



# 2010 Field Methods in Rock Art Student Information Packet

Please print or type and complete this form.

Fax to 432-292-4849, or mail to

**SHUMLA**

**PO Box 627**

**Comstock, TX 78837**

For questions, please call **432.292.4848** or email [programs@SHUMLA.org](mailto:programs@SHUMLA.org)

---

## “Notes and Comments”

Texas State University's *Field Methods in Rock Art* will be taught at SHUMLA May 16-June 4, 2010. SHUMLA School, Inc. is a nonprofit organization whose mission is to connect people of all ages with the land and their cultural heritage. The SHUMLA campus is a living museum 50 miles west of Del Rio in Val Verde County that offers people of all ages and backgrounds an experience of enrichment and discovery in one of the most spectacular landscapes in Texas. This experiential educational center is situated along the Pecos River on 1600 acres of land provided by a local ranching family. Programs conducted at the School focus upon the cultural and ecological resources present in this archeological heartland of Texas.

In the region surrounding SHUMLA there are hundreds of rock shelter sites, most of which contain archeological deposits and many of which contain elaborately painted murals that date back to over four thousand years ago. No other region in the Americas is known to contain so many well-preserved hunter-gatherer sites in such a small area. The broad expanse of undeveloped land surrounding the school makes this site well suited for instruction and innovative studies in archeology, ecology, natural history, prehistoric lifeways, and expressive culture.

The topics discussed below represent an effort to anticipate many of the questions you might have about SHUMLA and the Field Methods in Rock Art course. If there are matters not covered here, please contact the SHUMLA office at 432.292.4848 ([programs@SHUMLA.org](mailto:programs@SHUMLA.org)) or Dr. Britt Bousman at Texas State University at 512.245.2141 ([bousman@SHUMLA.org](mailto:bousman@SHUMLA.org)). Either resource will make every effort to answer your questions.

### **COURSE DESCRIPTION**

Field methods are the underpinning of the science of archeology. Rock art has posed a unique challenge to the field archeologist because, unlike other artifacts, it cannot be excavated, labeled, bagged, and transported back to the lab for analysis. This course will examine

rock art as an integral component of the archeological record. Students will be trained in field methods to record rock art and will gain first-hand experience recording rock art sites through photography, field sketches, mapping, and written inventories. These field methods are designed to generate a visual and written description of the art, which can be used to infer and explain past human behavior.

Lectures will expose students to methods of interpretation and analysis and to the theoretical underpinnings of cognitive archeology. Lectures will be provided by the course instructor and by archeologists and anthropologists specializing in the archeology of the Lower Pecos, hunting and gathering lifeways, expressive culture, and foraging adaptations.

### **COURSE OBJECTIVES**

The course will be taught on the SHUMLA campus and at archeological sites in the region. Since this is a field methods course, the majority of class time will be spent on-site recording rock art sites. Weather and site access will dictate, to some degree, the daily schedule.

- Students will learn how to establish a field research design and field data collection protocols.
- Students will learn field methods for recording rock art, including slide and digital photography, mapping, sketching, and written inventories.
- Students will learn laboratory procedures, record keeping, cataloguing, and records curation for rock art data.
- Students will be able to analyze rock art data in order to formulate and test hypotheses.
- Students will compare and contrast current theories regarding the meaning and function of the Lower Pecos rock art.
- Students will become familiar with the foraging adaptation, hunter-gatherer belief systems, and the archeology of the Lower Pecos region.
- Students will have prepared a detailed field journal for future reference and research ideas.

### **REQUIRED READING:**

*Rock Art of the Lower Pecos*, by Carolyn E. Boyd, Texas A&M University Press, 2003

### **Field Methods Reading Packet**

Selected articles and book chapters will be assembled into a reading packet. The reading packet will be available online and at SHUMLA and will be included in the cost of the course.

### **RECOMMENDED READING:**

*Introduction to Rock Art Research*, by David S. Whitley, Left Coast Press, 2005

\* Note: It is strongly advised that **BOTH** required and recommended reading (with the exception of the reading packet) be completed prior to arrival at SHUMLA.

