

WILDERNESS NAVIGATION

PRACTICE GUIDE

Map • Compass • Bearings • Terrain • Recovery

PRACTICE IN A FAMILIAR, LOW-RISK AREA

Use this guide to build skills before you need them.

PREPARE • LEARN • BE READY

IMPORTANT SAFETY & DISCLAIMER

PLEASE READ BEFORE USING THIS PRACTICE GUIDE

Wilderness navigation involves inherent risks, including getting lost, injury, changing weather, difficult terrain, and other hazards. The information, illustrations, exercises, and printable materials in this guide are provided for general educational and preparedness purposes only. They are not a substitute for professional navigation instruction, current maps, official land-management information, or sound judgment in the field.

VERIFY CURRENT INFORMATION

Conditions, routes, maps, compass readings, magnetic declination, trail information, weather, and other circumstances can change. Verify current conditions and information from appropriate official sources before traveling, and use equipment and navigation methods appropriate for your experience and the environment.

PRACTICE SAFELY

Practice these skills in a familiar, low-risk area before attempting more demanding terrain. Do not rely solely on this guide, a printed map, a compass, GPS, a cell phone, or any single source of information for your safety. Carry appropriate equipment and have a plan for changing weather, injury, loss of communications, or other unexpected problems.

LIMITATION OF RESPONSIBILITY

Survival Place Blog and its authors provide this material for educational purposes and do not guarantee that the information is complete, current, or appropriate for every situation. Use the information at your own judgment and risk. To the extent permitted by applicable law, Survival Place Blog and its authors are not responsible for injury, loss, damage, or other consequences resulting from the use or misuse of the information presented here.

When in doubt: stop, reassess, and choose the safest reasonable option.

How to Use This Practice Guide

Think of this guide as your navigation homework. The article teaches the basic skills; this workbook gives you assignments so you can practice those skills yourself. You do not need to find every feature or complete every exercise perfectly. The goal is to learn by doing, checking your work, and trying again.

HOW THE LESSONS WORK

Learn: Read the related section of the Wilderness Navigation article first.

Practice: Take the map and compass into a familiar, low-risk area.

Observe: Look for the features or direction the exercise asks you to find.

Record: Write down what you found, what you expected, and what actually happened.

Check: Compare your work with the map, terrain, compass, and GPS when appropriate.

Repeat: If something did not make sense, try the exercise again rather than simply moving on.

FIELD PRACTICE RULES

☐ Practice somewhere familiar and appropriate for your skill level.

☐ Carry the map and compass you actually intend to use.

☐ Do not rely on a single electronic device.

☐ Watch weather, daylight, water, and your physical condition.

☐ If you become uncertain, stop and reassess rather than continuing blindly.

☐ Use GPS as a verification tool while learning.

THE FOUR SKILLS

☐ 1. Read a topographic map.

☐ 2. Orient the map with a compass.

☐ 3. Take and follow a bearing.

☐ 4. Recognize uncertainty and recover safely.

Compass note: Procedures can vary by compass type and design, especially around declination adjustment. Follow the instructions for the compass you actually carry.

1 — Topographic Map Practice

Your assignment: Before going outside, study a topographic map of a familiar area. Your job is to find the terrain features listed below and record where you found them. You are not expected to find every feature on every map.

A. IDENTIFY THESE FEATURES ON YOUR MAP

Instructions: Find each feature below on your map and write its location, trail name, grid reference, nearby landmark, or another note that will help you find it again.

If a feature is not present in your area, leave that row blank and continue.

FEATURE	MAP LOCATION / NOTES
Peak / high point	
Ridge	
Valley	
Saddle	
Stream / drainage	
Steep slope	
Gentle slope	

B. LOOK AT THE TERRAIN

If you are practicing in the same area shown on your map, go outside and try to identify the features you found. Start with the easiest one. Ask yourself: Does the real terrain look the way the map suggested it would?

- ☐ I found at least one feature on the map before going outside.
- ☐ I found the same type of feature in the real terrain.
- ☐ I compared what I saw with the contour lines.
- ☐ I noticed at least one thing the map helped me predict.

C. CONTOUR-LINE HOMEWORK

Now practice reading the shape of the land. Find each item on your map and write what the contour lines tell you.

- ☐ Find close contour lines. What do they tell you about slope?
- ☐ Find widely spaced contour lines. What do they tell you?
- ☐ Locate a ridge.
- ☐ Locate a valley.
- ☐ Locate a stream or drainage.
- ☐ Find the highest nearby point.
- ☐ Identify a saddle if one is present.

2 — Orient the Map With a Compass

Your assignment: Use the map and compass you actually carry. Follow the steps below, then prove your orientation by comparing the map with several real-world terrain features.

A. MAP-AND-COMPASS SETUP

- ☐ Place the map on a stable surface.
- ☐ Identify the map's north reference.
- ☐ Check the map legend or declination information.
- ☐ Determine the local magnetic declination used for practice.
- ☐ Set the compass according to its instructions if adjustment is required.
- ☐ Keep the compass away from metal objects and electronics.
- ☐ Align the compass with the map's north reference.
- ☐ Rotate the map and yourself until the map matches the surrounding terrain.

