

# PREPARING FOR YOUR GRAND CANYON RAFTING ADVENTURE...

8-9 Day Motorized Trip  
Lee's Ferry to South Cove



THANKS FOR CHOOSING  
COLORADO RIVER & TRAIL EXPEDITIONS  
FOR YOUR OUTFITTER!

## OUR COMPANY

Colorado River and Trail Expeditions, or "CRATE," officially became a company in 1971. Prior to that time our owner, David Mackay, had been working as a rafting guide since 1964. He was a pioneer of sorts, developing technical backdown and turnaround motorized raft runs still used in the Grand Canyon today. In 1968 David met his future wife Vicki on a Grand Canyon trip. Together they started Colorado River & Trail Expeditions in 1971, one of only a handful of rafting companies that is still owned and operated by its founders. The spirit of service that Vicki and Dave began in 1971 continues today, as all members of the CRATE family work together to provide you with an outstanding river trip experience. Thank you for choosing our company for your Grand Canyon rafting adventure. We appreciate the opportunity to share this incredible experience with you. We look forward to seeing you on the river!

## OUR GUIDES

The men and women who operate our river trips are your guides, naturalists, cooks, excursion leaders, and fun-loving companions. They do it all, and they do it well. Each guide is certified in wilderness medicine emergency first aid, CPR, river rescue, and environmental ethics. They have participated in numerous training trips as helpers, or "swampers" and must be able to repair rafts, motors, and other equipment before they begin operating their own rafts with passengers. It takes further training to become a "trip leader." Most of our guides have a minimum of five years experience and our veteran guides have been with us from 10-20 years. Comprehensive training also involves interpretive instruction, including natural and human history, along with historical and environmental issues of the area. Our guides are also excellent outdoor chefs, offering up three fresh and delicious meals every day! Most importantly our guides are the kind of people you enjoy being around – happy, helpful, thoughtful, hard-working, intelligent and responsible.

## TRIP PLANNING PACKET

This packet has been composed to help you plan and prepare for your river trip and to give you an overview of the Grand Canyon area. You will receive more detailed information from the orientation and talks given by your guides. There will be interpretive discussions throughout your river trip. We suggest you consider reading some educational material prior to your river trip. You will find a list of recommended "best seller" titles in this packet, or you may visit our web site, [www.crateinc.com/books/](http://www.crateinc.com/books/), for a more comprehensive list of publications pertaining to the Grand Canyon and the Colorado River.

## OUR GOALS, OBJECTIVES, AND EXPECTATIONS

A trip to the Grand Canyon can be a life-changing experience. We will do our best to provide a memorable adventure, while at the same time, ensuring that the natural and cultural features and the wilderness character of the Canyon are preserved and protected. We ask that you support our efforts and that you adhere to the various laws, rules and regulations that govern your visit to Grand Canyon National Park and the surrounding lands. Some of these protocols and “regs” are discussed in this booklet. Others will be covered by the guides during the course of your river trip. Having said that, we hope you will have a “Grand” adventure and a lot of fun!

## WILDERNESS ENVIRONMENT

We feel strongly about preserving the wilderness character of the Grand Canyon river corridor. Because the Grand Canyon is so remote, it is one of the best places to view the night sky. We try to preserve this natural darkness by not having campfires or lanterns, and by asking participants to limit the use of bright flash lights. Also, many people retreat to the wilderness for solitude and to get away from the noise of the city. We think you will enjoy occasional moments of silence when you can stop, listen, and appreciate the natural soundscape of the Canyon. Please be respectful of other members in your party, as well as other canyon visitors you may encounter, so that they too can enjoy these special wilderness qualities of the Grand Canyon.

## ENVIRONMENTAL ETHICS

We want to do our best for the environment. On the river we try to reduce our production of trash. Thus, we would ask that you remove and recycle the packaging from any items you bring on the river trip, such as cameras, film, batteries, etc. On the river trip, we will ask you to help us recycle waste by separating paper, plastic, aluminum, and organic materials.

As part of our commitment for “responsible recreation,” we make an effort to travel with minimal impact on the environment. We recommend you visit the following web sites for information on outdoor ethics and minimal impact strategies.

[www.LNT.org](http://www.LNT.org) “Leave No Trace” 1-800-332-4100  
[www.treadlightly.org](http://www.treadlightly.org) Tread lightly!® 1-800-966-9900

### Seven Principles of Ethical Outdoor Recreation

1. Travel with minimal impact. Hike and camp on durable surfaces.
2. Respect the environment and the wildlife.
3. Be considerate of other visitors and their rights.
3. Plan ahead and educate yourself before your trip.
4. Allow for future use of the outdoors, by leaving a place better than you found it.
5. Dispose of waste properly.
6. Leave what you find. Take only pictures, leave only footprints.
7. Discover the rewards of responsible recreation.

## TRIP SUMMARY

The 8-day and 9-day motorized expeditions down the Colorado River cover the entire 280 miles of the Grand Canyon from Lee’s Ferry to Lake Mead. You’ll have the opportunity to hike in many beautiful side canyons with cascading waterfalls, natural swimming pools, and lush vegetation. We will visit interesting historical sites, study unique geological features, and marvel at the ever-changing vistas and panoramas that are revealed at each twist and turn of the river. In addition to the amazing scenery and educational aspects of the trip, there is plenty of whitewater excitement! We’ll run more than 200 rapids during the course of the expedition, including some of the most famous “drops and falls” in the world, like Horn Creek, Hermit, Crystal and Lava Falls. We’ll also enjoy periods of profound peace as the rafts drift quietly through narrow corridors of polished granite.

