

Cambridge University Caving Club

Loser Plateau

Expedition (Expo) 2024



Hello everyone!

Welcome to the CUCC Loser Plateau Expo 2024! This year's expedition is shaping up to be another gear year and i can't wait to embark on this adventure with all of you.

We've been busy planning for the past year, and now it's time for everything to come to life over the next five and a half weeks. To keep everyone in the loop, I've prepared this summary. For more detailed information, please visit the expo website and check out the comprehensive handbook available there. You can find everything you need to know about CUCC's Austria expeditions at [CUCC's Austria expeditions \(survex.com\)](https://www.survex.com) .

Our expedition will see over 40 enthusiastic explorers from all over the world heading out to Austria, spanning 5 and a half weeks.

Our group is a wonderful mix of experience levels, from first-time participants to seasoned veterans of the expedition. This blend of fresh perspectives and deep knowledge will create fantastic learning opportunities and ensure that everyone can contribute to our success.

On this note, it is important to remember that we are a team, so please look after yourselves and others. Communal jobs need doing so please jump on them when the opportunities arise to make sure it is a smooth running and successful expo!

I'm excited to meet each of you at different points throughout the expedition, and thankyou for everyone's hard work this year!

Yours in caving

Jono

Over Four Decades of Exploration

For over 40 years, the Cambridge University Caving Club (CUCC) has been delving into the depths of the Loser Plateau, located about 80 km east of Salzburg, Austria. This enduring adventure began in the mid-1970s and has since uncovered an extensive cave system stretching over 150 km of passages and shafts.

Annual Summer Expeditions

Each summer, usually in July and August, CUCC members gather for the expedition, a tradition that continues to attract both seasoned cavers and newcomers. The extensive documentation of these expeditions is preserved on our website, which houses over 900 pages and 800 images detailing our explorations.

Resources

For first-time participants, the wealth of information available can be overwhelming. However, gaining some familiarity with this material is crucial for making the most of the experience. A good starting point is the Expedition Primer, a guide designed specifically for newcomers. This primer leads to essential sections of the Expo Handbook, which provides detailed insights into the expedition.

Historical Context

The journey began in 1976 when a group of CUCC graduates, known informally as the Northern Branch, made a reconnaissance visit to Austria. By 1977, the expeditions saw increased participation, clear objectives, and the inclusion of CUCC undergraduates. Since 1978, the expeditions have largely been organized by CUCC undergraduates, with significant contributions from former members, known as ExCS (ex-Cambridge Speleologists).

Originally, the base camp was set up at Altaussee by the lake. However, since 1983, our home has been at Gasthof Staud'n'Wirt, near the Grundlsee road from Bad Aussee. Here, we are warmly welcomed annually by Hilde and Karin Wilpernig and their family.

Expedition Highlights and Reports

Except for a brief hiatus in 1986, the CUCC has maintained an unbroken presence on the Loser Plateau. Detailed reports from these expeditions are published in our journal, "Cambridge Underground," and many of these are available on our website. These reports, along with logbooks and personal accounts, provide a rich narrative of our adventures.

Archival Treasures

Our archives include transcribed logbooks, offering a candid glimpse into the experiences of expedition members. These logs reflect the mix of exhaustion and exhilaration that comes from a day's caving, often with a touch of humour from the day's events, alongside photos and some leads that may not have been looked at yet...

Support and Sponsorship

Since 1988, CUCC has received generous support from various companies, primarily in the form of food supplies. We gratefully acknowledge this support and proudly promote our sponsors.

Geology

The Loser Plateau in Austria is renowned not only for its stunning alpine scenery but also for its complex and fascinating geological features, which have made it a prime site for cave exploration. Here's an overview of the geology:

Geological Setting

The Loser Plateau is part of the Northern Calcareous Alps in the Eastern Alps of Austria, near the town of Altaussee. The region's geology is predominantly composed of Triassic-aged limestone and dolomite, which are marine sedimentary rocks formed approximately 250 to 200 million years ago. These rocks were deposited in a shallow sea environment and later uplifted and deformed by tectonic forces.

Lithology and Rock Types

Limestone and Dolomite: The plateau is primarily made up of Dachstein Limestone, a massive, thick-bedded limestone known for its pure calcium carbonate composition. This rock is particularly conducive to cave formation due to its solubility in weakly acidic water. Dolomite, a carbonate rock similar to limestone but containing magnesium, is also present and contributes to the plateau's rugged terrain.

