

Everything You Need to Know About Bear Canisters for Backpacking



What is a Bear Canister?

A bear canister is a portable, hard-sided plastic container used to store food safely from bears. It's also worth noting that bears aren't the only way to lose food on the trail. Rodents, raccoons, ants, and marmots can be surprisingly stealthy and aggressive! A bear canister gives you peace of mind when dealing with critters of all kinds.

When Should You Use a Bear Canister?

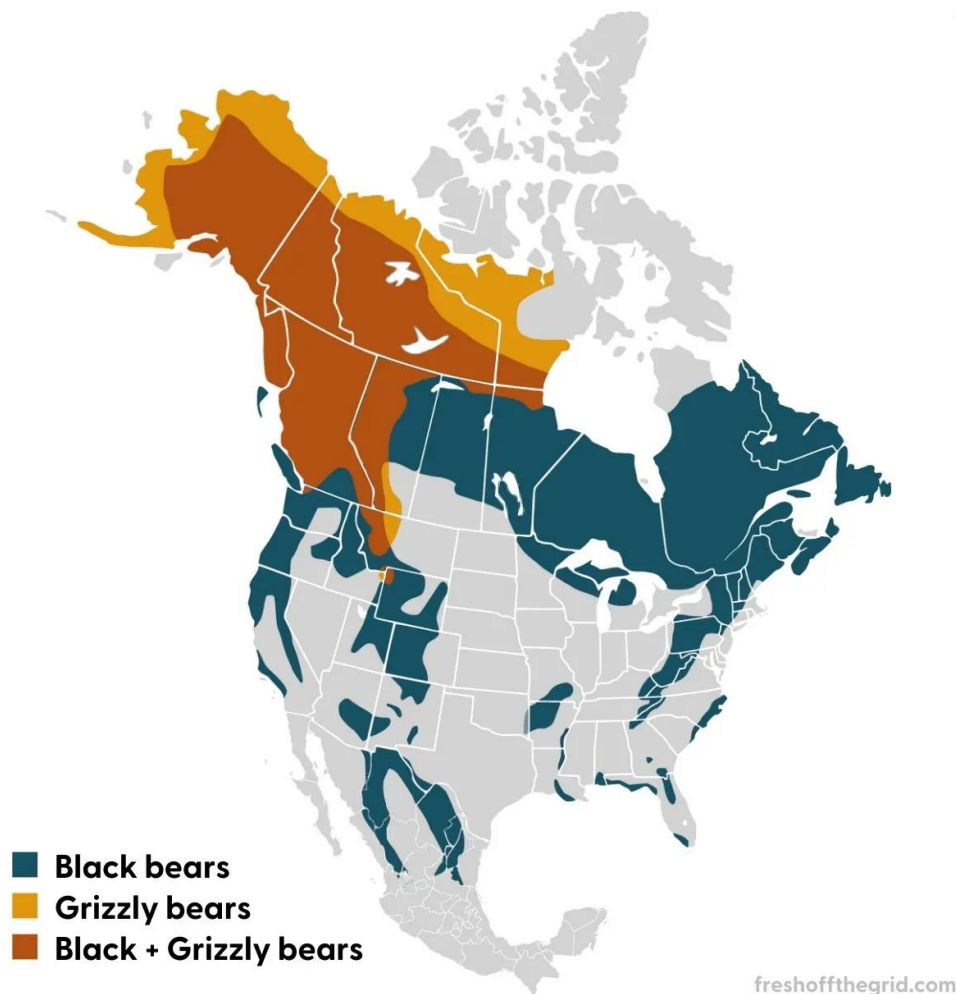
If you're backpacking overnight in an area where bears are known to inhabit, you definitely should consider using a bear canister to store your food. Using a bear container is the simplest and most effective way to prevent bears from accessing your food. In doing so, you not only keep your backpacking food safe, but you also help keep bears safe as well.

Bears can sniff out human food with impressive efficiency. Consider: A bloodhound's nose is equipped with about 230 million olfactory cells (scent receptors). That's 40 times the number in humans. It is estimated a bear's nose is just as sensitive as a bloodhound (if not more so).

Bears are incredibly adaptable and opportunistic creatures. A bear only needs to succeed *once* in accessing human food for it to habitually seek out humans as a potential food source.

The phrase “*a fed bear is a dead bear*” is used among park rangers because once a bear gets a taste for human food, it often becomes overly assertive, forcing rangers to euthanize the animal before it becomes a public hazard. Tragically, dozens of “problem” bears are shot and killed every year (in 2017, Colorado alone had to euthanize 178 bears).

