

**ORIENTATION FOR FIELD COURSE  
APPLICATION OF LEAVE NO TRACE PRINCIPLES  
MTA TOUR GUIDE TRAINING COURSE  
TRAINING OF TRAINERS**

**Rather than a list of rules with do's and don't, consider the following Leave No Trace guidelines as a way to increase our consciousness of the need for diminishing our impact on the land, animals and plant life of our wilderness areas.**

Once we realize the importance of these concepts we should be able to incorporate them willingly into our outdoor experience rather than view them as restrictions on our enjoyment of the wilderness. The concepts should become second nature to us.

Obviously different types of tourist groups, different situations, and different environments call for different means and different levels of incorporating the LNT principles.

Our camp will be an interactive, co-operative learning experience. There is no support staff. We will all work together to perform all of the chores necessary for outdoor living and learn by doing.

We will be involved in and sharing the following duties:

- ① Selecting a location for and setting up tents
- ① If necessary, cleaning up the campsite before sitting up tents
- ① Digging and maintaining the latrine
- ① Serving bed tea
- ① Assisting the cook with food preparation and clean-up
- ① Washing up cooking equipment after meals
- ① Packing out our trash and garbage
- ① Returning our campsite to it's original or better than original condition
- ① Properly disposing of the trash and garbage we take out of our campsite

If any of you have any questions, please, please ask. Remember this is an interactive learning experience.

If any of you have any problems of any kind, don't hesitate to inform me. For any medical problems I have a pretty well stocked medical kit at your service.

The goal of this course is to create a hands-on learning experience that will result in each of you having the confidence to be good leaders, good guides and to be good trainers of the skills you will learn here. Hopefully all of you will also learn to appreciate the need to be effective and responsible low-impact users of wilderness areas with respect for nature.

Protection of the environment is a big issue in the most Western countries. Adhering to the principles of Leave No Trace will impress both your foreign tourists and their respective travel companies. It will be good both for the environment and good for your business.

## What It Takes To Be A Tour Guide

When tourists come to Mongolia, the tour guide will be one of the first Mongolians most of these people have ever met. Their initial impressions of your country are strongly influenced by your behavior and your skill as a guide and a leader. If you are a guide you have a responsibility to be a good one.

A good guide can make a good trip even better. A bad guide can ruin an otherwise good trip.

What does it take to make a good tour guide? Obviously experience is important but even more important is proper training. Years of experience doing the job incorrectly are no substitute for proper training.

Being a guide is not for everyone. Admittedly it takes a certain type of personality – being outgoing and talkative are decided assets in the travel business. Think of it as theatre. You are an actor and if you're a good one, you can be a star.

Now let's look at some of the qualities that make up a good guide.

- ① First and foremost you must be a **leader**. Your clients look to you for guidance.
- ① You need proper training. A **well-trained** leader can guide anywhere, even outside one's area of expertise.
- ① You must have **confidence**. If you have confidence in yourself, so will others.
- ① You must be **professional** at all times. You're on-call 24 hours a day.
- ① You must be **diplomatic**. It's much better for people to want to do what you want them to do rather than trying to force them to do it.
- ① You must be **knowledgeable**. Do your homework. Make sure your facts are correct. Beware of giving out inaccurate information. You never know when someone in your group might know more than you do on the subject.
- ① You must be **caring**. They are in your home. Be a good host
- ① You must to be **fair**. Treat all of your tourists equally.
- ① You should show **respect** for your clients, yourself, and for Mongolia
- ① You need to be **flexible**. Situations change. Learn to work around them.
- ① You must be willing to take **responsibility** for your decisions and actions, right or wrong.
- ① Don't be selfish. A selfish guide is a dangerous leader.
- ① Don't lose your temper. Be alert and try to avoid confrontation.

The qualities listed above are by no means all that are needed in the job, but they are qualities that all good leaders possess.

And remember; tourists want to have a good time, they are on holiday. You are not. Of course it is okay if you have fun as well. Good luck

Roger Williams  
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## How To Be An Effective Tour Guide Trainer

The most effective and successful Tour Guide Trainers will those who are also good leaders and guides as well. The information contained in the “*What It Takes To Be A Tour Guide*” handout each of you have received is a useful reference tool.

