COLLECTING DATA
USING A GPS RECEIVER

Photo by Anton Petrus / Shutterstock.com
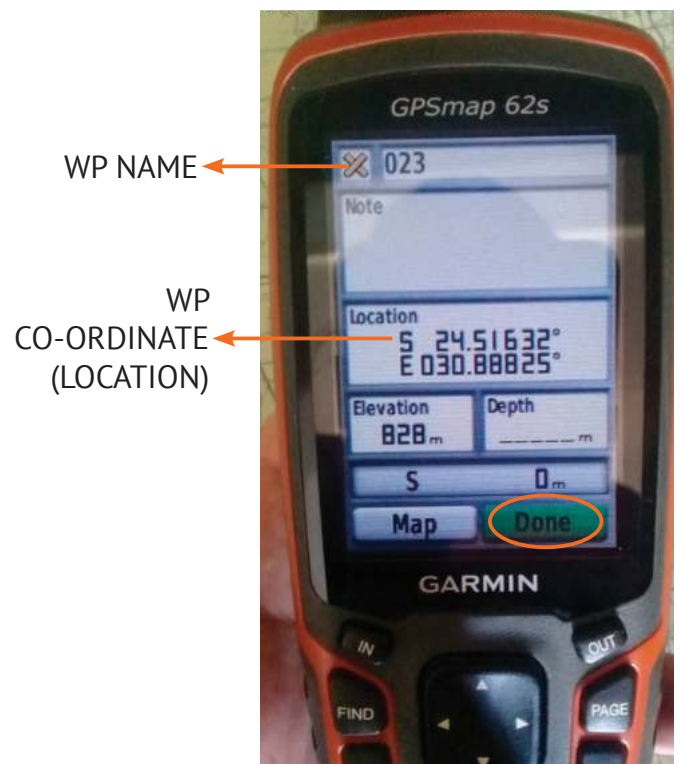
CITES

MONITORING THE ILLEGAL KILLING OF ELEPHANTS

MIKE

Funded by the European Union

1. RECORDING A LOCATION (WAYPOINT)

Any point (location) can be "marked" by taking a waypoint (WP).

Once a WP is stored on your GPS receiver you can "find" the location co-ordinate by navigating to it, you can communicate the location co-ordinate and you can view the co-ordinate on a map. You must record the waypoint name and the co-ordinate in your pocket book and all relevant report forms!

WP NAME →

WP CO-ORDINATE (LOCATION) →

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023

Note

Location
S 24.51632°
E 030.88825°

Elevation
828 m

Depth
___ m

S   0 m

Map   Done

GARMIN

To "mark" a WP:
- Make sure you are as close to the point you want to mark
- Select mark
- Select done

You can change the name of the waypoint and the icon.

2. RECORDING ROUTE INFORMATION (LOGGING TRACK INFORMATION)

In older models this function needs to be activated, but in all new models the track information will be recorded as long as the receiver is switched on.
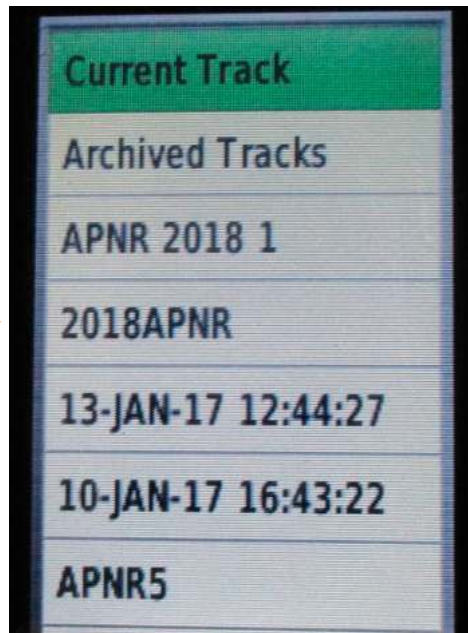
Route (track) information can be saved, archived and downloaded onto a computer.

All saved tracks can be reloaded and "viewed on map".