### **COURSE REQUIREMENTS**

**Project 1: Field Journal.** Each student will be expected to keep a field journal in order to 1) record observations from an informed perspective, 2) organize thoughts and formulate questions, 3) identify challenges and note possible solutions, 4) record potential hypotheses and the reasoning behind the hypotheses, and 5) identify areas for future research. In addition to being a good source of data, field journals, if done correctly, challenge the archeologist to be more OBSERVANT and to THINK critically. Required journal entry guidelines will be provided.

**Project 2: Oral Presentation.** Each student will be required to make an oral presentation on a designated journal article or book chapter. In the oral presentation, the student will present the material contained in the reading assignment followed by a critical evaluation of the article or book chapter. All students will be expected to have read the article and be prepared to discuss the reading following the presentation.

### **EVALUATION METHODS:**

Several instruments will be used to assess achievement of the course objectives listed above. Evaluation methods, general proportions, and considerations include:

- Participation in classroom and on-site discussions (10%)
- Quality and quantity of rock art data collection, including legibility, clarity, attention to detail, accuracy, and observational prowess (50%)
- Two Projects – Field Journal (25%) and Oral Presentation (15%)

### **COURSE CREDIT**

Texas State University (TSU) offers 6 semester credits for undergraduate students and 3 semester credits for graduate students for this three-week course.

Undergraduate – ANTH3375 & ANTH4360  
Graduate- ANTH5374G

The student must request a copy of his/her TSU transcript be sent to the student's home institution/university (as per TSU regs).

### **SHUMLA APPLICATION CHECKLIST**

There are several forms you will need to complete prior to your arrival at SHUMLA. Please complete and return these items to SHUMLA as soon as possible:

- *Application and Health Information Form*
- *SHUMLA and Texas State Acceptance, Release, and Waiver*
- *SHUMLA Release and Waiver of Liability, Assumption of Risk, and Indemnity Agreement*
- *SHUMLA Code of Ethics and Conduct*
- *Insurance Coverage Certification*

### **TRANSPORTATION**

Students are expected to arrive at the SHUMLA Comstock Office by 5:00 pm on the morning of May 10<sup>th</sup> and will be returned to their vehicles on May 29<sup>th</sup>. If you are flying in from out of state, you may arrive early and accommodations will be arranged provided you give SHUMLA advance notice of your itinerary. You will not need a vehicle while at the field school. Transportation to and from rock art sites will be provided by Texas State and SHUMLA.

### **ACCOMMODATIONS**

SHUMLA facilities include student dormitories, a 1600-square foot Pavilion surrounded by a 1200-square foot covered porch, a laboratory, kitchen, and offices, and an 1800-square foot educational center which houses a field library, classroom/laboratory, and two instructor cabins.

Students will be housed in dormitories at the SHUMLA campus, males in one room and females in the other. Each participant will be provided a cot, small aluminum table, and comfortable chair. Students have the choice of bringing their own tent.

### **RESTROOMS AND SHOWERS**

A separate 950-square foot restroom and shower house contains hot showers and all the comforts of home. There are two showers, two sinks, and three toilets in the men's and in the ladies' facilities.

## **LAUNDRY**

A washing machine and dryer are located in the utility room at the back of the Shower House. Students will have access to these facilities; however, we ask that use of this equipment be only **as needed**. Remember, we are in the field and a little dirt is a very good thing! SHUMLA will provide the laundry soap and dryer sheets.

## **FOOD**

Three meals a day are provided for the duration of the field school. Students are advised that, while they are free to make food purchases during trips to town, they will not be allowed keep personal items in tents, the dorms, or the refrigerator due to limited refrigeration space. To avoid visitation by raccoons, skunks, bobcats, or mountain lions we ask that you **DO NOT** keep food in sleeping facilities.

