operational enforcement skills

3.2.4.1 Marksmanship

Recommended minimum time allotment	
Theory: 1 hour	Practical: Practiced throughout the training course

Overview

Marksmanship can be learnt and mastered by all anti-poaching rangers issued with a firearm. Rangers need to be trained in the effective use of firearms so that they may defend themselves confidently against threats—poachers and dangerous wildlife—if necessary.

Core Competencies

On completion of the module the ranger must have learnt:

Basic - Stage 1

- Rifle range commands, drills and safety;
- The correct use and adjustment of sights;
- Tactically correct shooting positions including the use of cover; and
- How to fire the weapon accurately from the standing, kneeling and prone positions over various distances.

Intermediate - Stage 2 (requires adequate ammunition to be available)

- Tactically correct techniques to accurately engage a moving target;
- Aimed and instinctive shooting - day and night; and
- How mental conditioning and stress can affect a person in a combat situation - the Observe, Orientate, Decide, Act (OODA) loop decision cycle.

Assessment Criteria

Basic - Stage 1

- Practically demonstrate a high level of competence and safety in all the rifle range drills;
- Demonstrate adjusting sights correctly for elevation and direction;
- Demonstrate the correct techniques for grip, elbow position, alignment, breathing, trigger pull and follow through;
- Correctly and accurately operate a weapon at varying distances appropriate to local operational terrain; and
- Demonstrate the majority of shot placement in centre body mass.

Intermediate - Stage 2

- Practically demonstrate hitting a moving target accurately;
- Demonstrate movement with a weapon;
- Using a jungle lane, demonstrate accurate instinctive shooting at stationary and moving targets during the day and at night including demonstration of rapid and accurate target discernment; and
- Explain how to use the OODA loop principle when managing the impact of combat-induced stress on the mind and body.

3.2.4.3 Immediate action drills

Recommended minimum time allotment	
Theory: 1 hour	Practical: 4 hours & reinforced throughout training course

Overview

Contact drills should be structured as ‘immediate action drills’ and must be pre-drilled and pre-rehearsed actions that can be carried out instinctively, without orders or instructions being issued, for a given situation. It is imperative that contact drills are practised with live ammunition and in an environment that the rangers are likely to operate in.

Core Competencies

On completion of the module the ranger must have learnt:

- The principles behind Immediate Action Drills;
- The tactically correct actions for breaking contact;
- The tactically correct actions of fire and movement; and
- Individual and team operational firearm tactics.

Assessment Criteria

- With live ammunition usage, demonstrate day and night contact drills in the following scenarios:
 - When the rangers see the poachers first,
 - When the poachers and rangers see each other simultaneously, and
 - When the poachers see the rangers first.

N.B. In each of the above drills, loud and clear commands and signals need to be demonstrated to call for fire, indicate targets, and convey the plan of action and the operational status of each member.

3.2.4.4 Patrols

Recommended minimum time allotment	
Theory: 2 hours	Practical: 4 hours & reinforced throughout training course

Overview

Patrolling is when a team move across terrain, and take various forms and sizes according to the desired objective. The task of protecting a designated area is most often carried out primarily by rangers through patrols. An appropriate patrol strategy needs to be in place for any area being monitored, and will be influenced by the specific aim and environmental factors which include terrain.

Core Competencies

On completion of the module the ranger must have learnt:

- The reasons for patrols;
- Patrol types and their application:
 - General duty patrol – routine patrols not acting on targeted information (e.g. routine patrols, seasonal patrols, boundary patrol, fire patrols),
 - Directed patrol – targeted patrol responding to information received, can include search and tracking patrols, etc.,
 - Community patrol – going into the local villages and gathering information and creating awareness,
 - Escort patrol – safeguarding people or animals,
 - Overt reconnaissance patrol – information gathering patrol,

- Covert reconnaissance patrol – small team tactics applied in operational areas,
- Clandestine reconnaissance patrol – information gathering through pseudo ops, and
- Joint patrol – any type of patrol conducted in combination with other agencies;
- Patrol methods (e.g. foot, vehicle, aerial, waterborne and animal);
- Tactically correct patrol formations and patrol techniques;
- Individual sectors and responsibilities within a patrol;
- How to plan and conduct a short and an extended patrol; and
- How to cross minor and major obstacles.

Assessment Criteria

- Explain the reasons for patrols, the different types of patrols and their respective techniques;
- Explain how terrain, distance, level of urgency, available intelligence and availability of equipment can influence a patrol;
- Demonstrate patrol formations (e.g. single file, extended line, box, diamond, and scorpion patrol formations);
- Use hand signals to demonstrate the ability to conduct a patrol covertly;
- Plan and conduct a short patrol integrating the principles of movement e.g. spacing, communication, noise discipline, stealth, observation, camouflage, speed of movement and tactical rest stops;
- Plan and conduct an extended patrol demonstrating essential elements e.g. patrol equipment selection, patrol safety, ration and water planning, navigation, patrol discipline, temporary base site selection, regular rest stops; and
- Demonstrate the successful approach and negotiation of several different obstacles.

3.2.4.5 Surveillance

Recommended minimum time allotment	
Theory: 4 hours	Practical: 8 hours & an additional 1 hour for each spotting equipment

Overview

Surveillance is a systematic stationary (including Observation Posts) or mobile observation of a person, area or object of which there is a specific interest or concern. The intention is to gain detailed information, which may indicate the presence of illegal or suspicious activities in or around a protected area. It feeds into an overall picture of a protected area’s security plan, and can allow for more effective distribution of resources to key areas or vulnerabilities.

There are generally two purposes for conducting surveillance: Firstly, to observe a target area with the purpose of gathering information; secondly to observe an area with the intention of intercepting a target.

Successful surveillance requires a high degree of self-discipline, patience and teamwork. Although the teams are often small, these niche units generally seek to remain unnoticed by their target in both urban and rural environments.

