READY AT HOME · VOLUME 12

# Outdoor Skills

## Fire, shelter, knots, navigation

Lighting fires: ferro rods, char cloth, a five-part fire kit
Cutting wood safely, tarp shelters and eight useful knots
Finding your way without a phone




THE SERIES


0 Start Here
1 Just Add Water
2 Power Cuts & Storms
3 Water & Sanitation
4 Cooking & Warmth
5 First Aid
6 Symptoms & Home Care
7 Home Systems & Repairs
8 Fire Safety & Security
9 Communications
10 Grab Bags & Kits
11 Pantry & Stockpile
12 Outdoor Skills
13 Kids, Morale & Wellbeing
14 Offline Knowledge &
15 Other Emergencies


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# Contents

**1. Fire** 3

Using a ferro rod . . . 3

Home-made fire starters . . . 4

A five-part fire kit in a tin . . . 4

**2. Cutting wood safely** 5

**3. Shelter** 5

**4. Eight useful knots** 6

**5. Finding your way** 6

Using a compass with a map . . . 7

**6. Foraging: a word of caution** 7

**Emergency numbers & the series** 8

The Ready At Home series . . . 8

# 1. Fire

**Fire safety & the law**

- Only light fires where it's allowed and safe: a fire pit in your own garden, or a proper fireplace or stove. Never on peat or bogland: it can burn underground and flare up later.
- Clear a 2 m circle, keep water nearby, never leave it, and put it out completely: drown, stir, drown again.
- Burning vegetation (gorse, scrub) is illegal from 1 March to 31 August.

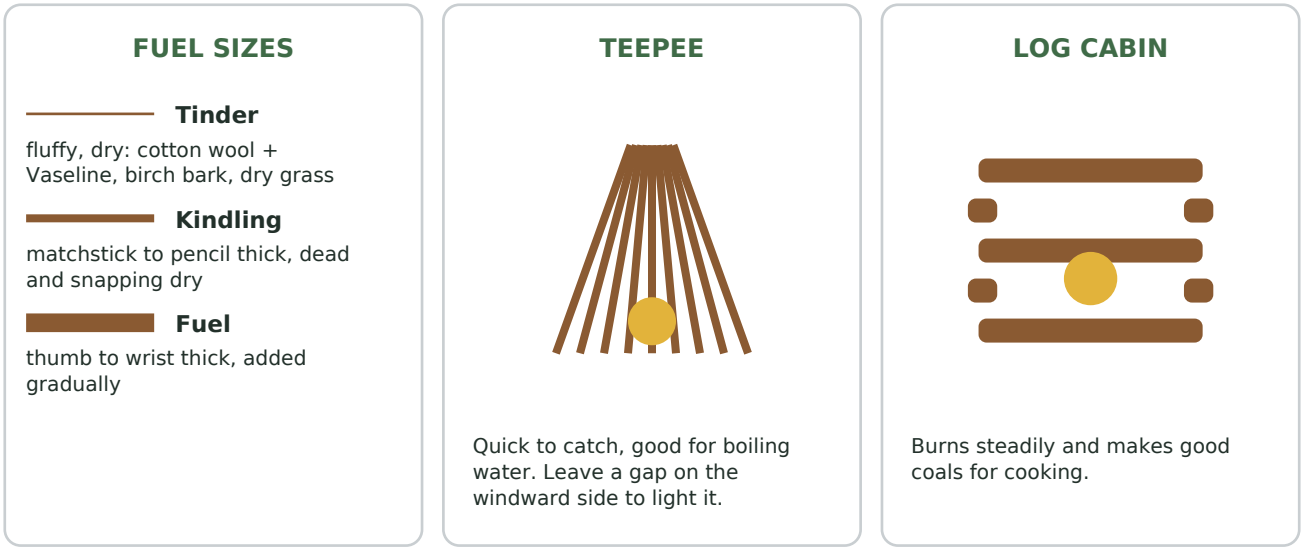



Figure 1. Gather everything before you strike a spark: twice as much kindling as you think you need.

## Using a ferro rod



1. Make a fist-sized nest of tinder. A Vaseline cotton ball catches every time and burns for a minute or more.
2. Hold the rod's tip right in the tinder at about 45°.
3. Hold the striker still against the rod and pull the rod back sharply. This keeps you from knocking the tinder over.
4. When it catches, shield it and feed in the thinnest kindling, then bigger pieces.
5. Don't smother it: fire needs air. Blow gently at the base if it struggles.