## **HOUSEKEEPING CHORES**

Everyone will be required to participate in the essentials of washing dishes, assisting with cooking, cleaning of the restroom and shower house, shopping, etc. The Camp Manager will assign chores on a rotating basis so that work assignments fall equally among all students.

## **CLOTHING AND PERSONAL EFFECTS**

The best clothing for students to wear is washable, quick-drying items that can stand a good deal of wear and tear. These should be comfortable, loose-fitting clothes that work well for kneeling, sitting, and rock climbing. Tight-fitting jeans will obstruct your flexibility, especially when they become wet with sweat. Experience has shown that low-rise jeans are unsuitable and very uncomfortable in the field.

The course instructor reserves the right to require students to wear long sleeved shirts and long pants under certain circumstances. The staff is not only concerned about sunburn, but also dehydration and other heat related illnesses. We will also be trekking through prickly brush on some hikes, the more protection you have, the better.

Please bring the following supplies with you to SHUMLA. Use of a duffel bag is encouraged – something that can be slid underneath your cot to make the most of your floor space.

- Small/medium backpack/daypack
- Water bottles or canteen
- Hat with wide brim and bandanna or neckerchief
- Sunscreen – a **MUST HAVE**, the higher the SPF, the better
- Chapstick with sunscreen
- Camera (optional, but highly recommended)

- Sleeping pad (optional, but highly recommended – provides extra comfort)
- Bedding (sheet and blanket or sleeping bag, pillow)
- Laptop with wireless access for personal use
- Bath towel and washcloth
- Hand and body lotion
- Personal toiletries
- Bag for dirty clothes, etc.
- Insect repellent
- Poncho or raincoat (just in case)
- Long pants
- Shorts (for time spent in camp)
- Long-sleeved shirts
- T-shirts
- Swimming suit (optional)
- Sturdy boots for hiking (**ABSOLUTELY CRITICAL** – see attached info on boots and socks)
- Tennis shoes for around camp, water shoes for the river
- Socks (highly recommend you wear liners and lightweight backpacking socks)
- Snake proof gaiters or chaps (optional)
- Gloves (optional – for rock climbing and bush-whacking)
- Hiking stick (optional, but recommended)
- Light jacket
- Insect head net (optional)
- Sitting pad – find in garden section (optional)
- Sunglasses (optional but highly recommended)
- Flashlight (**REQUIRED**)
- Binoculars (optional)

## **RECORDING EQUIPMENT**

SHUMLA will provide all rock art recording equipment needed for field work. Each student will be issued a recording kit upon arrival at the school. They will be responsible for the kit throughout the course.

## **FORBIDDEN ITEMS**

If you bring one of the forbidden items to SHUMLA you will be subject to immediate dismissal with loss of all academic credit and no tuition or fee refund.

- Illegal drugs and controlled substances
- Firearms
- Animals/pets
- Alcohol

## **ELECTRONIC AUDIO EQUIPMENT**

Radios, iPods, and MP3 players may be brought to SHUMLA. It is understood, however, that they can only be used under conditions that do not disturb other students. All of these items are prohibited at the rock art site and during lab.

## **INSURANCE**

All students must have health insurance coverage for the duration of the field school. Please complete the Insurance Coverage Certification form and provide the name and policy number of your Health and Accident Insurance. The policy must be in place prior to the beginning of the field session.

## **SAFETY ISSUES**

We want to provide you with a rewarding, stimulating, and challenging experience at SHUMLA. We cannot guarantee you a risk-free visit. We have no control over nature or the weather. We are telling you about the risks associated with your stay at SHUMLA because we respect your right to be made aware of these risks, and because we respect the environmental challenges of the Lower Pecos wilderness.