Core Competencies

On completion of the module the ranger must have learnt:

Basic

- The different types of surveillance and observation posts;
- The principles and aims of surveillance;
- How to select and utilize basic surveillance and hide equipment (e.g. binoculars, spotting scope, camouflage netting);
- The principles of camouflage and concealment in relation to conducting an observation or listening post;
- How to select or construct and then conduct maintenance on a position;
- How to ingress and egress correctly from a position;
- How to operate as part of a small unit (2-3 man team);
- Time and resource management during a surveillance operation (e.g. food, sleep, toilet);
- The principles of personal discipline during a surveillance operation (e.g. smoking, noise, movement, light, fires, monitoring target area); and
- Assess the relevance of actions observed.

Advanced

- Knowledge and correct use of advanced equipment used for specific surveillance operations (e.g. Listening devices, long-lens cameras, night optics);
- Detecting and countering surveillance; and
- Recognising the need for out of agency support.

Assessment Criteria

Basic

- Explain the difference between an *impromptu* or a planned listening post and observation post in both an urban and rural environment;
- Explain the requirements for a surveillance operation and the core principles required to make it successful;
- Explain how to manage time and resources such as food, toilet breaks, sleep and water, and the importance of personal discipline which would be required during a surveillance operation;
- Demonstrate the correct selection and use of equipment for conducting a surveillance operation;
- Demonstrate the correct appreciation of camouflage and concealment principles whilst setting up a surveillance post over a target area;
- Demonstrate the suitable selection or construction of an advantageous position in the establishment of a surveillance operation; and

- How to ingress and egress correctly and undetected from a surveillance position.

Advanced

- Explain and demonstrate the use of specialist equipment for a specific surveillance operation;
- Explain the principles behind counter-surveillance and the actions required; and
- Describe a situation that would require direct and immediate inter-agency support, e.g. police or army.

3.2.4.6 Rapid response to emergency situations

Recommended minimum time allotment	
Theory: 1 hour	Practical: 4 hours

Overview

The ability to respond rapidly to an incident can often be critical to success. Whether as a Quick Reaction Force (QRF) responding to an emergency in the field, or proactively taking part in a raid, the principles of high preparedness and rapid decision-making remains the same. Having durable and clear Standard Operating Procedures (SOPs) are very important for effective rapid response.

Core Competencies

On completion of the module the ranger must have learnt:

- The importance of threat evaluation which includes criminal potential and the team's own vulnerability;
- The importance of equipment and personal readiness;
- The principles and conduct of cover by fire; and
- The use of sudden and overwhelming force within Rules of Engagement.

Assessment Criteria

- Explain the threat evaluation procedure; and
- Demonstrate five minute reaction time to a call out (this should be done when training on other modules).

3.2.4.7 Searching and raids

Recommended minimum time allotment	
Theory: varying depending on applicable environment	Practical: 4 hours, however will vary depending on applicable environment

Overview

Under certain circumstances rangers may lawfully search an area, a person, vehicle, or premises. To search unlawfully or attempt to search without the proper authorization would lay the searcher open to criminal prosecution for assault or to civil action for damages. The ranger must make sure to

operate within the legal framework and that any raids and searches conducted are done so in an orderly manner.

Not all wildlife crime takes place within a protected area, it may be necessary to move through villages and urban areas and search houses outside a protected area in order to recover contraband or wanted criminals. While most often escorted by police or military, knowledge of these techniques will make a ranger safer and more effective.

Core Competencies

On completion of the module the rangers must have learnt:

- The legal powers and limitations of the team (as per the legislation);
- The use of 'search' or 'arrest' warrants;
- Orientation on jurisdictional issues and knowledge of the agencies that may be required to be co-operated with;
- The basic principles of searching and raids, including the use of 'winthroping' to identify cache locations;
- What equipment is needed and its use for a searches and raids and the role of each person in the search team;
- The importance of planning, briefing, debriefing, safety and security;
- The correct procedures and techniques and under what circumstances each of the following can be conducted:
 - Body search (including procedure for searching a female, or suspected armed person),
 - Property search,
 - Vehicle search,
 - Area searches, and
 - Raids;
- Principles of a perimeter, and a cordon;
- How to approach, make use of cover, and entry and exit of a suspected hostile structure;
- House search techniques, and common internal and external cache locations;
- The correct procedure should any illegal items or evidence be located during a search;
- The importance of documentation and which information should be recorded if evidence is found, e.g. photos, videos, time, date, address at which items were confiscated, suspected offence, name, identity number, date of birth and sex of owner of building, details of occupants, witnesses names, addresses, items confiscated, any other useful information – such as were there threats, verbal abuse, or did anyone try to escape;
- The correct arrest procedure, if the situation warrants an arrest; and
- Why and how to conduct a search or raid in an orderly manner.

Assessment Criteria

- Explain legal powers and limitation of different members;
- Explain the principles of searches and raids;

- Demonstrate a search of a person, property, vehicle (including in an emergency roadblock), area, and a raid (including evidence collection, information collection and arrest procedures);
- Explain the establishment of a perimeter, and the conduct of a cordon and search;
- Describe common cache locations and possible indicators;
- Demonstrate a working knowledge of various search equipment; and
- Demonstrate how to safely approach and enter a potentially hostile house.

3.2.4.8 Vehicle check points

Recommended minimum time allotment	
Theory: 1 hour	Practical: 4 hours

Overview

Vehicles are the most common method of transporting contraband from poachers on the ground to intermediaries in larger towns. As such it is important for a ranger to understand how to carry out a checkpoint, and search, safely and effectively.

Core Competencies

On completion of the module the ranger must have learnt:

- The principles of Vehicle Check Points (VCPs);
- The legalities of setting up and manning a VCP;
- How to situate and establish a VCP;
- The equipment required for both a planned and spontaneous VCP;
- The conduct required for a VCP, and roles and responsibilities of everyone present;
- The tactically correct and safe procedures required to operate a VCP and approach a vehicle; and
- How to safely and effectively search a vehicle.