To save route information:
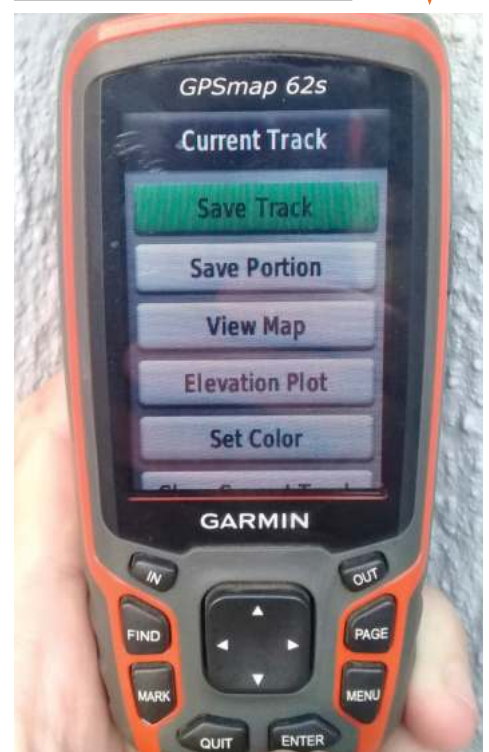- From main menu select "track manager" select "current track" select "save".

Route information can be used to determine "patrol coverage".

Once a track is saved you can retrieve it at any time by selecting the saved track and then selecting "view map".

You can change the name of the track and the colour of the track.

Take note: It is recommended that the ranger/scout rather "mark" waypoints every 30 min., on route, in order to save battery life on your GPS receiver.

3. RECORDING CARCASS (MORTALITY) DATA

Location data must be taken and recorded for ALL carcasses found in your area of operation!

Essential information includes:
- Date and time
- Exact location of carcass
- Detection method and how it was first found
- Decay stage of carcass (Age of carcass)
- Age and sex of elephant
- Type and cause of death
- Status of Ivory and other parts
- Full notes to be taken of all clues (evidence) used to determine type and cause of death.
- Good description of the area where the carcass was found
- The measurements of the tusks and teeth must also be done
- *Take note: Refer to "example of a carcass report form" (Appendix 1- Learner Guide)*
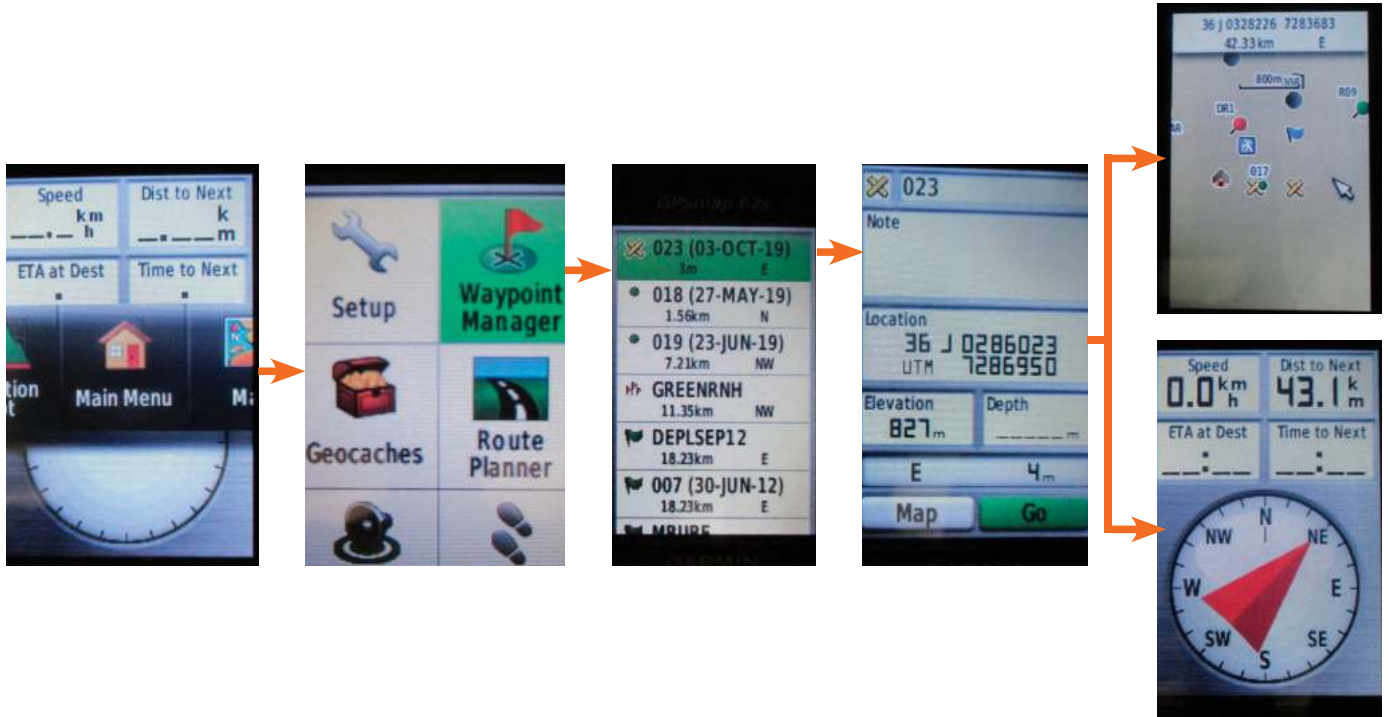