There are seven principles that significantly affect the quality of training

1. Trainers should provide all candidates with appropriate pre-course information.
2. An appropriate training solution should be determined to suit the individuals and the companies they represent.
3. Trainers should ensure the effective management of all issues relating to the delivery of the program.
4. The level and method of delivery should be appropriate to the needs of the trainee.
5. The quality of all training materials is assured.
6. The knowledge of the trainer in the area of training delivery should be technically accurate and up to date.
7. Trainers should initiate evaluation processes to maintain standards.

We will explore the following situations in this “Training of Trainers” course.

1. How to organize a training course
2. How to be an effective trainer
3. How to implement team building and instill team spirit
4. How to handle chore sharing and cooperation
5. How to “bring out” the shy trainee
6. How to monitor the success of the training
7. How to deal with trainee’s attention span
8. How to deal with negative attitudes and disruptive trainees
9. How to bring the training to a close
10. How to do a proper “wrap-up” and course evaluation session, with an emphasis on trainee’s feedback
11. How to critique the trainees
12. How to critique the trainer

In keeping with the interactive nature of this training course we urge you to tender any suggestions or criticisms you might have that would assist us in improving the “Training for Trainers” course.

Thank you  
Roger Williams

# MTA TOUR GUIDE TRAINING PROGRAM

## TRAINING OF TRAINERS COURSE

*Leadership Skills, Guiding and Outdoor Skills, Wilderness Safety and Judgment (accident prevention), Working with drivers, Leave No Trace Wilderness Ethics, and Cultural Issues*

### I. Introduction

1. Tourism is a service industry, we have no actual product to sell, we sell service
2. Tour guide is the primary contact with the clients, make a good impression

### II. Object of training course

1. To develop consciousness for the need for low impact tourism incorporating the principles of Leave no Trace Outdoor Ethics
2. To teach skills necessary to be a good leader and guide
3. To establish an interactive learning experience
  - A. Please participate
  - B. Feel free to ask questions at any time
  - C. If you don't understand let me know
4. To learn by doing
5. To instill the skills and confidence to make each of you successful guide trainers

### III. Principles of Leave No Trace (will elaborate on each principle in courses)

1. Plan Ahead and Prepare
2. Travel and Camp on durable Surfaces
3. Pack it in-Pack it out
4. Waste that can't be packed out should be disposed properly
5. Leave what you find – except litter and garbage
6. Use Fires Responsibly – Minimize Campfire impact
7. Respect Wildlife
8. Be Considerate of Others

### IV. Leadership skills

1. Four guiding principles
  - A. Safety first – “Bring them home alive.”
  - B. Have a good time – never forget that clients are on vacation- pleasure is their main reason for coming to Mongolia – it's okay for you to have a good time
  - C. The group is not a democracy – it's a benevolent dictatorship at best
  - D. Take responsibility for your decisions and actions – keep problems hidden
2. What makes a good leader?
  - A. Proper training
  - B. Confidence – a well trained leader can guide anywhere, even outside area of expertise – knowledge is important, confident leadership is more important
  - C. Caring – be fair, treat all clients equally- as a parent would –
  - D. Don't be selfish – a selfish leader is dangerous
  - E. Be diplomatic – better to have people want to do what you want them to do rather than appearing “bossy”
  - F. Be prepared – plan ahead and do your homework
  - G. Be respectful of client and Mongolia

- H. Don't lose your temper – Be alert and avoid confrontation
- I. Show by example – don't preach
- J. Watch for health problems
- K. Be open to spontaneity
- L. Be flexible
- M. Avoiding disaster and Dealing with disaster – you can run, but you can't hide