By properly using a bear canister, much of this can be avoided. Using a bear canister is easy and effective. It protects you, your food, other hikers, and the bear population at large. We know they can be heavy and bulky to carry, but it is an essential piece of backpacking gear, not to mention legally required in many state and national parks, national forests and wilderness areas, and a number of other public lands. This can be a frustrating topic to navigate, though, because not *all* areas within bear habitats have requirements, and even among places that *do* have requirements there are differences in which storage methods are and aren’t allowed. If you’re backpacking in bear country, your best bet is to call the ranger office in the area you’re going to be traveling through for up-to-date requirements, or Google “[area] food storage requirements”.



Black bear and grizzly bear habitats in North America

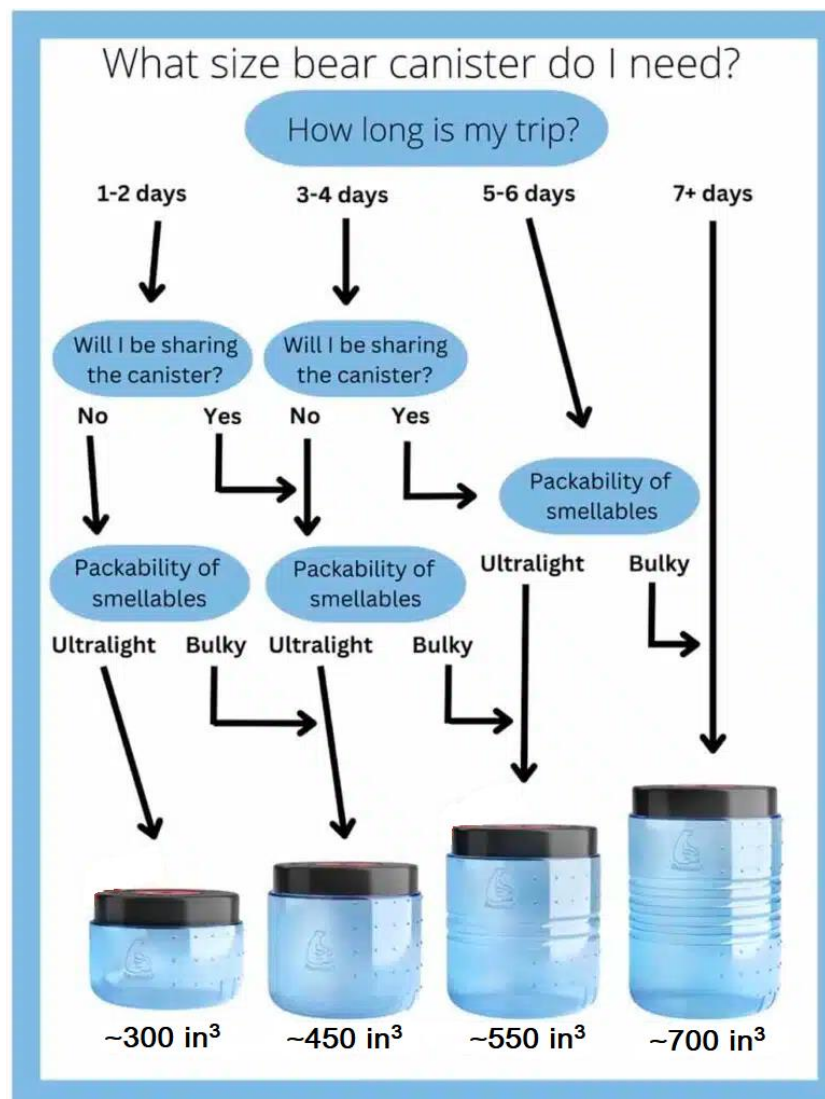
Bear Canister Pros and Cons

Upside: Canisters offer backpackers peace of mind by providing a simple, effective way to keep human food safe from animals. They can also double as a camp stool or food prep surface.

Downside: They are heavy (2-3 lbs.), bulky and a tight (or insufficient) fit for all the food and scented items you aim to carry on a lengthy trip.

What size bear canister do you need?

Deciding which size you need will be based on numerous factors including trip length, if you're sharing it with another person, types of food and smellables you bring, and anything extra that may need to fit inside. A general rule of thumb is that one day's worth of food takes up about 100 cubic inches or 1.6L. This metric is fairly accurate so long as you know how to pack your canister efficiently (keep reading below), your food is fairly calorie dense, and you're not over-packing toiletries (i.e., use travel sizes instead of full sized).



How to Use a Bear Canister

Now that you're the proud owner of a shiny new bear bin, what exactly are you supposed to do with it? In short:

1. Store the right things in the bear canister
2. Pack your bear canister as efficiently as possible
3. Choose your kitchen location wisely
4. Choose a smart place to leave the bear canister overnight
5. Carry your bear canister comfortably in your pack

What Goes Into a Bear Canister?