## MOTOR RAFTS

We will use 37-foot motorized “S” rigs on this trip. Each raft accommodates 12-14 passengers plus the guide and a helper. Generally, there are two rafts on each trip. Guests are encouraged to rotate between the two rafts so they get acquainted with other passengers and the entire crew. The rafts are roomy and comfortable. In between rapids, you can walk around, lean back on the side tubes, or even stretch out on the flat deck area in front of the raft. When we go through the rapids, we like to have everyone sit up front on the flat deck space.



# WHAT'S PROVIDED...

## WE PROVIDE

- ✓ Delicious meals, beginning with lunch the first day
- ✓ Assorted non-alcoholic beverages
- ✓ Plates, cups, utensils
- ✓ 32-Oz. Nalgene water bottle
- ✓ Waterproof bags for clothing and personal items
- ✓ Ammo cans for photo equipment and incidentals
- ✓ "Sleep kit" with freshly laundered and sanitized sleeping bag, thick foam pad, and ground cloth
- ✓ Tents in case of inclement weather
- ✓ Nice camp chairs
- ✓ Coast Guard approved life preservers

## NOT INCLUDED

- ✗ Lodging before/after the river trip
- ✗ Alcoholic beverages
- ✗ The cost of emergency evacuation and medical care beyond first-aid

## LIFE JACKETS

Life jackets must be worn at all times while riding on the rafts. Passengers are required to wear company provided Coast-Guard approved (Type V) jackets and are not allowed to bring a personal life jacket of their own. At the pre-trip orientation meeting, guides will demonstrate how to properly fit your life jacket securely.



## TENTS

A two-person dome tent with rain fly will be available in case of inclement weather.

## "SLEEP KITS"

We will provide a sleeping bag, foam pad, and ground cloth for each participant.

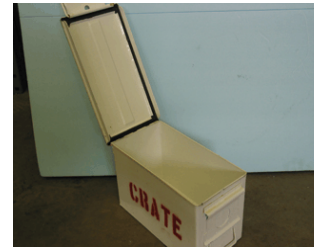
## CHAIRS

Collapsible chairs are available at camp. If you choose to use a chair, we ask for your help in packing it on the raft in the morning.

**NOTE:** Please notify our office in advance if you prefer to bring your own camping gear.

## WATERPROOF BAGS

Each participant will receive a large waterproof bag ("dry bag") for clothing and personal items. The bags are big and roomy and should have plenty of space for all of the clothing and gear we recommend. Dry bags are 30 inches high and 40 inches in diameter when fully packed. An identical bag contains the sleeping bag, foam pad, and ground cloth provided for your use during the river trip. Your "sleep kit" will be pre-packed aboard the raft. The waterproof bags and ammo cans are numerically coded. Your ammo can, clothing bag, and sleep kit will have the same number.



## AMMO CAN

You will also receive a 50-calibre ammo can. The ammo cans are accessible during the day, and so they are the best place to keep cameras, sun screen, reference materials, pens, notebooks, etc. (The dry bags are accessible, but take a little more effort to open and close.) The ammo cans are 5.5" wide x 6.7" high x 11.5" long.

Although we make every effort to ensure the waterproof qualities of our dry bags and ammo cans, we must caution you that they are not guaranteed to be water tight under all potential conditions, especially if they are not closed properly or if they are immersed.

## GRAND CANYON 8-9 DAY MOTORIZED TRIP

### WHERE TO MEET

Location: Best Western McCarran Inn  
4970 Paradise Rd.  
Las Vegas, NV 89119  
(702) 798-5530

Time: 7:30 p.m. (Nevada local time)  
Evening before departure

Our company representative will meet with you briefly the evening before the river trip starts. The meeting will begin at 7:30 p.m. by the swimming pool at the Best Western McCarran Inn. If you cannot make it to the meeting, please call our office to make other arrangements. Please note: The person who meets you in Las Vegas is not a river guide. He or she will not be able to answer river-specific questions. This person is there to give you your waterproof clothing bags and ammo cans, and to facilitate your departure from Las Vegas to the river. The trip leader for your rafting adventure will meet you at our warehouse in Fredonia, Arizona, on the way to Lees Ferry and will provide a river protocol/safety orientation then.

The morning of the trip, a charter touring bus departs at 6:30 a.m. from the hotel lobby main entrance. The bus ride will take about 5 hours to Lee's Ferry. Continental breakfast is served by the McCarran Inn staff at 6:00 a.m. You'll need to check out of your room, store your non-river luggage, and bring your river gear to the lobby, *prior to 6:00 a.m.* You may bring water, coffee, and food with you on the bus. You will have the opportunity to view some exciting landscapes along the way, including the Virgin River Gorge, the red rock country of southern Utah, the Vermillion Cliffs, and the Kaibab Forest. The bus will stop at our warehouse in Fredonia, Arizona where you will meet your guides and be served any early lunch. Upon arrival at Lee's Ferry, each person is responsible for getting all of his/her gear off the bus and making sure it's loaded aboard the raft. As soon as the rafts are loaded and everything is properly stored and tied down, we'll be on our way!