The most common and prevalent risks are:

- (1) Thorny shrubs and sharp cacti – the best prevention is proper attire and caution. Long-sleeved shirts and long pants will afford considerable protection. Proper foot-wear is a must. Avoidance is virtually impossible, but you can at least reduce the impact.
- (2) Rough, rocky terrain – The environment of this region is unforgiving. We will be climbing in and out of canyons, boulder-hopping, and occasionally fighting our way through dense, thorny brush. Again, dress appropriately to reduce injuries. Sturdy hiking boots and appropriate socks are a must for this rugged terrain. Many times sprained ankles, blisters, and falls can be avoided by wearing proper foot gear. Boots should be “broken-in” before arriving at SHUMLA. You don’t want to discover on the first day that your boots don’t fit.
- (3) Extreme heat/sunburn - Temperatures during the day can and likely will exceed 100 degrees with very few options for shade. It is essential that you wear sunscreen, a hat, long pants, and long sleeved shirts as protection from the sun. Evenings can be cool, but can also be quite warm. Come prepared for almost anything (except snow).
- (4) Poisonous snakes and spiders – Yes, we have rattlesnakes and numerous other poisonous snakes and spiders. The snakes will be doing their best to stay out of our way – we will do our best to pay them the same courtesy! The best thing to remember is to PLAY IT SAFE – don’t step or reach into any place your vision is blocked by shrubs or rocks. Snake proof gaiters or chaps are an option. ALWAYS keep sleeping facilities closed, check your shoes before you put them on, and stay alert.

## **VACCINATIONS**

It is strongly recommended that students make sure that their tetanus shot is up-to-date.

## **VISITORS**

The staff must be notified at least a week in advance if a student anticipates a visit from family or friends. It will not be possible to accommodate these individuals for meals or housing. Students are expected to continue their Field School assignments even when visitors are present.

## **COMMUNICATIONS**

There is no pay phone on the property. There is a pay phone at the Seminole Canyon State Historical Park headquarters (about 10 miles away) and SHUMLA offices are located in Comstock, which is 18 miles east of the campus. You may want to bring your cell phone, but realize that depending upon your carrier, it may or may not work. However, reception is usually excellent atop Jackrabbit Hill, which is located right behind the educational center. Please let anyone you list as a “contact person” know that you are submitting their names to SHUMLA personnel in case of an accident while you are with us.

## **FREE TIME**

Free time will be available between the end of the day and dinner. Due to the extreme afternoon heat, we will leave for the field early each morning and return to camp in the afternoon around 2:00 pm. After dinner we will meet for evening lectures, discussions, and lab work.

