

## Compass Basics

You will use an azimuth, part of a circle that can float on a card in a capsule with a needle that always will point to north because of the iron in our planet. Unless you are near railroad tracks or a concentration of power lines. Unless you are standing near a man with a belt buckle so large in his center that he seems focused on a metal button, or a closet with belts hung on nails on the back of the door like snakes by their heads. They swing slightly when any other door in the house opens or closes. Unless you are carrying a pocket knife. That, my father didn't tell me.

True north differs from magnetic north, he said, although I couldn't understand it: why did the geographical north pole matter if it didn't match the pull of the planet? Geography was his first love, and stars knit his blood, in particular, the north star, Polaris, what I couldn't see because I was nearsighted although I pretended in order to make him happy. Don't you see it? You've got to. It's right there. Yes, the little bear runs around one fixed point, has for centuries.

Truth be told, that star is moving closer to being truer. There was no north star when our ancestors drove across the sea, just a cub that seemed close enough to be handy. By the Middle Ages, the star seemed to stand still with the sky pivoting around it, and that's how we've come to know it. In time, it will move away from the celestial pole, just as it spent centuries moving towards it.

Others used the north star as a way to cross a desert.

My father bought more maps than we ever needed. He spread them on the floor and pressed the compass on their surfaces to teach me.

You find where you are through triangulation, by matching the landmarks around you to the landmarks on the map and working them with the compass into a triangle.

This doesn't work if you can't see things far away. Just as stars slurred, with my vision, mountains numbed in what might be forest, might be rock faces. There was never just one stream or peak on the map or around me, and I couldn't tell which was which to save my life. I preferred playing with the knife, watching how more than one blade could snap into the bone compartment.

It's easy, he said. Pay attention to terrain lines, the way the ground rises or falls around you. But you also have to figure declination, the difference between true north and magnetic north. If you forget to do it, you'll be lost, sure as I'm standing here. We've done it a hundred times now. Azimuth means the way, the direction.