Assessment Criteria

- Establish and conduct a VCP, demonstrate a thorough knowledge of the equipment used, site placement, ranger placement and their respective roles as well as sound management and discipline principles;
- Demonstrate, using tactically correct techniques, how to approach a vehicle and initiate contact with the driver;
- Individually demonstrate vehicle search techniques; and
- Demonstrate in teams how to conduct a cooperative and a non-cooperative search.

3.2.4.9 Temporary bases

Recommended minimum time allotment	
Theory: 1 hour	Practical: Reinforced throughout training course

Overview

A temporary base may be as small as an overnight stop for a reconnaissance patrol, or a more substantial support camp for an observation post. However, the principles remain the same.

Core Competencies

On completion of the module the ranger must have learnt:

- The role of a temporary base;
- The principles of temporary base selection taking into account defence, terrain, vegetation, wildlife and human movements patterns, access to water, shelter from the elements, proximity to water and the objective of the patrols;
- Reducing detection;
- Appropriate infiltration and exfiltration of a temporary base;
- The role and actions required of sentries;
- How to communicate within a temporary base;
- Discipline and team and personnel conduct required within a temporary base; and
- Night and morning stand-to routine.

Assessment Criteria

- Select and evaluate the suitability of five different temporary base sites using a combination of local knowledge, reconnaissance and topographical maps;
- Demonstrate how to secure, occupy, establish, carry out a night routine, infiltrate and exfiltrate a temporary base;
- Demonstrate communication and team and personnel conduct within a temporary base; and
- Describe the role of sentries and sentry routine.

3.2.4.10 Ambush

Recommended minimum time allotment	
Theory: 1 hour	Practical: 5 hours during day and at night

Overview

An ambush or ensnarement is an operation where rangers lie in wait for poachers or persons involved in illegal activities from a concealed position. An ambush can be a very effective tactic in law enforcement. The element of surprise is crucial to the success of an ambush and they require strict discipline, leadership and high standards in training and field craft.

Core Competencies

On completion of the module the ranger must have learnt:

- The reasons for an ambush;
- The legal basis for conducting an ambush;
- The principles of ambushing;
- The different categories of ambushes;

- Ambush groupings and associated responsibilities;
- Tactically correct techniques of communication in an ambush;
- How to initiate, follow through with, and withdraw from an ambush; and
- The equipment required to conduct an ambush.

Assessment Criteria

Explain:

- Explain the principles of ambush, with a focus on the element of surprise, having a simple plan, intelligence, early warning, depth, discipline and determination, and an alternative plan;
- Explain ambush site selection and describe different layouts and their associated responsibilities for an ambush for the following ambush groupings:
 - Early warning group,
 - Command group,
 - Attack group,
 - Stopper group, and
 - Reserve group;
- Explain the various ambush format layouts that are most appropriate to the rangers' specific environment and demonstrate the sequence of movement when occupying the various ambush sites; and
- List the equipment needed for an ambush.
- Demonstrate a deliberate and an immediate ambush during the day and at night avoiding detection and using strategic illumination if necessary;
- Explain the conduct during a long term ambush (longer than 72 hours) in the correct sequence and explain working in buddy pairs and a guard duty roster;
- Demonstrate competence in communication using hand signals, hand taps, communication rope (para-cord) and radios when in an ambush;
- Demonstrate how to initiate an ambush and follow-up techniques (searching ambush area) using live ammunition and the correct procedures for handling prisoners;
- Demonstrate a thorough understanding of cover and concealment;
- Demonstrate competence in communication using hand signals, hand taps, paracord and radios when in an ambush;
- Demonstrate withdrawal techniques from an ambush site; and
- List the equipment required to conduct an ambush.

3.2.4.11 Night operations

Recommended minimum time allotment	
Theory: 1 hour	Practical: 6 hours & an additional 2 hours for each extra equipment item

Overview

The cover of night can provide a valuable advantage to both rangers and poachers. Being able to operate effectively at night can give rangers the upper hand.

Core Competencies

On completion of the module the ranger must have learnt:

- How the human eye adjusts to darkness;
- Methods of movement and navigation at night without NVGs;
- The equipment needs for night operations;
- The principles behind NVGs and thermal imaging optics;
- The tactically correct operation of NVGs and thermal imaging optics; and
- The importance and conduct of light discipline.

Assessment Criteria

- Briefly explain the acclimatization process for the human eye at night;
- Demonstrate movement and navigation at night without NVGs;
- Demonstrate care, maintenance, and use of NV equipment; and
- Demonstrate movement at night and command and control using NVGs.

3.2.4.12 Unexploded ordnance, land mines and booby traps (elective)

Recommended minimum time allotment	
Theory: 8 hours	Practical: 8 hours

Overview

During the past 40 years, more than 100 million land mines have been placed in more than 50 countries, and numbers are increasing by each additional local war. The population at risk is mainly rural farming communities and people, such as rangers, who work in wild and rural areas. Surveys in mine-infested countries indicate mortality rates in civilian mine victims as high as 40-50%, most fatalities being pre-hospital. Whereas antipersonnel (AP) mines are designed to incapacitate or cause serious injury by blowing off a foot or hand or causing wounds with fragments, about 20% of victims die from mine blasts or ensuing complications.

Rangers working in areas where Unexploded Ordnances (UXOs) including aircraft bombs; all types of mines; and any military munitions of above 0.5 calibre; are still found, must be especially aware of the hazards, particularly of mines and booby traps. Knowledge of their workings and how they are employed is also essential.

Core Competencies

On completion of the module the ranger must have learnt:

- The definitions of the various terms used in connection with UXO's (e.g. anti-tank mines, AP mines, grenades, bomblets, clearance operations, hoax devices);
- How to identify the types of UXOs that could be found in their particular area of operations;
- SOPs on the discovery of suspected UXO locations (contact, cordon, control); and
- The correct procedures for contacting the relevant UXO clearance authority.