## Home-made fire starters



### Vaseline cotton balls

Rub a blob of petroleum jelly into cotton wool balls until they're saturated but still fluffy inside. Pack 20 into an old pill tub or film canister. Pull one open to expose dry fibres before striking. Burns 2-3 minutes, works when damp.



### Char cloth

Cut 100% cotton (old jeans or a T-shirt) into 5 cm squares. Put them in a small tin with a nail hole in the lid and set it in a fire or on a camping stove outdoors. Smoke and gas jet out of the hole; when it stops (5-10 min), take it off and let it cool fully before opening. The black squares catch a single spark and glow.



### 9 V battery and steel wool

Fine (0000 grade) steel wool fluffed out on a stone. Touch both terminals of a 9-volt battery to it and it glows instantly; blow gently into tinder. Keep the battery's cap on and store it apart from the steel wool so they can't touch in your kit.

**Not with phone power banks or lithium batteries**

You'll see videos using a lithium power bank or phone battery to light steel wool. Don't: shorting a lithium battery can make it overheat, vent toxic gas or catch fire, and you also lose the power bank you need for your phone. A cheap 9 V alkaline battery is the right tool.

## A five-part fire kit in a tin



Put one in every grab bag and the car. Each part backs up another, so it still works if something gets wet or lost.

| Part | What to pack |
|---|---|
| 1. Flame | A cheap lighter and a box of matches in a sealed bag |
| 2. Spark | Ferro rod and striker (works soaking wet, thousands of strikes) |
| 3. Tinder | 6-10 Vaseline cotton balls in a tube; a few squares of char cloth |
| 4. Extender | A tea light or candle stub to hold a flame while kindling catches |
| 5. Dry | A zip bag around everything, plus a little dry twine or birch bark |

# 2. Cutting wood safely



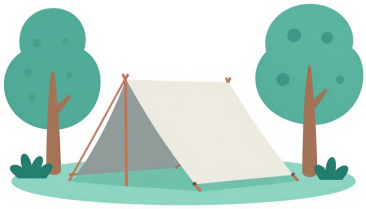
Saw on a sawhorse or log, at hip height, the cut just past the support.



Splitting: block on a chopping block, feet apart, axe swung down between them.

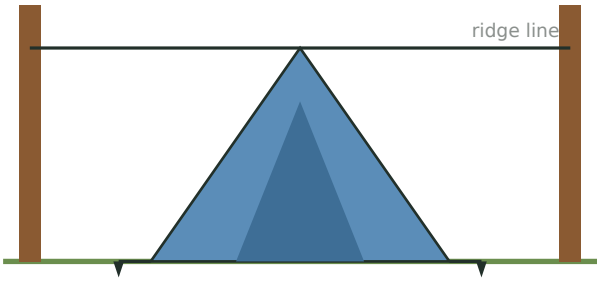
| Do | Don't |
|---|---|
| Wear boots, gloves and safety glasses. Clear the area of people, pets and trip hazards | Cut with anyone within two axe-lengths of you, or with children nearby |
| Use a bow saw for logs: let the saw do the work with long, steady strokes | Hold small pieces in your hand while you cut or split them |
| Split on a solid chopping block so the axe ends in wood, not the ground or your leg | Swing an axe towards your feet or across your body |
| Keep blades sharp (blunt tools bounce) and guarded when not in use | Use a chainsaw without training and full protective gear, or cut trees touching power lines (call ESB Networks) |
| Stop when you're tired: most injuries happen at the end of a session | Leave tools lying in grass |

# 3. Shelter



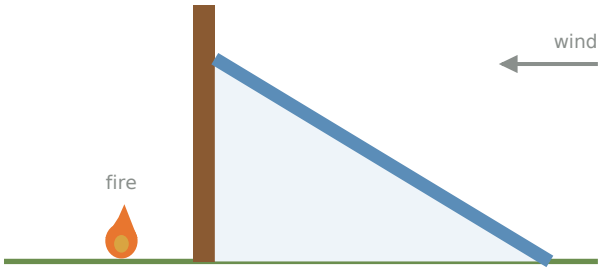
A tarp (3×3 m), 15 m of paracord and a few pegs give you a dry space to cook, wait out rain, or shelter in the garden if the house is unsafe.

