

Equipment List & Hiker Notes

CORRIDOR TRAILS CHECKLIST



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Congratulations on your decision to join us for what promises to be an exciting year! Our staff is looking forward to sharing with you the splendor of one of the planet's most spectacular destinations, the Grand Canyon of the Colorado River. As most of our class offerings require some degree of overnight backpacking, the following suggestions will help you to prepare better for your adventure. Having the proper equipment, clothing, food, and advance physical conditioning will certainly make for a more satisfying experience. If you have any questions after reviewing this information, please do not hesitate to contact our office. More specific information regarding the itinerary of your individual class will follow in the form of a pre-course packet. Pay special attention to points marked "**Important note.**"

TRAINING

The physical demands of hiking Grand Canyon are in stark contrast to those found in mountain climbing or hiking on relatively flat terrain. The first portion of your trip will be a **knee-jarring** descent, when your pack is heaviest. The climb out will come when your legs are most tired. The atmosphere will become increasingly thin as you near the top (the average South Rim elevation is 7,000 ft.), making it considerably more difficult to breathe. While preparing for this challenge do your best to simulate the following: 1) the **total distance** of your hike while carrying your anticipated weight (30-35 lbs. in most cases), 2) the **total elevation gain/loss** (5000ft each way for most rim-to-river hikes), and 3) the environmental conditions you are likely to encounter (see temperature & precipitation chart below).

Training for a Grand Canyon backpacking class should involve the following three elements:

Cardiovascular Fitness

This is perhaps the most important training item for the Grand Canyon hiker. Good 'cardio' health allows the hiker to take the breath under control and the

heart from pounding during the climb out of the Canyon.

A minimum of a 45 minute cardiovascular workout, three to five times a week is a good starting point. To fit this into the day, consider breaking into pieces: for example twenty minutes in the morning and twenty-five minutes in the afternoon. However, if you do split the workout, you are sacrificing endurance. (Make one workout each week greater than one hour to build endurance).

The following are excellent 'cardio' workouts-walking, running, bicycling, treadmill time, step machines, swimming, power walking. Walking up or down hill carrying a backpack is the best training for the Grand Canyon, but any cardio workout should increase strength and endurance.

So how much is necessary? Runners who train for races are able to do twice their weekly workout in one push. In other words, a three mile run each week should enable one to complete a six mile race. A 20 minute cardio workout three days a week amounts to an hour of cardio a week. This equates to a fairly comfortable hike duration of two hours. Therefore, in order to hike out the Canyon on the Bright Angel trail, which is 10 miles, a minimum of five miles of training each week, preferably on steep hills, is needed.

Muscular Strength

The stronger the muscles, the fewer the strains and injuries while hiking. Concentrate on developing the muscles that support the ankles, knees, back, and shoulders. Professional guidance from a trainer at the gym before starting this training should help to avoid injury. Videos dealing with calisthenics (or workouts without weights) are a good start too.

Body/Joint Flexibility

Workouts that emphasize flexibility include yoga, the martial arts, dance, and stretching. Stretching

should be an integral part of any workout. Always stretch when fully warmed up. Many athletes stretch after their workout, when the muscles are nice and loose and warm. It behooves the hiker to stretch at each rest-stop, and at the end of the day's hike to reduce soreness and stiffness the following day.

The following is a suitable workout schedule for general fitness to prepare for a Grand Canyon hike:

- Day one:** 45 minutes cardiovascular workout. 15 to 20 minutes lower body strength training.
- Day two:** 15 minute cardiovascular warm up. 15 to 20 minutes upper body training.
- Day three:** repeat day one.
- Day four:** repeat day two
- Day five:** repeat day one.
- Day six:** Day hike at least one hour in duration. Try to simulate the Canyon's trails by hiking on steep hills wearing hiking boots and backpack.
- Day seven:** Rest.

In the month leading up to your Grand Canyon hike, it is recommended that you follow a tougher training schedule:

- Day one:** 1.5 hours cardiovascular workout. 30 to 40 minutes lower body strength training.
- Day two:** 30 minute cardiovascular warm up. 30 to 40 minutes upper body training.
- Day three:** repeat day one.
- Day four:** repeat day two
- Day five:** repeat day one.
- Day six:** Day hike at least four hours in duration. Try to simulate the Canyon's trails by hiking on steep hills wearing hiking boots and backpack.
- Day seven:** Rest.

Remember- the fitter you are the more fun you will have and the more you will learn.

Important note: For a 72-hour period before your hike commences, ensure that you are consuming sufficient amounts of sodium and fluids. Doctors agree that hikers increase the likelihood of experiencing heat-related problems if they are sodium depleted (e.g., follow a low sodium diet) or are dehydrated (due to travel or using diuretics such as coffee or alcohol).