## V. Guiding Skills

1. What it means to be a guide – it's theater, people want to be entertained – so entertain
2. Interaction with Client – beware of ego – always remember, it's just business
  - A. Be personable – first impressions set the tone
  - B. Don't lose control of the group– first 2 days crucial – velvet glove technique
  - C. Serving – host not servant – these people are in your home, be a good host
  - D. Initiate conversations at meals but let people tell their stories, don't dominate the conversation
  - E. Don't sleep all the time on long drives – drives are a good time for briefings about local history, culture etc., but pace yourself, don't drone on and on, take a break every 15 to 20 minutes – stop if you're losing your audience
  - F. Try not to just read your information– better to know your material well or to memorize it
  - G. Group Dynamics – some people do well and enjoy groups, some are loners
  - H. Dealing with Difficult clients
  - I. Dress appropriately
3. Well-being of Clients - even difficult ones
  - A. Physical well-being – be aware of their, not your comfort zone. Different nationalities have different needs – cross-cultural sensitivity
    1. Health and Nutrition
      - a. Hydrate – 2-3 liters of water a day
      - b. Fruits and vegetables – offer local hygienic produce
      - c. First Aid knowledge and supplies
      - d. Dietary restrictions- vegetarians, lacto intolerance
      - e. Allergies – peanuts, bee stings, etc.
      - f. Wash hands before meals on treks - bowl of iodine water by dinning tent
  - B. Safety
    1. Watch for physical limitations
    2. Don't assume everyone is in as good shape as you are
    3. Don't push client to do what they can't do
    4. Help them succeed at physically difficult tasks
    5. Be sympathetic but not overly anxious if a client is injured
    6. Be very careful of clients who are kayaking and horse-back riding
    7. While trekking it's "Eyes up, feet stop"
    8. Have one guide in front and one in back as a sweep during treks.
    9. Lead guide should not let anyone walk in front
    10. Sweep guide should make sure no one is behind
    11. Acceptable ways to mark the trail – arrows in the dirt, arrows made of twigs

### C. Security

1. Remind people to be mindful of their belongings at all times
2. Beware of the possibility of pickpockets
3. Beware of drunks, especially at night – best to avoid them
4. How to deal with beggars
5. Recommend hotel safes in the city
6. Remind them to take care when crossing the street in UB
7. Recommend that clients store unneeded items in hotel storage rather than taking everything along on trips to the countryside – in locked bag

### D. Emotional and Psychological well-being

1. Watch for signs of stress and fatigue
2. Address and deal with any client's problems away from other group members
3. Dealing with complaints

## VI. Working with a tour leader – you are partners, different jobs, same responsibilities

### 1. Working with difficult tour leader

- ① Have a meeting as soon as possible so the 2 of you can establish a working relationship and for you to get a feel for how the tour leader works
  - ① Remember, not all tour leaders are the same
2. Leading a group without a tour leader – it's all in your hands
  3. Logistics of Itinerary – check it to make sure it's feasible
  4. Keep any disagreements away from clients
  5. Have meetings with the tour leader away from clients
  6. Try not to correct the tour leader in front of the clients
  7. Don't make the tour leader look bad in front of the clients

## VII Pre-trip preparation

1. Early arrivals – who, when, pre-paid airport pick-up?
2. Airport pickup and drop off
3. Rooming lists
4. Single supplements
5. Be aware of dietary requirements and restrictions
6. Maps & other handouts
7. Check and confirm all bookings
  - A. Hotels – try to get all rooms on the same floor
  - B. Meals – especially restaurant meals and any home visit meals
  - C. Check your “vouchers versus cash” for services and make sure you have all necessary vouchers for the correct number of clients
  - D. Transport
9. Check camping or trekking equipment including kitchen equipment
10. Coordinate with camp staff, cooks and drivers
11. Be familiar with itinerary and driving times
12. Look over the client list and familiarize yourself with the pronunciation of names
13. Try to have a welcome note and a small memento placed in each guest's room if your allows for it or suggest it to your booking travel company and invoice them
14. Find out if any client will have a birthday so you can order a cake for dinner again, if your budget allows for the expense
15. Make sure you have enough expense money to cover emergencies

