

Course Equipment and Food

Restoration Ecology in Greater Yellowstone

The following equipment and food-planning lists are intended to help you pack for your upcoming course. It is important that you bring needed clothing, gear & food, yet do not bring too much, as space in your backpack and the trailer will be limited.

WRFI supports sharp shopping and saving money. We do not expect you to spend any more than necessary. For example, a \$.50 thrift store food bowl works just a good as a \$50 titanium one. Some of your gear may be purchased at discount or used, but it all should be high quality.

Much of this equipment can last you a lifetime of outdoor adventure. If unsure about which item to buy consider what will be most useful to you after the course, and consult with WRFI staff. Where to shop? Buying from local shops often provides the best service and supports your community. Some larger chain stores have greater selection and excellent return policies. Craigslist gives you access to a world of cheap used gear - but don't let a good deal lead you into buying something that is worn out or does not fit well!

Please bring a copy of this document with you as you pack or shop for gear. It is essential to your safety and comfort that you are well-equipped and supplied. Call or email your instructors or the WRFI office if you have any questions!

Individual equipment supplied by WRFI

- WRFI travel mug
- Stuff sacks for dinner food
- Plastic bags for lining packs and stuff sacks
- Plastic bins (28"L x 19"W x 16"H) to store extra student food and equipment in the trailer
- Clean WRFI t-shirt at course end!

Group equipment supplied by WRFI

- Expedition First Aid kit
- Emergency communications (satellite phone)
- Tents & group tarps
- Cooking stoves, utensils, fuel & dinner food
- Water treatment: MSR Aquatabs (chlorine)
- Bear repellent spray
- Course with placed-based books and field guides
- Maps

REQUIRED EQUIPMENT

□ **Backpack:** Bring a high quality internal frame backpack with a capacity of <u>at least</u> 4000 cubic inches/65 liters. Larger people with larger clothes, amounts of food, etc. should consider 85-90L packs. It is not necessary to buy the best brands, e.g. Arc Teryx or Osprey. They are really nice, but not necessary. There are many "good" quality backpacks

for under \$300. Be certain that your pack is sized properly, fits comfortably with weight, and is well made.
Sleeping bag or down quilt : With <i>temperature rating of 15°F</i> , or warmer if you get cold easily. We often encounter snow early in the trip. Down is lighter, more compressible, and longer lasting than synthetic insulation, but must be kept dry and are generally more expensive.
Sleeping pad : Closed-cell foam pads work well and do not puncture; lightweight inflatable pads (Therma-Rest or equivalent) are more comfortable and compressible, but require careful use to avoid punctures. Bring a repair kit.
Camp chair : "Crazy Creek" style. You will spend a lot of time reading, discussing, and writing on this course. Chair "kits" (e.g. Therma-Rest trekker chair kit) that incorporate an inflatable sleeping pad are much lighter, more comfortable, and less bulky than those with built-in padding. However, they're also more vulnerable to puncturing.
Stuff sacks: 1-2 medium/large size nylon bags with drawstrings for organizing gear and food. Avoid the ultra-light, (sometimes called "sil") stuff sacks—they are expensive, tear easily, and probably won't last the entire course.
Small dry bags: 1-2. For miscellaneous items, WRFI will provide a large dry bag for clothing.
Pocket knife: Swiss Army style folding knife or multi-tool. 4 inch blade length maximum. Make sure this goes in checked baggage if you're flying to Montana.
Bowl : For all your eating needs. Durable plastic or lightweight metal food bowl. A securely sealing lidded bowl will allow you to keep leftovers – highly recommended!
Eating utensils: Spoon or "spork." Avoid the plastic spoon/spork combo—they tend to snap in half.
Water bottles: 2 liter total capacity. Be sure lids seal securely. Hydration system bladders can substitute for <i>one</i> bottle.
Headlamp and extra batteries: Lightweight is more important than high power.
Lighter: Simple butane model. Make sure this goes in checked baggage if you're flying.
Wristwatch: Waterproof, with alarm. This is essential for coordinating wake-ups and group meetings. Cellphones are heavy, fragile, and batteries will not last. Practice setting the alarm before the course starts. <i>Required.</i>
Sunglasses & sunscreen: UV protection and SPF 30+
Contacts or glasses: Spares are a good idea.
Journals, pens/pencils: At least 6 X 8 inches, spiral bound or Moleskine style preferred. Unlined paper is nice. Colored pencils or very small watercolors are enjoyable, but optional.
Toiletries: Travel size toothbrush and paste, lip balm, feminine hygiene products, and biodegradable soap. <i>Small</i> containers that can be refilled are best.
Prescription medications: Bring enough for the entire course—pharmacies are few and far between. Double check the expiration dates!

