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INSIDE OUT

GUIDEBOOK

EUROPE

is full of amazing places to explore – from forests and rivers to mountains and beaches. It doesn't matter where you start – what matters is your sense of adventure!

Hey everyone

We're pretty lucky – Europe is full of awesome and diverse landscapes: mountains, beaches, forests, lakes, and rivers are just waiting to be explored! And it doesn't matter whether you start right outside your front door or take a train to a place you've never been before. What counts are your ideas and your excitement for adventure!
We want to get you excited about going out there – rain or shine. Because when you're well prepared, there's no such thing as bad weather, just great stories to tell later.

Sure, we'll give you some tips and tools so you're not totally lost out there. But the most important step has to come from you: just go for it! Whether you're heading out for two days or two weeks – the first step out the door is always the hardest. After that, things usually get pretty awesome.
And one more thing: if you're heading out with your friends, remember – real adventures bring people closer. Head out as a team, and come back as one.

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Note on Emotional Safety

Throughout all activities in this guidebook, it is completely okay to step back if you feel overwhelmed. Everyone experiences challenges differently – physically, mentally, or emotionally. Pay attention to your own limits and communicate openly if you need a break. Strength is not only about pushing through but also about recognizing your needs and showing care and respect within the group.

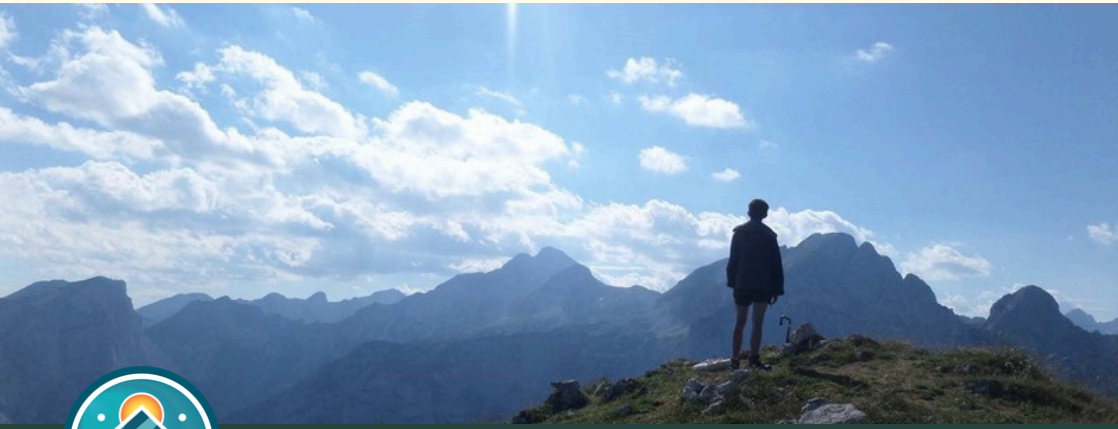
MODULE №1

Reading and Understanding the Outdoors

Unit 1: Understanding Natural Environments

Unit 2: Reading the Land – Navigation Tools

Unit 3: Nature Awareness – Signs, Weather, and Environment



Unit 1: Understanding Natural Environments
Theoretical Content (For youth ages 15–19)

What Is a Natural Environment?

A natural environment refers to ecosystems where ecological processes occur with minimal human interference. It includes forests, rivers, mountains, wetlands, and grasslands — systems governed by natural forces like weather, erosion, animal migration, and plant succession. These environments are dynamic and demand our attention and adaptability when moving through them.

Unlike human-built environments, natural landscapes require real-time decisions. For example, sudden weather shifts in the mountains or animal encounters in forests are not rare, and misreading such cues can be dangerous.

Ecosystems: Nature's Life Support Networks

An ecosystem is a biological community interacting with its physical environment. It includes:

- Biotic elements: Plants, animals, fungi, and microbes.
- Abiotic elements: Soil, rocks, water, sunlight, and atmosphere.

These systems function through nutrient cycling and energy flow — principles central to environmental science. A small disruption, like a campfire left burning or stepping off a trail, can cause cascading effects across this network.

Understanding this helps outdoor learners minimize ecological impact while increasing safety. For instance, degraded soil near a trail could indicate erosion risk or root exposure — signs that hikers should tread carefully.

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Ecozones and Biomes

Biomes are large ecological zones defined by climate, flora, and fauna

- Temperate Deciduous Forests — Alpine
- Ecosystems — Riparian Zones

Environmental Literacy= Field Awareness

As the ability to read natural systems in real time

Terrain Types: Landscapes and Their Demands

- Forests
- Rivers & Wetlands
- Mountains
- Rocky/Arid Zones

Ecozones and Biomes

Biomes are large natural areas that share similar climate, plants, and animals. Each biome has unique features that affect how we move through it and stay safe outdoors. Here are some important ones:

- Temperate Deciduous Forests – Found in Europe and North America. These forests have four seasons, many types of trees, and a wide variety of animals.
- Alpine Ecosystems – Found in high mountains. They are cold, windy, and have thin air and delicate plant life.
- Riparian Zones – Areas next to rivers and streams. These spots are rich in animal activity but have soft, erosion-prone ground.

Knowing which biome you're in helps you understand what kind of terrain and wildlife to expect. For example, wetlands are great for spotting birds but often have muddy, unstable ground that's tricky to walk on and low in oxygen.

Environmental Literacy = Field Awareness

Environmental literacy is more than scientific facts — it's the ability to read natural systems in real time. For example, changes in cloud patterns (cumulus turning into cumulonimbus) can predict thunderstorms. Animal track patterns, tree root exposure, or unusual silence in birdsong can all indicate hidden threats or ecological shifts.

Outdoor educators emphasize this skill as essential for responsible exploration.

Terrain Types: Landscapes and Their Demands

1. Forests

- Structure: Canopy blocks GPS, creates microclimates.
- Hazards: Slippery moss, disorientation, low light.
- Fact: Forest floor biodiversity is highest near rotting logs due to decomposition processes.

2. Mountains

- Elevation Risk: Oxygen levels drop by 30% at 2,500 meters.
- Weather Fact: Temperature drops ~0.6°C per 100m gain.
- Hazard: Altitude sickness affects 25% of people above 2,400m without acclimatization.

3. Rivers & Wetlands

- River Reading: Narrow + steep = fast current.
- Ecosystem Role: Wetlands filter pollutants, control floods, and serve as breeding grounds.
- Hazard: Standing water supports mosquito larvae; 1 in 5 global malaria cases are traced to wetland proximity.

4. Rocky/Arid Zones

- Surface Temperature: Can exceed 60˚C even in temperate zones.
- Dehydration Onset: Occurs before thirst due to delayed brain signal.

Wildlife and Environmental Cues

Animal Behavior

- Bird Silence: May signal predator presence.
- Crepuscular Activity: Most large mammals are active at dawn/dusk to avoid predators and heat.
- Scat Analysis: Used in modern conservation to track species movement and population health.

Natural Hazards

- Fallen Trees: Suggest soil instability or past storms.
- Lightning-Struck Trees: Bark splits and resin leaks may signal past strike zones — avoid during storms.
- Mushroom clusters: Indicate recent rainfall and high soil humidity — watch for slippery surfaces.

TERRAIN TYPES:
LANDSCAPES AND THEIR DEMANDDS

FORESTS

Structure: Canopy blocks GPS, creates micro-climates

Hazards: Slippery moss, disorientation, low light

RIVERS & WETLANDS

River Reading: Narrow + steep = fast current

Ecosystem Role: Wetlands filter pollutants, control floods, and serve as breeding grounds

Hazard: Standing water supports mosqulto larvae; 1 in 5 global malaria cases are traced to wetland proximity

MOUNTAINS

Elevation Risk: Oxygen levels drop by 30% at 2,500 meters

Weather Fact: Temperature drops −0,6°C per 100m gain

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ROCKY/ARID ZONES

Surface Temperature: Can exceed 60°C even in temperate zones

Dehydration Onset: Occurs before thirst due to delayed brain signal

Geo-Environmental

Terrain Feature	Risk	Recommendation
Scree Slopes	Rock slides	Use trekking poles, walk in zigzag
Avalanche Zones	Snow collapse	Avoid steep, shaded slopes in spring
Sinkholes	Sudden collapse	Stick to mapped routes
Peat Bogs	Hidden wet zones	Use a stick to probe before stepping

Final Reflection

Understanding the natural environment means going beyond surface knowledge. It means thinking ecologically, observing deeply, and moving respectfully. As you develop this knowledge, your confidence, competence, and safety grow — and so does your connection to the living world around you.

Reflection Questions:

1. What's one thing you noticed in nature recently that you had never paid attention to before?
2. How does understanding the land and its systems change the way you move through outdoor spaces?
3. In what ways can you show more respect and care for the environment during your next outdoor activity?

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Unit 1: Practical Activities – Understanding Natural Environments

Goal: Reinforce ecological awareness, terrain recognition, and field observation through real-time, embodied experiences.

Requirements: Open outdoor space (forest, park, field, riverside, etc.), small group sizes (3–6), no equipment needed.

1. Eco-Detectives

Focus: Understanding ecosystems, animal traces, and terrain features.

How it works:

- Give each team 10 minutes to walk through a section of the natural environment and gather evidence of ecosystem dynamics.
- They must return and report:
  - One example of plant-animal interaction (e.g., leaf damage, animal tracks, insect nests).
  - One clue about terrain type (e.g., sloping ground, loose rocks, damp soil).
  - One "risk" sign (e.g., eroded paths, dead tree leaning, signs of flooding).
- Share findings with the group and discuss what these indicators mean in terms of safety and movement.

Variation: Make it a timed challenge. Teams get bonus points for the most unusual or well-explained find.

2. Terrain Tacticians

Focus: Recognizing and adapting to different terrains.

How it works:

- Mark out 3–4 distinct micro-environments (e.g., shady area, slope, water edge, open field).
- At each spot, participants:
  - **Assess footing** (slippery, dry, loose?).
  - **Estimate visibility** (can they see 20m ahead?).
  - **List safe and unsafe actions** (e.g., "running here = danger because of slope").
- Rotate through all zones and then hold a short group discussion:
  - Which terrain felt safest? Which felt riskiest?
  - How would your group move through each one as a team?

3. Animal Ambassadors

Focus: Animal awareness and interpreting behavior patterns.

How it works:

- Assign each participant or small group an animal species **native to your local biome** (examples: fox, deer, owl, badger).
- They must move through the space for 5 minutes **as that animal** — silently, using its behavior:
  - **Fox**: slow, silent, alert to sound.
  - **Deer**: nervous, quick sprints, frequent scanning.
  - **Owl**: stealthy, vision-focused, perching.
- Group reflects: What did this teach you about how animals use terrain, light, and cover?
- Finish by discussing how this awareness helps avoid conflict and read signs of recent animal activity.

4. Silent Signals

Focus: Environmental cue recognition (wind, weather, sound, light).

How it works:

- As a group, stand or sit silently for 4–5 minutes in a natural area.
- Observe only using senses — no talking. Focus on:
  - Direction and strength of the wind.
  - Type and movement of clouds.
  - Sounds: birds, insects, distant human or water activity.
  - Temperature: sun vs shade, humidity.
- Each participant shares one invisible signal they picked up and what it might indicate (e.g., "Birds stopped singing = predator or human nearby").

5. Micro-Terrain Navigation

Focus: Reading terrain features for safe movement.

How it works:

- Pick a 20x20m area with varied terrain (trees, rocks, slopes).
- One participant is blindfolded or closes eyes.
- A teammate verbally guides them to a safe spot using terrain-based instructions only:
  - "Step over exposed root," "Turn toward the slope," "Avoid the wet ground ahead."
- Swap roles and repeat.
- Reflect on: How did terrain awareness help? What features were most important to note?

Challenge mode: Introduce "terrain hazards" by designating safe/unsafe zones based on visual clues.

6. Terrain Debate

Focus: Analyzing terrain choices and decision-making.

How it works:

- Pose a scenario to the group:
- "You're on a 3-day hike. You must choose your next campsite. You have three options: near a river, on a forest slope, or in a rocky clearing."
- Each group must choose one and argue their choice based on:
  - Terrain stability.
  - Weather exposure.
  - Wildlife safety.
  - Access to resources (water, firewood).
- Debate as a whole group and reflect on best practices for terrain-based decisions.

Unit 2: Reading the Land — Navigation Tools
Theoretical Content

Why Navigation Matters

Outdoor navigation is not just about getting from A to B — it's about safety, autonomy, and developing a deep connection with the land. For young explorers, learning to navigate builds confidence, resilience, and environmental literacy. In natural environments where trails may vanish, weather changes quickly, and digital devices can fail, traditional and natural navigation skills become critical.

Recent studies show that while GPS use can improve speed and reduce minor navigational errors, it can impair spatial learning and orientation memory, especially in novice users.

