



## Ready Pack

Kitchen Sinks Not Allowed

There are two temptations when responding to a SAR that can be problematic. Taking too much and not taking enough. Either can put you and your team at risk.

Carrying too much may prevent you from being able to keep up with your team and complete your assignment in a reasonable time. If your pack is too heavy you are also at risk of injury from the pack or by losing your balance or twisting an ankle.

Not carrying enough may mean that you become a burden to your team or you may not have the gear to accomplish your mission or respond to an emergency such as having to stay out overnight.

# The pack must

- Provide for personal and share of team specialty needs
- Allow you to carry out your SAR assignment
- Be durable
- Be weather resistant



Regardless of your choice, your pack needs to support you on an operational level if your assignment runs longer than planned, and to allow you to survive (note: survival does not equal camping in comfort). It should accommodate either a water bladder or a couple of quart/liter water bottles.

Your pack needs to be large enough to provide for both your personal needs and your share of any special equipment for team assignments. Technical rescue team members, for example, may carry 4,000 – 6,000 cubic inch packs for exactly that reason but most SAR personnel find 1,000 – 2,000 cubic inches sufficient.

**Talk to teammates before purchasing and get help at the store.**

# Consider

- Operability of zippers and buckles wearing gloves and/or mittens
- Adjustment for waist and shoulder straps
- The potential need to increase volume in a winter operating environment (or have different size packs).



VSP Search & Rescue  
issued packs

20L Summer      34L Winter

←      →



Whatever approach you take, be sure it is comfortable and will work in the weather and environments you will be searching in. For example, if you have to take your gloves off in the winter to work buckles and zippers, that might be a problem.

It's critical to emphasize again the importance of proper fit – some styles of shoulder straps and hip-belts, in particular, just don't match up with some torsos. Packs are designed to fit specific torso lengths, get help from a professional in fitting your gear.

Your pack may actually be your “packs”. Folks often find that the additional layering and thickness of winter clothing dictates a larger response pack than for warmer weather use. In addition carrying extra gear like snowshoes may require a different style pack.

Vermont State Police issues their team members season specific packs for this reason.

# Murphy's Pack Law

Gear "needed" will expand to fill all available space in the pack



As the slide points out, we advise some caution in picking a pack that is large – it's simply a natural tendency to fill it.

Some SAR personnel prefer a SAR vest with pockets in the front and either adding a pack to it or getting a vest with a pack.

Be careful about strapping too much onto the outside of a pack as brush, branches, etc. can pull off equipment and potentially result in its loss. Dangling gear also tends to get hung up or pulled off as well.

Wider means harder to maneuver while searching off trails.

# How you Pack Your Gear

- Some people use dry sacks to protect their gear. Everything fits into the bag on the right and you can take only those modules needed on a search.



How you pack your gear will depend on the type of team you are on and the specific mission. One approach is to modularize everything so you have a small bag for signaling, fire starting, basic items (safety glasses, ear plugs, etc.), first aid, food and water purification, etc. In the case shown above, each bag is water repellant and then is placed inside the larger water repellant bag.

Before heading out, talking over gear to be carried with your teammates will help ensure you have everything you need and minimize unnecessary duplication.

Use of dry sacks (frequently used in kayaking or boating) as shown above or several zip lock bags in a garbage bag will go a long way toward keeping your gear dry and ready for use when you need it.

# Personal Equipment

- Each searcher should be prepared to carry their equipment in rough terrain for up to 12 hours in the field (and 24 hours in a survival situation).
- Basic equipment may be carried in a fanny pack, vest or small day pack that can be stuffed inside the main pack when necessary.
- An additional supply of extra clothing that can be left at the search base is strongly recommended for all response situations.

Again, the challenge is to have what you need and nothing else. This takes experience, some guess work, and even then the most experienced searcher may not take everything they need and have to improvise.

Your gear needs to support you on an operational level if your assignment runs longer than planned, and to allow you to survive if you have to stay out overnight.  
(Note: survival does not mean camping in comfort, just surviving with no negative effects).