	Simple first aid: Basic supplies, such as blister bandages and small roll of athletic tape. WRFI provides a large group first aid kit with everything else needed
	Zip-lock freezer bags: Smaller ones for food and personal trash, larger ones (2 gallon) for books
	Bandanas: 1-2 recommended for hygiene or sun protection.
	Small whistle: Need one that you can remove from pack.
OP	TIONAL EQUIPMENT Trekking Poles: Old ski poles can suffice.
	Binoculars or hand lens: Dramatically helps your natural history observations – both close up and far away. Light, cheap, and small models are best.
	Camera: Be sure to have a good case for this delicate item. Don't forget batteries/charger/ memory cards.
	Small daypack / hip pack: For day hikes and van rides. Check to see if the top "lid" of your backpack can convert to a waist pack.
	Water filter: Nice to avoid all chemicals, required if you do not tolerate chlorine-based water treatment, or have a compromised immune system. MSR and Katadyn both make reliable, lightweight options.
	Compass: Simple models with rotating housing and clear baseplate.
	Fishing Gear: Very lightweight. You will need to purchase fishing licenses.
	Quick-Dry Towel or hand towel: Can be helpful for showers in town.
	Additional stuff sacks: 1-2 to organize clothes, books, etc.
	Phone / music player / headphones: For frontcountry use only, and not during program activities.
	Small, durable musical instrument: Our travels can be hard on musical instruments—so don't bring anything that would break your heart to see in pieces. Unfortunately we don't have room for full-sized guitars/banjos/and the like. But pack-sized guitars, ukuleles, and harmonicas have brightened up WRFI evenings.

Do NOT bring: Coolers, excessive magazines or books, slacklines, or other large, fragile, or generally unnecessary items because the van and trailer will be very full!

Dress for Success!

Early and mid-summer in Yellowstone is characterized by sunny days, fast-moving clouds, emerging wildflowers, and melting snow. Expect daytime highs to roam from the 50s to high 70s, with nightly lows typically in the 20s to 40s. Although the Henry's Lake Mountains and vicinity is fairly arid, we will likely encounter afternoon thunderstorms, periodic showers, and maybe even a few snowflakes, along with wind and sunshine. Remember, we will be at consistently high elevations, from 6,000 feet in the valleys to more than 10,000 feet on the highest mountain peaks, so expect cooler temperatures than in the surrounding valleys.

REQUIRED CLOTHING

Hiking Boots: Substantial boots with a leather upper or waterproof lining preferred. Must provide ankle support . Soles do NOT need to be extremely stiff, but should be thick enough protect your feet from sharp rocks. Wear your boots as much as possible before the course to break them in and prevent blisters!
Footwear for wading / camp: NO flip-flops! A pair of old sneakers work great for this, and are also good for around camp and in town. Sport sandals are also possibilities. Chacos or Tevas are the best-known, but any quality sandal that provides a stable and secure fit will work. Again, keep it light!
Hiking socks: Wool or wool blend. NO cotton! High quality socks make happy feet! 3-4 pair.
Underwear: Stretchy lycra shorts are comfortable and prevent chafing while hiking. Cotton underwear is nice for around camp and sleeping. 4 pairs of underwear are sufficient.
Sports bras: Synthetic for wet and cold, cotton for comfort on dry days and at night. 2-3 are sufficient.
Nylon quick drying pants: 1 pair. Those that are convertible into shorts can be handy. NO denim or cotton!
Nylon quick drying shorts: 1 pair for hiking & wading, NO denim or cotton.
T-Shirts: 2 (quick dry is best, but cotton will do here). WRFI will provide another one at course-end.
Fleece or wool jacket/sweater: Cotton sweatshirts won't do.
Insulated jacket: Lightweight down, synthetic or wool.
Long underwear: Both tops and bottoms, one expedition weight, one lightweight. Synthetic or technical wool top and bottom. Waffle underwear is often cotton—double check!
Rain jacket & PANTS: Must be <i>waterproof</i> and have a hood. Gore-Tex or equivalent preferred. (Coated nylon is not typically waterproof.) Must be durable.
Light gloves: Polypro, fleece or wool.
Warm hat: Wool or fleece, check the tag to make sure it's NOT cotton.
Sun hat: Baseball cap with bandana or wide brimmed crushable sun hat.
Mosquito head net: Make sure the mesh is fine enough to screen out smaller flies like no-see-um's. Versions with a hoop are more comfortable, all combine well with a brimmed hat.