Assessment Criteria

- Define the various terms used in connection with UXOs, e.g. anti-tank mines, AP mines, grenades, bomblets, clearance operations, finds, hoax devices;
- Explain how to identify the types of UXOs that may be found in their particular area of operation;
- Explain and show an understanding of the SOP (contact, cordon, control) on the discovery of suspected UXO locations, or 'finds' of explosives intended for illegal use; and
- Explain the correct procedures for contacting the relevant UXO clearance authority.

3.2.4.13 Waterborne operations (elective)

Recommended minimum time allotment	
Crew	
Theory: 3 hours	Practical: 5 hours
Coxswain	
Theory: 16 hours	Practical: 24 hours

Overview

Many protected areas are permeated or dominated by water systems, and it may be a rangers role to operate in this environment, bringing with it unique challenges and dangers.

Core Competencies

On completion of the module the ranger must have learnt:

Crew

- Riverine and coastal characteristics;
- How to improvise flotation devices and methods, including of how to tread water and swim;
- Personal and equipment preparations;
- The conduct and patrol formation required aboard watercraft;
- Immediate action drills, e.g. attack on launch, man overboard, use of bilge pumps;
- Enquiries afloat;
- How to embark and disembark and vessel;
- To identify boat types within the area;
- Basic boat handling skills, e.g. start/stop engines, use paddles and oars, docking ropes; and
- Use of ropes for moorings, rescue, and lashings, e.g. clove hitch, round turn two half hitches, bowline.

Coxswain

All the above skills plus:

- Navigation with instruments, and without instruments;
- Basic knowledge of meteorology;
- Basic knowledge of engine operations and repairs;
- Boat handling skills, e.g. moving alongside a pier or another vessel, foul weather manoeuvres;

- How to conduct casualty evacuation (CASEVAC) by boat, with appropriate care; and
- How to coxswain a variety of local craft.

Assessment Criteria

Crew

- List different characteristics and considerations of riverine and coastal areas;
- Prepare personal equipment for waterborne operations;
- Demonstrate:
 - The ability to maintain flotation for 10 minutes, and make way to shore,
 - How to embark and disembark a craft, both in non-tactical and tactical environments,
 - A working knowledge of conduct and patrol formation aboard watercraft,
 - A clear understanding, and working knowledge, of immediate action drills (e.g. 'attack on launch', man overboard, use of bilge pumps),
 - A working understanding of basic boat handling skills (e.g. start/stop engines, use paddles/oars, docking ropes), and
 - Proficiency with knots and hitches used for moorings, water rescue, and lashings;
- Indicate procedures for enquiries afloat; and
- Identify boat types within the area.

Coxswain

As per the above, for crew members, plus:

- Demonstrate the ability to navigate with instruments and without instruments;
- Demonstrate a basic knowledge of meteorology;
- Demonstrate a basic knowledge of engine operations and repairs;
- Demonstrate boat handling skills, e.g. coming alongside a pier or another vessel, foul weather manoeuvres;
- Discuss the procedures needed to ensure a safe CASEVAC by boat; and
- Describe the knowledge and skills required to ably coxswain the variety of local craft in use.

3.2.4.14 Aerial support (elective)

Recommended minimum time allotment	
Theory: 1 hour	Practical: 3 hours

Overview

Aerial support can act as a force multiplier to provide either surveillance or rapid transport across a far larger amount of ground than conventional methods. Rangers may be called upon to work with aircraft, and therefore need to understand the different roles and capabilities of such craft.

Core Competencies

On completion of the module the ranger must:

- Be able to explain the roles and capabilities of different aircraft;
- Know how helicopter drills work (e.g. embark, disembark, emergency procedures, danger areas);
- Know how fixed-wing aircraft drills work(e.g. embark, disembark, emergency procedures, danger areas);
- Understand ‘ground to air’ signals;
- Be able to act as a spotter; and
- Know how aircraft can be used to channel poachers to tactically and strategically advantageous ground.

Assessment Criteria

- Explain the abilities and limitations of rotary and fixed wing aircraft;
- Demonstrate embark and disembark techniques, and team coordination, for each aircraft;
- Demonstrate ground to air hand and land signals; and
- Working with an aircraft, select and occupy an area that gives the ranger team a tactical and strategic advantage.

3.2.4.15 Combatives

Recommended minimum time allotment	
Theory: 0.5 hours focusing on safety	Practical: 24 hours, an additional - 8 hours for inclusion of control & restrains, 8 hours for physical training, and 8 hours for self defence

Overview

Close quarter encounters with poachers often result in injuries or death to anti-poaching rangers. Having a set of skills and the confidence to use them can greatly reduce the threat of injury or death. The intensity of, and skills demonstrated, need to physically and psychologically prepare a ranger to deal with a determined attacker. Unarmed combat skills form an important part of this module.

Core Competencies

On completion of the module the ranger must have learnt:

- Situational awareness - Observe, Orientate, Decide, Act (OODA);
- Control and restraint techniques (compliance and control techniques);
- Prevention techniques to being overpowered by a prisoner;
- Unarmed combat skills to be able to subdue an attacker or a suspect attempting to escape or avoid arrest;
- Firearm retention skills;
- Tactically correct armed and unarmed response options when encountering sharp-edged or blunt weapons;
- Tactically correct use of a baton;
- Tactically correct use of pepper gas or other irritants in an intermediate force situation;
- To prevent unnecessary risks of injuries and death of the suspect during and after the arrest (positional asphyxia); and

- Coordinated team defence.