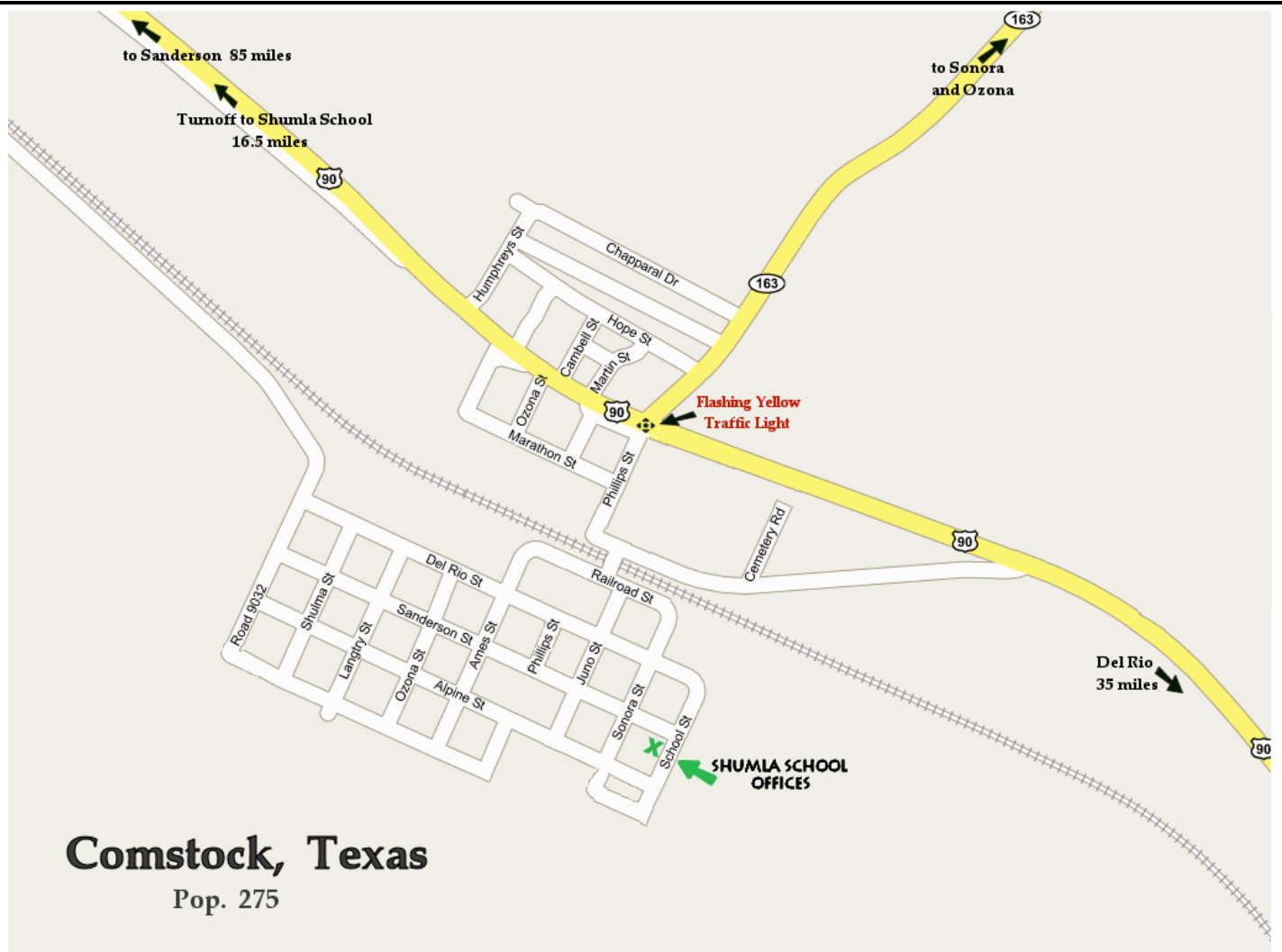
## **ALCOHOLIC BEVERAGES, TOBACCO, AND CONTROLLED SUBSTANCES**

The consumption of alcoholic beverages or the use of “controlled” or “mind altering” substances is prohibited. Further, the use of tobacco products is forbidden in all SHUMLA facilities and vehicles, and is not permitted during course time.

Violation of these rules may result in dismissal from the Field School without academic credit and without refund of fees or tuition.

## MAP AND DIRECTIONS

Students, meet at the **SHUMLA office** unless specifically instructed to meet at the SHUMLA campus. See the map below for directions to the office.



**Directions to the SHUMLA campus:** Go straight through Comstock on US Hwy 90. You will cross the Pecos River about 10 miles west of Comstock. As soon as you get off the west end of the bridge it is 5 miles to the turn-off to Shumla.

There will be a roadside stop on top of a cut in the roadbed on the left side of the highway about 1/2 mile before you get to Shumla, so that is your clue to slow down. Right after the road cut you will see a dirt road that goes off to the right (it's the old railroad bed)...you will take that turn-off and follow it across the railroad tracks.

At that crossing there are no warning signals so be careful as you cross the track. The gate into the ranch is marked Shumla Ranch and will be open for you.

As you enter the ranch, stay on the main road that goes straight up over the hill (do not go to the right). About 3/4 mile later you will arrive at another open gate and if you look to your left you will see the buildings of the school. At the bottom of the hill you will take a left and it will lead you straight to the pavilion. The road is rough as you approach the pavilion, so go slowly.

**Call the office if you will be arriving from the west or north and need further direction.** You can also Google Earth "Shumla" since the campus is located where the town Shumla used to be.

