

Stoves for Expedition Use

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WHEN WELL-KNOWN French climber, Yves Astier wrote Adams Carter asking him what high-altitude climbers in the United States thought about the stoves that should be used on expeditions, Carter felt that a poll taken among the leading American expedition climbers would best answer Yves' question. He wrote numerous expedition climbers and asked the following questions concerning the stoves they had used and their experiences with them.

1. What stove and what fuel did you use in your recent expedition?
2. How well did it work?
3. What would you use if you were planning another expedition?
4. If you had porters, either high-altitude or low-altitude, what provisions did you make for them to avoid their using precious supplies of wood?

Ad received twenty-two responses and it is very interesting that 90% of the people had basically the same response. Almost everyone divided the stove use into three categories: base camps (up to 19,000 feet), medium heights on the mountains (17,000 to 24,000 feet) and finally very high (over 24,000 feet).

Base-camp stoves were almost always kerosene-burning stoves. Kerosene is the most readily available fuel in third-world nations. Many people noted that the fuel quality was poor and all kerosene should be strained before using. Optimus 00's and 111's, Phoebus and Nepalese-made burners were all recommended. It seems that all these stoves are easy for the porters and cooks to keep running. It is interesting that poor quality fuel burned well in the cheap heavy, poor-quality stoves.

Many expedition leaders mentioned that low-altitude porters would use wood whenever possible. Some were reluctant to use the kerosene base-camp stoves on the approaches. It seems more encouragement to use these stoves is necessary by leaders to help preserve the limited wood supplies in countries such as Nepal, India and Pakistan.

For use on the mountain, above base camp, 90% of the responses recommended the Mountain Safety Research G/K multi-fuel stove. They recommended that white gas be used rather than poor-quality kerosene although the multi-fuel stove can use either. The stove was referred to as the "fiddlers" stove, meaning that it requires constant cleaning and attention to keep working well.

Fortunately it disassembles easily and can be kept running even when poor quality fuel is used. Fuel quality is everything with these stoves. My experiences are similar to those who have used them at the medium altitudes of 17,000 to 24,000 feet. With good quality white gas these stoves will run up to two weeks without cleaning. On one trip to Mexico I used low-quality auto fuel. The same stoves would barely run a half hour without major cleaning being necessary. Because of their light weight it is easy to bring along a few extras just in case you get one that is more finicky than usual. MSR sells a stove repair and maintenance kit for the MSR G/K which should be standard equipment on any expedition to a remote area of the world. One kit per stove is a good idea.

When planning an expedition to peaks where high camps are above 24,000 feet the Bleuet stove is preferred. They are simple to operate and, when used with special "iso-butal" fuel in high-pressure canisters, work well at these extreme altitudes. As with all stoves these have numerous problems. First of all the special high-altitude canisters are available in Europe only and are quite expensive. Most airlines refuse to transport these canisters because of their potential danger. Planning for these fuel canisters to arrive by land at the last city before your trek to base camp can be a minor nightmare. Another problem is keeping the canisters warm in frigid high camps. Jeff Lowe is working on a heat exchanger made of a length of copper tubing. The ends extend into the burner flame and the body of the tube wraps around the cartridge which is enclosed in ensolite. Combined with a hang-up cable the contraption becomes a convenient set-up for cooking in difficult conditions or extreme high altitude. Jeff plans to market a sophisticated version next year through his new company, Latok. We should keep our eyes on this new stove. As with all stoves the Bleuet has certain drawbacks. Great care should be taken when changing cartridges, especially when there are other stoves running near by. Cold canisters may seem empty but may have some fuel left in them. Lastly these stoves present the biggest disposal problem of any stove. Removing the spent canisters from the mountains is a must. We have all seen too many of the familiar blue canisters on mountains around the world.

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