Schrattenkalk Formation: Another significant rock unit in the area is the Schrattenkalk, a Jurassic limestone that is highly porous and contains numerous fossilized remains. This formation plays a crucial role in water infiltration and cave development.

Karst Landscape

Karst Topography: The Loser Plateau is a classic karst landscape, characterised by features such as sinkholes, dolines, and disappearing streams. Karst landscapes are formed by the dissolution of soluble rocks, particularly limestone, leading to the creation of underground drainage systems and caves.

Surface Features: The plateau is dotted with karren fields (limestone pavements), fissures, and gorges, all indicative of intensive chemical weathering and erosion processes.

Cave Formation

Speleogenesis: The caves in the Loser Plateau have formed primarily through the process of speleogenesis, where acidic water, usually containing carbon dioxide from the atmosphere or soil, dissolves the limestone along fractures and bedding planes. Over millions of years, this leads to the development of extensive underground networks.

Hydrological Influences: The region's hydrology is a key factor in cave formation. Water infiltrates through the permeable limestone, often emerging at lower altitudes as springs. The flow of water through these subterranean passages continues to enlarge and shape the caves.

Caves

Major Caves and Systems

Diverse Cave Systems The Loser Plateau hosts a variety of caves, from simple horizontal passages to complex vertical systems with shafts and large chambers. Some of the most notable caves include:

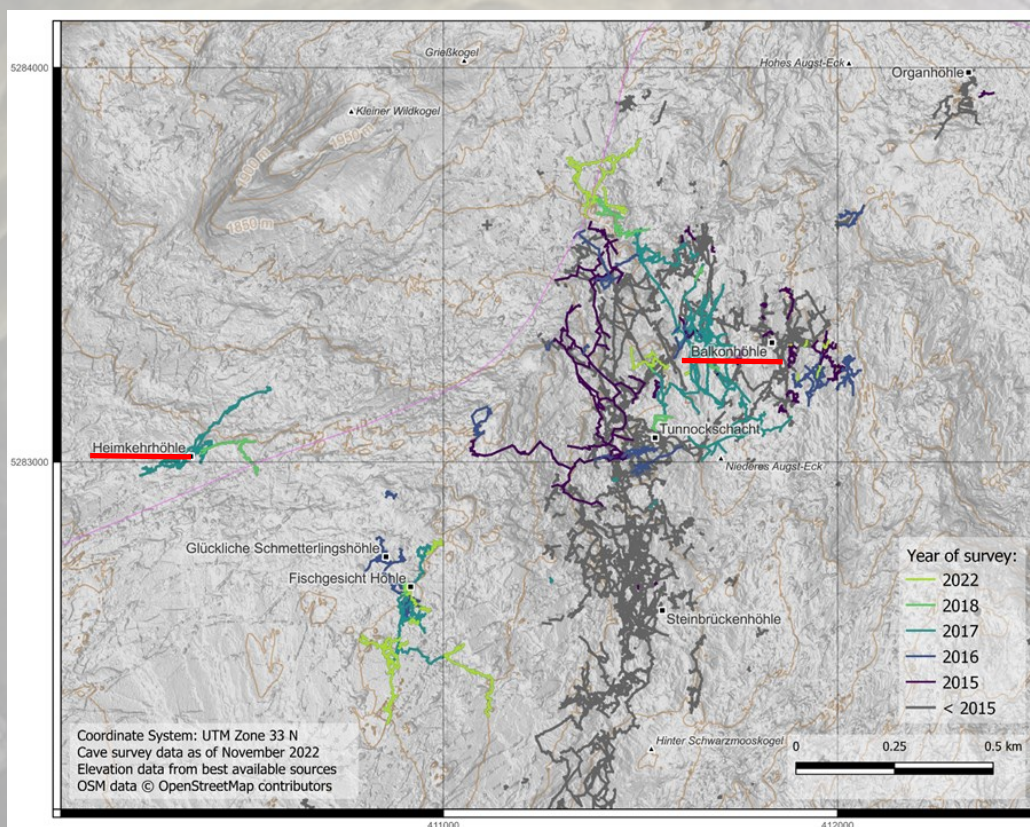
- Homecoming Hole (359): Known for its intricate network of passages.
- Tunnocks (258): Featuring extensive horizontal galleries.
- Balkonhöhle (264): Notable for its impressive vertical drops and significant depth..