---

## Hiking Boots and Socks

Downloaded from <http://home.earthlink.net/~barbmurray/boots.htm>

Some of the key considerations for **Hiking Boots** are:

### 1. Consider the Kinds of Trips You Have Planned

Outdoor footwear can be divided into 3 basic categories. Begin your search for the right boots or shoes by focusing on the category that best matches your backpacking plans.

∞ Lightweight hiking - These boots (and trail shoes) are designed for day hiking and very short overnight trips only. They stress comfort, cushioning and breathability. As a result, they are less supportive and durable than the options below.

∞ Midweight hiking/backpacking - These boots are designed for on- and off-trail hiking with light to moderate backpacking loads. They are more durable and supportive than lightweight hiking boots, but they are still intended primarily for short to moderate trips over easy to moderate terrain.

∞ Extended backpacking/mountaineering - These boots are designed for on- and off-trail hiking with moderate to heavy backpacking loads. They are designed with multi-day trips in mind. Durable and supportive, they provide a high degree of ankle and foot protection. Some of these models are designed specifically for rough terrain with heavy backpacking loads. They offer the very best in durability, support and protection. Some are stiff enough to accept crampons for snow/ice travel.

### 2. Consider the Materials

The materials used in a given boot or trail shoe will affect its weight, breathability, durability and water-resistance. Since boots made of different fabrics can be very similar in performance, however, personal preference is often the key when choosing between them.

∞ Nylon mesh and split grain leather - Nylon and split-grain leather boots are lightweight and breathable, which makes them perfect for warm- to moderate-weather use and short to moderate backpacking trips. They tend to be softer on your feet, they take less time to break in, and they are almost always lighter than full-grain leather boots. They also cost less. Unfortunately, nylon/split grain boots tend to be less water-resistant than full-grain leather boots (although styles that feature waterproof liners can be just as water-tight, if not more so).

∞ Full-grain leather - Full-grain leather is extremely water-resistant, durable and supportive (more so than split-grain leather or nylon). It's used primarily in backpacking boots designed for extended trips, heavy loads and hard terrain. Not as lightweight or breathable as nylon/split grain combinations, but it typically lasts far longer. Full-grain leather usually requires a break-in period.

∞ Waterproof barriers - Lightweight, waterproof

barriers (like Gore-Tex®) are built into many hiking boots to enhance their water resistance. These barriers are available in a variety of boot styles, from lightweight hikers to extended hiking/backpacking models.

Waterproof performance depends upon the type of barrier used, the materials protecting it and how well the boots/shoes are taken care of. If cared for correctly, these waterproof barriers often last longer than the boots themselves.

NOTE: Be careful when shopping for backpacking boots to differentiate between the following:

∞ Waterproof leather -- This is leather that's been treated to be waterproof. It's great stuff to have, but remember -- leaks may still occur (depending on how well the boot pieces are put together). Waterproof (or water-tight) construction -- This refers to construction techniques designed to keep leaks out (like seam-sealing, special stitches and precise designs). Water-tight construction is typically combined with waterproofed materials.

∞ Waterproof liners -- These are the special waterproof barriers described above that are built right into the boot to protect you from whatever leaks make it through the boot materials. These liners typically do a great job of keeping you dry. But remember, Gore-Tex (and the others) don't last forever.

TIP: The water-proofness (or water-resistance) of your hiking boots depends significantly on how well you treat them. Be sure to follow all care instructions that come with your boots so that they can perform well and last a long time.

### 3. Consider the Way the Boots are Constructed

#### Upper construction

∞ The more seams a boot or shoe has, the higher the risk for leaks and/or blow-outs. Leaking occurs when water seeps through the needle-holes or spaces between the boot panels. Blow-outs occur when general wear, repeated flexing or a snag causes a stitch to break and 2 panels to separate. In general, the less seams an upper has, the more water-resistant and more durable it will be.

#### Connection between the upper and the sole

∞ Hiking boot soles are either stitched or cemented to the rest of the boot.

Stitching - Durable, reliable, can be undone to replace the sole once it has worn down. Different techniques (Littleway, Norwegian) result in different strengths and stiffnesses.