	Town clothes: Presentable and comfortable shirt and pants/jeans/skirt for travel and meetings. Cotton OK.
OF	PTIONAL CLOTHING Fleece pants, down jacket, insulated booties, and shell gloves: For those who get cold easily.
	Liner socks: Thin synthetic, 2-3 pair. If you are prone to blisters
	Gaiters: To keep sand, snow and rocks out of your boots.
	Long sleeve sun shirt: Light fabric, light colored. You can buy special "desert shirts," or you can find cheap dress shirts at the thrift store. A thin synthetic zip-neck can substitute. Cotton OK.



Student Food Planning

Food is our fuel for exploring and learning, it provides a way to work and celebrate together. WRFI provides all on-course group dinners. Students provide their own personal breakfast & lunch food throughout the course. We will be able to resupply basic food items in towns between trips. For foods that are more perishable, like fruit and bread, it's best to only buy enough for the first couple weeks of the trip.

Goals of your food packing include:

- Appropriate amount of food: Enough, but not too much.
- **Proper type of food:** Foods you like, that are nutritious, and durable for an expedition.
- Packaging and organization: Buy in bulk when possible, remove all unneeded packaging, pack measured amounts in separate plastic bags. Double-bag sharp or messy foods to prevent spills. Contain liquids and peanut butter in leak-proof containers.
- **Ready to go:** Organize breakfasts and lunches in your stuff sacks for the first half the course.

Suggestions

- Test food types and amounts to determine your needs. Be aware that your appetite & caloric needs may fluctuate with increased physical activity & exposure to cold (or hot) temperatures.
- Do not attempt to use a WRFI course for purposes of weight loss/gain or major diet alteration.
- Consider space and weight limits of your food: we'll carry food inside your backpack where it will compete for space with your personal and group gear.
- Fresh fruit and veggies are heavy and spoil, so they are best as a treat for days 1-4.
- Canned goods are generally not worth the weight.
- If you are a voracious carnivore, bring some dry meat such as jerky for lunch and snacks. Tuna in foil packets is a good option.

Breakfast

Throughout the course, breakfast will be a "sit down meal" when the group gathers to boil water, drink tea or coffee and enjoy hot food. Be sure to include enough fats and proteins to provide sustained energy for an active day. Simple hot breakfasts combined with a midmorning snack work very well.

Common WRFI breakfast menus include:

oatmeal

malt-o-meal

bagels

cous cous

granola

dried fruit

granola

grape nuts

raisins

- cranberries
- apples

- nuts and nut butters
- powdered milk
- brown sugar
- cream cheese
- honey

Lunch

Lunch breaks vary from the 20-minute quick energy break to an extended stop, with a day hike and class. We do not cook for lunches unless it is very cold and hot drinks are in order. With that in mind, bring lunch foods that are quick to prepare, nutritious, and that do not require constant refrigeration.

Consider **fresh fruit and veggies** as a luxury that may be packed for days 1-3 of each section. After the 4th day of a section, your food must be durable, non-perishable, or at least "less perishable," such as carrots.

Common WRFI lunch menus include:

- tortillas
- bagels
- pita bread
- rice cakes
- crackers
- peanut butter
- cheese
- nuts or trail mix
- soy or meat jerky
- instant hummus
- pepperoni
- tuna in foil packets

- carrots
- apples
- dried fruit
- hot sauce
- mustard.
- candies and chocolate!

Trail Food

Aside from formal meals, there will be many times when a small snack will boost your energy and mood. **Trail mix, energy bars, nuts, jerky, or fruit** are good options.

Beverages

- Instant coffee, tea, cider mix, and hot chocolate: All classics.
- Bulk tea: And a re-usable (metal) tea ball reduces cost, packaging and garbage.
- **Brewed coffee**: Re-usable cloth coffee filters work great; French press-mugs work well. Coffee bags like tea bags but filled with coffee are simple solutions. "Cowboy coffee" is an option for the strong of stomach!
- **Powdered drink mixes**: Emergency-C, Gatorade, horchata, etc. These are great for improving the taste of guestionable or iodine-treated water on the trail.

Dinner

Instructors will plan and pack WRFI group dinners at the start of the course. Students will be increasingly involved in food planning and preparation as the course goes on. We use local & organic ingredients as much as possible and we pride ourselves on cooking healthful, tasty dinners. These meals usually include a variety of beans, cheeses, grains, pastas, sauces, spices, and vegetables. Our dinners provide a good balance of fats, carbohydrates and protein to support vigorous exercise and learning.

We plan dinner menus for all known food allergies (be sure to tell us about any allergies), but we cannot satisfy everyone's specific food preferences. WRFI dinners are vegetarian - because cheese and some veggies stay relatively fresh in the backcountry.

Water Purification

WRFI uses chlorine (MSR Aquatabs) and boiling to treat water. Students may bring water filters if desired; these must be effective against giardia and in good repair.