



## GRAND CANYON TRAINING & GEAR LIST

*Congratulations on your decision to join us for what promises to be an exciting trip! Canyon Tough is looking forward to sharing with you the splendor of one of the planet's most spectacular destinations, the Grand Canyon. The following suggestions will help you to prepare better for your adventure. Having the proper clothing, and advance physical conditioning will certainly make for a more satisfying experience.*

### 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 can be a knee-jarring descent; 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. and the North Rim is 1000 ft. higher), making it 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 (10 to 15 pounds for day hikes, 35 to 55 pounds for back packs)
- 2) the total elevation gain/loss (1000 to 6000 ft each way (depending on the hiking option that you choose) and the environmental conditions you are likely to encounter (see the National Park Service temperature & precipitation conditions: <http://www.nps.gov/grca/planyourvisit/weather-condition.htm>).

#### **Cardiovascular Fitness**

*The time to start is now.* This is perhaps the most important training item for the Grand Canyon hiker. Good cardiovascular health allows the hiker to breathe 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.

#### **Muscular Strength**

The stronger the muscles, the fewer the strains and injuries while hiking. Concentrate on developing 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 (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 to prepare for a Grand Canyon hike:

- Day one: 45 minutes cardiovascular workout. 15 to 20 minute slower 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



**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).

## GEAR LIST

### CLOTHING

- The following items are essential:
- Sturdy hiking boots or trail shoes 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
- Shorts or hiking pants that allow the legs to be zipped off
- Long pants such as leggings or lightweight trousers (no jeans) to block sun and give warmth
- Warm top such as a sweater or 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 (especially for the cooler months)
- Warm hat and gloves

### EQUIPMENT

- Backpack with waist belt and shoulder straps (beware of borrowing a pack from someone not your size)
- Tubed hydration bladders (such as the Camelback®) or Water bottles
- Lightweight sleeping bag
- Lightweight self-inflating mattress (such as Therm-a-Rest®) to insulate you from the ground and give you a comfortable night's sleep
- Tent\* of the lightweight backpacking variety
- Hip pack or lightweight day pack for trips with side hikes
- Lightweight backpacking stove\*, fuel (one container is usually sufficient), lighter/matches
- 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.
- Stuff sacks for keeping gear organized
- Plastic bags 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
- Personal First-aid kit\* or at least the following items:
  - Prescription medicine (please inform guide of any medications you are taking)
  - Advil®, or other anti-inflammatory drug to help with inflamed joints
  - Ace bandage
  - Dr. Scholls brand Moleskin®, a self-stick pad which can be cut to size to prevent blisters
  - Duct tape/Sports tape to affix moleskin and cover hot spots
  - Anti-bacterial hand sanitizer
- Trekking poles or Walking stick (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)
- Map (optional, your guide will have one)

*\* Items that may be shared with others to reduce total weight*



## FOOD

You will be responsible for bringing your own food for backpacks; on day hikes some snacks will be provided. On most backpacks a minimum of a gallon of water will be required. 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:* Hiking 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).

### 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.
- Other items that work well are beef or the "lighter" turkey jerky. Stick to easy-to-digest food high in carbohydrates.

## RENTAL EQUIPMENT

The sole outdoor outfitter at Grand Canyon is located within the Canyon Village Marketplace (928) 638-2262.

### In Flagstaff:

Babbitt's (928) 638-2262 [www.babbittsbackcountry.com](http://www.babbittsbackcountry.com) 12 E. Aspen Avenue, Flagstaff AZ 86001  
Peace Surplus (928) 779-4521 [www.peacesurplus.com](http://www.peacesurplus.com) 14 West Route 66, Flagstaff, AZ 86001

### In Phoenix:

LowerGear.com (866) 994-4537 Toll Free/(480) 348-8917 Local  
9419 E San Salvador Dr #101A, Scottsdale, AZ 85258  
REI (602) 996-5400 12634 N. Paradise Village Pkwy W, Phoenix, AZ 85023  
(480) 967-5494 1405 W. Southern Ave, Tempe, AZ 85282

## RECOMMENDED READING

Anderson, Michael F., [Living at the Edge: Explorers, Exploiters and Settlers of the Grand Canyon Region](#), 1998.  
Coder, Chris, [An Introduction to Grand Canyon Pre-History](#), 2000.  
Houk, Rose, [An Introduction to Grand Canyon Ecology](#), 1996.  
Price, L. Greer, [An Introduction to Grand Canyon Geology](#), 1999.  
Ranney, Wayne, [Carving Grand Canyon](#), 2005.  
Sadler, Christa, [Life in Stone](#). 2005.  
Thybony, Scott, [The Official Guide to Hiking Grand Canyon](#), 1997 Second Edition.

Most of these books may be purchased through the Grand Canyon Association at 800-858-2808 or online at [www.grandcanyon.org](http://www.grandcanyon.org). GCA members receive a 15% discount.