Your search assignments will generally be planned for 12 hours or less depending on the situation. Will you be ready?

The time to have your ready pack set up is before you get a call to a search so you can respond quickly and don't regret forgetting something.

Having a set of dry clothes at the base (in your car) can be the difference between being able to continue or not. Getting out of wet clothes on a cold day may prevent hypothermia and dry socks will go a long way toward saving your feet from blisters.

# The Personal Equipment List

- Basic module
  - Carry out SAR assignments
  - Operate comfortably for 12 hours
  - Survive for at least 24 hours
- In winter additional equipment
- Keep it efficient, based around patterns for staying alive, keeping your team alive, and keeping the search subject alive!

For every search you go on in Vermont, you should come prepared for 12 hour operational periods of searching. When you and your team depart the Command Post for your assignment, your team needs to have the equipment necessary to perform your task safely and effectively for 12 hours. If you get lost, injured, or you find the search subject and they are not mobile you all need to be able to survive for 24 hours so help can get to you.

Every search you go out on you should carry an extra layer of clothes (summer could just be rain jacket and winter another layer for warmth). Experienced searchers ALWAYS head out with a head lamp and enough extra batteries to replace them in every piece of equipment that uses batteries.

In your vehicle you need to have the equipment to be self-sufficient at the base camp for 24 hours That means the ability to sleep in your car reasonably comfortably if need be and to feed yourself. Keeping some blankets or a sleeping bag in your car at all times is a great idea.

In most cases you will find that if a search is expected to go for 24 hours or longer that some provisions for food and water for searches will be made but it is still a good idea to have something with you just in case.

# The Personal Equipment List

## **3 Season minimum equipment list (in addition to clothing being worn)**

- 2 liters water and food/snacks for 12 hours (roughly 1200 calories).
- Head lamp with spare batteries (2 separate light sources highly recommended)
- Extra insulating layer(s) based on conditions
- Shell layer
- Micro-spikes (spring/fall)
- Navigation aid (map/compass/gps/phone app)
- Communication (radio/phone)

In Vermont all SAR responders are expected to have a minimal amount of equipment with them or they may be turned away from participation.

Study the list on this slide carefully. Do you ALWAYS respond with a pack with these items (at a minimum) with you?

The correct answer is "YES"!

# The Personal Equipment List

## Additional Recommended Equipment

- Whistle
- Additional light source  
(2<sup>nd</sup> head lamp or small hand light)
- Fire starting kit
- Flagging tape
- Knife
- First aid kit
- Eye and ear protection
- Small repair kit



The previous slide listed the bare minimum for individuals to have with them in order to participate in a search mission.

Over time and with experience you will develop a gear list that works for you. The key is finding the right balance between having enough equipment with you to complete your mission safely, yet not weighing yourself down so much that you lose efficiency.

The items above, while considered 'optional' are carried by most experienced SAR responders.

# The Personal Equipment List

**In winter the following should be added:**

- Lithium batteries for head lamp & GPS
- Insulation for water so it doesn't freeze.



Responding to a search during winter conditions is far different and carries much more risk than in other seasons.

Inexperienced searchers may bring plenty of water but fail to protect it from freezing at which point it is useless. Some good 'tricks of the trade' are:

- Fill your water bottle with warm rather than cold water.
- Cover your water with an insulated sleeve (or even a thick sock)
- Carry your water bottle upside down – it will start to freeze from the 'top' (now the bottom of the bottle) allowing access to water even if partially frozen (Make sure you have a tight seal!)
- Bring a thermos with a hot beverage.

Batteries for your headlamp and GPS will lose power MUCH more quickly in cold temperatures. Swap batteries out with lithium for the winter and carry an extra set for each device.

You may also want to consider an auxiliary power bank for your phone. Keep it warm in an inside pocket close to your body.