Above is an excellent example of taking a photo of the elephant carcass, GPS co-ordinate and all recorded carcass details *(Elephants without Borders)*

4. FINDING WAYPOINTS AND COORDINATES

- Saved waypoints on a GPS receiver can be viewed, navigated to and information can be retrieved from the GPS regarding that specific point (location).
- Any co-ordinate can be read into a GPS receiver and navigated to or can be projected on a map.

How to find a saved waypoint:
From "main menu" select "waypoint manager", all saved waypoints will be listed. Select the desired WP and select enter and select "go"… You can use the compass or the map to navigate to your point …

Short-cut Key "FIND"
By selecting the "find" key a menu will open from where you can select "recent finds", "waypoints", "tracks", "co-ordinates", etc.

By selecting "coordinates" you can manually enter a co-ordinate in order to navigate too or to plot this point on your map.

5. OTHER IMPORTANT GPS FUNCTIONS

- **Trip counter**: Records information on distance covered (trip odometer), elevation, moving speed (maximum speed, moving time, moving average) and stopped time.
- **GPS compass**: Can be used to navigate to a known or marked point by using a compass.
- **Sight 'n Go**: Can be used to take a bearing to a specific point (e.g. if a gunshot is heard in a specific direction)

TRIP COUNTER

Patrol coverage is part of MIKE required data which can easily be recorded if the "Trip counter" function is used.

Important, remember to reset the trip counter prior to the patrol start time.
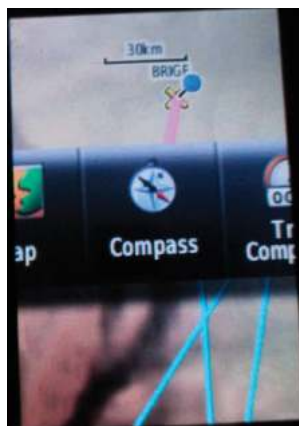

How to reset the Trip Counter:
Once the trip counter page is displayed on the screen, press "menu" and select "reset" then select "all". All readings on the trip counter will be set to "0".

Remember: Once the patrol arrives at the end point, record the distance travelled or take a photo of the trip counter page and submit this with your patrol report.
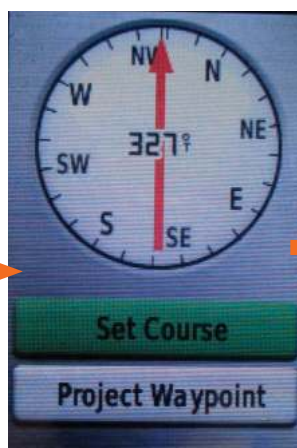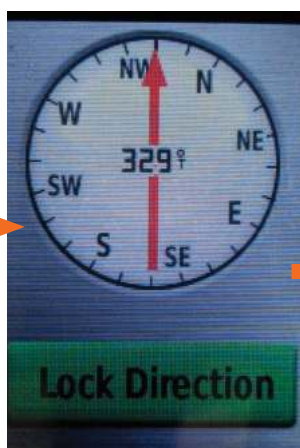
GPS COMPASS

By selecting the "find" key a menu will open from where you can select "recent finds", "waypoints", "tracks", "co-ordinates", etc.

Select "find", then the WP you would like to navigate too, select "go".
You can use the compass to navigate to the marked point, once you arrive at the location this message (left) will pop up on the screen.