Geological Significance

- **Research and Exploration:** The Loser Plateau is an important site for geological and speleological research. Its caves provide valuable insights into the region's geological history, the processes of karst development, and the dynamics of underground water flow.
- **Cave Conservation:** The geological features of the Loser Plateau are also significant for conservation efforts. Understanding the geology helps in protecting these delicate environments from the impacts of human activities and climate change.

Ongoing Discoveries

- **Continuous Exploration:** The geology of the Loser Plateau continues to attract cavers and researchers who uncover new passages and deepen our understanding of this dynamic system. The annual CUCC expeditions play a vital role in mapping and documenting these ongoing discoveries.



Archaeology/History

The caves around the Loser Plateau and Bad Aussee in Austria are of significant interest to both palaeoarchaeologists and archaeologists due to their rich deposits and cultural layers spanning various periods of human history. Many paleofauna remains have been found in lower caves, with a few bits coming up in some of the fringe caves that CUCC has explored!

Palaeoarchaeology in Caves:

Caves such as the "Loserfenster" and others in the vicinity have yielded palaeoarchaeological evidence, with many bears and other paleofauna actually being found around the lake we often swim at!. These caves served as shelters for human populations during the Mesolithic and Neolithic periods, approximately 10,000 to 5,000 years ago. Archaeologists have discovered various tools made of stone, bone, and antler, as well as pottery fragments, which provide insights into the material culture and lifestyles of these prehistoric groups.

Post-Palaeolithic Occupations:

Beyond, caves continued to be utilized by later cultures, including during the Bronze and Iron Ages. Archaeologists have uncovered evidence of continued human presence, often associated with burial practices, religious rituals, or temporary shelters for seasonal activities like hunting and gathering.

Bad Aussee and Cultural Heritage:

The town of Bad Aussee itself has a rich cultural heritage tied to its proximity to these archaeological sites. The Narzissenfest (Narcissus Festival) in Bad Aussee celebrates the region's natural beauty and cultural history, emphasizing its connection to both prehistoric and historic periods.

These caves and their archaeological deposits contribute significantly to our understanding of human adaptation and cultural evolution in the Eastern Alps region. Ongoing research and conservation efforts are crucial for preserving these sites and continuing to unravel the complexities of human history in this area.

For further information can be found at the great **Kammerhofmuseum** museum in Bad Aussee, which contains a host of geological and archaeological material!

Bartosiewicz, L., & Galik, A. (Eds.). (2014). Hunting in Northern Europe until 1500 AD: Old Traditions and Regional Developments. Oxbow Books.

Tringham, R. (Ed.). (2000). European Social Evolution: Archaeological Perspectives. McDonald Institute for Archaeological Research.

*These sources provide insights into the broader context of prehistoric archaeology in Europe, including the unique contributions of cave sites in the Salzkammergut region.

Basecamp

The Potato Hut is a semi-permanent structure designed to withstand the alpine conditions of Austria, and is our central point of operations, the Potato Hut is where the teams organise daily activities, plan expeditions, hold briefings, debriefings drink beer and nerd!

The hut also serves as a communal space where expo members can gather, eat meals together, and socialise after long days of exploration.

Daily Life at the Potato Hut:

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Morning Routines:

The day usually starts earlyish... with team members gathering in or around the hut for breakfast and the day's briefing. Plans for the day's exploration are discussed, and gear is checked and prepared within the hut's confines.

Caving Activities:

Teams depart from the Potato Hut to various cave entrances, returning after their explorations to debrief and log their findings. The hut acts as the reference point for coordinating these trips and ensuring that all members are accounted for.

Evening and Nighttime:

Evenings at the Potato Hut involve cooking, sharing meals, and discussing the day's discoveries. It's a time for relaxation and recovery, with team members often sharing stories and enjoying each other's company.

Accommodation:

Please **BRING A TENT** or alternative arrangements, we camp around the hut. Though some arrangements can be made; normally involving drink... to sleep in the hut, we try to limit this so that the hut can be accessed at all times to nerd and relax, with the upstairs loft used as primary storage.