# The Personal Equipment List

**In winter the following should be added:**

- Micro-spikes or crampons
- Snowshoes



Searching in the winter requires specialized equipment to safely travel in snowy and icy terrain.

Some type of traction devices for your feet may be necessary in steep or icy conditions and should always be carried starting in late fall and typically well into May.

Even though there may be little or no snow at lower elevations often conditions in the mountains will require snowshoes. This can be particularly deceiving in the spring when there may be green grass growing in the valleys and 4-5 feet of snow at higher elevations.

While it may be reasonable on some searches to use skis for those who have the necessary experience and skill, it is typically preferred to have the flexibility provided by wearing snowshoes.

While not considered 'required' equipment, many people find it easier to travel using ski poles to help with balance. They can also be used to knock snow off the trees so it doesn't fall down your neck! Adjustable poles are best as they can be fit to conditions and store more easily on your pack when not in use.

# The Personal Equipment List

**In winter the following should be added:**

- Dry base layer
- Adequate extra insulating layers



It is very important to provide some margin of error with your clothing for the winter. An extra dry base layer can be a life saver if you get wet (or to provide for the subject). And as discussed in the clothing section having adequate insulating layers for the conditions is a must.

Gloves tend to almost always get wet so having a dry pair is a good idea as well.

# The Personal Equipment List

**During colder weather a fire starting kit should be carried.**

There are many options for making your own!



You should always have the ability to start a fire.

You can purchase commercially made fire starter cubes or make your own. One simple method is to coat cotton balls in Vaseline and carry them in an old film can, prescription bottle or ziplock bag.

An old fashioned flint takes some practice but is very reliable. Butane lighters are convenient but may not work in very cold temperatures. Matches are hard to keep dry or light in rainy or snowy weather and are not recommended.

# Fire Building

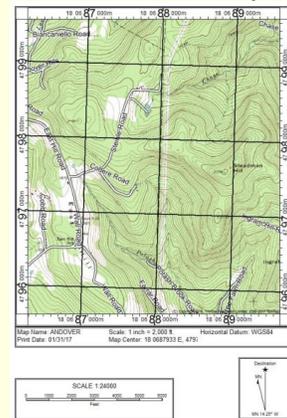


In March of 2018 searchers located a hiker near Middlebury Gap who had been lost for 2 days during a major snowstorm. Rescuers started a fire and were able to significantly rewarm him while they waited for an evacuation team to arrive.

# Team Equipment List

**In addition to personal gear,  
each team in the field should have:**

- First aid kit
- Communications with command post (w/ backup)
- Protection for subject (space blanket, extra clothes)
- Team assignment with map



Some equipment can be 'shared' among members of a team. If the group is going to stay together it may not be necessary for each member to carry things like temporary shelter or a first aid kit (though it can never hurt in case you get separated).

There may not be enough radios available for each person on a team, though ideally each person will have a way to communicate.

Often search managers will only provide one copy of a team's assignment and map – though a good trick is for each team member to take a photo of it on their phone.

## Packing it

- The basic equipment module should be capable of being combined with team specialty gear or carried on its own in the field
- Think about where in your pack different gear is stored – you will want easy access to items more frequently used.
- Winter clothing should be in a backpack capable of being carried in the field

Depending on the team you deploy with and what kind of unit you are in, you may be required to carry some team specialty gear. If so your pack needs to be capable of carrying your equipment and your share of team gear.

Talk to your unit members before you purchase the more expensive equipment to get advice from those who have been searching for a while and learn what they use. Their experience will be a big help to you in getting the right gear the first time.

During winter searches clothes tend to go on and come off frequently because of changing weather conditions, sweating because of terrain or going from day to night and/or night to day. You will need to be able to remove or add clothes and your pack will need to be able to support that.

## Congratulations, you have finished this module

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There is a list that summarizes the required and recommended personal and team gear on the main lesson page that you may want to review or print out for future reference.

You may close this window to return to the main course and select another module to complete.

Be sure you keep track on your course checklist so you know which modules you have completed.