**A-FRAME (front view)**




Ridge line between two trees, tarp draped over, edges pegged down. Best in wind and rain.

**LEAN-TO (side view)**

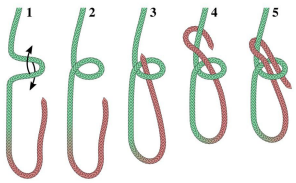



One edge tied high, the other pegged to the ground. Open side away from the wind; reflects a fire's heat.

Figure 2. Two simple tarp shelters.

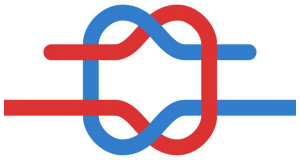
# 4. Eight useful knots

Knots are easiest to learn with a piece of string in your hands. Tie each one ten times and they'll stay with you.




**Bowline**

A fixed loop that won't slip or jam: round a tree, a rescue loop. Small loop, end up through it ('out of the hole'), round behind the standing part ('round the tree'), back down the hole. Pull tight.



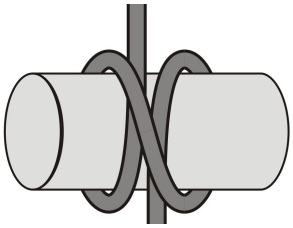
**Reef (square) knot**

Joining two ends of the same cord: bandages, bundles. Left over right and under, then right over left and under. Not for loads that matter.



**Figure-of-eight**

A stopper so a rope can't pull through a hole or pulley. Loop the end round the standing part, then pass it down through the first loop.



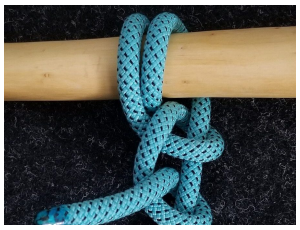
**Clove hitch**

Quickly tying to a post or pole. Two turns, the second crossing over the first, with the end tucked under the second turn.



**Sheet bend**

Joining two ropes of different thickness. Make a bight in the thick rope; pass the thin one up through it, round behind both strands, and under itself.



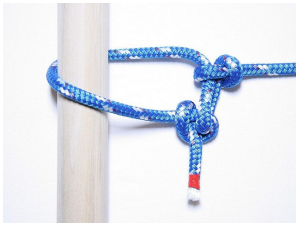
**Round turn & two half hitches**

Tying a line to a ring, rail or post so it holds under load. Two full turns round, then two half hitches round the standing part.



**Taut-line hitch**

Adjustable tension for tarp and tent guy lines. Round the peg, then two turns round the standing line inside the loop and one outside. Slide to tighten.



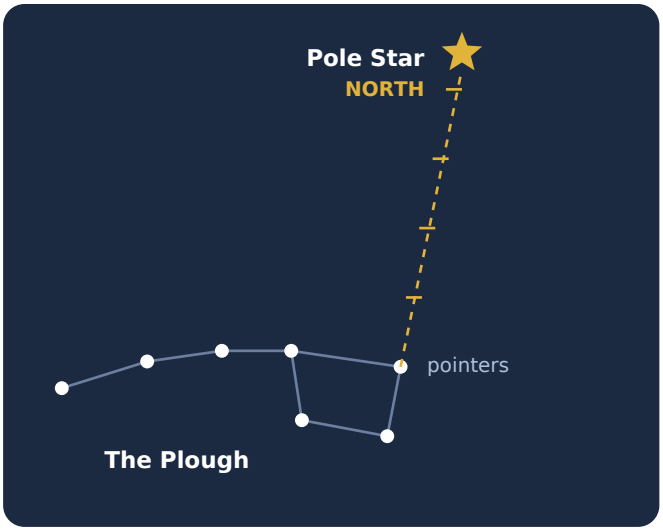
**Trucker's hitch**

Pulling a ridge line or load tie-down really tight. A loop in the line acts as a pulley; pull down hard and finish with two half hitches.

Knot images from Wikimedia Commons: bowline steps by Buz11 (CC BY-SA 4.0); reef knot by CountingPine (public domain); figure-of-eight and sheet bend by Lucasbosch (CC BY-SA 3.0); clove hitch by Hella/LittlePete/Warddr (CC BY-SA 3.0); round turn by Der Barbar (CC BY 4.0); taut-line and trucker's hitch by USCG PTC Developer (CC BY-SA 4.0).