Cementing - Faster and less expensive than stitching, resulting in lower boot prices. It hasn't always been reliable, but most modern methods produce durable, long-lasting bonds (depending upon the process and

specific glue used). Most cemented boots can now be resoled just like traditional stitch-down models.

#### 4. Test for Fit

Once you've narrowed down your options to a handful of boots or shoes, the best way to decide between them is to try them on. Don't rely solely on your "regular" shoe size when searching for the best fitting boots or shoes. One manufacturer's "9" may vary widely from another's (see below).

∞ Fitting tips:

Begin with a foot measurement - Have an experienced salesperson measure both of your feet using a Brannock device (a good place for this is REI). Use these measurements as your starting point for trying on boots. If one foot is larger than the other (which is quite common), fit your larger foot first. You may need to use extra socks or an insert to take up extra space in the other boot.

Pick the right socks - **Wear the type of socks and sock liners that you'll be using out on the trail whenever you try on boots.** Check the initial fit - Lace up the boots and stand up. They should feel snug around the ball and instep of your foot, but loose enough that flexing your foot forward is not uncomfortable. Your heel should be held firmly in place. If your foot feels like it's "floating" inside the boot, try a half size down. If your foot feels cramped or your toes make contact with the front or sides of the toe box, try the next bigger size.

Take a walk - Take a walk and see how comfortable the boots/shoes are. Check for any looseness, foot movement and/or heel lift. Good-fitting boots will hold your feet firmly in place without binding or pinching them. New boots may feel a little stiff at first, but they should still be comfortable. After a quick walk across a flat surface, step onto an incline facing downhill (if one is available) to check for foot slippage. Your feet should not slide forward easily, nor should you be able to move your heel from side to side. If either of these is possible, try a smaller (or lower volume) boot. If your toes make contact with the front of the boot without much forward movement, try a larger size or a different boot.

Investigate your options - Try on a number of boot models before you decide on a single pair, even if the first pair feels good. Every boot model is built around a different "last" (standard foot shape), so each one will grab you a little differently.

#### 5. Caring for your Hiking Boots

All hiking boots, especially leather ones, benefit from frequent cleaning and occasional conditioning with special boot treatments. These treatments condition leather and provide additional water protection to keep your feet dry. Proper boot care and conditioning is important whether you hike in dry, hot climates or wet, temperate areas. Taking a little extra time to care for your hiking boots can add years to their useful lives.

#### Basic Boot Care

The key to keeping your boots in good shape is to keep them as clean as possible. Dirt particles are very abrasive and over time they can damage just about any boot material. It's hard to keep your hiking boots clean while you're using them, of course, but brushing the dirt and mud off them after every hike will help keep them in good condition.

#### Drying your Boots

Whenever possible, dry your boots completely after each trip. To dry them, simply store them in a dry, warm area. Don't set your boots near a fire (or other heat source) to dry them more quickly, since high temperatures can damage boot materials and the cements used to hold them together. If you need to speed up the drying process, try stuffing dry newspaper inside your boots to absorb water. Replace the newspaper frequently for best results.

NOTE: If your boots are wet and dirty, it's best to dry them first, then brush the dirt off.

#### Washing your Boots

Most fabric boots can be washed on the outside with non-detergent soap and water to remove built-up dirt. Leather boots can also be rinsed off, but repeated washing and drying can dry out the leather over time and make it brittle.

#### Treating/Conditioning your Boots

A variety of boot treatments are available to condition the leather (and other materials) in your hiking boots. Most of these treatments are also formulated to enhance water-repellency. Boot treatments come in spray, liquid and paste form. Different types of treatments are intended for different types of boot materials. To help you find the best match for your boots, stores such as REI include specific treatment suggestions in Footwear Spec Charts. Refer to the manufacturer's care instructions for specific details on how to use these products. To condition your boots correctly, simply follow the instructions included with each boot treatment. The number of times you have to apply the treatment each season will depend on the boots you own, how often you use them and the specific treatment you choose.