Assessment Criteria

- Explain situational awareness;
- Demonstrate the techniques to restrain a prisoner;
- Demonstrate the techniques used to safely transport a prisoner to a holding or collection area;
- Show how to deal with and subdue a determined attacker;
- Demonstrate the techniques used to retain a firearm in a confrontation;
- Demonstrate the response options used to evade and disarm a determined attacker with a sharp-edged or blunt weapon in an un-choreographed attack;
- Show how to use a baton for defensive (blocking), offensive (jabbing), control and restraint, and escort techniques;
- Demonstrate the tactically correct techniques and safety precautions for deploying pepper gas or other irritants;
- Demonstrate an understanding of the anatomy and physiology of a human and the impacts the various arresting and subduing techniques can have on the body when arresting a suspect, as needed to prevent unnecessary risks of injuries and death (positional asphyxia); and
- Demonstrate a coordinated team arrest procedure.

3.2.4.16 Standard operating procedures

Recommended minimum time allotment	
Theory: 1 hour	Practical: 1 hour

Overview

Standard Operating Procedures (SOPs) are unique procedures that comprise a set of essential steps that instruct how to perform a specific task. They need to be performed routinely, allow minimal variation, prevent loss of effectiveness through deviation from best practice and reduce errors within the command and operational environments. SOPs allow units and individuals to communicate with and act together consistently effectively.

Core Competencies

On completion of the module the ranger must have learnt:

- Why and how SOPs are created;
- The relevant SOPs that the rangers will be expected to know in order to carry out their respective roles; and
- The procedures for implementing a SOP, and for updating it if necessary.

Assessment Criteria

- Demonstrate a thorough understanding of the SOPs within the rangers organisation; and
- Explain the need for and advantages of SOPs.

3.2.4.17 Wildlife crime information gathering

Recommended minimum time allotment	
Theory: 2 hours	Practical: 2 hours

Overview

All too often anti-poaching units have vast areas to patrol and most commonly the strategy is reactive in its approach. Forewarning of a poacher's intent and capabilities allows for an intelligence led approach to be adopted. Intelligence gathering can be the most important component of proactive contemporary law enforcement.

Core Competencies

On completion of the module the ranger must have learnt:

- The role of intelligence gathering in contemporary law enforcement activities;
- The difference between information and intelligence and how to convert information into intelligence;
- Different types of intelligence;
- The basic principles, as well as opportunities and risks, related to the recruitment, handling and evaluation of informants and informant networks;
- Principles of information sharing mechanism;
- Incentives and motivation for assisting law enforcement; and
- How to debrief an informer and log information.

Assessment Criteria

- Explain different forms of intelligence and give examples;
- Explain personality types and possible motivations for providing information; and
- Individually demonstrate an interview with an informant (asset).

3.2.4.18 Mission planning and orders

Recommended minimum time allotment	
Theory: 1 hour	Practical: 2 hours

Overview

Orders are the means by which a commander or superior conveys intentions to their subordinates and the directions for fulfilling them. Orders can be given in a formal written format or by a verbal briefing, or a combination. Formal orders are generally used at higher command level. It is preferred that all operation orders be written down and delivered orally in a briefing.

Types of orders include:

- Giving a guard direction to do a task,
- Quick orders for an incident that is occurring,

- Operation orders for unit level tasks,
- Patrol orders,
- Security or defence orders, and
- Formal orders for higher command level tasks.

All orders must be accurate, clear and concise. All orders should be planned, make an appreciation of the situation, and be structured and written down prior to being presented.

The aim of mission planning and ultimately the issuing of orders is to prepare each ranger on patrol with sufficient knowledge so that they know exactly what the mission is about, where the mission will be, how the mission will be conducted, the composition of the teams, what equipment and logistics are required and timings.

Core Competencies

On completion of the module the ranger must have learnt:

- The purpose of orders and the types of orders;
- The characteristics of orders;
- The Situation, Mission, Execution, Administration and Logistics, Command and Signal (SMEAC) Orders format and how to deliver orders using the SMEAC format;
- The sequence for the execution of orders;
- What information should be included in orders; and
- Mission debriefing protocols and formats.

Assessment Criteria

- Explain the different tactical orders, formal orders, battle orders, radio orders and snap orders;
- Explain the sequence for the execution of orders;
- Demonstrate an understanding of what information an order should include under terrain, situation, poachers, local population, own forces, reactions, execution, admin and logistics, equipment, control and signals, scheduled times, code words, call signs and frequencies and channels; and
- Demonstrate mission debriefing, both orally and in written format.

3.2.4.19 Basic crime scene response and photography

Recommended minimum time allotment	
Theory: 3 hours	Practical: 4 hours

Overview

The investigation of a crime is a critical component of law enforcement, that if conducted in a professional and thorough manner, can positively influence the prosecution of a case and ultimately the severity of the sentence handed down. The investigation starts with the crime scene. A disturbed crime scene can impact the quantity and quality of the evidence and it is in this context that crime

scene management (i.e. preservation), plays such an important role. The first responder is responsible for the protection of the scene.

Core Competencies

On completion of the module the ranger must have learnt:

- Overview of what crime scene management is and its importance in the chain from field to court;
- Correct procedures to approach the scene (Confirm);
- How to correctly initiate a preliminary survey and determine scene boundaries (Cordon);
- Correct techniques to secure and protect the crime scene (Control);
- Correct techniques used to evaluate physical evidence possibilities (Searching the crime scene);
- Correct techniques to protect and preserve evidence ‘as-is’ at a crime scene in case of inclement weather and the basics of crime scene photography;
- How to report relevant details to the Crime Scene Investigator (CSI) or Scenes of Crime Officer (SOCO).

Assessment criteria

- Describe the concepts of crime scene management and its importance in the ‘field to court’ continuum;
- Describe the correct procedures to approach the scene (including search for possible suspects still in the area);
- Demonstrate how to correctly initiate preliminary survey and determine scene boundaries (cordon the area including approaches and egress routes);
- Indicate the correct techniques to secure and protect the crime scene (Control);
- Explain the correct techniques used to evaluate physical evidence possibilities (searching the crime scene - spiral, strip, grid searches);
- Describe the correct techniques to protect and preserve evidence as-is at a crime scene in case of inclement weather, e.g. plastic sheeting placed over footprints, until arrival of the CSI/SOCO;
- Demonstrate how to take photographs at a crime scene, use labels and bags, and make accompanying notes;
- Explain how to report relevant details to the CSI or SOCO; and
- Explain common mistakes made by rangers at a crime scene.