Food:

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Key Points

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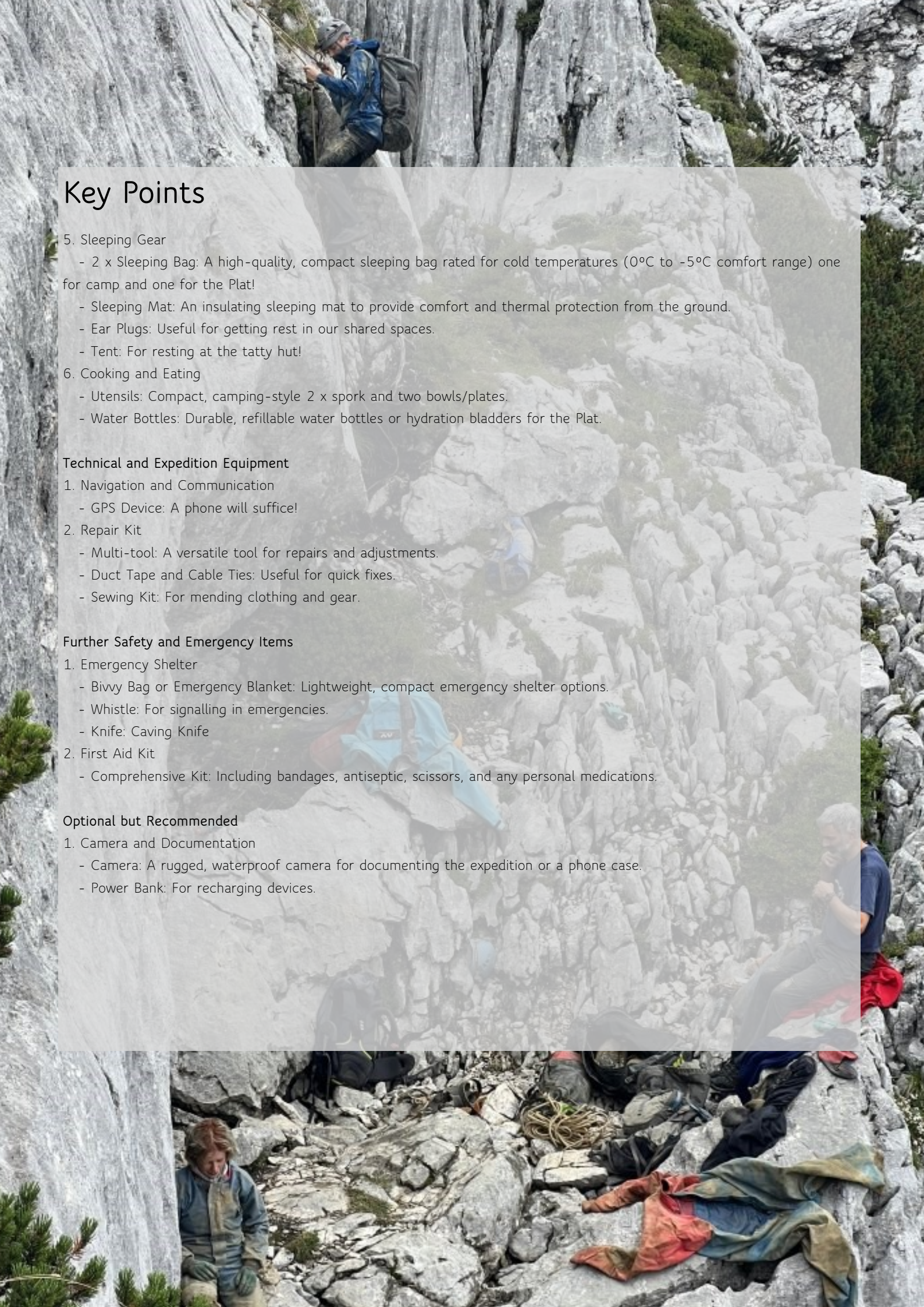
What should I bring?

