

Wilderness Expedition Planning



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08/15/25

Objectives

1. Understand preparation and considerations for an expedition
2. Discuss first aid kits and survival equipment
3. Navigate issues that arise during the expedition and complete a post-expedition debrief

What is an expedition?

- Oxford dictionary:

“A journey undertaken by a group of people with particular purpose, especially that of exploration, research or war.”

Part 1: Pre-trip considerations

- What kind of environment will you be in?

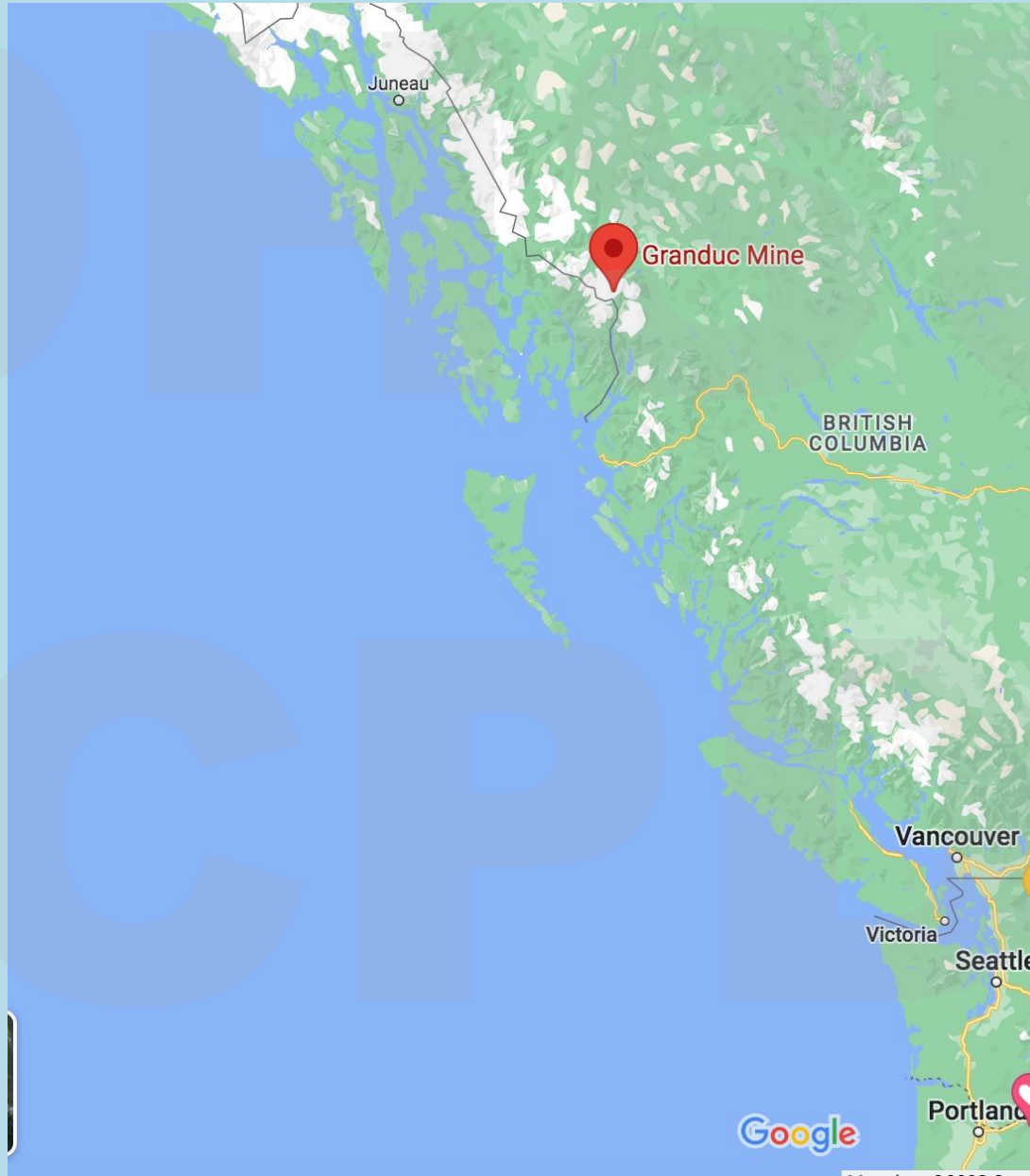








Let's start with a case...











Part 1: Pre-trip considerations

- Location, environment, resources
- Necessary paperwork and permits
- Participants – ability, physical fitness, previous injuries, medical problems
- Likely medical emergencies
- Evacuation routes/local SAR groups
- Evac insurance

Choosing your team



Choosing your team: Group Dynamics

- Decision making and hierarchy
- Expectations
- Picking the route
- Pace

Part 1: Pre-trip considerations

- Choosing your team
 - Fitness
 - Technical skills
 - Medical Knowledge
 - Ability to be a team player
 - Dealing with adversity
 - Attention to safety
 - Judgement
 - Personality

Part 1: Pre-trip considerations

- International considerations
 - Visas
 - Vaccinations
 - Extra medications
 - Travel insurance
 - Local violent crime/safety issues

What to bring?