### TRANSPORTATION

Our standard transportation package includes round-trip transportation from Las Vegas via deluxe motor coach. One the first day we depart Las Vegas at 6:00 a.m. and arrive at Lee's Ferry around 11:00 a.m. to begin the rafting expedition. The trip ends around 1:00 p.m. on the last day with a jet boat ride from the lower end of the Grand Canyon to South Cove Marina on Lake Mead. From there, you return to Las Vegas. Arrival time back in Las Vegas ranges from 4-6:00 p.m., depending on the security procedures at Boulder Dam. If you wish to make other transportation or meeting arrangements, please contact our office for additional information. Transportation options include having family members or friends drop off and pick up, scheduling a vehicle shuttle service or arranging for a charter flight.

### PARKING

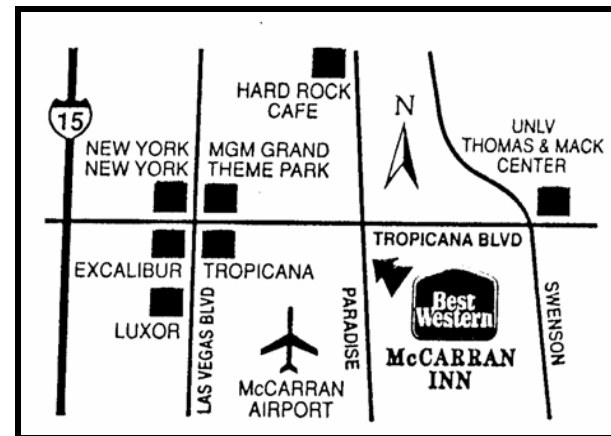
If you are a guest of the McCarran Inn before and after the river trip, you may leave a vehicle in their parking lot while you are on the river. Ask the front desk for a vehicle parking permit and parking instructions.

## GRAND CANYON 8-9 DAY MOTORIZED TRIP

### ACCOMMODATIONS IN LAS VEGAS

We have reserved a block of rooms at the Best Western McCarran Inn for the night before and the night after each river trip. (Rooms are not blocked until January, so please wait until after the first of the year to make your room reservation). We suggest you make your own reservation (by calling 702-798-5530) in order to select the type of room you prefer. You will need a credit card to guarantee the reservation. Rates vary depending on the desired date. Our clients receive a 15% discount as long as they identify themselves as customers of "Colorado River & Trail Expeditions." If you prefer we make a reservation for you, we will be happy to do so. Just give us a call.

The McCarran Inn is located "just down the road" from the Las Vegas McCarran International Airport. Rooms are clean and comfortable, though not luxurious. Non-smoking rooms are available upon request. There is not a restaurant on the premises, but the Hard Rock Café is within walking distance. Other restaurants are located in the big theme hotels within a one-mile radius of the McCarran Inn.



### LUGGAGE & VALUABLES

The McCarran Inn provides luggage storage for guests. Since space is limited, they request you only leave one piece of luggage per-person. Bags may be checked in at the front desk 15 minutes prior to departure for the river. They should be locked and have a luggage identification tag. Although nothing has ever been lost or taken from bags left at the McCarran, we strongly recommend you leave jewelry, large amounts of cash and other valuables at home. Airline tickets, car keys, wallets, etc. are equally safe in your suitcase at the McCarran or in your ammo can or clothing bag on the river (provided YOU keep track of them on the river and take the responsibility for making certain they bags and cans are properly closed and securely stored aboard the raft.)

# WHAT TO BRING...

## PACKING CHECKLIST

- 1-2 LONG PANTS & LONG SLEEVED SHIRTS** for sun protection and cool evenings and mornings or to wear on rugged hikes
- 2-3 SHORT PANTS** to wear on the river and/or over a swimsuit
- 4-5 SHORT SLEEVED SHIRTS - ie: T-SHIRTS, TANK TOPS, Etc.**
- BATHING SUIT(S)**
- SOCKS & UNDERWEAR**
- SWEATSHIRT or LIGHT WEIGHT FLEECE PULLOVER**  
Wind-breaker type from Memorial Day to Labor Day; warmer jacket for spring and autumn trips.
- RAIN SUIT** two-piece waterproof jacket & pants for possible thunderstorms, and to offer protection during some of the rapids, especially on shady mornings or evenings.
- AQUATIC/RUBBER SANDALS** to be worn on the raft and on "wet" hikes. Choose nylon webbing, buckle fasteners & non-slip soles.
- ATHLETIC SHOES**
- HIKING BOOTS (OPTIONAL)** most of the hiking we do, can be accomplished in sandals or athletic shoes. Bring hiking boots if you prefer extra support and protection. We recommend boots made of water-resilient materials that can get wet.
- HAT** for sun protection. Please affix a tie of some soft to prevent it from blowing off in the wind or being washed off in the rapids.
- TOILETRY ITEMS** Toothbrush, toothpaste, non-detergent biodegradable soap & shampoo, comb & brush, small quick-drying towel, shaving kit, feminine hygiene products, etc.
- SUN PROTECTION ITEMS** sun block, moisturizer, lip balm.
- SUN GLASSES** secure with a strap
- DAY PACK** for off-river hiking excursions. Packs should fit a sack lunch, a water bottle, camera & film, and extra clothing and/or rain jacket.
- PILLOW AND SHEET (OPTIONAL)** a small pillow will help you get a better night's sleep. For hot mid-summer trips, some people enjoy having a thin sheet.
- CAMERA , FILM OR MEMORY CARD, EXTRA BATTERY**
- MISCELLANEOUS** ziplocks, small supply of headache tablets, band-aids, Neosporin, small package of tissues, small flashlight, and 2-3 small trash bags for dirty or wet clothing
- OTHER** see equipment list notes for other ideas and suggestions

**CLOTHING TIP:** You will be most comfortable in loose fitting clothing that is made from lightweight and quick-drying fabrics.