Essential Caving Gear

1. Caving Helmet
2. Headlamps
 - Primary Headlamp: High-lumen output with adjustable brightness and a reliable mount.
 - Backup Headlamp: Always carry a secondary headlamp in case the primary fails.
 - Spare Batteries: Sufficient spares for all your headlamps, considering the duration of the expedition. Along with charger.
3. Caving Suit
 - Oversuit
 - Undersuit: A thermal undersuit for warmth, crucial for maintaining body temperature in our 3c cold caves.. Multiple layers is highly recommended. Synthetic fleece and alike is useful.
4. Boots
 - Wellies/Caving boots
5. Gloves
 - Primary Gloves: Durable, waterproof gloves for protection against cold and abrasions.
 - Backup Gloves: Extra pairs in case the primary ones get wet or damaged. But also for surveying, lighter ones are best here!
6. Harness and Safety Gear
 - Caving Harness: A comfortable and durable harness designed for caving, equipped with multiple attachment points.
 - Ascenders and Descenders: Devices like a Croll, Basic, or handled ascender for climbing ropes, and descenders like a Stop or Petzl I'D for controlled descents.
 - Carabiners and Connectors: Locking carabiners and quickdraws for securing ropes and equipment.
 - Cow's Tails: Adjustable lanyards for clipping into safety lines and anchors.
 - SRT Kit: Single Rope Technique (SRT) kit including a foot jammer and chest harness for vertical caving.

Personal Clothing and Gear

1. Base Layers
 - Type: Moisture-wicking and quick-drying base layers to wear under your caving suit. Bring multiple sets for changes throughout the expedition.
2. Insulating Layers
 - Type: Fleece or synthetic insulated layers for additional warmth.
 - Function: Essential for staying warm during surveying or in colder windy sections of caves.
3. Outer Layers
 - Waterproof Jacket: A lightweight cheap, packable waterproof jacket for surveying.
 - Windproof Layer: Optional but useful for windy conditions on the plateau.
4. Personal Care Items
 - Toiletries: Basic items like toothbrush, toothpaste, and biodegradable soap.
 - Towel: A quick-drying, compact towel.
 - First Aid Kit Personal first aid items including blister care, antiseptic wipes, and pain relief, bivvy and a candle with lighter is also useful!

A person in a blue jacket and helmet is climbing a steep, rocky mountain face. The background shows a vast, rocky landscape with some greenery. The text is overlaid on a semi-transparent grey box.

Key Points

5. Sleeping Gear

- 2 x Sleeping Bag: A high-quality, compact sleeping bag rated for cold temperatures (0°C to -5°C comfort range) one for camp and one for the Plat!
- Sleeping Mat: An insulating sleeping mat to provide comfort and thermal protection from the ground.
- Ear Plugs: Useful for getting rest in our shared spaces.
- Tent: For resting at the tatty hut!

6. Cooking and Eating

- Utensils: Compact, camping-style 2 x spork and two bowls/plates.
- Water Bottles: Durable, refillable water bottles or hydration bladders for the Plat.

Technical and Expedition Equipment

1. Navigation and Communication
 - GPS Device: A phone will suffice!
2. Repair Kit
 - Multi-tool: A versatile tool for repairs and adjustments.
 - Duct Tape and Cable Ties: Useful for quick fixes.
 - Sewing Kit: For mending clothing and gear.

Further Safety and Emergency Items

1. Emergency Shelter
 - Bivy Bag or Emergency Blanket: Lightweight, compact emergency shelter options.
 - Whistle: For signalling in emergencies.
 - Knife: Caving Knife
2. First Aid Kit
 - Comprehensive Kit: Including bandages, antiseptic, scissors, and any personal medications.

Optional but Recommended

1. Camera and Documentation
 - Camera: A rugged, waterproof camera for documenting the expedition or a phone case.
 - Power Bank: For recharging devices.

Key Points

Additional Notes

- Pack Smartly: Use waterproof and sturdy backpacks to organise your gear. Pack items in dry bags or zip-lock bags to protect against moisture.
- Test Your Gear: Ensure all your equipment is in good working order before departure and familiarise yourself with good SRT techniques. Please replace gear BEFORE expo if its buggard.
- Plan for Adaptability: Weather conditions and expedition plans can change, so be prepared to adapt your gear accordingly, we go from extreme heat, storms and snow all in the space of two weeks! So please pack to that.
- We are a team, we expect everyone to pull their weight and help out!
- Finally we must remember that the caves aren't going anywhere. Please cave safely and do not take risks. This isn't caving in the dales... Please pack accordingly and bring plenty of food and warm layers underground with you!!!