3.2.4.20 Basic identification of wildlife products

Recommended minimum time allotment	
Theory: 2 hours	Practical: 3 hours

Overview

The primary job of rangers is to prevent poaching of wildlife in their respective parks. However, during their course of duty, rangers will likely confiscate an array of wildlife items or products. It is

crucial for rangers to identify these items correctly. The correct identification of wildlife items along with well prepared court documentation improves the chances of conviction.

Core Competencies

On completion of the module the rangers must have learnt:

- How to identify common wildlife items or products applicable to their area of operation e.g. horns, hooves, meat, ivory tusks; this may be through physical identification or sample collection for biological identification;
- Record and measure wildlife items or products;
- Storage of confiscated wildlife items or products;
- How to determine an economic value of wildlife items or products;
- Be familiar with the wildlife species protection list for their country; and
- A basic understanding of Convention on International Trade in Endangered Species (CITES) concept.

Assessment Criteria

- Identify different wildlife items or products and explain the identification methods;
- Demonstrate how to record, measure and store wildlife items or products;
- Explain the national wildlife species protection list and concept of CITES; and
- Explain how to work out the economic value of the item or wildlife product.

3.2.4.21 Interview and interrogate

Recommended minimum time allotment	
Theory: 1 hour	Practical: 2 hours

Overview

When an individual is suspected of being involved in an offence, either as an offender or a witness, they need to be interviewed regarding their knowledge of the matter at hand. Interviewing suspects can provide very useful information leading to successful prosecution of a criminal act.

Core Competencies

On completion of the module the rangers must have learnt:

- The legal grounds for apprehension, detention, and guidelines to interviews or interrogations;
- When suspects should be interviewed under caution;
- The reason for interviews and interrogations;
- Types of equipment available to assist recording interviews, e.g. tape recorders, video cameras;
- The best times and procedures to follow when conducting interviews or interrogations, e.g. interviewed individually directly after apprehension;

- What information to obtain from suspects, e.g. name, where they come from, where they were going, how many of them were there, where the others were going, who they are, who else they are working with; and
- What to do with the information obtained, e.g. whether the information to be used to carry out immediate follow-ups.

Assessment Criteria

- Explain the legal rights of an apprehended person;
- Explain a ranger's powers to detain and interrogate;
- Explain the reasons for interviews and interrogations;
- Demonstrate how to conduct interviews and interrogations (including ensuring the suspect is not physically or verbally abused); and
- Explain what information should be gathered and what this information should be used for.
- Demonstrate how to use equipment to legally record an interview or interrogation.

3.2.4.22 Joint operations and cooperating with other law enforcement agencies

Recommended minimum time allotment	
Theory: 1 hour	Practical: 0 hours

Overview

At times rangers will work alongside other authorities such as National Police, Military, and other Anti-Poaching Units. Close coordination can increase the chances of success, but also brings with it the potential for confusion, mismanagement, and even danger.

Core Competencies

On completion of the module the ranger must have learnt:

- Lines of communication, command, and liaison when working with other law enforcement agencies;
- Strengths and weaknesses of the individual units and forces involved, and the principles of how working together appropriately can improve the success of operations; and
- 'Marry-up' procedure in the field between separate units.

Assessment Criteria

- Explain the lines of communication and command between different units; and
- Demonstrate the marry-up procedure.

3.2.4.23 Pesticide crime and wildlife poisoning investigations (elective)

Recommended minimum time allotment	
Theory: 24 hours	Practical: 3 hours

Overview

Many protected areas and adjacent areas are victim to poaching with the use of pesticides, whether for animal parts or for protein harvesting. It may be a rangers role to address and investigate crime scenes where pesticide has been used as the killing method. This role has unique challenges and hazards.

Core Competencies

On completion of the module the ranger must have learnt:

- An overview of pesticides and agrochemical basics: the classes, compounds, toxicity to mammals, birds and fish, and terminology used—such as half-life, toxicity and lethal dosage—in order to understand chemical product labels and how to interpret information;
- Use of pesticides and calibrating equipment (theory and practical): responsible pesticide purchasing, transport, storage, control and use; including health and safety issues and safe disposal, to enable broad comprehension of the risk management along the use chain;
- An overview of pesticide and chemical crime: pesticides are abused through ignorance and negligence, or for environmental and wildlife crime;
- To understand and identify the pesticides most abused in wildlife crimes;
- The legislation related to pesticides and poisons, to enable them to lay charges correctly and competently;
- Legal toxins in human, wildlife conflict management, the consequences and pitfalls;
- Reference sheets as developed for field use, to guide investigators to identification of toxins from symptoms shown by victim birds or animals;
- Poisoning investigation and prosecution protocols from the crime scene to court room; and
- Incident report forms and how to complete and submit them.

Assessment Criteria

- Describe World Health Organization colour bands to classify toxicity of products at a glance;
- Prepare personal equipment for investigating a poison crime scene;
- Name three examples of chemical classes of pesticides;
- Give an example of an environmentally friendly pesticide;
- Name and describe two pesticides which are frequently abused;
- Explain how toxicity is measured;
- Give an example of a carbamate pesticide;
- Describe the general treatment for organophosphate poisoning;
- List actions and equipment required for poison crime scene investigations;
- Name the law that regulates pesticides;
- Indicate where to find a poison emergency telephone number; and
- Name a pesticide that is banned.

3.3 Monitoring and record keeping

3.3.1 Debriefing and reports

Recommended minimum time allotment	
Theory: 3 hours	Practical: 2 hours

Overview

Debriefing refers to the structured report-back session where the ranger is expected to give factual information, to a superior, on a patrol, investigation or other field task they have been instructed to carry out. The information supplied will be assembled and evaluated so that the key results, relevant and important facts or trends can be established which will be used in planning and improving future or follow up operations. The discussion and review of an event or action enhances teamwork and effectiveness.

