

***MAFC Scouts Guidelines for Using CyberTracker for Data Collection***

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# Pre-Patrol Preparation


## As a Patrol Leader, understand the need for patrols (why) and what to know when planning protection activities (what)?

* What are the threats?
* Where are the threats and which is the most threatened area?
* What are the resources available for protection activities?
* Where have the patrols covered already?
* Are the threats increasing or decreasing over time?
* Are we achieving our aim of protection?
* Are the patrols effective?
* To know this - we need information which comes from data recorded during patrols.

## Understand the type of data required.

* Accurate
* Standardized
* Crime scene evidence
* Directly comparable across time and space
* Collected following systematic protocols

## Understand what the data model in CyberTracker captures:

* Patrol set up
* Human sign/threats
* Carcass observations
* Wildlife observations

## Note:

* Standard detail needs to be collected about each observation.
* Each observation needs to be geo-referenced with a date/time.
* Photos are to be taken where required or necessary.

# Patrol Preparation


## Patrol process in CyberTracker

1. Patrol preparation
	* Check that phone are charged
	* Switch the phone on and ensure GPS is enabled
	* Wait for phone GPS to get a position – icon “”will disappear
	* Do not embark on patrol before phone gets GPS position
	* Carry backup GPS or phone.
	* Upload necessary coordinates to GPS handsets for GOTO function use (e.g. coordinates for poaching incident).
2. Patrol start
* Always start with patrol start page
* Setup Patrol details:
* Patrol type
* Team
* Station
* Mandate
* Objective (if any)
* Comments (if any)
* Members
	+ Always start patrol by marking a “Patrol Start” under Position, as the first observation.
1. Patrol pause/resume
	* Use to record rests/breaks in patrol.
2. Patrol end
	* Take point (End Patrol) to close every patrol
	* Exit CyberTracker: use code 1234
	* Be ready for the next patrol.
	* Recharge phone using battery pack or link to computer USB.
	* Ensure battery packs are always fully charged

# On Patrol with CyberTracker

* + Keep the smartphone on during the patrol and not in hip pocket. Shirt pocket ok.
	+ If there are changes to patrol - e.g. change transport type, patrol leader, patrol division, patrol mandate – DO END the patrol and then start a new patrol.
	+ Adding a new observation versus add to previous observation. Ask patrol leads. E.g., if the item the same crime scene – use “add to previous observation”; if different crime scene, then it is a new observation.
	+ Do NOT/NEVER use SKIP GPS in field (gives the waypoint 0.00 – 0.00).
	+ Always acquire start and end patrol waypoints.

# Frequently Asked Questions.


## What should I do if SMART phone stops working?

* + Collect data using backup smartphone or GPS

and datasheets. Note down when the smart phone stopped working.



## What should I do if Phone hangs?

* + DO NOT turn device off.
		- Click the home key (circled red at bottom of phone - see right) and then click on CyberTracker app icon
		- If that fails, Go to Settings/Apps/ CyberTracker and then:
	+ Click ‘Force Stop’
	+ Click ‘OK’
	+ Click on CyberTracker icon to return to patrol data entry.

# Caring for your Smart Phone

* + Keep your phone always Fully Charged. Smartphones work best and last longer when kept fully charged.
	+ Avoid using a phone continuously until it completely runs out of power. Whenever you can, charge it. This should be especially so when you return from any patrol.
	+ Ensure all phone ports are tightly sealed. An open port or any that is not tightly sealed allows in dust and water, making it fail to work.
	+ Designate a safe place to keep and store your phone when not in use. It is a good practice to choose one spot where it always goes (near a charger) so that you can find it with ease.
	+ Keep your phone dry and away from dust. It is a rugged smartphone and water proof, but hey, these properties often fail! Avoid placing it near water or carrying it near open water (such as a pond, the river, or toilets).
	+ If there is something you do not understand on the phone, then do not do it. Leave it to the data manager.

