# OUTDOORS 

## The trick to estimating distances



Tips
from the Posse
By Mark Rackay

I was on a fishing trip with my old man mentor, Mr. Caster, hiking up to some beaver ponds that were hopefully full of hungry brook trout. Mr. Caster knew everything there was to know about the outdoors and the woods. He was a master backwoodsman, eve
telling me so at every opportunity telling me so at every opportunity.
Mr. Caster taught me about the woods, building a fire making woods, building a fire, making
shelter, finding food, Chesterfield shetter, finding food, Chesterfield
cigarettes, whiskey women, and a cigarettes, whiskey, women, and a
few other things that my grandfew other things that my grand-
mother would just as soon I not mother would just as soon I not
learn about. In other words, he was a perfect mentor for a boy. One thing he was truly superb at was guessing distances.
guessing distances.
He would spot a herd of mule deer on a distant mountainside and guess their distance. "There is a half dozen mulies on that ridge up there, 450 yards I would say, and the last one is a nice buck," he would proclaim.
Estimating distances has never been my strong suit. The invention of the laser rangefinder, and having it in a pocket size, has saved me from not properly estimating yardage. Problem is, I don't carry it with me everywhere I go.
The easiest way of estimating a distance is to pace it off. Mr. Caster would tell me to pace off 100 yards and set up a box so we could sho it with our 22 rifles. My pace, at age 9 , was considerable shorer than Mr. Casters pace. When set the target box up, it was always I could barely see it.
I could barely see it.
A pace is the distance of your A pace is the distance of your
natural step. I stress the word natural step. I stress the word natural. Ihave seen people go into some kind of a duck walk or a goose step. They will proclaim " 200 paces" at the end of their march and we still have absolutely no idea how far they actually walked.
The normal pace for an average person is 30 inches. Since none of us are average, we need to measure our pace. Start out by finding something with a pre-measured distance, like a football field. You know the field is 100 yards or 300 feet, goal line to goal line. Walk the length of the football field in your normal walking stride. Do not take extra-long or short strides, just walk in your normal pace and count your footsteps. Divide the distance in inches, 3600 , by the number of steps you have taken. If you hav stopped growing, this is your
pace for life. pace for life.
When pacing something off, count your right foot pace only 100 paces It makes keeping track 100 paces. It makes keeping track If you are pacing off a very long distance put pebbles in or distance, put pebbles in one pocket
and transfer one to another pocket


Tanner Creel uses range finding binoculars made by Leica for estimating distances,
but there are ways to guess distance without technology. (Photo by Mark Rackay)
every 100 paces. This method never works for me because I always have holes in my pockets, so the pebbles roll down my pant leg and into my shoes. Count pebbles in my shoe I guess.
Paces distances can change because of slopes and inclines. Pace distance increases on a down hill stretch, and increases when walking uphill. A rough terrain with mud, snow, or rocks can alter your pace. Other things such as, excess clothing, limited visibility and wind can also have an effect on your stride distance.
Another method of estimating distances of human wher First standing of human anatomy. First,
measure the distance between the centers of the pupils of your eyes. With a pair of binoculars, measure the distance between the centers of the eyepieces when adjusted for your eyes. For the average person, this is about 2 inches.
With this method, you will estimate distance by using only your extended thumb. Your extended arm, to the tip of your thumb is about 20 inches, or ten times longer than the distance between your eyes.
Lets say you are standing on a ridge and want to estimate the distance to a parked truck you see on a distant road. You estimate that the truck is 25 feet long, bumper to bumper.