**FOR EARLY SPRING AND AUTUMN TRIPS:** You may want to bring some clothing items for extra warmth, including a pair of thermal underwear (or fleece pants & top), a warm jacket (preferably stuffable), gloves, wool socks, and a warm fleece or wool hat, in case the weather is unseasonably cool.

# EQUIPMENT LIST NOTES

**HEALTH AIDS & MEDICATION:** If you require daily medication for such things as diabetes or hypertension, you should pack 2-3 separate containers of the medication and keep them in separate places during the river trip. Please advise the Trip Leader if you require cold storage or other special storage facilities for your medication. If you use eyeglasses, contact lenses, hearing aids, or other health aids, it's a smart idea to bring "extras" on the trip with you. You should secure glasses with a chain or strap. Bring extra batteries for hearing aids if possible. Bring extra solution and cleaning agents for contact lenses. The sun, wind, sand and water may irritate contact lens wearers. If you have a pair of regular eyeglasses or prescription sunglasses, you may want to bring them with you, just in case.

**PHOTOGRAPHY EQUIPMENT:** Most people want to document their river trip digitally or on film. Although your camera will suffer some wear and tear and will need a good cleaning when you get home (it's impossible to keep sand completely out, no matter how careful you are), it should be relatively safe throughout the trip. There is room for camera film, and other photo accessories in your ammo can and dry bag. These containers are accessible at all times during the river trip.

**BINOCULARS:** Binoculars are nice to have if you enjoy close up views of birds, big horn sheep, or other animals or natural features. We recommend small, lightweight models that will fit comfortably in your daypack and/or ammo can.

## FOOTWEAR – SANDALS, ATHLETIC SHOES, HIKING BOOTS:

Good quality, comfortable, appropriate footwear is essential on the river. We recommend one pair of river sandals (similar to those made by Chaco or Teva). They can be worn on the raft and also on off-river hiking excursions. We also recommend one pair of athletic shoes as a backup, or as an alternative hiking shoe. Hiking boots are optional, but recommended if you need the foot/ankle support they provide on long or rugged hikes. You should consider a style of boot that is light weight, with good ventilation and constructed of synthetic material. Since we often cross streams, you will want hiking boots that won't be ruined if they are immersed.

**MONEY & GRATUITIES:** You may wish to bring some money to purchase snacks, souvenirs, a fishing license, or other items during the pre-trip bus ride to Lees Ferry. For example, we have tee shirts available at our warehouse, and Marble Canyon Trading Post (about 5 miles from Lees Ferry) sells books, shirts, postcards, stamps, snacks and beverages. Also, we generally stop at Phantom Ranch in the bottom of the Grand Canyon on the 3rd or 4th day of the trip. At the Phantom Ranch cantina you can purchase post cards and send them to friends or family members with a cancellation stamp that says mailed by mule from the bottom of the Grand Canyon. Cold beer, soft drinks, and ice cream are sold at Phantom Ranch. In regard to gratuities, past customers have suggested that we mention the custom of tipping the river guides. Gratuities for the guides are at your discretion, as a gesture of thanks for their professionalism and service. The common practice is to give the gratuity to the trip leader on the last night.

**MISCELLANEOUS:** You may wish to bring a pad and pencil to keep notes about your trip. Another nice thing to have is a mile-by-mile river guide map that lets you know where you've been, where you are, and where you are going. Women might like one loose fitting skirt or muumuu to wear in camp. Other items that might come in handy include a couple of large bandannas to catch the sweat on some of those long hikes, a little spray bottle to mist yourself with cold water on hot days, and a few carabineers to fasten items such as day packs and water bottles to each other and/or to the boat or your dry bag.

## GENERAL INFORMATION...

**HEALTH & FITNESS:** People of all ages have enjoyed this river trip with us. Our major concern is that participants be in basic good health and good physical condition. We do not recommend this trip for those with chronic heart trouble, back pain, arthritis, or for anyone recuperating for surgery. Pregnant women should check with their physicians. Please tell us if you have any health conditions of which we should be aware.

**YOUTH/CHILDREN:** We recommend children be at least 12 years of age for our Grand Canyon raft trips. We want to be sure they fit properly in a life jacket and have good cognitive ability in a "emergency" situation.

**ALLERGIES:** If you have not already done so on your Reservation Form, please let us know if you have any allergies that we should be aware of. This would include food allergies, plant allergies, potential reactions to insect bites or stings and allergies to certain elements such as iodine. We need to know the severity of your reaction to these allergies, as well as the correct emergency first-aid procedures.

**MEALS:** Our meals consist of a variety of fresh fruits, vegetables, meats, and dairy products. They are nutritious and delicious. Although we do not serve a "vegetarian" menu, we do provide enough fresh produce and non-meat items that most vegetarian dieters get along fine. We are willing to try and accommodate special diet requests if we are advised well in advance of the trip. Please give us a call to discuss your particular diet needs. If your diet needs are unusually unique, we may suggest that you bring some of your own food items to supplement our menu.

**BEVERAGES:** Cold water and lemonade are available at all times on the raft and in camp. Coffee is served with breakfast and dinner. We also offer fruit juice, soft drinks and assorted teas. We do not provide any alcoholic beverages. You may bring your own small supply of wine liquor and/or beer for the trip. Beverages must be in non-breakable cartons, plastic bottles, or cans. Please limit beer to 3-4 cans per-person per-day. Alcoholic beverages may be transported on the bus from Las Vegas, but they may not be opened or consumed on the bus.

