

# THE SCHOOL FOR MOUNTAIN LEADERSHIP MOUNTAIN SKILLS NEWSLETTER



“Replacing luck with skill”

SML MOUNTAIN SKILLS NEWSLETTER | ISSUE NO: 1 | AUGUST 2020



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## SAFETY MANAGEMENT IN ADVENTURE

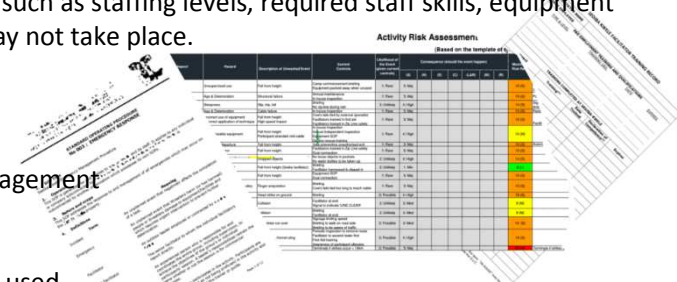
### ADVENTURE IMPLIES RISK, AND RISK HAS TO BE MANAGED

On 15 January 2020, at the start of the school year, Enoch Mpianzi drowned while on a school camp. While this particular death seems to involve a rogue operator with 4 previous deaths reportedly taking place at the same venue, the backlash that resulted impacted all adventure operators in the schools camping industry, and some beyond that. Dozens, if not hundreds of camp outings planned by schools being cancelled. One camp venue with whom SML does business informed us that they'd had in excess of R1-million worth of camps wiped off their books in the space of 3 weeks as schools (and churches, and businesses) cancelled their developmental outings left, right and centre. The reason? Concerns about how safety was managed at venues.

Despite the apparent “rogue operator” origins of this accident, the backlash forced the industry to take a hard look at how it manages safety. Many venue directors simply don't know what should go into an adventure operation's Safety Management System. This is made harder to understand by the act that safety management systems are scaleable. It makes no sense for a one-man mountain guiding operation to have a policy that requires facilitator (or guide) induction programmes, for example. But even the one-man operation will have certain aspects in place, such as an emergency plan. Depending on the scale of the operation, the safety management system may include:

- A Safety Policy, which explains how everything fits together and what various people's responsibilities are.
- Risk Assessments for all activities, identifying sources of danger, the risks that may manifest and how to manage them.
- Standard Operating Procedures for all activities which list things such as staffing levels, required staff skills, equipment requirements and conditions under which the activity may or may not take place.
- Inspection records of all safety equipment
- Training records of facilitators
- Emergency plans
- A mechanism for facilitators to report of safety concerns to management

At SML we were requested by a number of operators to assist them in developing their Safety Management Systems. While this system may be used as part of a defence in the event of a liability claim arising from an injury or loss, that is not its primary purpose. **The primary purpose of a Safety Management System is to put mechanisms in place to prevent an accident or loss** from ever happening, and to limit the damage or loss if it ever does happen.



# MOUNTAIN / HIKING LEADER TRAINING

Finally some good news!

In looking for places to conduct training we made contact with LEDET (Limpopo Economic Development, Environment and Tourism department). LEDET are the government department that manages the Wolkberg Wilderness Area near Tzaneen. They have indicated to us that although recreational hiking is limited (under Level 3 of the Disaster Management Regulations relating to COVID-19) to day hikes only (06h00 to 18h00) with group sizes maximum 4 people, this restriction does not apply to professional activities.

What this means is that training which is aimed at professional development is permitted to take place. Not only that, but it is not restricted to daylight hours only and may involve multi-day training, which they are willing to accommodate in Wolkberg.

With that in mind, we have set aside the dates of **Mon 07 to Sun 13 September 2020** (7 full days) to run a **Mountain Hiking Leader** training course in the Wolkberg Wilderness area. The plan is to cover the full spectrum of mountain leader skills, with the exception of high altitude skills and winter skills (snow and ice), which will be covered in the Drakensberg in a separate workshop.