1. Navigation Tools

A. Map Reading

Topographic maps are graphic representations of the earth's surface — they include contour lines, terrain features, rivers, trails, and landmarks. Knowing how to read them enables:

- Route planning based on terrain type and elevation gain.
- Estimating travel time and water sources.
- Recognizing risky zones like cliffs or swamps.

Contour lines tell a story: tightly packed lines = steep terrain; spaced-out lines = flat land. "V" shapes often indicate river valleys, and circles can signal hilltops or depressions. Teaching these fundamentals early fosters deeper spatial awareness (Watters, 1997).

B. Compass Skills

A compass helps orient the map and gives you a **bearing** (direction in degrees) to follow. Core concepts include:

- **Magnetic North vs. True North**: Adjusting for magnetic declination is crucial.
- **Taking a Bearing**: Align the map, place compass edge along your route, and rotate until the needle aligns with orienting arrow.

Modern teaching methods show improved outcomes when learners physically manipulate the compass outdoors rather than relying on static diagrams.

C. GPS Devices

GPS receivers provide location (latitude, longitude), elevation, and track history. Advantages:

- Works in fog, darkness, and featureless terrain.
- Emergency tracking.
- Route backtracking and data logging.

However, **GPS overuse reduces map literacy and situational awareness**, especially in teens. Encouraging hybrid navigation (GPS + compass/map) offers the best learning outcomes (Hergan & Umek, 2017).

Reading the Land – Navigation Tools

Why Navigation Matters

In the outdoors, weather changes, trails can disappear, and devices might fall. Developing navigation skills builds confidence and environmental literacy

Recent studies show overuse of GPS impairs spatial learning

1. Navigation Tools

A. Map Reading

Topographic maps show contour lines and features of the earth's surface

- Helps with route planning and time estimates
- Lets you identify hazards

B. Compass Skills

A compass orients the map and provides direction (bearing).

- Works in poor visibility
- Avoid overreliance for better learning

C. GPS Devices

GPS devices provide your location, elevation, and track history

- Works in poor visibility
- Avoid overrellance for better learning

2. Natural Navigation Techniques

The sun travels east to west across: the sky each day. In the Northern Hemisphere;

- Morning: sun in the east
- Noon: due south [shortest shadow]
- Late afternoon: west

Gore Skills to Master

- Orienting a map
- Triangulation
- Backbearing
- Dead reckoning
- Route planning

2. Natural Navigation Techniques

Nature can guide us — with no batteries required.

Sun Position

The sun moves east to west daily. In the **Northern Hemisphere**:

- Morning: sun is in the east.
- Noon: due south (shortest shadow).
- Late afternoon: west.

To find direction:

- Place a stick in the ground.
- Mark the tip of its shadow.
- Wait 15–20 minutes and mark again.
- A line from the first mark to the second runs west → east.

This technique has been validated in celestial compass research, even inspiring robotic orientation systems (Dupeyroux et al., 2017).

Landmarks

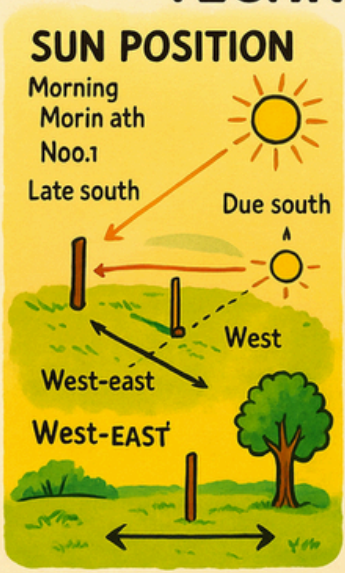
Using landmarks like rivers, ridgelines, tree clusters, or distinct rock formations enhances mental mapping. Field-based learners report stronger place memory when they practice matching physical features with topographic maps.

3. Core Skills to Master

Skill	Description
Orienting a Map	Aligning the map with the landscape using compass and terrain.
Triangulation	Finding your location by taking bearings to two known landmarks.
Dead Reckoning	Estimating your position based on direction, time, and pace.
Backbearing	Using a compass to retrace your steps.
Route Planning	Choosing paths based on terrain, distance, water, and hazards.

Mastering these increases independence and confidence, particularly for multi-day hikes or unfamiliar terrains.

NATURAL NAVIGATION TECHNIQUES



CORE SKILLS TO MASTER

Skill	Description
Orienting a Map	Aligning the map with the landscape using compass and terrain
Triangulation	Finding your location by taking bearings to two known landmarks
Dead Reckoning	Estimating your position based on direction, time, and pace
Backbearing	Using a compass to retrace your steps
Route Planning	Choosing paths based on terrain, distance, water, and hazards

Final Reflection

Reading the land combines analytical thinking, sensory awareness, and practical skill. Whether you're following a printed map or interpreting sun shadows, your ability to navigate connects you more deeply to nature — and yourself.

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Practical Activities

For youth ages 15–19 | No extra materials required beyond maps, compasses, and surroundings

Activity 1: Triangulation Challenge – "Find Yourself"

Objective: Teach participants to determine their exact location using a map and compass, applying triangulation to real terrain.

Setup:

- Choose a location with at least 3 visible landmarks (e.g. a tree line, a radio tower, a hilltop).
- Give each participant or group a topographic map of the area and a compass.

Steps:

1. **Identify Landmarks**: Each participant chooses three clearly visible, well-marked features on the map.
2. **Take Bearings**:
   - Stand still and point the compass at the first landmark.
   - Rotate the bezel to align the magnetic needle with north.
   - Read the bearing (in degrees).
   - Repeat for two more landmarks.
3. **Plot on Map**:
   - From each landmark's position on the map, draw a line along the reverse bearing (bearing minus 180°).
   - Where the lines intersect is your current estimated position.

Tips:

- Space out your chosen landmarks — a wide angle between them makes the intersection more accurate.
- If lines don't intersect perfectly, look for the triangle they form (your position is likely inside it).

Time: 25–40 minutes
Skills Learned: Map reading, compass use, bearing calculation, spatial estimation

Reflection Questions:

- How confident were you in your position estimate?
- What would you do differently in poor weather or low visibility?

Activity 2: Natural Navigation – "Sun Tracker"

Objective: Learn how to find direction and estimate time using only the sun and shadows.

Setup:

- Choose an open outdoor space with direct sunlight.
- Provide each group with a stick (30–50 cm), a watch or phone (for timing only), and a notebook.

Steps:

1. Create a Shadow Dial:
   - Stick the rod upright in the ground at mid-morning.
   - Mark the tip of its shadow (Point A).
   - Wait 15–20 minutes; mark the new shadow tip (Point B).
   - Draw a straight line from A to B. This runs west to east (A = west, B = east).
2. Find Cardinal Points:
   - Stand with your left foot on A and right foot on B.
   - You're now facing north.
3. Observe the Sun's Movement:
   - Watch how the shadow shortens and lengthens over time.
   - Use your shadow's angle and length to estimate how far through the day you are.

Bonus Variant: Have groups repeat this in the afternoon and compare how direction and shadow angle change throughout the day.

Time: 30–45 minutes
Skills Learned: Direction estimation, solar path tracking, orientation without tools

Reflection Questions:

- Could you repeat this without a watch?
- How might cloud cover change your plan?

Activity 3: "Bearing Hunt" Orienteering Challenge

Objective: Practice using compass bearings and pacing to locate hidden objects or waypoints.

Setup:

- In a forest, field, or schoolyard, secretly place 3–4 markers or signs.
- Create directional clues that use compass bearings and estimated distances.

Example Course:

1. "Start facing the tallest tree in the north. Walk 60 meters at 135° (southeast) and look under a log."
2. "Turn to a bearing of 270° (due west) and pace 40 meters. You'll find a red ribbon on a post."
3. "Walk 20 meters toward 30° (northeast) to find the final clue."

Instructions:

- Learners begin with only the first instruction and a compass.
- They must use pacing (previously calculated) and compass skills to reach each point.
- Each point contains the next instruction (or could include small challenges like riddles or outdoor trivia).

Time: 45–60 minutes
Skills Learned: Bearing following, distance pacing, compass navigation, decision-making

Reflection Questions:

- How accurate were your bearings? What threw you off?
- What helped you stay oriented between clues?

Unit 3 – Nature Awareness: Signs, Weather, and Environment

Theoretical Content

What Is Nature Awareness?

Nature awareness is the ability to interpret natural signs—like weather, animal activity, plant responses, and terrain changes—to understand environmental conditions and risks in real time. It's a skill grounded in environmental literacy, often cultivated through hands-on outdoor learning and direct sensory engagement with the landscape.

Modern outdoor education increasingly values this literacy not only for safety, but also to foster environmental stewardship, critical thinking, and youth resilience.

Reading Weather Signs in the Field

1. Cloud Literacy

Cloud types tell you about upcoming weather:

- Cumulus clouds (fluffy, flat base): Fair weather.
- Cumulonimbus (towering, dark base): Thunderstorms likely.
- Cirrus clouds (wispy, high-altitude): A warm front may be approaching, signaling a change in pressure.

Recognizing cloud movement and growth rate helps predict wind direction and storm formation (Okur-Berberoglu, 2015).

2. Barometric Pressure Clues (Without Tools)

- If animals suddenly grow quiet or restless, a pressure drop may be occurring.
- Joint stiffness or ear pressure changes in humans can signal approaching low pressure.

3. Smell & Sound

- Before rain, many people notice a musty or earthy smell ("petrichor") — a sign of moisture-laden air.
- Sounds travel farther in humid or low-pressure conditions, helping estimate environmental shifts.

Orientation Using Natural Signs

1. Sun Position

- In the Northern Hemisphere, the sun rises roughly east and sets west.
- At noon, shadows are shortest and point north.
- Estimate time by tracking the sun's arc:
  - Mid-morning: East-Southeast
  - Noon: Overhead
  - Late afternoon: West-Southwest

2. Moss and Vegetation

- Moss grows best on the north side of trees (cooler, shadier side), though this varies by humidity and elevation.
- Lichens and ferns cluster in moisture-retaining zones, hinting at nearby groundwater.

3. Wind Patterns

- Morning breezes often come downslope in valleys; afternoon winds rise upslope as the land heats.
- Sway patterns in tall grass or trees indicate sustained wind direction.

Nature Awareness:
Signs, Weather, and Environment

What Is Nature Awareness?

Interpret weather, animal activity, plant responses, and terrain changes in real time

Reading Weather Signs in the Field

Cloud Literacy

Cumulus (floffy, flat base)

Cumulonimbus Thunderstorms likely

Cirrus (wispy, high-altitude)

Barometric Pressure Clues (Without Tools)

- Animals become quiet or restless
- Joint stiffness or ear pressure changes

Smell & Sound

- Musty smell before rain
- Sounds travel farther in humid air

Orientation Using Natural Signs

Sun Position

In the Northern Hemisphere, the sun rises roughly east and sets west

3 Wind Patterns

Wind often shifts upslope in the afternoon

2 Moss and Vegetation

Moss tends to grow on the north side of trees

4 Animal Cues

Birds fall silent just before a storm

Changing Conditions = Changing Strategy

4. Animal Cues

- Birds fall silent when predators or storms approach.
- Ant colonies often build steeper walls on the side facing prevailing winds or rain.
- Frogs croak more before rainfall due to increased humidity sensitivity.

Changing Conditions = Changing Strategy

Even subtle changes in the environment can affect safety and navigation:

- Temperature Drop: Often precedes thunderstorms or sudden weather fronts.
- Sudden Mist: Indicates rising humidity; may signal an incoming warm front or terrain-based condensation (like in valleys).
- Soil Moisture Change: Watch for boggy textures or color shifts — this may indicate flash flood zones or unsafe ground.

Outdoor learning programs stress real-time responsiveness: stop, observe, interpret, then act — a crucial safety rhythm.

The Cognitive Value of Observing Nature

Interpreting environmental signs strengthens:

- Pattern recognition
- Critical thinking under uncertainty
- Risk management

Place-based and immersive outdoor learning experiences enhance memory retention and ecological empathy (Gillis, 2016), especially among teens who often feel disconnected from abstract classroom learning.

✅ Summary Table: Environmental Cues & Their Meanings

Cue	What It Suggests	What You Should Do
Towering dark clouds	Storm likely	Seek cover or reassess route
Sudden bird silence	Predator or weather alert	Stay alert, reduce noise
Rising humidity, no breeze	Warm front or rainfall	Repack gear, waterproof items
Fern clusters on slope	Moist ground	Watch for slippery soil
Wind shift in forest	Weather transition	Check orientation & plan

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Practical Activities

Age Group: 15–19 | Focus: Environmental observation, safety awareness, natural cues

Activity 1: "Skywatch Log" — Forecast Like a Naturalist

Goal: Train students to observe, interpret, and document weather cues and develop pattern recognition over time.
Materials: Notebook or phone camera (optional), pen/pencil, access to an open sky view.

