



WORKING ON FIRE INTERNATIONAL

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CONSERVATION FIRE MANAGEMENT COURSE

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For Conservation Managers

Kruger National Park South Africa
Prescribed Burning : 5th to 9th May 2008
Fire Suppression : 12th to 16th May 2008

1. Introduction

The following Integrated Fire Management course is intended to equip managers in all aspects of Integrated Veld Fire Management. This will include Awareness, Prevention, Protection and Post Fire Rehabilitation.

The course is developed in collaboration with AfriFireNet and supported by the Global Fire Monitoring Center GFMC.

2. Objectives

To provide a comprehensive fire management training / capacity-building package for conservation managers in Southern Africa. This will cover the following:

3. Course Content

The course is focused on fire management based on a sound understanding of the fire ecology of African grasslands and savannahs. This requires an insight into the behavior and effects of fires in these ecosystems which can then be used for formulating fire management programs for livestock production and wildlife management that will include prescribed burning and the prevention and control of wildfires.

3.1 Fire a Natural Factor of the Environment in African Grasslands & Savannas - WT

Fire is recognised as being a natural factor of the environment in African grasslands and savannahs because of the occurrence of distinct wet and dry climatic periods and the existence of lightning as a natural ignition source. The wet periods enable the vegetation to grow and accumulate plant fuels, particularly grass material, which during the dry period become highly flammable and can and are ignited by naturally occurring lightning storms. This is supplemented by the dominant ignition source of fires caused by dense populations of human beings and has resulted in Africa becoming known as the "Fire Continent" where

its ecological role is widely recognised and used as an essential range management practice.

3.2 Fire Behaviour in African Grasslands & Savannahs - WT

Fire behavior refers to the release of heat energy during combustion as described by fire intensity, rate of spread of the fire front, flame characteristics and other related phenomena. Information will be presented on fire behavior parameters pertinent to fire effects, factors influencing fire behavior, fire behavior models and the behavior of different types of fires.

3.3 Fire Effects in African Grasslands & Savannahs - WT

The effects of fire on African grasslands and savannahs depend upon the four different components of the fire regime. Information will be presented on the effects of type and intensity of fire and season and frequency of burning on the grass and tree/shrub components of the vegetation. It will also be discussed how considering the inclusion of all these different components of the fire regime has greatly improved the ability to predict the effect of fire on the vegetation in African grasslands and savannahs. Finally information will be presented on the interacting effects of fire and herbivory on the composition and structure of grassland and savannah vegetation.

3.4 Prescribed Burning in African Grasslands & Savannahs – WT

Firstly recommendations will be presented on the use of fire as a range management practice for livestock production. This will include the reasons for burning, ecological criteria for prescribed burning, the recommended fire regime in terms of type and intensity of fire and the season and frequency of burning and finally the post-fire range management.

Secondly recommendations will be presented on the use of fire as a range management practice for wildlife management. Different burning systems have been developed for wildlife management in African grasslands and savannahs and these are best developed in Southern Africa and include the lightning burning system, range condition burning system, patch mosaic burning system and the integrated burning system. The different fire regimes and post-fire range management associated with these different burning systems will also be presented.

3.5 Practical Application of a Prescribed Burning Program - WT

Guidelines will be presented on the recommended burning procedure, different types of firebreaks, width of firebreaks, burning equipment and equipment for controlling fires.

3.6 Fire Weather - LH

- Using global monitoring systems
- Weather forecasts
- Fire weather statistics
- Relative importance of weather parameters
- Weather recording instrumentation
- Prescribed burning
- Weather prediction
- Using FDI predictions synoptic charts

Fire Detection - CA

- Aerial reconnaissance
- Patrolling
- Manual / unmanned towers
- Tower placement

3.7 Incidence Command Systems - FF

- ICS structure models
- ICS in Africa
- Recruiting and training
- International assistance
 - a) from Africa
 - b) from abroad
- Moving towards international co-operative agreements

3.8 Fire Detection - CA

- Camera system
- Manual system
- Investigating suitable African Law enforcement models

3.9 Fire Suppression – CA / FF / AH

- Training and manpower
- Ground crew organization
- Equipment
- Fire fighting procedures (including counter firing methods)
- Aerial fire fighting
- Fire fighting control
- Communication
- Evacuation
- Traffic control
- Disaster management

4. Live Fire Field Exercises

The course participants will participate in all the planning and live fire operations on the 2008 SAVFire research experiment which will be held in the Kruger National Park.

www.fire.uni-freiburg.de/GlobalNetworks/Africa/Afrifirenet_6f.html

5. Costing

See the attached Annexure A

ANNEXURE A

Course Price List

5.1	Prescribed Burning Course (Option 1)	Total Cost: Euro 791
	<ul style="list-style-type: none"> • Course will be held over 5 days • Cost will include all course material & PPE's issued for the duration of the course • Cost excludes accommodation & meals for the duration of the course • Cost excludes airfare & transport • Cost excludes vat 	
5.1.1	Prescribed Burning Course (Option 2)	Total Cost: Euro 1279
	<ul style="list-style-type: none"> • Course will be held over 5 days • Cost includes accommodation & meals for the duration of the course. • Cost will include all course material & PPE's issued for the duration of the course • Cost excludes airfare & transport <p>Cost excludes vat</p>	
5.2	Fire Suppression Course (Option 1)	Total Cost: Euro 791
	<ul style="list-style-type: none"> • Course will be held over 5 days • Cost will include all course material & PPE's issued for the duration of the course • Cost excludes accommodation & meals for the duration of the course • Cost excludes airfare & transport • Cost excludes vat 	
5.2.1	Fire Suppression Course (Option 2)	Total Cost: Euro 1279
	<ul style="list-style-type: none"> • Course will be held over 5 days • Cost includes accommodation & meals for the duration of the course • Cost will include all course material & PPE's issued for the duration of the course • Cost excludes airfare & transport • Cost excludes vat 	
5.3	Prescribed Burning & Fire Suppression Courses	Total Cost: Euro 2558
	<p>If a student wishes to attend both courses the above rate will be charged:</p> <ul style="list-style-type: none"> • Cost includes the weekend accommodation & meals • Cost includes all course material & PPE's issued for the duration of the course • Cost excludes airfare & transport • Cost excludes vat 	