### **HAND-WASHING:**

We emphasize sanitation and cleanliness on the river. It is important to keep everyone healthy while traveling in a group. Portable hand-washing devices are set up in every camp and during lunch breaks.



**SANITARY FACILITIES:** Portable toilet facilities are set up at each camp during the trip. Clean, sanitary toilets are concealed in tents for maximum privacy. The toilets are primarily for solid waste, which must be carried out of the Canyon. Feminine hygiene products can be disposed of in the toilet or with the regular trash. You will be asked to urinate in the river. If you are not comfortable with this, please give us a call at the office to discuss other options.

**BATHING & SOLAR SHOWERS:** You may bathe in the Colorado River utilizing biodegradable soaps and shampoos (free of detergents). Please do not bathe or wash your hair in the waterfalls and side streams. The soap residue is harmful to the aquatic communities. Because the Colorado River is so cold, the best method for bathing is to follow the general rule of "men downstream, women upstream," jump in a get wet, jump out and soap down, jump in a rinse off, and jump out and air dry! You should bathe only in calm water, shallow areas near the banks of the river. Be sure and have a least one companion nearby when you bathe. You may bring solar showers, but they cannot be used away from the river. The shower water must fall into the river.

**EMERGENCIES:** Our guides are capable of handling emergencies as they arise (although they are generally few and far between). Trip leaders and guides are certified in Wilderness First Aid and CPR. Our emergency equipment includes wilderness oriented first-aid-kits, aircraft transceiver radios, and satellite communications systems. We are able to call for medical assistance or evacuation if necessary. If an evacuation is necessary, you will be helicoptered out of the Canyon to the medical clinic at Grand Canyon Village on the South Rim. If additional treatment or hospitalization is required, you will probably be taken to Flagstaff, Arizona. The cost associated with evacuation from the river and subsequent medical treatment is the financial responsibility of the ill or injured person.

In the event of an emergency at home, we can get a message to you, but it is very costly. We will hire a small plane or helicopter to fly along the river and locate our group. Our crew can then speak to the pilot by radio and relay messages to you. Should an emergency at home require your evacuation from the river, the crew will determine a safe place for a helicopter to land, and the messenger pilot will radio for an evacuation helicopter to pick you up there. Keep in mind that the cost of a search plane and the evacuation helicopter is very expensive. This cost is the financial responsibility of the affected passenger and will not be paid by Colorado River & Trail Expeditions. Therefore, make sure you tell your family/friends that you wish to be notified only under certain specific conditions. Please have your family call our office they wish to contact you or leave a message for you while you are on the river. We monitor this number frequently, or we leave word on the voice mail where we can be reached during non-business hours: 800-253-7328.

**TRIP INSURANCE:** We encourage you to purchase travel insurance that covers emergency evacuation and medical care and reimburse you for non-refundable trip fees in the event that you must cancel after all monies have been paid. A brochure from Travelex Company is enclosed that explains their coverage and rates. Please call us for more information, or you may call Travelex directly on their toll free information line (1-800-228-9792). If they ask you for a location number, it is 44-0060. You may also enroll online at [www.travelex-insurance.com](http://www.travelex-insurance.com). This travel insurance company waives pre-existing conditions if you sign up for the insurance within ten days of paying your deposit for the trip. However, if you do have a pre-existing condition, we suggest you call Travelex Information and make sure your condition will be adequately covered by their policy. If you are traveling from outside of the United States, please contact our office for international travel insurance information.

## WHAT TO EXPECT ON YOUR RIVER TRIP...

**FISHING:** You may bring a small, collapsible rod if you wish. Most fishing is done in camp during the evening hours. There is not much time or opportunity during the day. Artificial lures and flies only, no baited hooks. Fishing licenses can be purchased at Marble Canyon Trading Post on the way to Lees Ferry. We prefer a catch and release strategy, but if you wish to clean and cook the fish you catch, that is okay. We will ask you to cook your fish in foil so that it does not leave that good, old fishy smell and residue on our grill. (Thanks!)

**REFERENCE & READING MATERIALS:** Over the years we've put together a fairly comprehensive inventory of books and other publications pertaining to rivers and natural history. We suggest you study about the area prior to your river trip and bring along some maps and/or field guides to enhance your travel. Our web site, [www.crateinc.com](http://www.crateinc.com), contains a complete list of recommended reading materials which we sell. If you would like to order any of the publications we carry, you may do so by mail, e-mail, or telephone. Payment may be made with a personal check or charged to a VISA or MasterCard account. Additionally, we have enclosed a set of interpretive pamphlets from the Grand Canyon Natural Association pertaining to some of the extraordinary things you can plan to see and do on your journey through the Canyon.

**END OF TRIP ARRANGEMENTS:** Your river trip will end at South Cove Marina on Lake Mead about 1:00 p.m. on the last day. From there, you will travel to Las Vegas via chartered motor coach. You can expect to be back in Las Vegas around 6:00 p.m. at the latest. If you plan to catch a flight back home that same evening, it would be best to make a reservation for a flight that leaves after 9:00 p.m.

**SPECIAL NEEDS:** We will be happy to do our best to accommodate passengers with special needs if we are advised well in advance. Contact our office to discuss any specific requests.