Steps:

1. Choose a consistent time of day (e.g., 9 a.m. or 3 p.m.) to observe the sky for 5–10 minutes daily over a 5-day span.
2. Record:
   - Cloud types (draw or describe)
   - Wind direction (use leaves/trees as indicators)
   - Humidity level (sticky feeling on skin, haze, breath visibility)
   - Any smells (e.g., rain on soil, ozone, dry grass)
   - Bird or insect activity (volume, species, sudden changes)
3. Make a prediction: Will it rain within 12 hours? What direction is weather coming from?
4. Next day, compare predictions to actual weather.
5. On Day 5, reflect on how accurate your reading has become and what signs you now notice instinctively.

Time: 10 mins/day for 5 days + 20 min wrap-up
Skills Practiced: Weather forecasting, pattern recognition, sensory awareness, journaling

Activity 2: "Silent Circle" — Deep Environmental Listening

Goal: Heighten sensory awareness and interpretation of animal behavior, wind, and micro-environmental signs.

Materials: None needed, just a quiet space (wooded area, park, field).

Steps:

1. Sit in a circle with participants spaced 3–5 meters apart.
2. No talking, phones, or movement for 10 full minutes.
3. During silence, each participant should:
   - Identify 5 sounds (birds, wind, leaves, insects, far-off voices).
   - Detect changes (e.g., bird alarm calls, wind gusts, sudden quiet).
   - Note sensory shifts: a drop in temperature, a change in lighting or scent.
4. After 10 minutes, debrief together:
   - What did you hear first? What faded in or out?
   - Did anything signal environmental change (e.g., drop in animal sound)?
   - Would any of these signs make you change your route or routine outdoors?

Optional twist: Repeat the same circle after a weather front or during a different time of day.

Time: 20–30 minutes
Skills Practiced: Auditory awareness, risk detection, mindfulness, interpreting environmental stability

Activity 3: "Nature Clue Trail" – Scavenger Hunt with Meaning

Goal: Encourage learners to connect natural signs to real-world outdoor decision-making.

Materials: Pre-selected area with natural features (trees, trails, open ground, etc.)

Setup:

1. Choose 5–7 stations along a trail or in a large natural space.
2. At each station, learners will:
   - Identify **a natural clue** (e.g., tree leaning away from wind, moss growth, shadow length).
   - Interpret what it tells them (e.g., prevailing wind direction, cardinal direction, moisture level).
   - Make a **navigation or safety decision** based on the clue:
     - Would you camp here?
     - Which direction is north?
     - What's the likely weather pattern?

Example:

- **Clue**: Trees with bark stripped on one side.
- **Interpretation**: Likely deer rubbing antlers—animal pathway nearby.
- **Decision**: Avoid camping on this corridor.

3. Finish with a group discussion: Which clues were easy/hard to spot? Which would help in a survival scenario?

Time: 45–60 minutes
Skills Practiced: Natural orientation, ecological inference, decision-making, environmental literacy

MODULE №2

Practical Outdoor Techniques

Unit 1: Building a Shelter

Unit 2: Making Fire

Unit 3: Finding & Purifying Water

Unit 4: Food in the Wilderness

Unit 5: Hygiene & Health

Decision-Making Guide for Weather & Terrain

Hot & Dry Conditions

- Hydration first: Always check water supplies before leaving camp – plan at least 1 L per hour of activity.
- Cooking: Use gas stoves instead of open fires – high fire risk!
- Resilience Tip: Fatigue and irritability increase in heat – encourage breaks and buddy checks.

Rainy & Humid Conditions

- Stay dry, stay warm: Wet clothes cool the body quickly – use layering and waterproof covers.
- Set camp high: Avoid valleys, riverbanks, or depressions where water collects.
- Cooking: Build a small rain cover for cooking; keep firewood dry in tarps or bags.
- Movement: Wet rocks and roots are slippery – move slowly and in pairs.
- Resilience Tip: Keep morale up with humor and teamwork; small routines (like tea time) help.

Fog & Low Visibility

- Stop and regroup: Don't wander separately – visibility deceives distance.
- Use landmarks & compass: Trust instruments, not intuition.
- Sound signals: Agree on whistles or shouts to stay connected.
- Resilience Tip: Calm leadership and clear communication reduce panic.

Mountainous or Rocky Terrain

- Pace management: Shorter steps, steady rhythm.
- Load control: Keep backpacks close to the body, avoid swinging weight.
- Weather shifts fast: Always prepare for sudden temperature drops.
- Cooking & fire: Only in safe, flat areas away from rockfall zones.
- Resilience Tip: Encourage support and patience – teamwork prevents accidents.

Forest & Dense Vegetation

- Navigation: Use clear bearings; mark trails gently (no cutting or carving).
- Fire: Only use existing sites – high wildfire risk in dry forests.
- Food storage: Hang food away from sleeping areas (animals!).
- Resilience Tip: Move quietly and observe nature – mindfulness improves group focus.

Building a Shelter

Theoretical Content (For youth ages 15–19)

Relevance

Shelter building is one of the fundamental survival skills. According to the "Rule of Threes" in survival logic, a person can typically survive only 3 hours without shelter in extreme weather conditions (cf. Canterbury, D.: Bushcraft 101, 2014). A basic structure that shields from cold, moisture, and wind can be life-saving. Even in non-extreme scenarios, a shelter provides a place to rest, creates structure, and offers psychological safety.

Subject Content

1. Why shelter matters:

- Protection from hypothermia, overheating, moisture, insects
- Place to rest or sleep
- Psychological benefit: safety, control, point of orientation

2. Choosing the Right Location (Source: Ray Mears, Essential Bushcraft, 2002):

- elevated and dry ground
- protected from wind (avoid cold air traps or sinkholes)
- no risk from dead branches, animal trails, rockfall, erosion
- within reach of resources (e.g., wood, water)

3. Materials

- Natural: branches, leaves, bark, grass, moss
- Man-made: tarp, cord, paracord, sleeping pad, bivy sack
- Tools: pocket knife, small saw, gloves (optional)

4. Types of Shelters (adapted from Thomas, Dave: Survival Shelter Guide, 2020)

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Type	Description	Advantages	Best Use Case
Lean-To	Slanted roof with back wall	Fast to build, one open side	Wind from one direction
A-Frame	Ridgepole with angled sides	Good stability, all-weather use	Rainy or multi-day setups
Tarp Shelter	Tarp suspended with cord in various forms	Lightweight, flexible, modular	Light packing, fast deployment
Debris Hut	Dome-like with natural materials	Excellent insulation, emergency use	Cold, emergency conditions

Learning Process / Methodology

Phase 1: Introduction (15 min)

- Prompt question: "What do humans need first in the wilderness?"
- Use of images/videos of shelter types (flipchart or projector)
- Clarify learning objectives for the session

Phase 2: Theory (30 min)

- Guided input by instructor
- Short presentation or worksheet
- Shelter type comparison with group discussion

Phase 3: Practice (90 min)

- Form groups (2–4 people)
- Task: "Build a functional shelter based on your surroundings"
- Choice of materials either free or assigned
- Optional documentation with photos or short video

Phase 4: Reflection & Conclusion (30 min)

- What worked well?
- What would you do differently next time?
- Checklist: Dry? Wind-protected? Stable?
- Group photo & cleanup

Extension: Shelter Construction in Different Climates

- **Rainforest:** airy design, raised off ground to avoid wetness
- **Cold climates:** compact, insulated, wind-resistant
- **Desert:** shaded, well-ventilated, sand protection

(Source: The SAS Survival Handbook, Wiseman, J., 2004)

Timeline (Total: approx. 3 hours)

1. Introduction & Objectives: 15 min
2. Theory & Site Analysis: 30 min
3. Construction Phase: 90 min
4. Wrap-up & Reflection: 30 min

Notes for Facilitators

- Safety first: never build shelters under dead trees or in flood zones
- Build with environmental care – follow Leave No Trace principles
- Encourage teamwork, role division, and creative thinking

Required Materials (varies by shelter type)

- Tarp or plastic sheet
- Paracord / cord
- Natural materials (leaves, branches, moss)
- Pocket knife, optionally small saw
- Sleeping pad or mat
- First-aid kit
- Camera or phone for documentation

Conclusion

Building your own shelter teaches not only technical outdoor skills, but also strengthens self-efficacy, teamwork, and a deep connection to nature. A shelter symbolizes protection, creativity, and trust in one's own abilities.

Sources & Literature:

- Canterbury, D. (2014): Bushcraft 101
- Mears, R. (2002): Essential Bushcraft
- Wiseman, J. (2004): The SAS Survival Handbook
- Thomas, D. (2020): Survival Shelter Guide

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LEAN-TO

A-FRAME

TARP SHELTER

DEBRIS HUT

Making Fire – The Right Way

Theoretical Content (For youth ages 15–19)

There's hardly anything more peaceful and mesmerizing than sitting around a crackling campfire beneath a star-studded sky. But with increasing wildfire risks due to climate change and environmental stress, it's more important than ever to understand how to make a fire safely, responsibly, and effectively.

Safety First – Fire as a Responsibility

Fire is not a toy. Even a small spark can cause major damage if not handled carefully.

- **Never leave a fire unattended** – Fires can spread quickly and unexpectedly. One person must always be present to supervise it [1].
- **Build a proper fire pit** – Dig a shallow pit and surround it with a ring of stones to contain the flames. Avoid layered or river stones – they can trap moisture and **explode** when heated due to steam buildup [2].
- **Never burn trash** – Especially plastics or foil. These release toxic fumes like dioxins, furans, and heavy metals that are harmful to people and nature [3].
- **Avoid lighting fires on peatland or organic-rich soil** – These can ignite below the surface and smolder for days, risking large-scale wildfires [4].
- **Don't build fires on rocks or boulders** – Intense heat can cause them to crack or split due to thermal stress.
- **Keep firefighting tools ready** – A bucket of water, sand, or a shovel can help quickly contain an emergency.
- **Extinguish thoroughly** – Stir the ashes with water until they're cold to the touch. No ember must remain.

Sources:

[1] U.S. Forest Service – Campfire Safety Guidelines
[2] Boy Scouts of America Handbook (14th Edition)
[3] Environmental Protection Agency (EPA): Open Burning Facts
[4] Global Peatlands Initiative – UNEP Report on Peat Fires

Gathering Wood – With a System

A well-built fire starts long before you strike a match. Choosing the right wood and organizing it is key.

- **Tinder** – Thin, dry twigs (less than 1 mm thick), dry grass, birch bark, or even dryer lint. Must ignite easily.
- **Kindling** – Slightly thicker branches (up to thumb thickness). They help transition the fire from spark to flame.
- **Firewood** – Larger logs or split wood, ideally seasoned (dried for at least 6–12 months) to minimize smoke and maximize heat.

Sort and stack your wood before lighting the fire. It helps you build and feed the fire efficiently.

Building the Fire – Step by Step

1. **Start small** – Begin with a nest of tinder, then add kindling in a cone or grid.
2. **Allow for airflow** – Oxygen is essential. Avoid compact piles that block ventilation.
3. **Ignite from the base** – Light the tinder and let the flame rise naturally through the layers.

Campfire Structures

- **Star Fire** – Radial layout; ideal for long-lasting embers and light.
- **Cooking Fire** – A flat, compact firebed; stable for cookware.
- **Pagoda Fire** – Criss-cross logs; burns well even with slightly damp wood. Good for beginners.

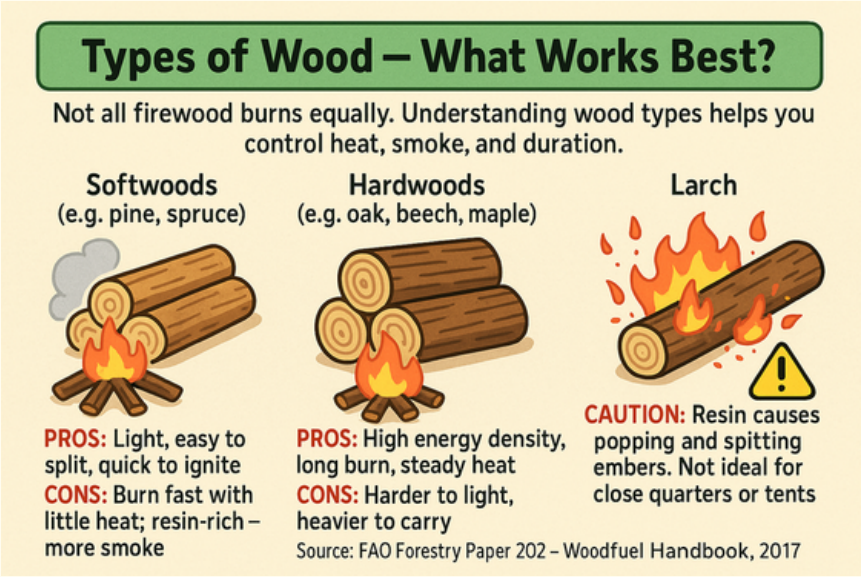
Tip: Always start small and build up as the fire becomes stable.