AVERAGE TEMPERATURE & PRECIPITATION
(Fahrenheit and inches)

	South Rim			North Rim			Inner Gorge		
	Max	Min	Precip	Max	Min	Precip	Max	Min	Precip
January	41	18	1.32	37	16	3.17	56	36	0.68
February	45	21	1.55	39	18	3.22	62	42	0.75
March	51	25	1.38	44	21	2.63	71	48	0.79
April	60	32	0.93	53	29	1.73	82	56	0.47
May	70	39	0.66	62	34	1.17	92	63	0.36
June	81	47	0.42	73	40	0.86	*101	72	0.31
July	84	54	1.81	77	46	1.93	*106	78	0.84
August	82	53	2.25	75	45	2.85	*103	75	1.41
September	76	47	1.56	69	39	1.99	97	69	0.97
October	65	36	1.11	59	31	1.38	84	58	0.65
November	52	27	0.94	46	24	1.48	68	46	0.43
December	43	20	1.62	40	20	2.83	57	37	0.87

* Inner Gorge highs are averages. High temperatures can exceed 120 degrees Fahrenheit.

WHAT YOU NEED TO BRING

CLOTHING

With a typical 30 degree Fahrenheit differential from rim to river, bringing the appropriate clothing is critical. Use the “Average Temperature & Precipitation” chart to help you plan accordingly. The following items are essential:

- ❑ **Sturdy hiking boots**, well broken in (buy them ½ to one-size larger than your street shoes to allow for swelling and thick socks)
- ❑ **Brimmed hat** and bandanna
- ❑ **T-shirt** and **long-sleeved** shirt for protection from the sun (cotton for hot months)
- ❑ **Underwear**
- ❑ **Shorts**
- ❑ **Long pants** such as leggings or lightweight trousers (no jeans) to block sun and give warmth at night (especially for the cooler months)
- ❑ **Warm top** such as a sweater or fleece jacket (especially for the cooler months)
- ❑ **Hiking socks** such as Smartwool®, Thor-Los® or similar padded socks (wearing a thin liner sock under your hiking socks is highly recommended. Thin polypropylene socks are one type). *No cotton socks*
- ❑ **Rain shell**, waterproof jacket (especially for the cooler months)
- ❑ **Sport water sandals** like Texas® or more light-weight flip-flops for camp comfort
- ❑ **Warm hat and gloves** (especially for the cooler months)

EQUIPMENT

Important note: The less weight you carry the more fun you will have. Think of ways to make items do double duty. Share items with others in the class (this can be worked out at orientation on the first day). Cut back on “stuff” by practicing a less complicated style of living while on the trail. For example, if you’re bringing along a cheap paperback to read, tear off the part you’ve already read! Below is an equipment checklist; examine it carefully.

CHECKLIST

- ❑ **Backpack** with padded waist belt and shoulder straps, and a suspension system that will shift weight to hips. Internal or external frame. (Beware of borrowing a pack from someone not your size.) and **Pack Cover**
- ❑ Lightweight **sleeping bag**. (Some trips that are at higher elevations need warmer bags. Trip description will contain this information.)
- ❑ **Lightweight self-inflating mattress** (such as Therm-a-Rest®) to insulate you from the ground and give you a comfortable night’s sleep. (Important no matter what season.)

- ❑ **Tent*** of the lightweight backpacking variety, ideally free-standing
- ❑ **Camp/Trail Seat** (Therm-a-Rest®). Canyon surfaces are invariably hot, cold or uncomfortable to sit on.
- ❑ **Hip pack** or *lightweight day pack* for trips with side hikes
- ❑ **Tubed hydration bladders** (such as the Camelback®). Generally you’ll need one gallon (at least four liters) of carrying capacity.
- ❑ Lightweight **backpacking stove***, fuel (one container is usually sufficient), lighter.
- ❑ **Cooking Pot***, **Plastic cup, bowl, and utensils** You may not need a knife as you will be carrying a pocketknife. *Depending on your meals, your cooking pot can also serve as your bowl and your cup.* Make sure your spoon has an **extra long handle**.
- ❑ **Stuff sacks** for keeping gear organized.
- ❑ **Plastic bags** (including one large Garbage Bag) for carrying trash, dirty clothes, and for keeping gear dry
- ❑ **Toilet articles** and washcloth (bandanna can double as towel and/or washcloth)
- ❑ **Sunscreen, lip balm and sunglasses**
- ❑ **First-aid kit*** or at least the following items:
 - ❑ a. **Prescription medicine** (please inform instructor of any medications you are taking)
 - ❑ b. **Advil®**, or other anti-inflammatory drug to help with inflamed joints
 - ❑ c. **Ace bandage**
 - ❑ d. Dr. Scholls brand **Moleskin®**, a self-stick pad which can be cut to size to prevent blisters
 - ❑ e. **Duct tape/Sports tape** to affix moleskin and cover hot spots (wrap the tape around a water bottle or sun block container)
 - ❑ f. **Anti-bacterial hand sanitizer**
- ❑ **Walking stick/Trekking Poles with rubber tips (strongly recommended)**, **knee brace** if needed
- ❑ **Headlamp** or flashlight (small, lightweight, using AA or AAA batteries)
- ❑ **Pocketknife** such as a Swiss Army knife (with scissors)
- ❑ **10 feet Nylon Cord** for hanging your backpack
- ❑ **Money** if you plan on making purchases at Phantom Ranch (T-shirts, postcards, etc.)
- ❑ **Notebook**, drawing supplies, or paperback books, if desired
- ❑ **Guidebooks*** (optional)
- ❑ **Maps*** (optional)