SIGHT 'N GO

This is a very valuable function as you can take a bearing using the GPS, by simply pointing the GPS in the desired direction, from "main menu" select "sight 'n go", select "lock direction", you will be asked whether you want to "set course" or whether you want to "project waypoint" (with "project waypoint" you will need to enter the estimated or known distance).
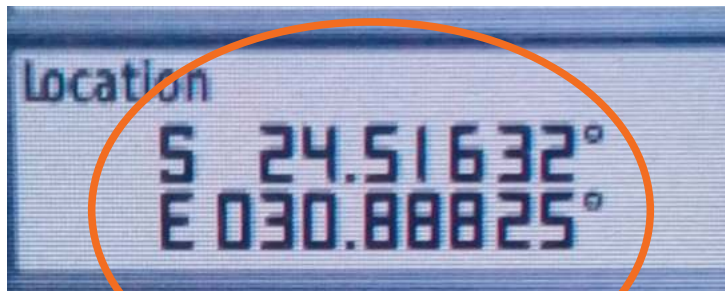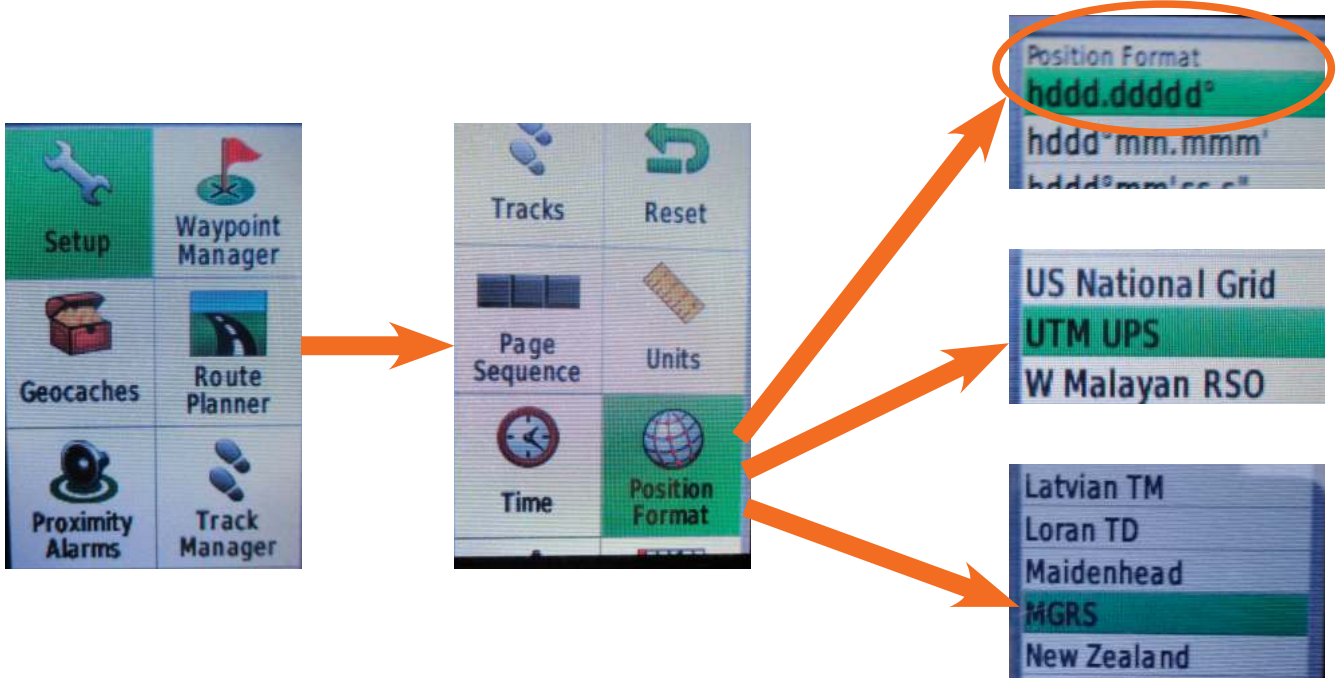
6. CHANGING THE POSITION FORMAT

MIKE recommends that all location data be collected in **decimal degree** position format.