# Steps for SMART Data Entry from GPS

* 1. **Entering Patrol Data From GPS (Note: This is the same process for entering Transect Survey Data)**

In case you collect data using the GPS instead of the smartphone, the following is the procedure for downloading the data to a computer

* 1. Convert GPS waypoints into format that MapSource can read
		+ Connect GPS to computer
		+ Open dnrgps (Shortcut is on Taskbar)
		+ Click on 'GPS'
		+ Select 'Download All'
		+ Select Waypoints to download and press 'OK'
		+ Go to 'File'
		+ Select 'Save To' and Choose 'File…'
		+ Browse to Folder where file will be saved (**C:\Users\USER\Desktop\M & R Data\FIELD DATA**. All M&R Desktops should use this directory path)
		+ Type file name. (Include outpost, GPS number and Date)
		+ In 'Save as type' select 'GPS Exchange Format'
		+ Select 'Save'
		+ In next window tick 'Waypoints' and select 'OK'
		+ Select 'OK' again. Close dnrgps.

1. Convert dnrgps file created into format readable to smart using MapSource
	* Open MapSource (Shortcut is on Taskbar)
	* Go to 'File'
	* Click on Open
	* Browse to the file saved in C:\Users\USER\Desktop\M & R Data\FIELD DATA using DNR GPS
	* Select File and Click on 'Open'
	* Click on 'File'
	* Click on 'Save As…'
	* Browse to ‘MapSource Files', C:\Users\USER\Desktop\M & R Data\FIELD DATA and Open it by double clicking it.
	* Type file name. (Include outpost, GPS number and Date)
	* In 'Save as type' select 'GPS eXchange Format (\*.gpx)'
	* Click on Save.
	* Close MapSource

1. Open Saved Waypoints in SMART to create Patrols
	* Open SMART
	* Click on 'open new Patrol wizard'
	* Fill in the Patrol details and select the date range of all the data on the GPS and forms. click 'Finish' at the end
	* Click on 'Import Waypoints…'
	* Select 'GPX File' and click on 'Next'
	* Click on 'Add' button and browse to file saved in C:\Users\USER\Desktop\M & R Data\FIELD DATA\MapSource Files
	* Select File and Click on 'Open'
	* Click 'Import All (and assign to correct day)' option
	* Click on 'Finish'
	* Click on 'OK'
		+ 1. **Setting up a patrol track in SMART**
	1. Option 1: Creating patrol tracks in SMART using downloaded GPS data
		* In SMART, Click on 'Set Track…'
		* Click on 'Generate from Waypoints'
		* Click 'Next'
		* Select 'Generate tracks from waypoints from all days'
		* Click on 'Finish'
		* Click on 'Ok'
		* Start entering the observation data from the data sheets

1. Option 2: Converting patrol tracks and entering them into SMART **(Only if Option 1 fails)**
	1. Converting Tracks in MapSource into format readable in SMART
		* Connect GPS to computer
		* Open MapSource (Shortcut is on Taskbar)
		* Click on 'Transfer'
		* Click on 'Receive From Device…'
		* Click on 'Tracks' (a tick mark appears)
		* Click on 'Receive'
		* Click on 'OK'
		* Click on 'File'
		* Click on 'Save As…'
		* Browse to ‘MapSource Files' save in C:\Users\USER\Desktop\M & R Data\FIELD DATA\MapSource Files and Open it by double clicking on it
		* Type file name (Start with 'Track - *outpost, GPS number and Date’*)
		* In 'Save as type' select 'GPS eXchange Format (\*.gpx)'
		* Click on Save.
		* Close MapSource

1. Open Saved Track in SMART to create Patrol track
	* In SMART, Click on 'Set Track…'
	* Select 'GPX File' and click on 'Next>'
	* Click on the 'Add' button and browse to track file saved in C:\Users\USER\Desktop\M & R Data\FIELD DATA\MapSource Files
	* Select File and Click on 'Open'
	* Click 'Import Only tracks for "date"
	* Click on 'Finish'
	* Click on 'OK'
	* Repeat this process for all the other days patrolled.
	* Start entering the observation data from the data sheets