* Items that may be shared with other members of the class to reduce total weight

FOOD

You will be responsible for bringing and preparing your own food. Keep in mind that food is every bit as important as water for maintaining a proper electrolyte balance and avoiding dehydration and other heat-related ailments.

Important note: Backpacking will make you feel hungrier than when at home and therefore it is imperative that you try to increase your **calorie intake** by at least half (to at least 3,000 total calories per day). Your food should therefore be high in calories but only weigh between 1 and 1.5 lbs. per day. If it weighs more, you do not have the right food.

To simplify this important part of your preparation, prepare a menu (sample below). This will allow you to organize food by meals and days and to calculate your calorie intake. You will want to pack as lightly as possible, so it is a good idea to repack food in Ziploc® bags to avoid carrying extra packaging (keep in mind that everything you pack in you must also pack out).

MEAL SUGGESTIONS/FOOD PLANNING TIPS:

- Choose foods that require only a short cooking time (several minutes or less is best). This will allow you to carry less fuel. Oatmeal and other hot cereals make excellent breakfasts and take a small amount of boiling water. Most hot cereals come in quick-cooking forms. This does mean having to fire up your stove which can slow your morning departure. Granola with reconstituted dry milk provides some welcome “crunch” as well.
- **Salty foods are much more appetizing than sweets while hiking and are critical in maintaining a healthy sodium level. The body needs sodium to function properly. Therefore, look at food labels to ensure you are getting enough.** Taking a few sweets along is fine for an occasional treat, but crackers, pretzels, and peanuts should be consumed frequently throughout your hike. With sweets it’s best to strive for crunch, flavor, and texture. Gingersnaps, peanut butter cookies, animal crackers, and cheese & peanut butter cracker sandwiches are some good choices. Try to get things that won’t **crumble** under the rough treatment of backpacking.
- Backpacking food can sometimes be bland so try to add crispy, spicy things to your meals. Take a small amount of your favorite spices in a

Ziploc® bag and add them to your pasta and other prepared dishes.

- Pre-made, lightweight, well-balanced backpacking meals are available in most outdoor stores. Examples are granola with blueberries or spicy Thai peanut curry. The meals typically only need hot or cold water. Check out www.campmor.com to look at the following brand names: Backpackers Pantry® or Mountain House®, or Mary Jane’s Farm®.
- Make your own GORP or trail mix. Cashews, salted peanuts, dried fruit, peanut M & M’s®, sunflower seeds, etc. make up a tasty high energy/fat/calorie food.
- Be creative! For those who like Mexican food instant refried/black beans and soy chillis are available at most grocery stores. They are lightweight, delicious, and inexpensive. Keep an eye out for sauce/soup mixes as well to jazz up a dish. Cous cous is light weight and cooks in no time. Consider mixing it with dehydrated veggies and chili/curry powder.
- Avoid cans of food. Not only are they extremely heavy, but the empties smell and can attract unwanted critters to your pack.
- A variety of foods- such as tuna, salmon and chicken- are available in ready-to-eat packages which are great for lunches.
- Fresh fruit is poorly suited to backpacking as it quickly becomes bruised and mealy in the heat. Dried fruit is much more sensible and appetizing in the long run but requires that you drink plenty of water while you eat it as your body needs to reconstitute the fruit to digest it.
- Other items that work well are beef or the “lighter” turkey jerky or salami. Stick to easy-to-digest food high in carbohydrates for the daytime. Don’t bring anything that must be cooked for lunch since you most likely will be on the trail.