**FEEDBACK:** We welcome any comments or suggestion you may have. It is always fun to hear stories from the river.

**QUESTIONS?:** Feel free to contact us and discuss any questions or concerns you might have in regard to the river or this information packet. Our e-mail is [crate@crateinc.com](mailto:crate@crateinc.com). Or call us toll-free at 1-800-253-7328. For those calling from outside the U.S., our local number is 801-261-1789. We enjoy the opportunity to chat with our customers.



**CAMP ROUTINE:** Our guides will wake you early in the morning with a call for “coffee.” When you hear the “breakfast” call, it means time to come to the kitchen area. After eating your breakfast, you will have a chance to pack your personal camping gear. The guides will break-down the kitchen and start to load the rafts. You may carry your gear to the beach area in front of the boats and when the guides have secured the deck, they will ask for your help loading personal dry bags. We ask passengers not to board the rafts until all gear is stored securely. We stop during the day for lunch, usually on a sandy beach along the bank of the river. After a full day of rafting and hiking, we will find a place to set up camp. We ask everyone who is able to help unload the boats. Guides will set up the kitchen and community camping gear while individuals set up their personal area. If you have physical limitations, our guides are happy to assist you. Soon after making camp, the guides will begin to cook dinner. This is often a good time to write in your journal, read a book, or take a refreshing bath or “power nap.”



**PROTECTION OF CULTURAL RESOURCES:** We may see, visit, or possibly camp within close proximity to protected cultural resources such as ancient dwellings and historical sites. Any disturbance to these resources is prohibited by law. We want to emphasize the importance of preserving, conserving, and protecting them so that future generations may experience their educational, aesthetic, and inspirational benefits.

Our company, together with our river guides, has an ethical responsibility to protect cultural and historical sites. We wish to work for the long-term conservation and protection of these sites by practicing and promoting stewardship. Stewards are both caretakers of and advocates for the archaeological record for the benefit of the people. Stewards use their knowledge to promote public understanding and support for preservation.

Due to cultural, historical, and spiritual connections, several Indian tribes have a unique relationship with the Grand Canyon and its surrounding regions. Our guides will share traditional and contemporary Native American perspectives throughout your visit. You may be interested in studying about Native American culture and history before your trip. As we visit ancient sites of historical or spiritual significance, it is important to do so with reverence and respect. The following page lists a few things you should consider regarding your visit. Your guides will give you further instructions on the river.

## OUR POLICY FOR THE PROTECTION OF HISTORICAL AND ARCHAEOLOGICAL SITES ON RIVER TRIPS

The Grand Canyon is rich in evidence of its early indigenous cultures and historic adventurers and explorers. It must be remembered that these sites and the artifacts associated with them have survived for hundreds or thousands of years, and the greatest care must be taken when visiting them.

### GUIDELINES FOR CULTURAL AND HISTORIC SITE VISITS

1. Be aware that some sites are closed to visitation and/or camping.
2. Recognize some sites will best be viewed from a distance to insure the least amount of impact.
3. Always practice "leave no trace" ethics when visiting historic and/or archaeological sites
4. Visitors must be accompanied by a company guide for all site visitations
5. Stay on established trails. Foot traffic is the most severe type of impact to a cultural site, because it can cause erosion. For this reason, be especially mindful when walking near the footings of a wall or structure.
6. Never sit, stand, lean, or climb on any wall or roof of a ruin or other structure.
7. Do not touch rock art, structures or artifacts. Do not pick up scattered relics such as potshards.
8. It is illegal to remove anything from a cultural site. Items associated with cultural sites have greater significance when left in their natural environment.

You may not remove, alter, or deface historical areas and archaeological features. Likewise, you may not remove rocks or vegetation from a National Park. Please don't put your guide in the difficult position of asking you not to take something. Any illegal conduct or activity must be reported to the National Park Service.

### OFF-RIVER HIKING

Our company emphasizes off-river hiking. We want you to experience as much of the Canyon as possible on your visit. Each river trip is unique as there are many different side canyons to explore. Before each hike, the Trip Leader will describe the expected length of time for the stop, the distance to the destination, the trail conditions, and any other relevant information. All hiking is optional and often there is a choice to hike just part of the way. The Park Service requires customers to be accompanied by a guide on all hikes.



The remaining information in this brochure has been taken from QuickLook, Trip Planning/Visitor Information, Grand Canyon National Park, produced by the National Park Service, U.S. Department of the Interior. Visit their on-line Trip Planner at [www.nps.gov/grca/grandcanyon/](http://www.nps.gov/grca/grandcanyon/).

## GRAND CANYON NATIONAL PARK INTRODUCTION

Grand Canyon is unmatched throughout the world for the vistas it offers to visitors on the rim. It is not the deepest canyon in the world. Both the Barranca del Cobre in northern Mexico and Hell's Canyon in Idaho are deeper. But Grand Canyon is known for its overwhelming size and its intricate and colorful landscape. Geologically it is significant because of the thick sequence of ancient rocks that are beautifully preserved and exposed in the walls of the canyon. These rock layers record much of the early geologic history of the North American continent. Grand Canyon is also one of the most spectacular examples of erosion in the world.

Grand Canyon was largely unknown until after the Civil War. In 1869, Major John Wesley Powell, a one-armed Civil War veteran with a thirst for science and adventure, made a pioneering journey through the canyon on the Colorado River. He accomplished this with nine men in four small wooden boats. Though only six men completed the journey. His party was, as far as we know, the first ever to make such a trip.