Types of Wood – What Works Best?

Not all firewood burns equally. Understanding wood types helps you control heat, smoke, and duration.

- **Softwoods** (e.g. pine, spruce):
  - Pros: Light, easy to split, quick to ignite.
  - Cons: Burn fast with little heat; resin-rich – more smoke.
- **Hardwoods** (e.g. oak, beech, maple):
  - Pros: High energy density, long burn, steady heat.
  - Cons: Harder to light, heavier to carry.
- **Larch**:
  - Caution: Resin causes popping and spitting embers. Not ideal for close quarters or tents.

Source: FAO Forestry Paper 202 – Woodfuel Handbook, 2017



After the Fire – Leave No Trace

Even a great fire must come to an end.

- Let the fire burn down fully. Use water to douse the ashes.
- Stir and repeat until **cold to the touch**.
- Restore the site: Remove fire ring stones, scatter cold ash, and cover scars with soil or leaves if appropriate.
- Leave the place better than you found it – a key outdoor ethic.

Source: Leave No Trace Center for Outdoor Ethics – www.LNT.org

Practice Makes Perfect

Fire-making is a **core wilderness skill**. It builds patience, responsibility, and environmental awareness. Practice in safe settings, respect burn bans or restrictions, and teach others what you've learned.

With time, you'll learn to "read" the fire – what it needs, when to feed it, and when to let it rest.

Final Challenge

Plan and run a full campfire evening for your group:

- Build and manage the fire
- Prepare safety measures
- Cook something simple (e.g., bread on a stick)
- Leave the site spotless

Earn a "Fire Master" badge or title upon completion!

Finding & Purifying Water

Theoretical Content (For youth ages 15–19)

Why is Water So Important?

The human body is made up of around 60% water. Especially during physical activity, in heat, or under stress, proper hydration is crucial. Even mild dehydration can significantly affect concentration, strength, and mood.

Source: Federal Centre for Health Education (BZgA): Drinking in Everyday Life

How Much Water Do You Need Outdoors?

Water needs depend heavily on weather, terrain, and physical exertion. A rough guideline:

- 2–4 liters per day (more in hot weather or during intense activity)
- Add 1–2 liters if cooking meals

Tip: It's better to have too much than too little.

Source: German Alpine Club (DAV): Drinking on the Trail

Before You Go – Bring Water

When leaving home, fill at least two water bottles with tap water. In most parts of Europe, this is safe:

- Tap water in EU countries complies with the EU Drinking Water Directive (2020/2184)
- In some regions (e.g., Southern Europe or islands), it's best to check locally or use bottled water.

Sources:

- European Commission: EU Drinking Water Directive (2020/2184)
- German Environment Agency: Drinking Water in Europe

On the Go – Recognizing Water Sources

- Many hiking maps or apps (like Komoot, Outdooractive) mark **springs**
- **Mountain springs** (clear, cold, flowing from rock) are usually drinkable
- **Streams through towns**: check carefully for pollution; cautiously taste a small amount or better: **ask locals for water**
- Even without speaking the language: **hold up your empty bottle** – people will understand

Source: Ray Mears: Essential Bushcraft (2003)

Water Treatment Options

If using water from natural sources, make it safe to drink:

- **Boil** for at least 5 minutes
- **Purification tablets** (e.g., Micropur Forte, Katadyn)
- **Portable water filters** (e.g., LifeStraw, Sawyer Mini)

Sources:

- Wiseman, J. (2004): The SAS Survival Handbook
- Stiftung Warentest: Water Filter Comparison

What's the Best Bottle?

Bottle Type	Advantages	Notes
Reused PET Bottle	inexpensive, lightweight, widely available	choose sturdy bottles (not too thin)
Stainless Steel / Nalgene	durable, sustainable	heavier and usually more expensive
Wide-Mouth Bottle	easy to clean	ideal for regular or long-term use
Collapsible Water Carrier	large volume, low weight when empty	good for base camps or group use

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On the Go – Recognizing Water Sources

Many hiking maps or apps (like Komoot, Outdoor-active) mark springs

Mountain springs (clear. cold, flowing from rock) are usually drinkable

Streams through towns: check carefully for pollution; cautiously taste a small amount or better: ask locals for water

Even without speaking the language: hold up your empty bottle - people will understand

Source: Ray Mears: *Essential Bushcraft* (2003)

Food in the Wilderness

Theoretical Content (For youth ages 15–19)

Goal: To provide basic knowledge about safe and nutritious food in nature, enabling survival without access to a supermarket.

1. Basic Principles of Finding Food

- Rule of 3: Surviving 3 weeks without food is possible, but strength and concentration decrease quickly.
- Priority: Secure water first, then look for food.
- Save energy: Don't burn more energy than you gain from food.

2. Plant-Based Food

Edible wild plants (only with proper knowledge!):

- Raw: Berries, nuts, wild apples
- For tea: Nettle, mint, elderflower
- For salad: Dandelion, ground elder, daisies
- Cooked: Nettle, sorrel, plantain

Dangers: Never eat plants you can't clearly identify!

Tip: Use a wild plant guidebook or an app like "Flora Incognita".

3. Seasoning and Flavor

- Use a few well-suited spices
- Fat = flavor & energy
- Add spices to hot oil when frying

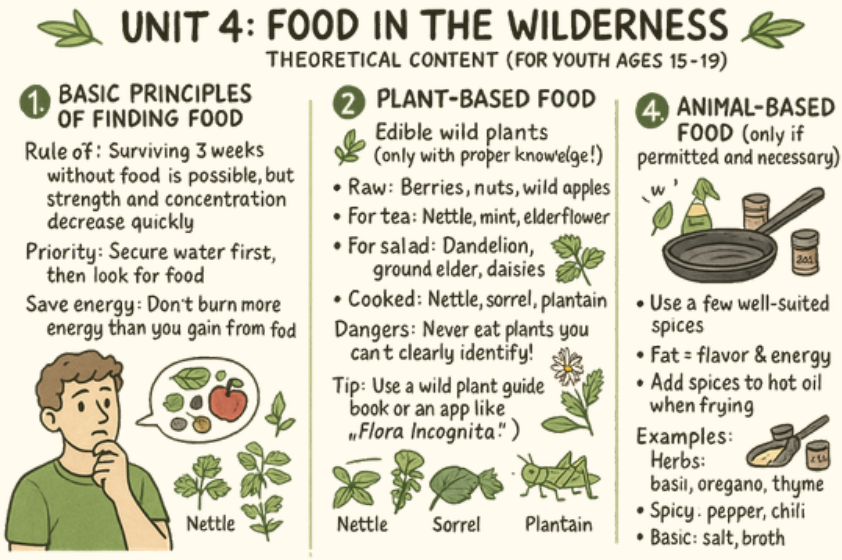
Examples:

- Herbs: basil, oregano, thyme
- Spicy: pepper, chili
- Basic: salt, broth, soy sauce

4. Animal-Based Food (only if permitted and necessary)

- Fish: Caught with fishing line or improvised spear
- Insects: Protein source in emergencies (e.g., grasshoppers, ants)

Important: Always respect local laws and ethical guidelines.



5. Water as a Foundation

- **Water before food!**
- **Safe sources:** Mountain springs, clear streams (upstream from towns/farms)
- **Purification methods:**
  - Boil for at least 5 minutes
  - Use filters or tablets (e.g., Micropur)
  - Charcoal filter or UV sterilization

Source: "Drinking Water on the Go," Outdoor Handbook by T. Hinrichs

Daily water needs: 2–4 liters or more depending on weather and activity.
Transport tips:

- Reused PET bottles (make sure they're sturdy)
- Wide-mouth bottles: easier to clean
- Water containers for groups or base camps

Source: www.outdoor-magazin.com

WATER AS A FOUNDATION

WATER BEFORE FOOD!

Mountain springs

clear streams
(upstream from towns)

PURIFICATION METHODS:

Boil for at least 5 minutes

Use filters or or tablets (e.g. Micropur)

Charcoal filter or UV sterilization

DAILY WATER NEEDS: depending on weather on 2-4 liters or more weather on activity.

TRANSPORT TIPS:

- Reused PET bottles (make sure they're sturdy)
- Wide-mouth bottle: easier to clean

- Water containers for groups or base camps

Source: www.outdoor-magazin.com

6. Cooking and Preparation

Basic equipment:

- Metal cup, knife, lighter/matches
- Foldable stove or campfire
- Pot, pan, cooking spoon, cutting board, cloths, trash bags

Cooking methods:

- Boiling in a pot or can
- Frying on a flat rock
- Roasting in embers (e.g., potatoes or fish)
- Making tea with fresh herbs

Transport & shelf life:

- Butter in a container
- Oil in a hard plastic bottle
- Liquids in freezer bags
- Fresh items only for 1–3 days

Source: www.bergzeit.de, "Nutrition on Trekking Tours"

7. Leave No Trace – Cooking & Food

- Plan ahead: Choose meals that create little waste and leave no fresh leftovers.
- Avoid single-use packaging: Use reusable containers, fabric bags, or glass jars.
- Cook on existing fire rings or stoves: Avoid creating new fire sites in nature.
- Use local resources responsibly: Do not take water from small or sensitive natural sources for cooking.
- Pack out all food waste: Even crumbs or pasta water don't belong in nature — animals can become dependent on human food.
- Use biodegradable soap sparingly: Wash dishes at least 50 meters away from any water source.
- Separate and pack out your trash: "Pack it in – pack it out." Everything you bring must go back with you.

COOKING AND PREPARATION

BASIC EQUIPMENT:

Metal cup, knife

Foldable stove or campfire

COOKING METHODS

Boiling in a pot or can

Transport & shelf life

Roasting in embers (e.g.) potatoes o fish)

Fresh items only for 1-3 days

Making tea with fresh herbs

Fresh items only for 1-3 days

Source: www.bergzeit.de

„Nutrition on Trekking Tours“

8. What to Avoid

- Eating unknown plants or mushrooms
- Using spoiled or slimy food
- Drinking untreated water

9. Further Tips & Literature

- "Edible Wild Plants" by Fleischhauer, Guthmann & Spiegelberger (AT Verlag)
- "Survival for Beginners" by Hannes Wimmer
- "Bushcraft 101" by Dave Canterbury
- "Cooking Outdoors" by Carsten Bothe

10. Practical Task: Cooking Together in Nature

Objective: To apply and reinforce learned skills through hands-on experience.
Task:

1. Form small groups (3–5 people).
2. Plan a simple meal using available ingredients (e.g., vegetable pan, herbal tea, stick bread).
3. Prepare the meal outdoors using your cooking gear.
4. Focus on:
   - Cleanliness and safety (especially around fire)
   - Sustainable use of resources (water, wood)
   - Working as a team
5. Document your experience (photo, short note, feedback session).

Goal: Build confidence in outdoor cooking and enjoy the shared experience.

Hygiene & Health

Theoretical Content (For youth ages 15–19)

Hygiene & Health – Staying Clean and Healthy Outdoors

Introduction: Maintaining hygiene in nature can be challenging without showers and bathrooms – but it is essential. Good hygiene prevents illness, boosts well-being, and supports group morale. With a little preparation and knowledge, it's easy to stay clean and healthy in the wilderness.

Hand Hygiene

- Wash hands with clean water and biodegradable soap before cooking, eating, or after using the toilet.
- If water is scarce: use hand sanitizer (min. 60% alcohol) or alcohol wipes.

Source: CDC – Clean Hands Save Lives (www.cdc.gov/handwashing)

Toilet Practices in the Wild

- Always dig a hole **15–20 cm deep** and at least **50 m away from water sources**.
- Use **biodegradable toilet paper** or carry it out in a zip bag.
- Bury waste completely and disinfect hands afterward.

Source: Leave No Trace Center for Outdoor Ethics (www.lnt.org)

Body Care Without a Shower

- Wash regularly with a **wet cloth or sponge**.
- Use **natural water bodies** only with **eco-friendly soap**.
- Focus areas: face, feet, armpits, groin.
- **Change clothes daily** if possible; dry damp clothing in the sun.

Clothes and Laundry

- Avoid staying in sweaty clothes – it causes **skin irritation** and colds.
- **Air clothes** regularly.
- Pack at least **1–2 changes** of underwear and socks.

Wound Care and First Aid

- Clean minor wounds with **sterile water** or disinfectant.
- Cover with a clean bandage.
- Carry a **first-aid kit** with:
  - Band-aids, gauze, disinfectant wipes
  - Tweezers (e.g., for ticks)
  - Blister patches, painkillers

Source: German Red Cross (DRK), Outdoor First Aid Guidelines

Insect Protection

- Wear **long sleeves and pants** in high-risk areas.
- Use **natural repellents** (citronella) or chemical sprays (DEET, icaridin).
- Sleep under **mosquito nets** if needed.