## Planned topics include:

- The mountain environment and models of access
- Human thermoregulation, energy requirements and basic nutrition
- Mountain hazards (Weather, Terrain, Rivers, Creatures)
- Applied mountain weather forecast adaptation
- The SA legal and regulatory framework pertaining to adventure leaders, including risk management and liability
- Environmental impact management
- Equipment: Personal, Overnight and Group
- Personal movement skills
- Overnight skills (Campcraft and Hut etiquette)
- Navigation (Map, compass, GPS, applied)
- Trip and route planning
- Leadership responsibilities, group management skills and operational leadership
- Adapting urban First Aid to the wilderness environment
- Accident and emergency preparedness

There will be space for a **maximum of 8 participants**, operating on a first-come, first-served basis. We will need a minimum of 4 people to make this course viable. The **course costs per person will be R 3,750**.

These costs include:

- All access fees and permit fees for the Wolkberg Wilderness Area reserve
- Use of all training materials
- Training handbook and 1:50,000 topo map

Participants will be expected to bring their own personal and overnight equipment. If necessary, tents, sleeping mats, sleeping bags, stoves and pots may be rented for a nominal fee.

If you would like to grab one of the places on this course, please contact us at: [admin@sml.co.za](mailto:admin@sml.co.za)

# SAFETY NOTICES & PRODUCT RECALLS

## **PETZL: STATIC ROPE**

On 21 July 2020 Petzl issued an inspection instruction for LOW STRETCH KERNMANTEL ROPE (static rope) after a defect appears to have manifested during manufacture. See the link below for more detail.

<https://www.petzl.com/INT/en/Professional/recalls/2020-7-21/Request-for-inspection-of-Petzl-low-stretch-kernmantle-ropes>

## OTHER TRAINING AND ACTIVITIES

1. If you have enrolled for a GASG course, this is a reminder to get those assignments done! Feel free to email or phone for a consultation if you require assistance
2. Access to properties in the Magaliesberg remains extremely limited. At present we are able to only conduct 1-on-1 training in the Magaliesberg. Please contact us at [admin@sml.co.za](mailto:admin@sml.co.za) if you are interested in individualised training.

## TECH TIP: WHAT IS MAP DATUM?

(And why does it matter?)

When mankind started attempting to make maps of planet earth he was faced with a few problems:

1. The shape and size of planet earth was unknown (and assumed for millenia to be flat!)
2. There was no consistent system for referencing the location of a place.

The first problem (the shape and size of planet earth) was solved by measuring angles to specific stars relative to the horizon at specific times, then comparing the angles to the same star at the same time from different locations that were known distances and directions from one another. As the instruments used to measure time, angle above horizon and compass direction became more accurate, surveyors could calculate the shape and size of planet earth more accurately and improve their models.

The second problem was solved by creating an imaginary grid and “overlying” it on the mathematical model of the earth. Again, measurements were done using the stars as reference to determine the “coordinates” of locations. However, it didn’t take long for the surveyors to realise that when a new model of the shape of planet earth was derived it would create problems, since the position references (or coordinates) would not be consistent between models, and re-surveying every location would take too long. So, to solve this problem, they would model the shape and size of planet earth (called the Reference Ellipsoid) calculate the location of one location in terms of the specific model they were using. This combination of Reference Ellipsoid and Reference Location came to be known as map datum.

All other locations would be surveyed using that one location as their “point of origin”. When a new datum was defined, the relative positions of all other locations could just be recalculated using a formula instead of someone having to go out and re-survey every point. The implication of this is that the reference coordinates for a location are only valid for a specific datum. When the datum changes, so do the coordinates. The difference in South Africa between the “old” (Cape Datum) and the “new” (Hartbeeshoek\_94 Datum) is up to 285m in places – enough to send you down the wrong gully that isn’t the start of your mountain pass! So...if you are using a GPS to navigate, make sure that it is set to the same datum as the map you are getting the coordinates from!