In the late 19th Century there was interest in the region because of its promise of mineral resources - mainly copper and asbestos. The first pioneer settlements along the rim came in the 1880s. Early residents soon discovered that tourism was destined to be more profitable than mining, and by the turn of the century Grand Canyon was a well-known tourist destination. Many of the early tourist accommodations were not much different than the mining camps from which they developed. Most visitors made the grueling trip from nearby towns to the South Rim by stagecoach.

In 1901 the railroad was extended from Williams, Arizona to the South Rim, and the development of formal tourist facilities increased dramatically. By 1905 the El Tovar Hotel stood where it does today - a world class hotel on the canyon's edge. The Fred Harvey Company, known throughout the west for hospitality and fine food, continued to develop facilities at Grand Canyon, including Phantom Ranch, built in the Inner Canyon in 1922.

Although first afforded Federal protection in 1893 as a Forest Reserve and later as a National Monument, Grand Canyon did not achieve national park status until 1919, three years after the creation of the National Park Service. Today Grand Canyon National Park receives about five million visitors each year, a far cry from the annual visitation of 44,173 in 1919.

Grand Canyon became a national park in order to give it the best protection we, as a nation, have to offer. The mission of the National Park Service is to preserve the park and all of its features, including the processes that created them, and to provide for its enjoyment by park visitors in a way that will leave the canyon unspoiled for future generations. Now, more than ever, we recognize how complex and difficult a task this can be.

## GEOLOGY

Grand Canyon attracts the attention of the world for many reasons, but perhaps its greatest significance lies in the geologic record preserved and exposed here. The rocks at Grand Canyon are not inherently unique. Similar rocks are found throughout the world. What is unique about the geologic record at Grand Canyon is the variety of rocks present, the clarity with which they are exposed, and the complex geologic story they tell.

Two separate geologic stories exist at Grand Canyon. The older story is the one revealed in the thick sequence of rocks exposed in the walls of the canyon. These rocks provide a remarkable record of the Paleozoic Era (550-250 million years ago). Scattered remnants of Precambrian rocks as old as 2000 million years can also be found at the bottom of the canyon. The story these rocks tell is far older than the canyon itself. Mesozoic and Cenozoic rocks (250 million years old to the present) are largely missing at Grand Canyon. They have either been worn away or were never deposited.

The second geologic story at Grand Canyon concerns the origin of the canyon itself: when and how did it come to be? On one level the answer is simple: Grand Canyon is an erosional feature that owes its existence to the Colorado River. Of equal importance are the forces of erosion that have shaped and continue to shape the canyon today. These include running water from rain, snowmelt, and tributary streams which enter the canyon throughout its length. The climate at Grand Canyon is classified as semi-arid. The South Rim receives 15 inches/38 cm of precipitation each year. The bottom of the canyon receives 8 inches/20 cm. The rain comes suddenly in violent storms, particularly in the late summer of each year. The power of erosion is therefore more evident here than in other places which receive more rain.

Grand Canyon owes its distinctive shape to the different rock layers in the canyon walls. Each responds to erosion in a different way: some form slopes, some form cliffs, some erode more quickly than others. The vivid colors of many of these layers are due mainly to small amounts of various minerals. Most contain iron, which imparts subtle shades of red, yellow, and green to the canyon walls. Climate plays an important role in the appearance of the canyon. If there was a higher amount of precipitation at Grand Canyon, the plants and trees that grow here would be very different. The canyon walls might be covered with lush vegetation, rather than the cacti and shrubs growing there today.

How old is the canyon itself? The early history and evolution of the Colorado River (of which Grand Canyon is only a part) is the most complex aspect of Grand Canyon geology. We know that the erosion which has shaped the canyon has occurred only in the past five to six million years. This is only yesterday, considering the age of the rocks through which the river has carved.

Grand Canyon continues to grow and change. As long as rain and snow continue to fall in northern Arizona, the forces of erosion will continue to shape Grand Canyon.

## PLANTS & ANIMALS

At Grand Canyon 75 species of mammals, 50 species of reptiles and amphibians, 25 species of fish, and over 300 species of birds exist.

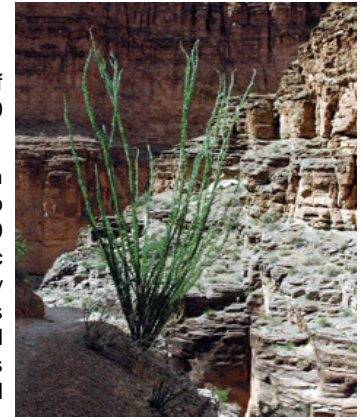
The South Rim of Grand Canyon lies on the edge of a high plateau whose gray-green forests stand out in sharp contrast to the arid lands below the rim. From here the cliffs drop 5000 feet/1524 m to the Colorado River, crossing several biotic zones in the process. It is a landscape characterized by abundant sunshine, extremes of temperature, and long periods of drought punctuated by torrential downpours in summer and snow in winter. The soil is thin; bedrock lies just a few inches below the surface. The competition for moisture in this dry land is keen.

On the rim at elevations above 7000 feet/2134 m, ponderosa pine is the dominant tree in the forest. Below 7000 feet/2134 m, pinyon pine and Utah juniper are the dominant trees. Gambel oak is another common member of the forest. The trees are interspersed with drought-resistant shrubs like cliffrose, fernbush, and serviceberry. Warm, sunny areas along the rim may be home to desert plants like banana yucca and claretcup cactus.