- Location: national or international?
- Day trip or how many days?
- How many people?
- Support with motor vehicle/raft/porter or carrying gear?
- Access to water
- Egress points







Equipment: The First Aid Kit



General Principles

It is impossible to have an all-purpose medical kit for all situations

- Size/bulk
- Weight
- Durability
- Multi use potential

Consider the likelihood of needing an item, and the consequences of not having it

Additional Considerations

- Type of trip/expedition
- Length of the trip
- Types in injuries on similar prior trips?
- Participants
- Environment

Additional Considerations

- Potential risks and endemic disease
- Available resources (Evacuation route method, proximity, communication, and duration)
- Mode of transportation
- Skills and training of the owner of the kit

Golden Rule

- If your first aid kit too bulky or heavy, you're not going to want to bring it.



First aid kit organization

- Waterproof, weatherproof
- Modular
 - By most likely to be used
 - Making emergency equipment easy to access
 - By organ system

Minutes, hours, days

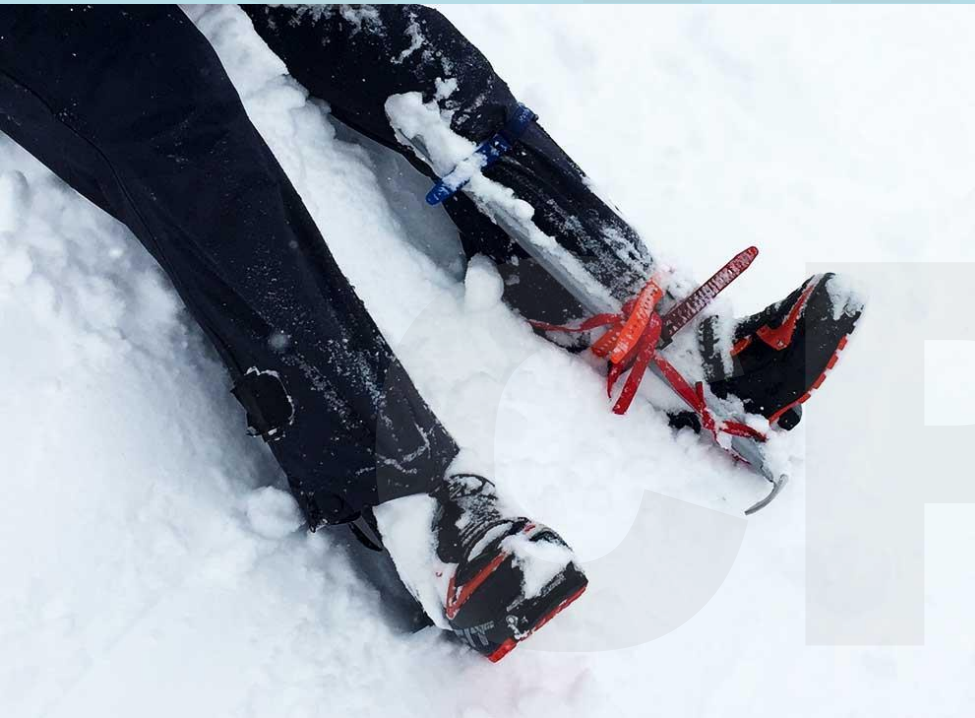
- Day kit: minutes and hours
- Multi-day expedition: days

Minutes and hours

- Circulation
- Airway
- Breathing

Days

- Disability: splint, wound care supplies
- Environment: survival kit



Medications

Acetaminophen

Ibuprofen

Diphenhydramine

Aspirin

Loperamide

Glucose

Water purification tablets

+/- Oral rehydration salts

+/- Ondansetron

+/- Epi pen

+/- Lidocaine

+/- Antibiotics

+/- Opioids

Survival kit: the 10 essentials

- 1) Navigation
- 2) Headlamp
- 3) Sun protection
- 4) First aid
- 5) Knife plus a gear repair kit
- 6) Fire
- 7) Shelter
- 8) Extra food
- 9) Extra water
- 10) Extra clothes

My first aid kit



First Aid Kit: 10oz (day kit) + 11oz (overnight module)

Survival Kit: 11oz

My first aid kit

Wound care	Meds	ABC	Misc	Survival kit
4x4	Benadryl	Nasal trumpet	Tweezers	vaseline-soaked cotton swabs
Nonstick pads	Ibuprofen	Breathing barrier	Pregnancy test	lighter (in ziploc)
Waterproof band aids	Tylenol	Tourniquet	Tampons	flint fire starter
Regular band aids	ASA	Wound clot	SAM splint	whistle
Tegaderm	Immodium	Pulse ox		compass/grid reader
Moleskin	Claritin	14ga x 3.5" angiocaths		headlamp/batteries
New skin	Hydrocortisone cream			duct tape
Syringe for irrigation	Epi pen		Notebook	knife
Gloves	Lidocaine		Lighter	emergency blanket
Combine dressing	Glucose		Duct tape	water treattent tabs
Chlorhexidine	Bacitracin		Hand sanitizer	
Alcohol swabs	Antibiotics		Thermometer	
Steri strips	Dermabond		Scalpel	
	Zofran		Safety pin	

Equipment – Water treatment

- Considerations: sources of water, availability contamination level, water clarity
- How much to carry with you
- Treatment methods
 - Chemical
 - Filtration
 - UV

Equipment – activity specific

- Clothing – no cotton (exception - desert travel)
- Rain/inclement weather plan
- Bring extras of the essentials!



Part 2: The Expedition

- Risk Assessment



Part 2: The Expedition

- Group dynamics
 - Is there an established leader?
 - How are conflicts resolved?
 - Getting the team back on track

Part 2: The Expedition

- Backcountry communication



Part 3: The debrief

- What equipment got used
- What went well/didn't
- What you wish you would have known beforehand
- Group dynamics issues

Questions?