- Hold your right arm out directly in front of you, elbow straight and thumb - upright, in the "thumbs up" position. -With one eye closed, align your upright thumb so that it covers the distant object, in this case the truck.
- Without moving your head, extended arm, or upright thumb switch eyes, so that your open eye is open. Observe clo eye is open. Observe closely appears with the other eye open Your thumb should appear to
way from the object.
- Estimate this displacement by equating it to the size of something you are familiar with, in this case is the 25 foot long truck. You can use power poles, buildings, an animal, anything you can guess the length of.
- In this case, the distant truck is 25 feet long. It appears that five trucks could fit in the displacement, or 125 feet. Multiply hat figure by 10 ( the ratio of the ength of your arm to the distance etween your des), nd you di he estimated dince When truck, or 1,250 feet, When you hold out your open, then with the othor eye open, then with the other eye to the object background, moving from side-to-side This is called parallax, and the parallax fa distant object is the angle of a distant object is the angle
between its directions of view from the two ends of a baseline. Like all other outdoor skills, ou are going to want to practice this estimation of distances. I was outside, in the front yard, pointing at the single lady's car up the street, estimating the distance. She caught me, and now thinks I was pointing at her and winking. Now I am in trouble with the wife because she would never understand the truth. Guess I should practice in the backyard from now on.
Mark Rackay is a columnist for the Montrose Daily Press and avid hunter who travels across North and South America in search of adventure and serves as a director for the Montrose County Sheriff's Posse. For information about the posse call 970-252-4033 (leave a message) or email info@mcspi.org For outdoors or survival related
questions or comments, feel free to questions or comments, feel free to elkhunter77@icloud.com


## Pandora's parasite

For every human on Earth, there are 200 million insects. Current estimates on the human population this year put us at 7.9 billion. 'Ill let you do the math. While some biologists refer to our time in various terms, the Age of Mammals or the Anthropocene (pointing out human dominance of the world), some would argue that we are really in an Age of Insects.

It could be that some of these creatures embody many of the difficulties in our world. In Greek mythology, Pandora is presented a box by the god Zeus and told to never open it. Her curiosity gets the best of her and upon opening it, troubles of all sorts escape greed, pain, disease,
I was thinking on this aspett I was thinking on this aspect
of biology when one of the of biology when one of the
more disagreeable insects flew more disagreeab
into our house.
One warm spring day, not long ago, a door was open for long ago, a door was open for
a short time. A low buzzing a short time. A low buzzing
sound came inside, rather like a B-52 Stratofortress that the Air Force uses, except that there was a slightly higher, tinny pitch to it. This buzzy-bug was an enormous fly that decimated the quiet with a change in tone as it banked around corners or bounced off windows.
My wife eventually corralled the beast, pinning it against the glass with a repurposed pickle jar. We got a close look at this enormous fly, and she found that it was a bot fly. As it turns out, bot flies are parasites, primarily on mammals.
Their life cycle comes in four stages (insects vary between three and five stages) starting with an egg, then larva, pupa and adult. Being a parasite, the bot fly needs a host for the larval stage. Me ado y bazes around looking for a mate After love is found the female After love is found, the female looks for a host. America are looking for furry friends like rabbits, rodents, furry friends like rabbits, rodents, Depending on the specie (there is only one in the Ameri-

Outdoors
By Paul Zaenger
cas that seeks human hosts) the egg is successful at attaching, hatching, and as a larva embedding itself below the skin. In the larval stage it looks like a maggot, which gives the ly its common It live is he old world term). tlives off orks host fro wollen tissues can only make swollen tissues can only make pain in the affected area When has gained all the needed has gained all the needed utrition from its victim (mouse through the skin and onto the ground where it goes from larva to pupa to adult.
I take a close look at our specimen in the jar. They have oo mouth parts as adults, so they don't eat.
They live only a short number of days and have only one purpose - to mate. Unlike house fly yes, these are blocky; very large and bulging out from the head. The gray and black coloring, some of it from hair that spikes outward, gives it a menacing appearance.
In the pantheon of parasites, the bot fly appears to be among the most grotesque.
That's a human perspective, but digging through Pandora's Box of misery, it can leave any f us wondering why these nsects persist. Some research rs have put forward a Parafor humans, parasites stress the biology enough that the species iology enough that ecomes stronger.
Paul Zaenger has been a supervisory park ranger at son National Park since 1993. Other park assignments include Mount Rushmore National Memorial and Glen Canyon National Recreation Area.


The outdoors are full of interesting insects. (Photo by Paul Zaeger)