Health Maintenance

- Drink enough (at least **2 liters/day**).
- Eat balanced meals and rest properly.
- Signal if you feel dizzy, weak, or unwell – **speak to a leader**.

HEALTH AND HYGIENE IN THE WILDERNESS

TOILET PRACTICES IN THE WILD

- Always dig a hole 15-20 cm deep and at least 50 m away from water sources.
- Bury waste completely and disinfect hands afterward.

Source: Leave No Trace Center for Outdoor Ethics (www lnt.org)

BODY CARE WITHOUT A SHOWER

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- Sleep under mosquito nets if needed

HEALTH MAINTENANCE

- Drink enough (at least 2 litres/day)
- Eat balanced meals and rest properly
- Signal if you feel dizzy, or unwell -

Source: "Fit in the Wild," Bundeszentrale für gesundheitliche Aufklärung (BZgA)

Conclusion: Even without modern facilities, staying clean and healthy in the wild is possible. It's not about perfection – it's about routine, awareness, and adapting your hygiene to the environment. This way, you'll stay safe, strong, and enjoy your time outdoors!

Further reading:

- "Outdoor Hygiene & Safety" – DAV (German Alpine Club)
- "Survive!" by Les Stroud
- "Ultralight Outdoor Hygiene" by M. Hudson

MODULE №3

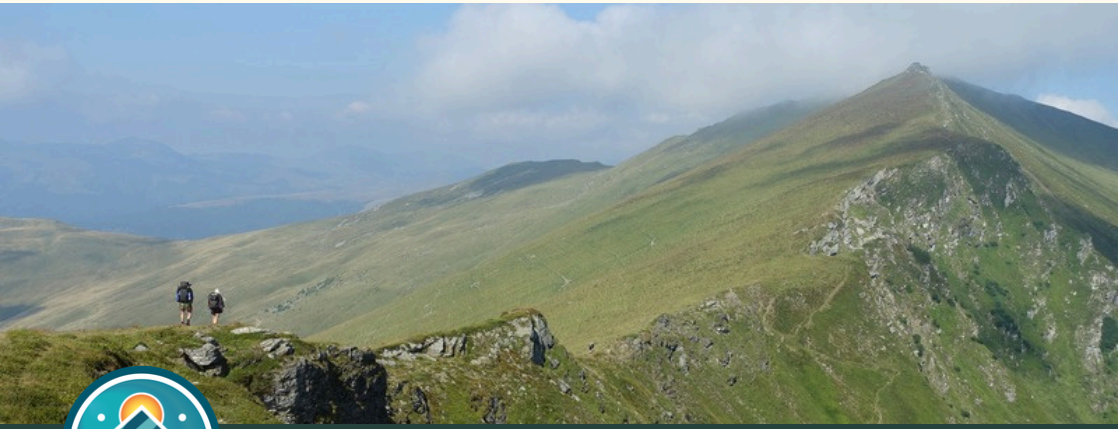
Risk and Safety Awareness
Stay Calm, Stay Smart, Stay Safe in Nature

Unit 1: Mountains – Stay Safe, Stay Smart

Unit 2: Rivers: Beautiful, Powerful – and Sometimes Risky

Unit 3: Sharing Space with Animals

Unit 4: Weather – Read the Sky



Mountains – Stay Safe, Stay Smart

Mountains are exciting places — but also risky if you're not ready. In the table below you can see some of the most common dangers, how to recognise them and what to do.

Top Mountain Hazards

Danger	What to Look For	What To Do
Steep terrain	Loose stones, cliffs, wet rocks, cudden drop-offs	Walk carefully, use poles
Fog	Trail disappears, everything looks the same	Stay together, don't guess the way
Cold & wind	Cold, storms, fast cloud cover; Shivers, numb fingers, tiredness	Check forecast, add layers, keep moving, snack
Altitude	Headache, short breath	Rest, hydrate, take it slow
Peer pressure	"Let's just go for it!"	Speak up - a good group listens
Getting tired	Mistakes happen when you're worn out	Rest often, check in with each other

Key Risk Management Skills You Can Practise

Being outdoors is fun, it's even better when you're ready for what might happen. Here are a few simple skills that help you stay safe, calm, and confident on any adventure.

Preparation Skills

Clothing

Wear layers so you can stay warm, cool down, or stay dry as the weather changes. A waterproof jacket and sturdy shoes or boots are useful — even on short walks.

Packing

Bring the essentials:

- Water bottle
- Small snack
- Map or phone with battery
- Whistle
- Emergency foil blanket (they're tiny but important)

Your 1-Minute Risk Plan (STOP–CHECK–DECIDE–ACT)

1) STOP
Pause for 10 seconds. Look around. No rushing = better decisions.

2) CHECK
Scan the 4 things that change risk fast:

- Terrain: steep? loose? slippery? cliffs?
- Weather: wind? rain? heat? fog? (could it change soon?)
- People: how's the group? tired? nervous? new to this?
- Time: how much daylight left? how far to safe exit?

3) DECIDE (pick one and say it out loud)
Avoid: "This is too risky now — we choose a safer option."
Reduce: "We continue, but slower / spaced out / with poles / rope / different path."
Accept (low risk): "OK to continue — we stay alert and re-check in 10–15 mins."

4) ACT
Who does what? (leader / back-marker / buddy pairs)
What gear helps? (layers, map/phone power, water, whistle)
Where's the safe stop if things change? (tree line, hut, bus stop, village)
Quick examples:

- Mountain ridge gets windy → Reduce: jackets on, increase spacing, turn back if gusts worsen.
- River looks calm but deepens suddenly → Avoid: don't enter; choose a bridge or shallower crossing.
- Friend is quiet + pale in cold rain → Reduce: hot drink, extra layer, shorter route to shelter.
- Re-check rule: If anything changes (terrain, weather, people, time), repeat the plan.

Activity - Risk Spotters
You'll choose a real walking or hiking route using an online map and look for places where risks might come up — things like tricky paths, steep hills, or hidden hazards.
You'll plan it like you're leading a small group — not to scare anyone, but to be the kind of person who's ready for anything.

Choose Your Route
Use the map app to pick a natural place you'd like to explore. It could be:
- A local forest path
- A hill or mountain walk
- A riverside or nature trail

Choose somewhere you know, have visited, or would like to go one day.
Use satellite view or the "terrain" layer to see slopes and natural features.

Spot the Risky Bits
Look closely at your chosen route. Try to find at least 5 possible risks. For each one, ask yourself:
- What could make this part tricky or unsafe?
- When would it be most risky — in rain, fog, heat?

Who might struggle here — a tired person, a younger person, someone afraid of heights?

Some examples:

- Steep or uneven ground
- Rivers or streams to cross
- Open areas with no shelter
- Forests with low visibility
- Long stretches without signal or exits

Write them down or mark them on your map.

Think About Solutions

For each risk, ask:

- What would help reduce this risk?
- What would I tell someone before we start?
- Would I change the route, or bring extra gear?

Share Your Plan

You'll present your route and risk ideas to the rest of the group. Be ready to explain:

- What place you chose and why
- What risks you noticed
- How you'd keep people safe
- You can also learn from others' routes and ideas.

Tips for Doing It Well

- Think like a leader — not just "what's dangerous?" but "how can I help others feel safe here?"
- Consider different types of people: someone with no hiking experience, a child, someone nervous
- Use your own experience — when have you felt unsure on a walk or hike?

Reflect & Discuss

After the activity, you might talk about:

- What risks were easy or hard to spot?
- Did anyone in your team disagree?
- Would you feel more confident walking this route now? Why?
- How does planning like this change how you see nature?

Rivers: Beautiful, Powerful – and Sometimes Risky

Have you ever walked along a river and wanted to jump in? Or watched water rushing past and thought, "That doesn't look too deep"? Rivers can look calm on the surface, but they can hide dangers that are hard to see.
In this unit, we'll look at how to enjoy rivers safely — by knowing what to watch for, how to move around them, and what to do if things go wrong.

Why Rivers Deserve Respect

Rivers aren't just water. They change all the time — the flow, the depth, the shape of the banks. That's what makes them exciting and also unpredictable. Even a stream that looks safe might have a strong current underneath or be deeper than it seems.

Here's what to watch out for:

Common River Hazards

- Slippery rocks and muddy banks – easy to fall or twist an ankle
- Strong currents – water can pull you even if it looks still
- Sudden drop-offs – the riverbed may go from shallow to deep in seconds
- Hidden branches or rubbish – can catch your legs or trip you
- Cold water – jumping into cold water can shock your body and make it hard to breathe
- Flash floods – rain upstream can raise the water level without warning

What You Can Do to Stay Safe

You don't need to avoid rivers — just be smart around them. Here are some simple ways to lower the risk:

- Wear proper shoes – sandals or bare feet don't grip well on wet rocks
- Walk slowly – don't rush near water, especially on uneven ground
- Stay back from the edge – keep a safe distance unless invited closer by a leader
- Don't jump or dive – even if someone else is doing it, you don't know what's below
- Watch your group – check in with each other, especially if someone seems distracted or nervous
- Ask before going in – never enter the water without checking with a leader or adult

What If Something Goes Wrong?

- If you fall in: Try to stay calm. Float on your back with your feet pointing downstream. Look for a place to grab on.
- If someone else falls in: Shout for help, don't jump in. Throw them something to hold onto if you can (a stick, rope, or bag).
- Always tell a leader straight away — don't try to sort it all alone.

Staying Safe Means Enjoying More

Knowing the risks doesn't mean you have to worry all the time. It means you're paying attention — and that makes you a stronger, safer part of the group.

Once you know how to move safely near rivers, you'll feel more confident exploring them — and you'll be able to help others too.

Activity: Sit, Watch, Listen – Reading the River

Sometimes we're so used to moving and talking that we forget how to simply notice the world around us. In this activity, you'll sit quietly by a river or stream and observe — not with a task to complete, but just to be there and see what you notice.
You'll listen, watch, and reflect. This helps you tune in to nature, stay aware of your surroundings, and notice how a place makes you feel — not just what's happening around you.

1. Find a Spot
You'll choose a safe place near the river to sit. It should be somewhere you feel calm, where you can see and hear the water. Spread out so you have some personal space.

2. Stay Quiet and Just Notice
Sit still. Don't talk. Watch the water. Listen to the sounds. Feel the air, the ground, your breath.
You don't have to do anything — just let yourself settle. If your mind wanders, bring it back to what's in front of you.

3. Try This While You Sit
You can write, draw, or just think. Try asking yourself:

- What can I hear? Near me? Far away?
- What's moving? What's completely still?
- What does this place feel like — peaceful, powerful, alive, tense?
- If I were younger or more nervous, would this spot feel different?
- If this river could speak, what would it say?

You don't have to answer everything. Just pick what feels interesting.

4. After You Sit

You'll come back together with the group to share (only if you want to). You might talk about:

- Something surprising you noticed
- How the place made you feel
- What you think a child, or someone new to nature, might experience here

Tips for Doing It Well

- Let yourself slow down — this isn't a race
- It's okay to feel bored at first — stay with it, your focus will sharpen
- If your mind wanders, gently bring it back to the water
- Use your senses, not just your eyes — listen, feel, even smell the air
- Try not to judge your thoughts — this isn't a test

Why It Matters

When you pay attention to a place like this, you start to notice things other people miss — sounds, feelings, small movements. This makes you more aware, more present, and more connected. That's not just useful for safety — it's also part of what makes being in nature so powerful.

Sharing Space with Animals

When you're outdoors — whether in a forest, up a hill, or by a river — you're not alone. Lots of animals live in the same places where we walk, explore, and camp. Most of them don't want anything to do with us — but sometimes we cross paths. In this unit, you'll learn how to spot signs of animals, what risks to watch out for, and how to stay calm and safe around them.

Why It Matters

Most animals won't bother you. They're either curious or trying to stay out of sight. But that doesn't mean we can ignore them. Being prepared means:

- Knowing which animals are nearby
- Understanding what not to do (like chasing or feeding them)
- Staying calm if you're surprised by one

You don't need to be scared. Just aware.

Animals You Might Meet (and What to Watch For)

Insects and Ticks

- **Bees and wasps** sting when they feel threatened — don't swat or panic
- **Ticks** are tiny and hide in long grass. Some carry disease (like Lyme disease), so it's important to check your skin after walking through bushes or tall grass
- Wear long sleeves and light colours, and use insect repellent if you're in the woods for a while

Snakes and Small Wildlife

- In many places, snakes (like adders) live in sunny clearings or near rocks
- They're shy and won't attack unless you step on or grab them
- Watch where you step, especially in dry, sunny spots

Birds and Squirrels

- These animals are fun to watch — but don't get too close to their nests or young
- Some birds (like gulls or geese) may hiss or flap if they feel their babies are in danger

Bigger Wildlife

- Depending on where you are, you might see deer, foxes, or even wild boar
- These animals usually avoid people, but don't approach them — even if they seem friendly or slow
- Never try to feed or touch wild animals

What About Farm Animals?

