# Equipment

If you are properly prepared and equipped, you will be more comfortable and able to take in new ideas and experiences during the trip.

### CLASS MATERIALS

- You will need a notebook and digital camera or sketchbook to document plants and habitats studied during the trip.
- A class reader may be provided at the start of the trip. Cost is usually about \$10.
- The recommended textbook for field trips is California Vegetation by Holland and Keil, ISBN 0787226858. See https://he.kendallhunt.com/product/ california-vegetation to order from the publisher, Kendall Hunt.
- The Jepson Manual and regional floras may be available for reference during the trip. Email before the trip will suggest books and maps for the region to be explored.

## DAYPACK

You will need a daypack that contains the following NECESSARY items, which you will need to have available to you during the day.

- Water bottles or Camelback that can hold AT LEAST 2 LITERS of drinking water. If you bring a Camelback (bladder), make sure it doesn't leak BEFORE you leave, and bring at least one backup water container. If you have a water filter, bring it on day hikes!
- Snacks and lunch READY TO EAT
- Hat/gloves/warm/water repellent layers, as needed
- Map, compass, hand lens, small journal or notepad, pencil, camera with at least two extra batteries, watch, headlamp, spare batteries, flashlight, pocket knife, whistle
- Enough toilet paper and personal necessities for the day. Allergy medicine? Tampax? WHATEVER YOU WILL NEED FOR THE DAY, TO HAVE WITH YOU.

## CLOTHING, from the ground up

### Feet

- Boots Fabric or leather. Breathable, comfortable, worn in (not worn out), waterproofed, good laces
- Insoles 'ultra sole' types with good shock absorption
- Socks Synthetics or wool, poly pro/fleece or blends; Carry at least 2 pair extra; Sock liners (thin type) help some boots fit better
- Moleskin or surgical tape- Ample quantities depending on how tender your feet are
- Light-weight sandals are recommended for stream crossings and around camp

### Legs

• Gators and crampons - Not necessary, too heavy to justify

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- Long underwear Poly pro synthetics, wool, or fleece tops and bottoms 1 pair, 2 pair if you need them to sleep. NO COTTON! Silk is lightweight and good for sleeping.
- Pants Nylon (breathable) type, zip-off leg types good

### Torso

- Shirt Fleece/wool/silk/poly pro type (flannel ok but not encouraged) long sleeved, with good collar, pockets (keep in mind you may need to cover up where there are mosquitos)
- Outerwear/shell Fleece pullover or zip up hooded
- Rain coat and rain pants or rain poncho
- A down jacket keeps you toasty on cold evenings and mornings in camp, and takes up very little space in a small stuff sack.

### Hands, Head and Neck

- Gloves Poly pro gloves, fleece, or wool avoid cotton
- Hats Sun hat with wide brim essential for day hikes, warm knit or fleece hat for cold nights
- Head net may be necessary for summer trips where there are mosquitos

### Face, Eyes and Skin

- Sunglasses UV protective! Wrap-around types keep wind out
- "Croakies" or eye glass holders
- Eye drops Natural tears, non vasoconstrictor types, help flush sunscreen out
- Sunscreen and lip balm spf 30-50 best, small size 5-day supply for face, neck, arms
- Mosquito repellant or head net may be necessary for summer trips (Note that DEET is toxic to frogs avoid swimming in alpine lakes after using DEET)

### CAMPING GEAR

- Lightweight backpacking Tent 1 person (or 2 persons if you're going to share) 3 lbs is good.
- Sleeping bag Down filled, -0 degree preferred. A +10 or 0 degree older bag might now be rated 15-30 degrees higher depending on history/storage practices. Know your loft!
- Sleeping pad Thermarest or "Neoair" types most comfortable; foam pads are cheaper but bulkier
- Pillow small crushable or inflatable types
- Down Jacket in a stuff sack, good to have at camp on cold evenings and mornings; doubles as a soft pillow
- Backpack internal or external type that you can practice loading to learn what items you can manage. Equipment stores will help you fit your pack correctly. Remember to leave space for shared equipment such as fuel canisters and water filters.
- Pack cover essential for waterproof hiking and storage (a large garbage bag can suffice)
- A day pack is necessary on backpacking trips, for day hikes away from base camp

## PERSONAL ITEMS

- Stuff sacks to keep personal items organized
- Map, compass, hand lens, small journal or notepad, pencil, camera, batteries, watch, headlamp, spare batteries, pocket knife, whistle - these should be accessible in your day pack along with enough toilet paper and personal necessities for each day.
- Medicines anti-inflammatories, aspirin for higher elevation acclimation, personal medications
- Backup flashlight or headlamp for camp
- Toiletries toothbrush, tp, moleskin, band aids, antiseptic, hand cleaner, wet wipes, deodorant

### Reminder: Do not allow pack weight to exceed 30% of your own!

Food

### **Road Food**

Shared treats are always appreciated during long road trips, especially by the drivers!

