

# Equipment List & Hiker Notes

## PHANTOM RANCH CHECKLIST



**C**ongratulations 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.

Remember, these lists are a guide to what will be required. Final gear choice should be based on the most up-to-date weather forecast. For example, no rain gear will be needed if rain is not forecast.

## 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**, waterproof and well broken in (buy them ½ to one-size larger than your street shoes to allow for swelling and thick socks)
- ❑ **Brimmed hat**
- ❑ **T-shirt and long-sleeved hiking shirt**
- ❑ **Underwear**
- ❑ **Shorts**
- ❑ **Long pants** such as leggings or lightweight trousers
- ❑ **Warm top** such as a sweater or base layer
- ❑ **Down Jacket** or similar warmth fleece jacket
- ❑ **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 and pants
- ❑ **Sport water sandals** like Tevas® or more light-weight flip-flops for camp comfort
- ❑ **Warm hat and gloves**

### EQUIPMENT

You will be required to carry a day pack for the hike in and out. For the extra clothes, toiletries etc each participant will be allowed no more than 10 pounds which will be hauled in and out by mules in a duffel bag we provide.

- ❑ Comfortable **Day Pack** large enough to carry lunch, snacks, fluids, and spare clothing.
- ❑ **Tubed hydration bladders** (such as the Camelback®) or Water bottles. Generally you'll need at least three liters of carrying capacity.
- ❑ **Stuff sacks** for keeping gear organized.
- ❑ **Toilet articles** and 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)
- ❑ **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)

### FOOD

A full meal plan is arranged for your stay at Phantom Ranch with the exception of lunch/snacks for your first day of hiking which you must carry and lunch on your hike-out day which you may arrange once at Phantom Ranch or send in with your duffel gear.

### MEAL SUGGESTIONS/FOOD

#### PLANNING TIPS:

- **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.

- 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.
- A variety of foods- such as tuna, salmon and chicken- are available in ready-to-eat packages which are great for lunches.
- 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.

*SAMPLE MENU:*

**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®.

## 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.