If your hike goes through farmland, you might walk near sheep, cows, or horses. They're not wild, but they're big and can still be risky.

- **Cows with calves** may become protective and walk towards you
- **Horses** may kick or run if they feel surprised
- Stick to marked paths, don't chase or call to them, and walk calmly through fields

If you're in a group and walking through a field with cows:

- Stay together
- Walk slowly and confidently
- Don't run or wave your arms

Dogs on Trails

Most dogs are friendly, but not all are under control — especially in nature areas where they're off the lead.

- If a dog runs up to you, don't scream or run
- Stand still, keep your arms by your sides, and avoid eye contact
- If it keeps jumping or barking, call for help or let a group leader know

What To Do If You're Worried

- Tell someone if you see an animal and don't know what it is
- If you hear buzzing or spot a snake, stop and move away slowly
- Don't throw food, chase animals, or pick up baby animals — their parents might be nearby
- Ask questions! The more you know, the less nervous you'll feel

You're a Guest in Nature

Animals live in these places all the time — we're just visiting. When you show respect and move with awareness, they'll usually do the same. Knowing the risks isn't about being scared — it's about feeling ready and confident.

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Sometimes wild animals get too close to humans — foxes in cities, birds nesting near paths, wild boar near farms. People often move, scare off, or even kill animals when they think they're a risk.

But is that fair? Should we have that right?

This debate lets you explore different views, practise standing up for your ideas, and hear what others think — even if you disagree.

What to Do

1. **You'll be placed in a team:**
   a. One side says: Yes, humans should be allowed to control wildlife
   b. The other side says: No, animals have the right to live freely without interference
2. **Your team will prepare your arguments (10–15 mins):**
   a. What do you believe?
   b. Why? Can you give real examples?
   c. What might the other side say — and how could you respond?
3. **We'll have a short debate:**
   a. Each side speaks (no shouting, no cutting off)
   b. Then we open it up for questions or reflections
   c. You can also share your personal opinion at the end

Debate Rules (Simple and Respectful)

- Speak honestly — you don't need to use fancy words
- One voice at a time — listen fully before responding
- Challenge ideas, not people — don't make it personal
- Stay open — it's okay to change your mind
- Support each other — even if you're nervous, you're part of a team

How to Build Your Point of View

- Think about what matters to you — safety? fairness? nature?
- Use examples — a real story or situation is more powerful than just opinions
- Explain how you feel — emotions are valid, just keep them respectful
- Back it up — facts, experience, or common sense all help

If You Get Stuck

- Take a breath — silence is allowed
- Ask your team for help
- Say, "I'm not sure, but I think..." — it's okay to explore an idea out loud

After the Debate

We'll sit down together and talk about:

- What surprised you?
- Did you change your thinking?
- Is there a middle ground between the two sides?
- How would you handle a real situation like this?

You don't have to be loud to be heard. What matters is that your point of view is real, respectful, and thought through. That's what makes this a meaningful conversation — not a competition.

Weather – Read the Sky

When you're outdoors — whether in a forest, on a hill, or near a river — the weather is always part of the story. It can change quickly, and it can change everything: the ground, your mood, your safety, and your decisions.
Some days are perfect for exploring. Others demand smart thinking, good gear, and the ability to say, "We need to change the plan."
This unit is about how to **notice**, **understand**, and **adapt to** the weather — not just hope it stays nice.

What Can Go Wrong?

Cold + Wet

- If your clothes get soaked and it's chilly, you can lose body heat fast — even in spring or autumn
- Cold fingers, shaking, and tiredness can be early signs of **hypothermia**

Hot + Dry

- If you're walking in the sun for too long without drinking, you can get dizzy or sick
- Headaches, tiredness, or red skin can be signs of **heat exhaustion**

Wind + Storms

- Strong winds can break branches, blow away gear, or make you lose balance
- Thunderstorms bring lightning — and it's dangerous to be exposed on hills or under tall trees

Fog or Low Visibility

- If you can't see the path clearly, it's easy to get lost or miss hazards
- You might not notice where your group is — or where you came from

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What Helps You Stay Safe?

Smart Clothing

- Wear **layers**: something warm, something waterproof, something breathable
- Avoid cotton when it's cold or wet — it stays damp
- Always bring **extra warmth**, even if the day starts sunny

Right Gear

- A rainproof jacket
- Hat, gloves (yes, even in spring)
- Water bottle
- Sunscreen + sunglasses
- Emergency snack
- Dry socks (game-changer!)

Weather Awareness

- Check the forecast before you go
- Learn to spot changes: dark clouds, wind shifts, cold air
- Speak up if you feel too hot, too cold, or dizzy — there's no shame in listening to your body

How Weather Connects to Everything Else

- In the **forest**, rain makes roots and leaves slippery
- In the **mountains**, fog and wind can turn a fun walk into a risky climb
- By the **river**, hot sun makes you thirsty — but it might also tempt you to jump in without thinking
- With **animals**, weather affects their behaviour — and yours. Wasps love heat, snakes love sun, cows might huddle in wind

The weather doesn't just add risk – it changes the rules.

What Do You Notice?

Being weather-aware means more than checking an app. It's about noticing:

- How your body feels in different temperatures
- How your mood shifts (does the cold make you quiet? Does the sun make you rush?)
- How your group is doing – does someone look frozen, or tired, or overexcited?

The more you pay attention, the safer and more confident you'll feel – and the more fun you'll have.

Remember:

You don't need perfect weather to have a great time.

You just need the right mindset, gear, and decisions to move safely with the weather, not against it.

Activity: Weather Scenario Relay

1.Get Ready

Your facilitator will facilitator will prepare a set of weather scenario cards. Each one describes something that could happen outdoors — and your job is to figure out what you'd do.

2. Make Teams

Split into teams of 4–6 people. Make sure everyone gets a turn to speak and write.

3. Solve the Scenario

For each scenario, your team will:

1. Spot the risk – What could go wrong here?
2. Make a decision – What's the best thing to do now?
3. Plan ahead – What gear, knowledge, or action would help?

You'll only have a few minutes for each one — think clearly, decide together, and write your answers down.

4. Final Group Reflection

Once all the teams are finished, share your favourite or most difficult scenarios. Talk about:

- Which ones surprised you?
- What did different teams decide to do?
- What would you pack or do differently next time?

Tips for You

- You don't need perfect answers — just clear, safe thinking.
- Listen to your team before jumping in.
- Be creative — real weather is unpredictable!
- Ask questions if something in the scenario confuses you.

Activity: Pack for the Weather

1. The Scenario

Your team will get an outdoor challenge like one of these:
You'll use this scenario to guide your decisions.

2. The Gear Pile

You'll have a big list of possible items — or real equipment. Some things are clearly useful, others might be useless, or even make things worse.

3. The Packing Challenge

Your team has 10–15 minutes to:

- Choose 5–8 items that match your scenario
- Write down why you chose each one
- Be ready to explain your choices to the group

4. Share Your Pack

Each group will present:

- What you packed
- Why those things are important
- What you didn't bring and why

You might also give feedback on each other's packs. Did any team forget something important? Or overpack?

Questions to Think About

- What item did your team argue over the most?
- Did you pack too much or not enough?
- Would you change your choices if you had to carry the bag yourself?
- How does being prepared change how you feel outdoors?
- What's one thing you'll pack differently next time you go outside?

Tips for You

- Think about the weather, not just comfort
- Don't fall for items that look useful but don't help in your specific scenario
- Ask: "Is this really helping me stay safe, dry, warm or ready?"

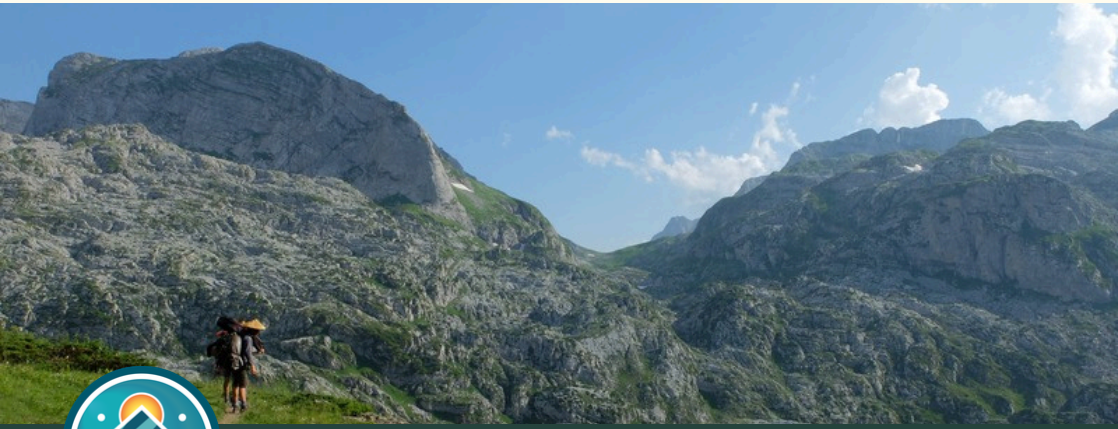
MODULE №4

Teamwork essentials

Unit 1: Team Development Stages

Unit 2: Team Roles and Contributions

Unit 3: Active Listening and Communication



Team Development Stages

Theory

What Are Team Development Stages?

Have you ever noticed how a group of strangers slowly becomes a tight-knit team? Whether it's starting a new school year, joining a sports team, or going on an outdoor adventure with new people, teams don't just magically work well together from day one. They go through predictable stages.

Back in 1965, a psychologist named Bruce Tuckman discovered that all teams - from school project groups to professional sports teams - follow the same pattern of development. He identified **five stages** that every team experiences:

The 5 Stages Explained

1. FORMING

"Nice to meet you!"

This is the honeymoon phase, where everyone is on their best behaviour. People are:

- Being polite and friendly
- Getting to know each other
- Figuring out what the team is supposed to do
- Looking to leaders for direction
- Avoiding conflict (everyone's still being nice!)

In outdoor settings: Everyone's excited about the adventure, sharing snacks, and asking basic questions like "Where are we hiking?" or "Who's brought the map?"

2. STORMING

"Wait, that's not how we should do it!"

Reality hits! This is when conflicts and disagreements start popping up:

- People have different ideas about how things should be done
- Personalities clash
- Some people try to take control while others resist
- Frustration builds when things don't go smoothly
- The team might feel like it's falling apart

In outdoor settings: Arguments about which trail to take, who carries what equipment, or disagreements about pace. Someone might complain that others aren't pulling their weight.

3. NORMING
"Okay, let's figure this out together."
The storm starts to calm as the team finds its rhythm:

- People start to understand and accept each other
- Ground rules and expectations are established
- Roles become clearer (who's good at what)
- Trust begins to build
- The team develops its own "way of doing things"

In outdoor settings: The group figures out a hiking pace that works for everyone, establishes who's good at navigation vs. cooking, and creates systems for sharing responsibilities.

4. PERFORMING
"We've got this!"
This is where the magic happens! The team is now working like a well-oiled machine:

- High productivity and effectiveness
- People support each other naturally
- Problems get solved quickly
- Everyone knows their role and does it well
- The focus is on achieving goals together

In outdoor settings: The team moves smoothly through challenges, naturally supports struggling members, makes quick decisions together, and tackles obstacles with confidence.

5. ADJOURNING
"Thanks for the memories!"
Also called "Mourning," this is when the team's work is done:

- Celebrating achievements together
- Reflecting on what was learned
- Saying goodbye (which can be emotional!)
- Moving on to new teams or projects

In outdoor settings: The final campfire, sharing favorite memories from the trip, exchanging contact information, and feeling sad that the adventure is ending.

Why Does This Matter?
Understanding these stages helps you:

- Stay patient during the Storming phase (it's normal!)
- Recognize when your team is making progress
- Help your team move through stages more smoothly
- Not take conflicts personally - they're part of the process
- Appreciate the journey your team takes together

Key Points to Remember:

- All teams go through these stages - it's completely normal
- You can't skip stages - each one is necessary
- Teams might cycle back to earlier stages when new challenges arise
- Not all teams reach performing - some get stuck in Storming
- The journey through stages can take hours, days, weeks, or months

Practical Activity
Activity: Video Analysis - Spotting the 5 Stages

What you'll do: Watch this YouTube video about team development and identify examples of each of Tuckman's five stages.

Video: "The 5 Stages of Team Development"
https://www.youtube.com/watch?v=osNrBLH374A

Your mission: As you watch, fill out the worksheet below. Look for moments that show each stage and write down what you observe.

Worksheet:

Stage	What I Observed	Time in Video
FORMING 🤝 *Look for: introductions, politeness, uncertainty, looking for leadership*		
STORMING ⛈️ *Look for: conflicts, disagreements, frustration, power struggles*		
NORMING 📋 *Look for: agreements, rule-setting, role clarity, compromise*		
PERFORMING 🎯 *Look for: smooth teamwork, problem-solving, goal achievement*		
ADJOURNING 👋 *Look for: celebrating, reflecting, saying goodbye*		

Discussion Questions: After watching, think about:

1. Which stage in the video seemed most challenging for the team?
2. What helped the team move from Storming to Norming?
3. Can you think of a time when you experienced these stages in your own life?
4. How might recognising these stages help you in future team situations?