The rule is fairly straightforward: All food, items with any scent, and all trash belong in your bear canister. *This includes but is not limited to all sealed or packaged food, sunscreen, soap, mosquito repellent, lip balm, deodorant, medications, and feminine products. As a general rule, if you put it in your mouth or on your skin, it should probably be stored in a bear-resistant container.*

How to Pack a Bear Canister

If you're not already a precise planner when it comes to backcountry meals, hiking with a bear canister will make you into one. As a general rule of thumb, one day of food for one person takes up around 100 cubic inches of bear canister space. But there is a lot you can do to stretch your bear canister capacity as far as possible.

- **Plan out your full menu precisely.** Avoid bringing too much (or too little). Lay out each day, divide portions, and pre-measure mixed foods like rice and pasta.
- **Choose dense foods that are high in fat,** because they pack a lot of calories into a small amount of space. Nut butter, salami, hard cheeses, trail mix, and high calorie meal replacement bars are all good places to start.
- **Make your own meals!** This can be a little intimidating at first, but it's not as difficult as it seems! Pick up a dehydrator and started experimenting with simple meals you can make at home. Tacos, pastas, and ramen noodles are a great way to get some veggies in, adjust portions to how much you actually prefer to eat, and be able to change flavors so you know you'll love the meal! It's also a great way to conserve space in any size of canister by packaging them into freezer ziplock bags. They will take up far less space than any pre-made meals on the market. Have just-add-water breakfasts like oatmeal and powdered milk.
- **Choose foods that pack down into small spaces without much air in between.** For example, couscous or angel hair spaghetti will pack down to a smaller space than the same amount of calories of shell or macaroni pasta (unless you crush them into smaller pieces, which is definitely an option).

Here are a few ideas to help you pack your bear canister efficiently:

- **Remove excess packaging.** Get rid of bulky boxes and inflated packaging. Put food and toiletries into re-sealable bags or small containers. This saves space and reduces garbage. Clearly label each bag, and add any instructions you may need, like cook time or how much water is required for hot meals. Use a pin to make a hole at the top of freeze-dried meal bags to squeeze out the air.



- **Organize your food by day** so you don't have to unpack your whole canister to find your next meal. Start with the food for your last day at the very bottom, then layer each subsequent day's food as you work your way to the top of the canister. Toiletries can go at the top so they are accessible each day.
- Many energy bars like Cliff and Luna Bars are very flexible—you can bend them around the rounded sides of the canister or shove them into gaps between larger meal packages.
- **Check that *all* your food and toiletries will fit into your canister *before* your trip.** Pack your bear canister at home, not at the trailhead (or worse, once you hike into camp the first night!). If you're sending food ahead for a longer hike, consider doing a dry-fit in your canister before shipping your resupply box.

- Remember that **you can carry your first day's worth of food outside of your bear canister**, so long as you don't leave it unattended in your pack.



Where should I set up my camp kitchen?