Information is an extremely valuable tool at all levels of protected area management, and reports are how most information is conveyed to aid planning and adaptive management. Rangers are responsible for submitting accurate, detailed, honest and timely reports summarizing patrol activity, signs of illegal activity, wildlife sightings, etc. to their hierarchy. The practice of recording personal notes and using pocket books should be encouraged.

Core Competencies

On completion of the module the ranger must have learnt:

Debriefing

- The purpose of post-operation debriefing;
- To identify how and when a post operation debriefing should take place;
- To summarize what happened in an operation (what worked well and what challenges were faced); and
- To identify elements to maintain and others to improve, if necessary, and aspects of follow-up required.

Reporting

- Reasons for having standard report formats and accurate reporting;
- Types of reports particular to that area, e.g. patrol report, incident report, spoor report, gunshot report, SMART report, and be able to report quantitatively about patrol activities or specialist field tasks such as key species monitoring, surveillance and investigation; and
- Report formats.

Assessment Criteria

- Demonstrate an understanding of the report formats by drafting the following (whichever are applicable):
 - Patrol authorization form,
 - Patrol movements and observations form,
 - Situation report,

- Carcass report,
- Track/spoor report,
- Noise report,
- CASEVAC report,
- Contact report,
- Landing zone report,
- Patrol report,
- Debriefing report, and
- Key species observation report
- Aircraft or watercraft sighting report.

3.3.2 Data collection

Recommended minimum time allotment	
Theory: 2 hours	Practical: 2 hours & reinforced throughout training course. Additional time needed if specialist data is collected

Overview

It is vital that field data records are prepared and maintained to inform anti-poaching efforts. Relevant field data to be recorded includes a variety of things needed for wildlife management and protection such as law enforcement effort, live animal sightings and tracks, signs of poaching activities, details of carcasses, etc. Data is also collected for monitoring trends and for various management purposes, which can at times be for specialist projects if required. Rangers need to understand and be able to collect data appropriately, as it may be required in fulfilment of their duties.

Core Competencies

On completion of the module the ranger must have learnt:

Basic

- The purpose and importance of basic data collection;
- How to collect the necessary standard basic data during patrols and operations, concisely and accurately, which may be written on specific data sheets, or entered into an electronic hand held device;
- How to identify the 'items' for which data needs to be collected, e.g. illegal activity, key animal or plant species, animal tracks and signs;
- Where to submit the data once collected and in what time frame;
- The importance of safe keeping of data; and
- How to use basic monitoring equipment such as a GPS, digital camera and paper data sheets.

Specialist

- The purpose of specialist data collection;

- How to collect the necessary specialist data required, for example sightings of rare species, tracks or specific law enforcement data;
- How to identify the specialist 'items' for which data needs to be collected; and
- Where to submit the data once collected and in what time frame.

Assessment Criteria

Basic

- Explain the purpose of data collection;
- Complete all the necessary standard data sheets, and, where required, enter the data into the appropriate device;
- Identify all the necessary items for which data needs to be collected;
- Explain where to submit data once completed and in what time frames; and
- Explain the importance of keeping data safe.

Specialist

- Explain the purpose of specialist data collection, including the importance of accuracy in doing so;
- Complete all the necessary data sheets, and, where required, enter the data into the appropriate device, for the specialist information required;
- Identify the necessary specialist items for which data needs to be collected; and
- Explain where to submit the data once completed and in what time frame.

4. Post training

4.1. Post training evaluations and review

Training needs to be assessed after having been conducted in order to determine whether the training outcomes have been achieved. Training is never over. After a course has been completed, a validation on the training is required; which should occur after a few months. The rangers need to be assessed on the job, to determine what has and has not been retained by them. From this the reasons why components have not been retained needs to be determined and training must be adjusted accordingly.

Examples of evaluations include the ranger being required to:

- Conduct an exercise raid using live ammunition in the field as a member of a team;
- Conduct an exercise raid in the open as a member of a ranger team;
- Conduct an exercise without other rangers describing where people would be deployed for a raid;
- Answer questions after seeing a demonstration of a raid; and
- Undertake a written test on how to conduct a raid.

A training register should be kept, which includes the name of each ranger trained, the training received (type, scope and duration), results achieved, notes on their abilities, and recommendations for future training and development.

4.2 Post operation review for training requirements

After any anti-poaching operation, a debriefing and reporting session normally takes place. These sessions and reports must be analysed on a regular basis to assess whether additional training is required in a particular aspect to help improve operational success or safety.

4.3 Annual review of operations and potential training needs

As in the case of the above mentioned analysis of post operation debriefing and reporting sessions, it is also important that all field ranger tactics, general operations and special operations are reviewed on an annual basis to determine if any additional training is needed. This may simply lead to earmarking that ongoing refresher training is needed, or it may result in the identification of a more specific type of training as a requirement. Annual reviews are an opportunity to engage top management in the process of reviewing operational performance, examining training needs and reviewing whether budgets and resources allocated are adequate. Proper post operation and regular training reviews form the basis of being able to construct convincing arguments to top management and potential external partners. Annual reviews including reports to top management and partners are important, if not essential, to achieve improvements to operations and training regimes.

Conclusion

Field ranger anti-poaching work differs, sometimes markedly, in different parts of the world and even within a country. This makes the development of a useful global training guideline challenging. This training guideline attempts to take into consideration the various aspects across the globe. It includes various electives to include modules that may not be required by universally but to cater for situations where needed. The field of anti-poaching and ranger training is continually changing and improving and this document will need to be regularly updated as strategies, tactics and techniques improve.