Bonus Challenge: Think of a recent team experience you've had (sports team, school project, friend group planning something). Can you identify which stages your team went through? Write a short paragraph describing your team's journey using Tuckman's model.

Team Roles and Contributions

Theory

Why Do Teams Need Different Types of People?

Imagine trying to build a shelter in the wilderness with a team where everyone is exactly the same - all leaders, all creative dreamers, or all detail-focused perfectionists. It would be chaos! The best teams are like a puzzle where different pieces fit together to create something amazing.

Dr. Meredith Belbin spent years studying successful teams and discovered that the most effective teams have people playing different team roles. These aren't job titles - they're the natural behaviors and strengths people bring to group work.

The 9 Belbin Team Roles

Think of these as different "superpowers" that people naturally have when working in teams:

THINKING ROLES

These people focus on ideas and analysis

1. PLANT "The Creative Genius"

- Strengths: Comes up with innovative solutions, thinks outside the box
- Weaknesses: Can be impractical, might ignore details
- In outdoor settings: "What if we build our shelter using those fallen branches in a completely new way?"

2. MONITOR EVALUATOR "The Wise Judge"

- Strengths: Sees all options clearly, makes good decisions, spots problems
- Weaknesses: Can be overly critical, slow to decide
- In outdoor settings: "Wait, let's think about this route - it looks dangerous and the weather's changing."

3. SPECIALIST "The Expert"

- Strengths: Deep knowledge in their area, passionate about their expertise
- Weaknesses: Only focuses on their specialty, can be narrow-minded
- In outdoor settings: "I know everything about navigation - let me handle the map and compass."

ACTION ROLES
These people focus on getting things done

4. SHAPER "The Challenger"
- Strengths: Drives the team forward, loves challenges, doesn't give up
- Weaknesses: Can be aggressive, might upset others
- In outdoor settings: "Come on team, we can make it to the summit before dark if we push ourselves!"

5. IMPLEMENTER "The Reliable Doer"
- Strengths: Turns ideas into action, works systematically, very reliable
- Weaknesses: Can be inflexible, slow to adapt to changes
- In outdoor settings: "Okay, let's set up camp step by step - first the tarp, then the sleeping area, then the cooking space."

6. COMPLETER FINISHER "The Perfectionist"
- Strengths: Pays attention to details, ensures quality, meets deadlines
- Weaknesses: Can be anxious, might get stuck on small details
- In outdoor settings: "Before we leave, let me double-check we've packed everything and left no trace."

PEOPLE ROLES
These people focus on relationships and teamwork

7. COORDINATOR "The Natural Leader"
- Strengths: Good at delegating, sees the big picture, brings out the best in others
- Weaknesses: Might not contribute their own ideas, can be seen as manipulative
- In outdoor settings: "Sarah, you're great with the stove - can you handle dinner? Mike, you're our strongest hiker - want to lead the way?"

8. TEAMWORKER "The Peacemaker"
- Strengths: Keeps everyone happy, prevents conflicts, very supportive
- Weaknesses: Can be indecisive, avoids difficult conversations
- In outdoor settings: "Hey, I can see everyone's getting tired and frustrated - let's take a break and have some snacks."

9. RESOURCE INVESTIGATOR "The Networker"

- Strengths: Great at finding help and resources, enthusiastic, good with people
- Weaknesses: Can lose interest quickly, might be overly optimistic
- In outdoor settings: "I'll ask those other hikers about the trail conditions ahead, and maybe we can team up with them!"

Key Points About Team Roles:

- Everyone has a preferred role - what feels most natural to you?
- Teams need a mix of roles to be successful
- You can play different roles depending on the situation
- No role is better than others - each one is valuable
- Most people have 2-3 strong roles they naturally play
- Understanding roles helps reduce conflict - you realize people aren't being difficult, they're just playing their natural role

Why This Matters in Outdoor Settings:

In outdoor adventures, you need:

- Plants to solve unexpected problems creatively
- Shapers to motivate the team through tough challenges
- Implementers to set up camp efficiently
- Teamworkers to keep morale high when things get difficult
- Completer Finishers to ensure safety protocols are followed
- Coordinators to organise the group and delegate tasks
- Resource Investigators to find help or additional supplies
- Monitor Evaluators to assess risks and make safe decisions
- Specialists to handle technical equipment or specific skills

Practical Activities

Activity 1: Real-World Role Spotting (Homework)
What you'll do: Over the next week, observe a real team situation you're part of and try to identify the different Belbin roles people are playing.

Possible situations to observe:
- Group project at school
- Sports team practice or game
- Family planning a trip or event
- Friends organizing a hangout
- Club or organization meeting
- Video game team or online group

Your mission:
1. **Choose one team situation** you'll be part of this week
2. **Observe without judging** - just watch how people naturally behave
3. **Take notes** about what each person does and says
4. **Identify roles** - which Belbin role is each person playing?

Reflection Questions:
- Which roles were present in your team?
- Which roles were missing? How did that affect the team?
- What role did you naturally play?
- How could understanding these roles help your team work better together?
- Were there any conflicts that might have been caused by role clashes?

Activity 2: Role Detective - Text Analysis
What you'll do:
Read the scenario below about a group planning an outdoor camping trip. Try to identify which Belbin team role each person is displaying.

Scenario: Planning the Mountain Camping Trip
The outdoor club is planning a three-day camping trip to the mountains. Here's what happened during their planning meeting:

Alex jumped up excitedly and said, "What if we don't just camp normally? What if we build tree houses and sleep in the canopy? I saw this amazing technique online where you use ropes and tarps to create elevated shelters!"

Sam immediately responded, "That sounds cool, but let's think about this practically. What if it rains? What if someone falls? We need to consider all the risks before we decide."

Jordan pulled out a detailed spreadsheet and said, "I've researched the weather patterns for the last five years. Based on the data, we have a 73% chance of rain on Saturday, so we need waterproof gear."

Casey stood up and declared, "Look, we've been talking for an hour and made zero decisions! We need to pick a campsite TODAY, assign who brings what, and get moving. Time's wasting!"

Riley quietly said, "I can see everyone's getting a bit stressed. Maybe we should take a break and get some snacks? I brought cookies for everyone."

Morgan started writing on the whiteboard, "Okay, let's organize this. Casey, you're great at making quick decisions - can you research campsites? Jordan, you're our data expert - can you handle the weather and gear list? Alex, we need your creativity for activities."

Taylor jumped in, "I know someone who works at the outdoor gear shop - I can get us a group discount! And my cousin went to that area last month - I'll ask her about the best spots!"

Avery methodically said, "Whatever we decide, I'll create a detailed packing checklist for everyone and make sure we have backup plans for each activity."

Quinn looked worried and said, "Before we finalize anything, I want to double-check we have all the safety equipment, emergency contacts, and that we've told our parents exactly where we'll be."

Your task: Match each person to their Belbin team role:

Person	Team Role	Evidence (what they said/did)

Active Listening and Communication

Theory

What Is Active Listening?

You might think listening is just... well, hearing what someone says. But there's a huge difference between simply hearing words and truly listening. Have you ever been talking to someone who was scrolling through their phone, looking around the room, or clearly thinking about something else? How did that make you feel?

Active listening means giving your full attention to understand not just the words someone is saying, but also their feelings, thoughts, and what they really mean. It's like being a detective, but instead of solving crimes, you're solving the mystery of what someone is trying to communicate.

Why Does Active Listening Matter?

In outdoor settings, good listening can literally be the difference between safety and danger:

- Following safety instructions correctly
- Understanding weather warnings
- Hearing when a teammate needs help
- Catching important navigation directions
- Building trust with your team

In everyday life, active listening helps you:

- Build stronger friendships and relationships
- Avoid misunderstandings and conflicts
- Show people you care about them
- Learn more from teachers, coaches, and mentors
- Be seen as trustworthy and mature

The SOLER Model for Active Listening

SOLER is an easy way to remember the key elements of active listening. Each letter represents something you should do with your body and mind:

S - SQUARE SHOULDERS
Face the person directly
- Turn your body toward the person speaking
- Don't stand or sit sideways or at an angle
- This shows you're giving them your full attention

Why it works: Body language speaks louder than words. When you face someone, it signals "You're important to me right now."

O - OPEN POSTURE
Keep your body language welcoming
- Uncross your arms and legs
- Keep your hands visible (not in pockets or behind your back)
- Relax your shoulders
- Avoid barriers like holding objects between you and the speaker

Why it works: Crossed arms and closed postures make you look defensive or uninterested, even if you're not trying to be.

L - LEAN IN
Show engagement through your position
- Slightly lean toward the person speaking
- Don't lean back or away from them
- Close the distance appropriately (not too close!)

Why it works: Leaning in shows interest and makes the speaker feel heard and valued.

E - EYE CONTACT
Look at the person speaking
- Make regular eye contact (not staring!)
- Look away briefly and naturally, then return your gaze
- Match the level of eye contact to the culture and situation

Why it works: Eye contact creates connection and shows you're focused on them, not distracted by other things.

R - RELAX
Stay calm and comfortable

- Keep your facial expressions natural and responsive
- Don't fidget, tap, or show impatience
- Breathe normally and stay physically calm

Why it works: When you're relaxed, the speaker feels more comfortable sharing their thoughts and feelings.

Common Listening Mistakes to Avoid:

The Multitasker: Checking phone, looking around, doing other things
The Closed-Off: Crossed arms, turned away, looking uninterested
The Leaner-Backer: Physically distancing yourself from the speaker
The Starer/Avoider: Either staring intensely or never making eye contact
The Fidgeter: Tapping, checking time, showing physical signs of impatience

Remember: SOLER in Action
Good listening isn't just about being polite - it's about creating a space where people feel safe to share their real thoughts and feelings. When you use SOLER, you're showing respect and building stronger connections with the people around you.

Practical Activities
Activity 1: Active Listening Observation Diary
What you'll do: For one week, become a "listening detective" and observe conversations around you. You'll focus specifically on SOLER behaviors and how they affect communication.

Your mission: Each day, observe at least 2-3 conversations in different settings and take notes about the SOLER behaviours you witness.
Reflection Questions:

1. Which SOLER component was most commonly missing in the conversations you observed?
2. Which SOLER component seemed to have the biggest impact when done well?
3. What was the most obvious example of poor listening you witnessed?
4. How did this week of observation change how YOU listen?
5. Which SOLER component do you think you need to work on most?

Activity 2: YouTube Video Analysis - SOLER Skills in Action
What you'll do: Watch this specific YouTube video and analyze the SOLER skills demonstrated by the participants using your new knowledge of active listening.
Video to Watch: https://www.youtube.com/watch?v=UnW3xkHxIEQ

Fill in the following materials:
Best SOLER Moment:

- Time stamp: _____
- What happened: _____
- SOLER component(s) demonstrated: _____
- Why it was effective: _____

Worst SOLER Moment:

- Time stamp: _____
- What happened: _____
- SOLER component(s) missing: _____
- How it hurt the conversation: _____

Quick Summary: Write 2-3 sentences about what this video analysis taught you about the importance of body language in listening. Use specific examples from the video to support your points.

MODULE №5

Sustainability and Environmental Responsibility

Unit 1: Ecological Footprint – Understanding Our Impact

Unit 2: Ethical Consumption and Sustainable Choices

Unit 3: Eco-Leadership – Leading Change in Outdoor Environments

Ecological Footprint – Understanding Our Impact

What is an Ecological Footprint?
Your **ecological footprint** is a way of measuring how much nature you use in your everyday life. It looks at everything you consume; how much water you use, how much energy you use, how much food you eat, and how much waste you produce. All of these things impact the environment in different ways.

How Does It Work?

- **Carbon Footprint**: This measures how much carbon dioxide (CO2) you're responsible for producing. It comes from things like driving, flying, and using electricity.

- **Water Footprint**: This tracks how much water you use in your daily life, including everything from brushing your teeth to drinking and using water in food production.

- **Waste**: The things you throw away—plastic bottles, food wrappers, old clothes—all contribute to your ecological footprint. The more you throw away, the bigger your impact.

Why Should You Care?
Every action you take, whether big or small, adds up. Understanding your ecological footprint helps you realize how your daily choices contribute to climate change, resource depletion, and pollution. The more you know, the more control you have to make positive changes.

Key Takeaways:

- Your actions have an impact on the environment, even the small ones.
- You have the power to reduce your ecological footprint.
- Being mindful of your footprint helps protect the planet for the future.

Activity 1: How Big Is Your Footprint?

Challenge 1: Ecological Footprint Calculator
Use an online ecological footprint calculator to get an idea of your personal environmental impact. These tools ask questions about your lifestyle, transportation habits, food choices, and energy use.