Below the rim, it's another world. The temperature within the inner canyon can be as much as 30 degrees F/18 degrees C higher than temperatures on the rim. Summertime highs along the Colorado River can reach 120 degrees F/49 degrees C. Much of the inner canyon is considered desert, excluding the areas along the river and tributary streams which have rich riparian (streamside) habitat. Much of the vegetation in the inner canyon is typical of that found in deserts to the south: cacti and drought-resistant shrubs. Riparian plants include thickets of willow and tamarisk.

The park is home to a wide variety of animals. Mule deer are common throughout the park and are the mammals most commonly seen on the rim. Desert bighorn inhabit the remote slopes of the inner canyon but are occasionally seen on established trails. Bobcats and coyotes range from rim to river, and a small population of mountain lions exists in the park. Among the smaller mammals that inhabit Grand Canyon are ringtails (closely related to raccoons), beavers, gophers, chipmunks, several varieties of squirrels, rabbits and bats. Reptiles and amphibians are represented by a wide variety of lizards, snakes (including the unique Grand Canyon "pink" rattlesnake), turtles, frogs, toads and salamanders. Hundreds of species of birds make their home in the park, along with countless insects and arachnids (spiders and scorpions).

Grand Canyon National Park is home to a number of threatened and endangered species. The native Colorado River fish have suffered as a result of the dramatic changes in water volume, temperature and sediment load since the completion of Glen Canyon Dam in 1963. These fish include the pikeminnow, humpback chub, and bonytail chub. Several species of endangered birds make Grand Canyon home, including the peregrine falcon, bald eagle, and willow flycatcher. A number of endangered plants can also be found in the park. More and more, protected lands like Grand Canyon National Park provide a refuge for plants and animals that are under increasing pressure elsewhere.



## WORLD HERITAGE SITE

Over 150 nations working together have identified hundreds of universally treasured landmarks across the globe. These timeless world heritage sites include remains of ancient human communities, enduring traditional societies, irreplaceable ecosystems, and supreme examples of artistic or natural beauty. Many sites are protected under their country's national park service - a pledge to ensure their integrity for now and into the future.

Through the collective recognition of the community of nations expressed within the principles of the convention concerning protection of the world's cultural and natural heritage, Grand Canyon National Park was designated a World Heritage Site on October 26, 1979. It joins a select list of protected areas around the world whose outstanding natural and cultural resources form the common inheritance of all mankind.

## CLIMATE

### SUMMER

Summer temperatures on the South Rim, at 7000 feet (2134m) are relatively pleasant 50s-80s°F (10°-20°C). Thunderstorms frequently occur during July, August, and early September. Inner canyon temperatures are extreme. Daytime highs at the river, 5000 feet (1500m) below the rim, often exceed 105°F (40°C).

### WINTER

Winter conditions on the South Rim can be extreme. Be prepared for snow, icy roads and trails, and possible road closures. Roads on the South Rim are plowed when needed. Canyon views may be temporarily obscured by fog during passing storms. Entrance fees are not refundable because of weather conditions.

### SPRING AND FALL

Spring and fall weather is unpredictable. Be prepared for sudden changes in the weather at those times of year. May and October can be some of the driest months, although snowstorms may occur. Late April and May can be windy. Spring and fall can be the best times to be hiking in the canyon.

### Inner Canyon Weather Stats

Month	Avg. High	Avg. Low	Avg Percip (in.)
March	71.0	46.1	0.80
April	82.6	54.8	0.48
May	91.3	62.4	0.37
June	101.4	71.0	0.37
July	106.3	76.8	0.83
August	102.6	74.0	1.59
September	97.6	68.1	0.81
October	85.8	58.4	0.68
Annual	81.8	55.8	8.44



## NATIVE AMERICANS AT GRAND CANYON

Humans have been living at Grand Canyon for at least 4,000 years. Split twig figurines are the oldest evidence of their presence. These animal figurines are a few inches in height, made primarily from twigs of willow or cottonwood. They are found in caves below the rim. Split twig figurines were fashioned by the people of the Desert Culture.

The ancestral Puebloan people of the southwestern United States made their home in the four corners region, where Utah, Colorado, New Mexico and Arizona share a common point. Their record in this region is rich and spans the time period from 200 BC to AD 1300. The Anasazi, who had been occupying lands east of the Grand Canyon for 600 years or so began drifting into the Grand Canyon region by 500 AD. By 800 AD, the Anasazi were entering a phase known as the Pueblo. Ruins of adobe houses in the Grand Canyon shows that Pueblo Indians lived in this area, probably as early as the 1200's

The ancestral Puebloan people are believed to be the ancestors of the Hopi people, who inhabit a region east of Grand Canyon. The Hopi name for these ancestors is Hisatsinom (hee-SOT-sin-ahm). The Hopi people believe they emerged from the canyon and that their spirits rest here.

The Havasupai people inhabit the inner canyon in a region west of Grand Canyon Village. In this remote and beautiful corner of the canyon sits the village of Supai and the descendants of a people who have lived within the canyon for several hundred years. The village remains accessible only by foot, pack animal or from the river but is still heavily visited each year by tourists.

The Navajo people make up one of the largest tribes in North America. The Navajo live throughout the region and on the Navajo Reservation, which borders the park to the east. Relative newcomers to this region, they are the descendants of Athabascan peoples who migrated into the southwest from the north in the 15th Century.

The Hualapai Reservation borders the canyon to the south. The Hualapai are descendants of the Cerbat people and have been in the area since AD 1300.

The Southern Paiute Indians occupy land north of the Colorado River in what is known as the Arizona Strip. They have traditionally used the canyon for hundreds of years.

The Zuni Indians view the canyon as their place of origin, though today they live in New Mexico.