## FOOD FOR BACKPACKING TRIPS

We supply stoves, fuel canisters, pots for boiling water, water filters, and water bags for bringing water back to camp. Everyone helps pack in these communal items, so be sure to leave some space in your pack. We use the pots just for boiling water to minimize the number of pots, stoves, and fuel canisters carried. We don't want to weigh our packs down with the extra fuel necessary for cooking food on the stove. Please bring only food that can be cooked by adding hot water, NOT food that needs to cook in a pot, and NOT those bags that need to be immersed for a period of time in the hot water. Each potful of boiled water is enough for several people to prepare freeze-dried meals or instant soups. So, for hot food, plan to bring only items that can be prepared by simply adding boiling water to YOUR container off the stove. We may bring ice chests to keep food cool on the way to the trailhead and to have on our return, depending on bear issues at the trailhead parking lot.

- **Bear cans may be required** for some locations, otherwise bring a 50-foot line (minimum eighth-inch diameter) for hanging food in your stuff sack.
- Liquids: Two one-liter bottles are preferable. Designate one bottle for electrolytes or flavorings, one for clear water. Bring your own water filter if you have one.
- **Breakfasts:** Instant oatmeal or whole-grain granola with dried fruit and nuts, breakfast bars, dried dairy products, hot chocolate, tea, or coffee (instant is better than it used to be)
- **Snacks:** Important! Include energy bars, crackers, nuts, sweets (reward foods)
- Lunches: Some make delicious sandwiches each morning; others bring energy bars, nuts, precut veggies, crackers, cookies, bread, jerky, and dried fruit.
- **Dinners:** Sometime in the afternoon, the thought of dinner arises and is cherished the rest of the day. Dehydrated beans, soups, and potatoes in small paper cook-in cups can satisfy. To save space, transfer each serving from the bulky cup to a small ziploc bag and bring one reusable bowl with cover to prepare your dinners. Good bread, avocado, and (hard) cheeses are more tasty. Some people bring freeze-dried

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meal packets (more expensive). Try it before you come to make sure you like it – if you prepare a large package of food and don't like it, you will be faced with eating it anyway because you can't leave garbage in the wilderness, even if you bury it. Dry cheese for grating or topping is good. Dessert is important! Bring and ration dessert items for yourself and others. M&M's, cookies, fruit bars, etc. are always devoured. Some vegetables (cherry tomatoes, carrots) pack well, but watch the weight.

- **Seasonings** for variety (very important): herbs, dried vegetables, pepper, olive oil, bacon bits or jerky can convert ho hum to yum yum.
- **Cleanup**: Bring tissues or paper towel to wipe out your bowl and utensil, then rinse out the clean bowl with a small amount of boiled water. Remember that you are required to pack out all your trash and garbage. Do not use soap; dump any wastewater far from lakes or streams.
- **Fire Issues**: Campfires are illegal in many areas at high elevation, and depending on the fire season, regulations may be enacted that prohibit use of camping stoves as well. We will monitor Forest Service announcements that affect fire regulations in areas we will be camping.

# FOOD FOR CAR-CAMPING TRIPS

We will supply drinking water, stoves, and communal cooking equipment. People travelling together can coordinate cooler use in each vehicle. Let Stew know if you would like to borrow a large cooler. Hot water will be available in the morning and after dinner.

You supply your own breakfasts, lunches, and snacks; personal water bottles; and your own bowl, cup, spoon, fork, knife. Some trips may involve potluck dinners, or you may bring your own – that will be announced in email before the trip. Disposable plates save precious water, make sure these have no plastic so they can be burned in the campfire.

## Dinners

Some car-camping trips are planned with potluck dinners. In that case, participants will be contacted to sign up to contribute menu items for shared dinners, which usually include two main dishes (one vegetarian), grain, appetizer, green salad, fruit salad, vegetable, and dessert. Dinner items should be prepared as much as possible before the trip, to save time at the end of the day when everyone is hungry and tired. This means that at camp we do not cook, we reheat what we have prepared before the trip. (Including pasta. It takes a long time to boil all that water, especially in the mountains.) All fresh uncooked fruits and vegetables (salad items) need to be washed BEFORE the trip. Cooked foods that will be served later in the trip can be frozen. Plan to serve your menu items and put away any leftovers. Students who are not preparing menu items for dinner that night should help with cleanup or campfire chores.

## Breakfasts

Boiling hot water will be available in the mornings for beverages or instant cereal. Bring coffee, tea, or hot cocoa. Granola, fruit, hard-boiled eggs (already cooked), yogurt, muffins are easy and quick. Don't plan to cook bacon, pancakes, etc. - there's not enough time for that, or water for cleaning up. Prepare your own lunch and snacks during breakfast. Camp cookware will be stowed immediately after breakfasts are eaten and lunches are prepared.

### Lunches and Snacks

Individual eating patterns vary considerably. Always have lunch, snacks, and liquids available in your own daypack during the day, not packed away somewhere out of reach, so when you become hungry or thirsty you can deal with it without inconveniencing the group. It's always good to have snacks that can be eaten while standing up, without crunching too loudly to interrupt the class: energy bars, nuts, cut fruits and vegetables, sweets. You can make sandwiches for lunch during breakfast. On most occasions, we will not be stopping for lunch. Some people do not become hungry until after dark, when the plants are no longer visible.

Remember - Always Have Food With You!