How to change the position format:
From the main menu select "setup", then select "position format", enter on position format and select the desired format from the list...
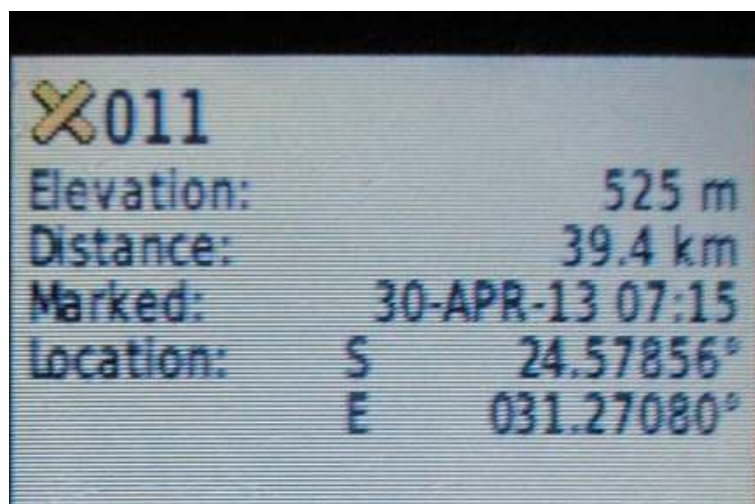

DECIMAL DEGREE
POSITION FORMAT

GRID ZONE 36J

UTM
POSITION FORMAT
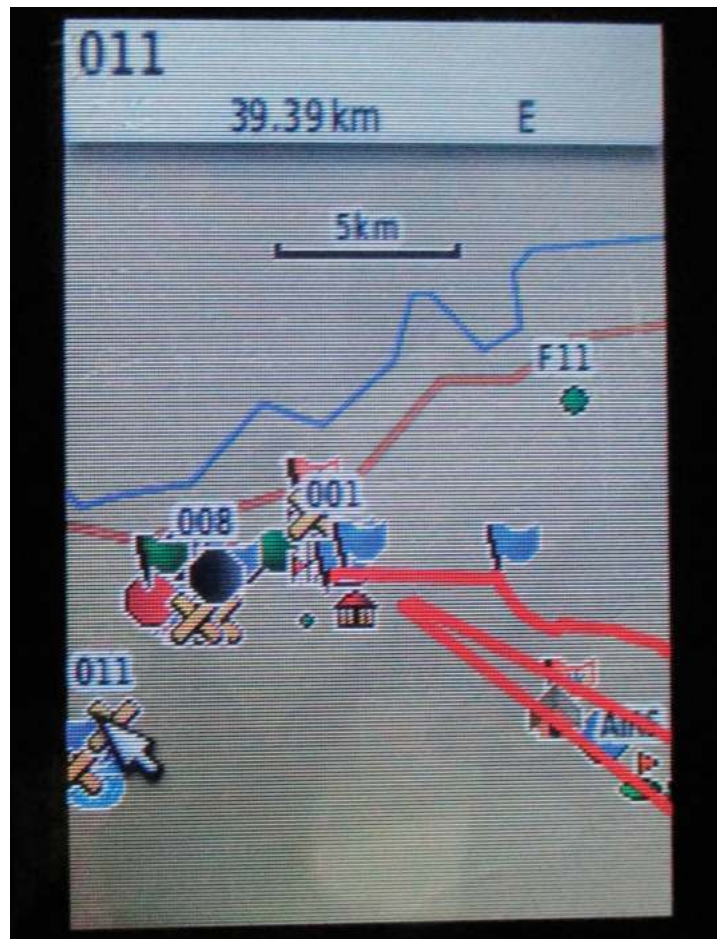
7. USING A GPS TO NAVIGATE

Once you have WPs on your "map" page of the GPS, navigating to any point is very easy.
Simply select the point (use the scroll button to move the pointer) and select "go".

Information can be obtained on each saved WP. Select a waypoint and then press the menu button

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Auto 06-SEP-18
07.14.37

Distance:	123.7 km
Area:	138.88 km²
Total Ascent:	1595 m
Total Descent:	1512 m
Max Elevation:	553 m
Min Elevation:	357 m

You can "review" any saved track in order to get detailed information on total distance, total surface area and elevation.

Select track, press menu and select "review track".