Appendix 2. Example of the use of force continuum

In order to ensure voluntary compliance by the perpetrator several steps apply before resorting to the use of maximum force. These are, typically:

- Command Presence
- Verbal and non-verbal interaction
- Physical control
- Aerosol Gas
- Electrical devices
- Impact weapons
- Deadly force

Command presence

By adopting an attitude of self confidence and control the law enforcer insinuates his / her power due to the backing of the law in a situation. The perpetrator sees his options diminished and accepts his subjugation to the law in the matter at hand. This could potentially diffuse the situation. If it does not the next step in the use of force continuum is applied.

Verbal and non verbal interaction

The law enforcer advances the use of force continuum by using voice and presenting a more aggressive or solid stance. Verbal commands and body posture indicates to the perpetrator the law enforcer will and can gain control of the situation. The perpetrator now has to comply or face an advance in the use of force continuum.

Physical control

The law enforcer now applies physical control over the subject. This can be done by various physical moves, take downs and restraints. The law enforcer must match his physical actions to the abilities displayed by the X subject. It would be useless to try and apply physical control to a person that is armed and displays ability to use the armament. The failure to apply physical control leads to an advancement of the continuum.

Aerosol gas

The use of Pepper spray is an aggressive step. Pepper spray will disable a subject to allow for physical control or restraint. It can be administered from a relatively safe distance and if administered correctly is highly effective. Once the subject is down physical control can be implemented. Should the response be negative due to circumstance the next step of the continuum must be applied.

Electrical Shocking Devices

These devices are highly effective and combined with good tactics will render a suspect incapable. It is non-lethal and care must be taken not to “lose” the device during a struggle! If this device does not place the law enforcer in control of the situation or is negated by reactions from the subject the next step in the use of force continuum must be applied.

Impact Weapons

The use of impact weapons can be potentially fatal and should be used to obtain control as swiftly as possible. Various impact weapons exist but essentially almost any hard object can be used as an impact weapon. Care must be taken to avoid the deadly zones on the body during application of an impact weapon.

Deadly Force

This is the final option available to the law enforcer. The deadly force option includes the use of weapons against the subject when all else has failed. The law enforcer must always be prepared to apply deadly force when necessary. It is not an easy thing to do and must be legally justifiable. It is also an option which will remain with the law enforcer all his life. In certain situations the law enforcer would have to make this life or death decision in a split second. This takes mental preparedness as well as astute judgement.

Appendix 3. Example of stages of weapon readiness

To ensure safe handling and the prevention of accidents during active service, the rifle is carried in various stages of preparedness. The particular stage that a rifle is carried at, will depend upon the task being carried out and the proximity of the enemy.

Stage 0

Chamber empty
Breech closed
Magazine off
Change lever on 'S'.

This stage is used in safe areas where no immediate danger exists, such as in sleeping quarters, offices, houses and on public transport.

Stage 1

Chamber empty
Breech closed
Full magazine on
Change lever on.

This stage is used in non-operational areas and during training.

Stage 2

Chamber empty
Breech closed
Full magazine on
Change lever on.

This stage is used when in operational area where only a minor threat exists, on guard duty and when ordered to do so.

Stage 3

Round in chamber
Full magazine on
Change lever on 'S'.

This stage is used when on patrol in high threat zone, on vehicle sentry, and when ordered to do so.

Stage 4

Round in chamber
Full magazine on
Change lever on 'F'.

This stage is used when danger is imminent, in an ambush, and when so ordered to do so.

Stage 5

Round is chambered
Full magazine on
Change lever on 'A'.

This stage is only used in exceptional circumstances or when so ordered.

Appendix 4. Example of equipment lists

Table 1: Standard field issue for each patrol team member (example)

Quantity	Item	Replacement Interval
2	Uniform shirts long sleeve	Annual
2	Uniform trousers long	Annual
1	Uniform cap	Annual
1	Web belt, nylon 4,5cm	Three years
1	Bush jacket	Three years
1	Jersey – 80% polyester	Three years
1	Rain suit	Annual
3	T-shirt (olive drab)	Annual
1	Combat boots – pair	Annual
1	Rain boots (gum boots) - pair	Annual
4	Socks - pair	Annual
2	Leech socks – pair	Annual

	<u>For cold climates include</u>	
2	Silk underwear	Annual
1	Parka	Three years
1	Gloves	Annual
1	Head over/balaclava	Annual
1	Winter boots	Annual
1	Wristwatch (black waterproof type)	Three years
2	Water bottles (1 litre)	Annual
1	Mess kit	Two years
1	Multipurpose knife (SAK)	Three years
1	Back pack	Three years
1	Small personal first aid kit	As required
1	Notebook and pen	As required
1	Pair handcuffs/plasi-cuffs	Three years
1	Torch	Two years
1	Camouflage mosquito net/hammock	Three years
1	Sleeping bag	Three years
1	Extra rope for hammock (webbing) 4m	Three years
1	Rain flysheet 4m x 4m (quality)	Three years
1	Extra rope for flysheet (thick) 5m	Three years
1	Extra rope for fly sheet (thin) 12m	Three years
1	Machete	Three years
1	Lighter and Waterproof matches in case	Annual
1	Waterproof document case	Three years
1	Hand held radio	Three years

Table 2: Issue for routine patrols, over and above standard field issue (example)

Quantity	Item
1	Ration pack per man per day
1	Compass or GPS
1	Binocular
As necessary	Maps (waterproofed)
1	Radio (VHF or UHF)
1	Water purifying tablets
1	Small spade
1 roll	Toilet paper
	Rangers are responsible for their own personal issue. Must have 2 full water bottles per day.

Table3: Issue for clandestine patrol, over and above standard field issue (example)

Quantity	Item
1	Ration pack per person per day
1	Compass or GPS
1	Binocular or spotting scope
As necessary	Maps (waterproofed)
1	Radio (VHF or UHF)
1	Water purifying tablets
1	Small torch
1	Small spade
1	Surveillance log
1 per person	Clandestine footwear
1 per 2 person	Two person tent
	First aid kit - expanded (contents as per Table 2....)
3 rolls	Toilet paper
	Rangers are responsible for their own personal field issue. Must have 2 full water bottles per day.

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