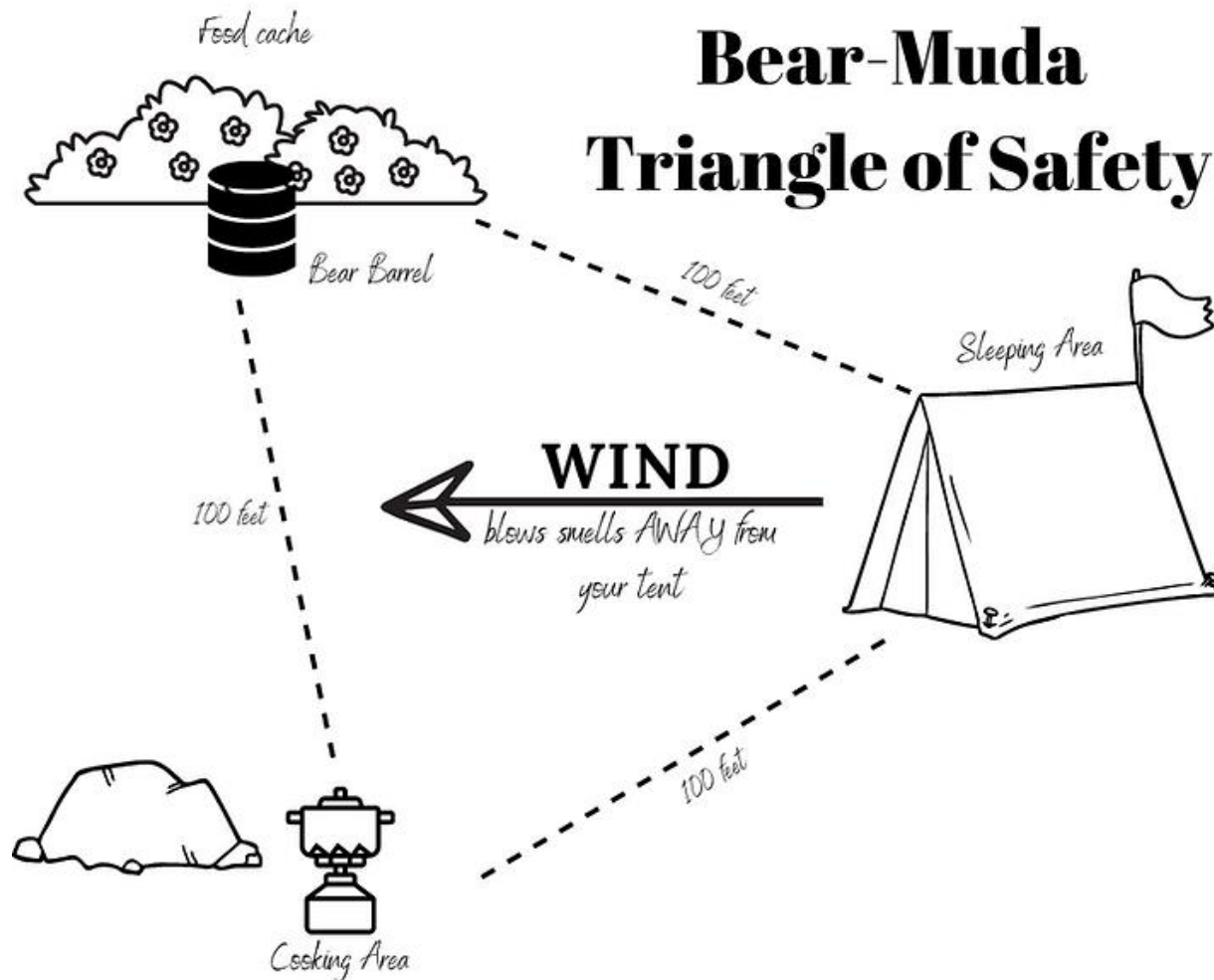
When hiking in bear country it's important to set up your "kitchen" and "dining room" at least 100 yards downwind from where you'll sleep. The process of eating or cooking leaves scraps or even just scent that a bear's sensitive nose can easily pick up. If a bear comes to investigate during the night, you'd rather it not trip over your tent in the process.

Some people even like to stop for dinner somewhere along the trail and then keep hiking to camp, especially in grizzly territory. This works especially well for ultralight hikers putting in long days, but is a good bear avoidance strategy for anyone.

Where do I leave the bear canister at night?

Here's the key thing to remember when deciding where to leave your bear canister at night: a bear canister is designed to prevent a bear from actually eating your food. A bear may still smell your food, find your food, and try to get your food. With this in mind, place your bear canister:

- **In an open area at least 100 feet downwind from your campsite.** Apply reflective stickers to boost their nighttime visibility.
- Away from any steep hills, river banks, lakeshores, or drop-offs where it could roll and fall somewhere undesirable if a bear decides to play with it.
- Don't place a canister up against rocks, roots or anything else hard enough that a bear could damage the canister by placing all its weight on it.



Additional Bear Canister Tips

- Before putting the canister in its overnight location, check ALL clothing and pack pockets. Nobody likes to discover an extra wrapper or granola bar after closing up the canister and have to go back in the dark to add it.
- This may sound obvious, but always keep your bear canister closed and locked when you're done taking food out. When bear canisters do fail to keep food safe, it's usually because of human error. The bear canister only works when it is closed and locked!
- The best thing about bear canisters (aside from not endangering bears or yourself) is having a sturdy camp chair or food preparation surface during mealtime.

Definitely do NOT:

- Keep your bear can in or near your tent.
- Attach rope or anything else to your bear can that could allow a bear to carry it away.
- Hang your bear can (hanging is not very effective and not necessary with a can, plus see above about attaching rope)

How to Carry a Bear Canister

Adding a bear canister to your gear list can disrupt the packing strategy of even the most experienced backpacker. Where is the best place to pack this bulky, heavy, inflexible object?

Here are some tips on how and where to carry your bear canister:

- The best place for a bear canister in your pack is relatively low and close to your back, which keeps weight distributed as comfortably as possible.
- Try packing your canister either at the very bottom of your back, or just on top of your sleeping bag (which is at the very bottom).
- Consider carrying your bear can horizontally (lid facing to one side) instead of upright, if it will fit.
- It's a more advanced move, but some hikers manage to carry their bear canister on top or below their packs, saving more space inside. Just remember, don't leave any ropes attached to the bear can itself, or a bear could carry it away during the night.