# 5. Finding your way

- Keep paper maps for your area: Tailte Éireann (Ordnance Survey Ireland) Discovery Series 1:50,000.
- Download offline maps on your phone before you need them (Volume 14).
- Your phone's GPS works with no mobile signal; it's the map that needs downloading in advance.
- Note landmarks, junctions and distances on any walk, especially in fog on hills.

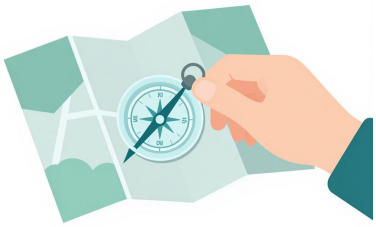



At night: find the Plough (the 'saucepan'). Follow the two stars at the end of the pan about five times the gap between them. That's the Pole Star, almost exactly north.

By day in Ireland: the sun rises roughly east, is due south around 12.30 pm in winter (1.30 pm in summer time), and sets roughly west.

Figure 3. Finding north without a compass.

### Using a compass with a map



1. Lay the compass on the map with its edge joining where you are to where you're going.
2. Turn the dial until the orienting lines line up with the map's north-south grid lines (N at the top).
3. Lift the compass off. Turn your body until the red needle sits inside the red outline arrow.
4. Walk in the direction of the travel arrow. Pick a landmark on that line, walk to it, repeat.

## 6. Foraging: a word of caution

Only eat a wild plant or mushroom if you're completely sure what it is. Several poisonous plants grow in Ireland and look like edible ones (e.g. hemlock water dropwort, lords-and-ladies). Easy, well-known options are blackberries (late summer) and young nettle tops (cooked like spinach, picked with gloves). Leave wild mushrooms to experts.

# Emergency numbers & the series

| Service | Number | Use it for |
|---|---|---|
| **Emergency services** | **112 or 999** | Ambulance, Garda, fire, coast guard. Works from any phone, any network. |
| ESB Networks | 1800 372 999 | Power cuts, fallen or damaged lines (24/7) |
| Gas Networks Ireland | 1800 20 50 50 | Smell of gas (24/7). Call from outside the house. |
| Uisce Éireann (Irish Water) | 1800 278 278 | Water outages, burst mains, boil-water notices |
| HSELive | 1800 700 700 | Health service information |
| Public Poisons Line | 01 809 2166 | Advice if someone has swallowed or touched something harmful (8am-10pm daily) |
| Samaritans | 116 123 | Anyone struggling to cope (24/7) |
| Text About It | Text HELLO to 50808 | Free text support (24/7) |
| Childline | 1800 66 66 66 | Children and young people up to 18 (24/7) |
| Your county council | | Roads, flooding, local emergency centres |
| Met Éireann | met.ie / Met Éireann app | Weather warnings |

Numbers checked November 2026. Write in your county council's number above, and your own local numbers (GP, out-of-hours doctor, pharmacy, vet, neighbours) in Volume 0.

## The Ready At Home series

| Vol | Title | What it covers |
|---|---|---|
| 0 | Start Here | Household plan & emergency numbers |
| 1 | Just Add Water | Home-dehydrated emergency meals |
| 2 | Power Cuts & Storms | Getting through long outages |
| 3 | Water & Sanitation | Storing, treating, toilets |
| 4 | Cooking & Warmth | Without mains power |
| 5 | First Aid | Step-by-step emergency care |
| 6 | Symptoms & Home Care | Red flags, minor illness, medicines |
| 7 | Home Systems & Repairs | Shut-offs, leaks, storm damage, floods |
| 8 | Fire Safety & Security | Alarms, escape plans, extinguishers |
| 9 | Communications | Family plan, radios, signals |
| 10 | Grab Bags & Kits | 72-hour, car, child & pet kits |
| 11 | Pantry & Stockpile | A 30-day food store you rotate |
| **12** | **Outdoor Skills** | Fire, shelter, knots, navigation |
| 13 | Kids, Morale & Wellbeing | Keeping people okay |
| 14 | Offline Knowledge & Media | Libraries, maps & media without internet |
| 15 | Other Emergencies | Radiation, chemicals, heat, illness, cut off |

This series gives general preparedness guidance. It is not a substitute for professional medical, electrical, gas or structural advice, or for a certified first-aid course. In an emergency, call 112 or 999 and follow the call-taker's instructions.

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