

## Maps, Compass, and GPS

Your crew will be one of about 300 in the Philmont backcountry at any given time. With almost 215 square miles plus adjoining lands such as the Valle Vidal and the Barker Wildlife Area, you will not see many crews except when you are in camps. Good map and compass skills are essential for successfully navigating between camps.

Yes, except for the Valle Vidal there are trails, and usually there will be a signpost at a trail junction. The marker may be the new style (a simple post with coordinates routered/stenciled on the sides) or old (arrows with names of camps or other features, hopefully pointing toward the correct trail). In either case, you need to be able to identify on the map where you are. Shakedown hikes are an opportunity to brush up on your map and compass skills, as well as to learn how to use a GPS, if you so choose.

**While a crew will have a designated navigator each day, navigation is the responsibility of every crew member.** If the crew gets lost, it is not the fault of the navigator. Rather, everyone is at fault for not paying attention to the surroundings and realizing what they actually see around them is **not** what the map indicates they should be seeing. If the crew does get lost and cannot figure out where they are on the map, they must backtrack until they reach a location that can be identified on the map.

So, what do you need to know? At a minimum, all crew members should be able to:

- Read and understand the symbols on a topographic map.
- Understand contour lines, and what the spacing between them means.
- Use a compass to orient a map to magnetic north and understand declination.
- Triangulate from three visible references to establish your position on the map.
- Take and follow a bearing.
- Determine the UTM coordinates of a location.

The Watchu [GPS and Maps](#) page, linked from the [Resources](#) section of the [Crew Development](#) page of the [Watchu Experience](#) Web site, contains a wealth of information on how to use a map, compass and GPS, as well as GPS waypoint data for both the Watchu Mountain Adventure and Philmont. Check it out!

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**Phil Fact:** Paul Zastrow was a Russian immigrant who settled on 600 acres along the Rayado River west of the Abreu homestead in the 1910's. In 1949 Zastrow Camp, east of the Abreu homestead, was the site for the second-ever Wood Badge course for adult Scouters (the first was offered at New Jersey's Schiff Reservation in 1948).

Zastrow was used as a summer trek camp during the Ponil Complex fire of 2002, and it was decided to continue to use it for the Land Navigation program.

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Out in God's country,

**Paul Zastrow**

Rayado, New Mexico