SAMPLE MENU:

Breakfast: Cereal/granola with powdered milk, instant oatmeal or other hot cereal, hot chocolate.

Lunch: ‘Pouch’ tuna/salmon/chicken, Bagels, peanut butter, jelly, crackers, tortillas, pita bread, salty nuts/trail mix/GORP, gingersnaps and other crunchy cookies, granola, Powerbars® or Cliff Bars®

Dinner: Pre-made backpacking dinners, quick-cooking rice or pasta dishes, with packaged chicken or tuna, refried beans, spices with soy chili and cous cous.

Drinks: Hot chocolate, herbal tea, and powdered electrolyte replacement drinks like Gatorade® or Gookinade®

Important note: Avoid caffeine, which is a diuretic that causes dehydration.

FYI

The following are several Grand Canyon National Park regulations of interest:

- Carry out your trash. Burning, burying, or leaving trash or toilet paper is prohibited.
- Wood or charcoal fires of any type are prohibited. Sterno or fossil fuel backpack stoves are permitted.
- Use of biodegradable or any other type of soap in creeks or camping within 100 feet of any water source (except at designated sites) is prohibited.
- Feeding, touching, teasing, or intentionally disturbing wildlife is prohibited.
- Throwing or rolling rocks or other items down hillsides or mountainsides, into valleys or I canyons, or inside caves is prohibited.
- Leaving a trail or walkway to shortcut between portions of the same trail or walkway, or to shortcut to an adjacent trail is strictly prohibited.
- Possessing, destroying, injuring, defacing, removing, digging, or disturbing from its natural state any plants, rocks, animals, mineral, cultural or archeological resources natural features, or signs is prohibited. Walking on, entering, traversing, or climbing an archeological resource is prohibited.
- Traps and nets are prohibited. A valid fishing license is required for all fishing.
- Because of their sensitive and sometimes dangerous nature, entry and/or exploration of any caves or mines must be approved in advance through Grand Canyon N.P.

RECOMMENDED READING

A more specific reading list may accompany your forthcoming pre-course packet. The following books provide an excellent overview of Grand Canyon National Park.

Anderson, Michael F., *Living at the Edge: Explorers, Exploiters and Settlers of the Grand Canyon Region.*

Coder, Chris, *An Introduction to Grand Canyon Pre-History.*

Hirst, Stephen. *I Am the Grand Canyon.*

Houk, Rose, *An Introduction to Grand Canyon Ecology.*

Houk, Rose, *Grand Canyon Trail Guide: South Kaibab.*

Price, L. Greer, *An Introduction to Grand Canyon Geology.*

Ranney, Wayne, *Carving Grand Canyon.*

Sadler, Christa. *Life in Stone.*

Thybony, Scott, *The Official Guide to Hiking Grand Canyon.*

Thybony, Scott, *Phantom Ranch.*

Thybony, Scott, *Grand Canyon Trail Guide: Bright Angel*

Whitney, Stephen, *Field Guide to the Grand Canyon.*

Most of these books may be purchased over the phone through the Grand Canyon Association (GCFI's parent organization) at 800-858-2808 or online at www.grandcanyon.org. GCA members receive a 15% discount.

RENTAL EQUIPMENT

The sole outdoor outfitter at Grand Canyon is located within the **Canyon Village Marketplace** on the South Rim. If your class originates in Grand Canyon Village (inquire if you are unsure) then you may wish to rent a portion of your gear. The following is their rental price list (all prices subject to change):

	Per Day	Deposit
Day pack (North Face)	\$6.00/\$9.00	\$40.00
Internal Frame backpack	\$10.00	\$180.00
Butane stove (fuel/cook set extra)	\$5.00	\$45.00
Cooking pot set	\$5.00	\$30.00
Sleeping bag (North Face)	\$12.00	\$105.00
Primus Sleeprest Pad	\$5.00	\$55.00
Two-person tent	\$14.00	\$225.00
Trekking Pole/Hiking stick (each)	\$2.00	\$50.00

- All rentals must be paid for in advance and require a refundable security deposit. We accept cash, Visa, MasterCard, American Express, and Discover.
- Reservations may be made up to 5 days in advance by calling 928-638-2262. Cancellations may be made up to 24 hours prior to rental date. If equipment is not rented and no cancellation is made, an overnight fee will be charged.
- All rental gear is checked thoroughly, before and after washing. When gear is returned, it will be inspected for damage. So please, be careful with all items. A fee may be charged for equipment returned torn, ripped, or in unserviceable condition. You are more than welcome to check the gear, before leaving store.
- Rates and service are subject to change and subject to National Park Service approval.