Steps:

- Go online and find the ecological footprint calculator called https://www.footprintcalculator.org/home/en
- Answer questions about your lifestyle, such as how often you drive, what food you eat, how much electricity you use, etc.
- Once you get your results, write down your ecological footprint in terms of how many Earths it would take if everyone lived like you.

Reflect:

- What surprised you about your footprint?
- Where do you think you can make changes to reduce your impact?
- How do your daily choices influence the environment?

Challenge 2: Track Your Daily Footprint for 3 Days
For the next three days, keep track of the following:

Water Use: Note how much water you use each day (e.g., showers, brushing teeth, cooking).

Energy Use: Track how much electricity you use (e.g., lighting, heating, air conditioning, electronics).

Waste: Write down how much waste you throw away (e.g., plastic, food waste, packaging).

Transportation: Log how you get around (walking, biking, public transport, driving, etc.).

Steps:

- Use a notebook or an app to record your daily habits.
- At the end of 3 days, look at your totals and think about which areas have the highest impact.
- Identify 1-2 changes you can make to reduce each category (e.g., turn off lights when not in use, take shorter showers, use reusable bags).

Resources:

- **Foraging Apps:** Use apps like PlantSnap or Seek by iNaturalist to safely identify plants when you're outdoors.
- **Foraging Books:** The Forager's Harvest by Samuel Thayer or Edible Wild Plants by John Kallas.
- **Sustainable Camping Guides:** Check out websites like Leave No Trace for eco-friendly camping and meal tips.

Prompts & Ideas for Visuals

Visual 1: Infographic on Ecological Footprint Components

Create a simple infographic that shows the three main components of your ecological footprint:

- Carbon Footprint (showing cars, airplanes, and electricity use)
- Water Footprint (images of showers, faucets, food production)
- Waste (showing recycling, composting, landfills)

Visual 2: Footprint Challenge Chart
A chart or list where young people can log their daily water, energy, waste, and transportation habits for 3 days. You can use colors to show high, medium, or low impact.

Visual 3: Before and After Footprint Comparison
Create a before-and-after graphic to show the change in a person's ecological footprint after making sustainable choices, e.g., reducing waste, using less plastic, or walking instead of driving.

Visual 4: Eco-Friendly Tips
List simple eco-friendly actions in a bullet-point format that encourage reducing footprint. For example:

- Turn off lights when not in use
- Use a reusable water bottle instead of buying plastic ones
- Walk or bike instead of driving short distances
- Switch to LED bulbs to save energy

Key Reflection Prompts:
- What was the most surprising thing you learned about your ecological footprint?
- Which areas do you think are easiest for you to reduce? What changes can you make right away?
- How can you inspire others to reduce their footprint as well?

Now that you understand your ecological footprint, let's take your learning outside!

Camps: Choose reusable utensils and dishes instead of disposables. Set up a waste-sorting station at your campsite. Plan low-impact meals using local ingredients.
Hikes: Bring a reusable water bottle, stay on designated trails to protect native plants, and practice "Leave No Trace" principles by packing out all waste.
Daily Practice: Turn your eco-choices into habits—bike or walk to school, reduce energy use at home, and choose local produce when possible.

Ethical Consumption and Sustainable Choices

What is Ethical Consumption?
Ethical consumption means making purchasing decisions and lifestyle choices that benefit the environment, society, and economy. It involves being aware of the impact that the products you buy and use have on people, animals, and the planet.

It's about choosing products that are sustainable, fair trade, and responsible, rather than those that contribute to exploitation, pollution, or waste.

Key Aspects of Ethical Consumption:

- **Sustainability:** Buying items that are durable, reusable, and made from sustainable resources (e.g., bamboo, organic cotton).
- **Fair Trade:** Supporting businesses that ensure workers are treated fairly and paid well, especially in developing countries.
- **Waste Reduction:** Opting for products with minimal packaging, and reusing or recycling items as much as possible.
- **Local and Seasonal:** Choosing local and seasonal food to reduce carbon footprints associated with transportation and global trade.

Why Does It Matter?
Every time you buy something, you make a choice that impacts the world. By choosing more ethical and sustainable products, you reduce your personal ecological footprint and encourage businesses to take responsibility for their environmental and social impact.

As young people, you have the power to shift demand toward ethical products, pushing industries to become more sustainable in how they operate.

Activity 1: Ethical Consumption Research Project

Objective: Explore the impact of a specific product or industry on the environment and society, and research ethical alternatives.

Steps:
Pick a Product or Industry: Choose a common product you regularly use (e.g., clothes, electronics, food, or packaging) and research its environmental and social impact.

Research: Look into how this product is made, how it's sourced, and the workers involved. For example:

- Is it made with sustainable materials?
- Are the workers paid fairly and treated ethically?
- What's the environmental impact of its production (e.g., water usage, waste, emissions)?

Find Alternatives: Research more ethical, sustainable alternatives. Consider:

Fair trade products: How can you support fair wages and better working conditions?

Sustainable products: What alternatives are available that reduce environmental harm (e.g., using biodegradable materials, supporting eco-friendly brands)?

Create a Presentation: Create a short presentation, video, or infographic summarizing your findings and alternatives. Share it with others to raise awareness about ethical consumption.

Activity 2: Upcycling Challenge

Objective: Teach teens how to give new life to old materials and products by repurposing them into something useful and creative. This encourages reducing waste and practicing ethical consumption by reusing and upcycling instead of buying new.

Steps:
Gather Materials:

- Collect a variety of old items that are no longer used or have been discarded. These can include items like:
- Old clothes (e.g., t-shirts, jeans, jackets)
- Empty jars or bottles
- Broken or unused furniture
- Old magazines, newspapers, or cardboard boxes
- If needed, look around your home, school, or local community for materials that are headed for the trash.

Brainstorm Repurposing Ideas:
Think creatively about how these items can be upcycled into something useful, stylish, or fun. Here are some ideas:

- Old T-shirts: Turn them into reusable shopping bags or make a stylish patchwork blanket.
- Glass Jars: Repurpose them into plant pots, candle holders, or storage containers.
- Cardboard Boxes: Create organizers, photo frames, or a DIY desk organizer.
- Wooden Furniture: Repaint or refinish old chairs or tables to give them a new life.

Challenge yourself to come up with a new use for each item, reducing waste by repurposing things instead of throwing them out.

Upcycling Project:

Once you've decided on your projects, gather any extra materials you might need, such as paint, glue, scissors, or fabric.

Create your upcycled item. You can do this individually or in groups. Take your time to design and construct your upcycled product. Encourage creativity and fun in the process.

Showcase and Reflect:
After completing your upcycled creations, share your work with others. Present your new items and explain how you gave them a second life.

Reflection Questions:

- How did it feel to repurpose old items instead of buying new ones?
- What sustainable benefits do you think upcycling has?
- Can you think of other things in your life that could be upcycled instead of thrown away?
- What new skills or ideas did you learn about reusing materials?

Before and After Photos:
Take before-and-after photos of the items you upcycled. Show the transformation from discarded materials to new, functional items. This will visually demonstrate the power of repurposing.

Visuals:

Infographic: Sustainable vs. Non-Sustainable Choices:
Design a visual that contrasts sustainable, ethical choices with harmful or wasteful ones. For example, "Local Organic Produce" vs. "Imported Produce with Plastic Packaging," or "Fair Trade Clothing" vs. "Fast Fashion."

Impact Calculator:
Create an impact calculator that shows the environmental and social costs of common products. Teens can use this to make decisions in real life based on the environmental and ethical consequences.

Ethical Consumption Guide:
Provide a simple list or flowchart of sustainable alternatives for common items. For example:

- **Food:** Local, seasonal, plant-based vs. imported, packaged, meat-heavy diets.
- **Clothing:** Secondhand, ethical brands vs. fast fashion
- **Products:** Reusable items vs. single-use plastic.

Upcycling Step-by-Step Infographic:
Create an infographic that outlines the steps for a simple upcycling project, like turning a shirt into a reusable bag or creating a DIY planter from a glass jar. Include the materials needed and instructions.

Upcycled Product Gallery:
Make a visual gallery (e.g., on a poster board or digital slideshow) showcasing different upcycled products. You can include both your own creations and examples of what others have made to inspire more sustainable choices.

Eco-Leadership – Leading Change in Outdoor Environments

Before becoming eco-leaders, connect your learning to outdoor experiences. Each hike, camp, or cleanup is a chance to practice and model sustainability—showing how mindful choices can inspire others to care for the environment.

What is Eco-Leadership?
Eco-leadership is about taking charge of environmental responsibility and encouraging others to make sustainable choices. It's not just about talking—it's about leading by example, inspiring others, and guiding a group to act in ways that protect the environment.

An eco-leader uses their knowledge, skills, and actions to promote environmental sustainability in outdoor settings, like when organizing nature hikes, camping trips, or community cleanups.

What Makes an Effective Eco-Leader?
Lead by Example: Show others how to take care of nature by making eco-friendly choices in your own actions.
Inspire Others: Motivate people to take care of the environment and to adopt sustainable habits.
Communicate Clearly: Share knowledge about environmental issues and solutions in ways that others can understand and get involved.
Problem-Solving: In outdoor activities, unexpected challenges (like waste, weather, or lack of resources) arise. A good eco-leader knows how to solve problems while keeping sustainability in mind.

Why is Eco-Leadership Important in Outdoor Settings?
Outdoor activities often come with challenges, such as waste management, respecting wildlife, or conserving water. As an eco-leader, you'll encourage others to consider the environment in every decision they make, whether it's choosing eco-friendly camping gear, minimizing waste, or respecting the natural surroundings.

Activity 1: Eco-Scavenger Hunt: Discovering Sustainable Practices in Nature

Objective: Encourage teens to learn about sustainability by exploring the outdoors and identifying eco-friendly practices.

Steps:
Create a List of Sustainable Items: Before going outdoors, create a list of eco-friendly items or practices for teens to find (e.g., reusable water bottles, native plants, composting stations, natural sources of water, wildlife, recycling bins).
Organize the Hunt: Split the group into small teams. Set a time limit for the scavenger hunt (e.g., 30 minutes to an hour). Teams will walk around and try to find items from the list while practicing sustainable behaviors (like reducing waste or using reusable items).
Leadership Task: Assign a leader to each group who will ensure the team follows sustainable practices, like picking up trash or recycling when necessary.

Reflection: After the hunt, have a group discussion where each team shares what they found, how they contributed to sustainability, and what leadership tasks they took on during the hunt.

Visual Ideas:

Scavenger Hunt Checklist: A list with pictures of eco-friendly items to look for.
Sustainability Scoreboard: Track each team's progress in identifying sustainable practices.

Creative activities that help you observe and appreciate nature more closely:

- **Sound Mapping:** Sit quietly outdoors and draw a simple map showing where different sounds come from (birds, wind, water, people).
- **Drawing Plants:** Sketch the shapes, textures, and colors of nearby plants or trees to notice small details often overlooked.

These activities build awareness, mindfulness, and a stronger connection to the environment; key qualities of an eco-leader.

Activity 2: Nature Clean-Up Challenge:
Leading a Group Clean-up with a Purpose

Objective: Engage teens in outdoor clean-up activities while fostering eco-leadership by giving them the responsibility to organize and lead the clean-up.

Steps:
Set a Goal: Decide on a specific area to clean up (e.g., a park, beach, or hiking trail). Set a clear goal: how much trash or recyclable materials can you collect in a given amount of time?
Divide Roles: Assign leadership roles to individuals, such as:

- **Group Leader:** Oversees the cleanup and ensures everyone follows safety and eco-friendly practices.
- **Waste Trackers:** Track how much waste is collected and categorize it into recyclables, compostable materials, and trash.
- **Photographers:** Take before-and-after pictures of the clean-up site to highlight the positive impact.

Clean-up Execution: Lead the group to the designated site and have them follow the eco-friendly waste management process (e.g., use reusable gloves, sort waste properly, reduce plastic use).

Reflect and Discuss: After the clean-up, discuss how eco-leadership played a role. How did the leaders manage the group? What strategies helped keep the team motivated to clean up?

Visual Ideas:
Cleanup Progress Chart: Create a visual tracker of how much waste is collected, categorized by type.
Before-and-After Photos: A powerful visual to show the impact of the clean-up and how it contributes to environmental sustainability.

After the clean-up, reflect on how your team showed eco-leadership and stayed motivated. Remember—caring for nature keeps it healthy so you can come back and enjoy it again.

Let's Go!

Your first adventures are already waiting – just outside your door!
Grab your friends, pack your backpack – and head out!
Go explore the world together. If you run into problems along the way: no worries! You'll figure it out – and if not, just ask the people you meet.
Because: At least 90% of people are friendly and happy to help if you ask them nicely.

One last thing:

Leave nothing but footprints – and take everything with you that doesn't belong in nature.

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