#### A Note on Oil Treatments

Avoid using oil-based treatments like Mink Oil on any leather hiking boots. Oil-based products are intended to soften leathers and make them more supple, which can negatively affect the support of hiking boots. Use wax or silicone-based treatments only.

Some of the key considerations for **Hiking Socks** are:

The socks you wear on the trail can have a significant effect on your backpacking experience. Like footwear, socks must be chosen carefully to match the kinds of conditions you expect.

1. Consider the Kinds of Trips You Have in Mind  
Backpacking socks are designed to provide warmth, cushioning and abrasion resistance in a variety of conditions. The right sock for you depends on the kinds

of trips you have planned and the weather conditions you expect. Here are the basic categories you have to choose from:

∞ Liners - Sock liners are thin, lightweight wicking socks designed to be worn right next to your skin. These liners wick sweat away from the surface of your foot to keep you dry and more comfortable. Liners also limit the amount of abrasion between your outer sock and your skin. They are designed to be worn under other socks. Lightweight hiking/backpacking socks - Designed for warm conditions and easy trails, lightweight backpacking socks stress wicking performance and comfort over warmth. These socks are thicker, warmer and more durable than liners alone. They also provide more cushioning. But they are relatively thin so that you can stay comfortable on warm weather trips. Because most lightweight backpacking socks are made from wicking materials, they can be worn with or without liner socks. Midweight hiking/backpacking socks - These socks are designed to provide reliable cushioning and insulation in moderate to cold conditions. They tend to be thicker and warmer than lightweight hiking socks. Many models have extra padding built into high-impact areas like the heel and the ball of the foot for maximum comfort. These socks should be worn with liners. Mountaineering socks - Mountaineering socks are the thickest, warmest and most cushioned socks available. They are designed for long trips, tough terrain and cold temperatures. Usually, mountaineering socks are too thick and warm for basic backpacking journeys in warm conditions.

## 2. Consider Your Material Options

∞ Wool - Wool is an extremely popular natural sock material. It is warm, cushioning, and retains heat when wet. Unfortunately, wool can take a long time to dry and it can be scratchy next to your skin (NOTE: many new wool options, including mohair, do not have this problem). It can also wear out quickly if not reinforced with other materials. Wool blends (combinations of wool and synthetic materials) are extremely popular because they address many of these problems.

∞ Synthetic insulating materials - REI offers a number of man-made materials designed to insulate like wool

and wick moisture, without the negatives mentioned above. These materials (Hollofil®, Thermax®, Thermastat®) trap warmth like wool, but they are softer on the skin. They also dry more quickly and are more abrasion resistant. These materials are available in a variety of sock styles and thicknesses.

∞ Silk - Silk is a natural insulator. It's comfortable and lightweight, but not as durable as other options. It's occasionally used in sock liners for reliable wicking. The synthetic wicking materials (like polypropylene and Coolmax) used in wicking sock liners are often woven into thicker backpacking socks as well, to enhance wicking performance.

∞ Cotton - 100% cotton is not recommended as a sock material for backpacking. Cotton absorbs sweat, dries slowly, provides no insulation when wet and it can lead to discomfort and blisters out on the trail. However, cotton is extremely comfortable. And when combined with wool or other wicking and insulating fibers, cotton can be a great choice for light hiking in summer.

∞ Cushioning materials - Many backpacking socks provide extra cushioning around the heel, the ball of the foot and the toe area to increase comfort. The padding is created either by increasing the density of the weave in those areas, or in some cases by weaving long-wearing materials like acrylic into those areas. This extra padding can be a real foot-saver on hard trips over rough terrain.

∞ Support materials - Many of today's hiking socks include a small percentage of either stretch nylon or Lycra® spandex. These elastic materials help socks hold their shape and keep bunching and wrinkling to a minimum.

## 3. Take a Test Drive

When possible, take a quick walk in the sock styles you are considering to get a feel for how much cushioning they have. And be sure to buy the right size--your socks should fit snugly. Bunched up sock material can make any backpacking trip an uncomfortable one.