B. PROVE YOUR MAP IS ORIENTED

Don't stop when the compass appears aligned. Look around you. Find three independent terrain features and use them to check your work.

Terrain feature	What the map shows	What I see

C. QUICK CHECK

What would you look for before moving if the map says a ridge should be right, a stream ahead, and a trail turn coming soon?

3 — Bearing Practice

Your assignment: Practice several different bearings instead of memorizing only one direction. Set the bearing on your compass, turn until aligned, choose a visible landmark in that direction, and record what happened.

A. BASIC BEARING REFERENCE

Bearing	Approximate direction
000° / 360°	North
045°	Northeast
090°	East
135°	Southeast
180°	South
225°	Southwest
270°	West
315°	Northwest

B. PRACTICE EACH BEARING

If one bearing points toward an unsafe or inaccessible area, do not walk there. Instead, identify a safe landmark in the same general direction or practice the bearing without traveling.

Bearing	Landmark chosen	Approx. distance	Result / notes

C. LANDMARK TECHNIQUE

Once a bearing is established, avoid staring at the compass for the entire walk. Pick a visible object along the intended direction, walk toward it, then establish another landmark and repeat.

Practice route: Start _____ → Landmark 1 _____ → Landmark 2 _____ → Destination _____

4 — When Navigation Goes Wrong

Your assignment: Practice the decision-making process before you ever need it. Imagine that your trail, terrain, or direction no longer matches what you expected. Work through STOP instead of automatically continuing.

STOP

Stop: Stop moving long enough to assess the situation instead of continuing in an uncertain direction.

Think: Ask when you last knew exactly where you were and what happened after that point.

Observe: Examine your map, compass, GPS if available, terrain, weather, daylight, water, injuries, and equipment.

Plan: Decide whether you can safely return to a known location, establish your position, or need to remain where you are and seek assistance.

LAST KNOWN LOCATION EXERCISE

Choose a point on your familiar route. Without looking at GPS, record the last location where you are certain of your position.

Last known location: _____

What direction did you travel afterward? _____ Approx. time: _____

What did you cross or pass? _____

Did you climb or descend? _____ Major trail turns? _____

SHOULD YOU RETRACE YOUR STEPS?

Check each statement that is true for your practice situation. This is a decision exercise—not permission to enter unsafe terrain.

☐ I know where I last had a reliable position.

☐ The route back is clearly identifiable.

☐ The route back is safe under current conditions.

☐ Returning will not require crossing an immediate hazard.

☐ I can maintain enough daylight, water, and energy to do it safely.

Safety first: Do not retrace a route that requires unsafe travel through dangerous water, unstable terrain, avalanche terrain, cliffs, wildfire, or another immediate hazard.

5 — Complete Field Practice

Your final assignment: Put the skills together in one short, familiar-area exercise. The goal is not distance. The goal is to make a prediction, navigate, observe, and check your work.

THE ASSIGNMENT

- ☐ Pick a starting point.
- ☐ Study the map and identify several obvious landmarks.
- ☐ Orient the map.
- ☐ Predict what you should encounter next.
- ☐ Take a short bearing.
- ☐ Walk to a visible landmark in that direction.
- ☐ Observe whether the terrain matches your prediction.
- ☐ Verify your position with GPS.
- ☐ Repeat the exercise.

FIELD LOG

Exercise	What I predicted	What actually happened	Verified?

WHAT DID YOU LEARN?

- Which skill felt easiest? _____
- Which skill needs more practice? _____
- What equipment or compass feature do you need to understand better? _____
- What will you practice next time? _____

6 — Field Quick Reference

Keep this page with your gear or print it separately as a quick reminder. It is a reference—not a substitute for practice.

BEFORE YOU LEAVE

- ☐ Study the route and major terrain features.
- ☐ Identify starting point, destination, intersections, water crossings, ridges, alternate routes, and bailout points.
- ☐ Download offline maps.
- ☐ Carry an appropriate paper map and compass when appropriate.
- ☐ Check current conditions and magnetic declination.
- ☐ Charge electronics and carry backup power.
- ☐ Leave your itinerary and expected return time with someone you trust.
- ☐ Set a realistic turnaround time.
- ☐ Carry appropriate emergency equipment.

IF THE TERRAIN STOPS MATCHING THE MAP

- ☐ Stop.
- ☐ Think about your last known location.
- ☐ Observe the map, compass, GPS, terrain, weather, daylight, water, and equipment.
- ☐ Use multiple independent clues to establish your position.
- ☐ Plan before moving.
- ☐ If uncertain, avoid wandering farther simply because you feel pressure to continue.
- ☐ If remaining where you are is safe and you cannot establish a reliable route, consider staying put and making yourself easier to find.
- ☐ Move if staying creates an immediate danger.

FINAL REMINDER

Good navigation is a series of small checks: the creek is where the map says it should be, the ridge matches, the trail junction appears when expected, and your direction and distance make sense. Practice those checks until they become routine.

SURVIVAL PLACE BLOG • PREPARE • LEARN • BE READY