## VIII. Group arrival, pickup, and on the bus to the hotel

1. Call ahead to see if flight is on time
2. Be on time
3. Carry a sign with the booking travel company's name on it unless the tourists booked directly with your company in which case have your company's name on the sign
4. Identify yourself, if you have a difficult name give yourself a nickname, people can relate to you easier if they can pronounce your name
6. Start learning names now and try to learn everyone's name as quickly as you can
7. Have tourists move away from the flow of arriving passengers and wait together
8. Know the locations of the toilets and give your group a chance to use it before getting on the bus
9. After all clients have arrived count the luggage and supervise loading
10. Have people get on the bus with their carry-on bags
11. Ask the group if they are sure they have all of their belongings before you depart
12. Re-introduce yourself
13. Introduce the driver
14. Tell the local time
15. Tell the average temperatures for day and night for their stay
16. Give out city maps and any other handouts you may have prepared
17. Get hotel business cards ahead of time and pass them out so the tourists can use them to show taxi drivers
18. Tell clients the driving time to hotel
19. If group is flying via Beijing check passport for Chinese visa
20. If anyone needs a Chinese visa inform your office to obtain forms
21. On the drive to the hotel explain things they see from the bus rather than giving a lecture, tourist will be interested in having buildings and landmarks identified
22. Giving the tourist Ulaanbaatar's latitude or the fact that Ulaanbaatar and Paris are at about the same latitude would be helpful
23. Explain about local taxi and typical taxi rates
24. Give an explanation about local currency and exchange rates, show them the money
25. Explain local tipping customs for restaurants and taxis
26. Tell clients the time and location of the next meeting before they get off the bus
27. After arrival at hotel distribute room keys as quickly as possible
28. If it is possible to get the room keys and registration forms before you pick up the clients, even better
29. Mark and get the luggage delivered to rooms as soon as possible
  - ① Have chalk or labels to mark the bags
30. Give a briefing to the whole as soon as possible, before the first dinner is fine
31. Have clients introduce themselves to the group and say a little about themselves
  - ① What to cover in your briefing
    1. Safety first – "Bring them home alive."
    2. Have a good time, you're on vacation
    3. Stress the importance of being on time
    4. Explain that hot water is not always available and is central
    5. Explain road conditions and bumpy jeep rides
    6. Explain occasional difficulties with MIAT domestic flights
    7. Alcohol is on their own expense
    8. Cover points listed under "Security", (see section V, subsection 3C
    9. If client has health or any other problems please tell them to let you know

## IX. During trip

1. Always be early at meeting time and engage tourists in conversation
2. Eat meals with clients, if possible and try to sit next to different people at meals
3. Have a few stories, jokes, and folk tales at the ready for lulls in meal conversation
3. Don't smoke in front of the clients
4. Have a liter bag on the bus and use it
5. Collect tickets for international departure flights and reconfirm
6. Always inform clients of driving times to destinations, adding a little extra time
7. Give departure times for the bus after visits as well as the location of bus
8. Arrange a home visit with a meal if possible
9. Plan a meal with local food specialties
10. Arrange to have local hygienic produce for clients
11. Arrange a cultural program with local dance, music and khoomi
12. Arrange a sporting demonstration – archery or wrestling for example
13. Make sure there is always some mineral water on the bus, especially when it is hot
14. Reconfirm morning wake-up call each night before going to bed
15. Explain difficulties of taking antiques out of Mongolia and the to get export permit as well as the need to get to the airport earlier than the group. If client is delayed by customs the group will go and they could miss their flight.
16. Remind clients to pay any hotel charges, mini bar, laundry & room service the night before departure to avoid a late departure for the airport
17. Remind tourists the day before flight departure about the departure tax and ask them to try to have exact change

## X. End of trip

1. Allow plenty of time to get to the airport
2. Check to see room keys have been returned.
3. Late departures, confirm any arrangements your company is responsible for
4. Collect airport departure tax from group and pay for the group yourself
5. Get airport departure forms ahead of time
6. Pass out departure forms to each client on the bus to the airport, this will save time

## XI. Other factors in a successful trip

1. Relationship between local outfitter and booking travel company
2. Importance of trust in the travel business
3. Luxury or high end tourist versus budget travelers
4. Cultural differences in tourists from different countries
5. Importance of first briefing
6. What to do if....?
  - A. Clients don't get along with each other
  - B. Tour leader gives out incorrect information to the group
  - C. Client doesn't show up at breakfast
  - D. Client becomes ill
  - E. Client needs to be medi-vaced
  - F. Client is very difficult
  - G. Client wants you to go out late at night to a club looking for "girls"
  - H. Client expresses a romantic interest in you
  - I. Husband and wife don't get along
  - J. You get sick

## XII. Drivers and Navigation

1. Refuel before departure time and whenever possible
2. Check distance versus fuel consumption to see if you need to carry fuel containers
3. Always carry
  - ① Tool kit & First Aid kit
  - ① Fire extinguisher
  - ① Extra lug nuts
  - ① Cable ties
  - ① Towing cable
  - ① Electrical tape
  - ① Duct tape
  - ① Drinking water
  - ① Shovel
  - ① Motor oil & radiator fluid
  - ① Maps
  - ① Compass
  - ① GPS
  - ① 2-way radio – one for lead vehicle and one for sweep vehicle
4. Communication between drivers and guides
  - ① Driving route and estimated time
  - ① Lunch stop, time and location
  - ① End of day destination
  - ① Try not to talk to much with the driver in Mongolian when clients are in the vehicle, unless you keeping him a wake
  - ① If you and driver do laugh it's a good idea to explain to the group what you're laughing about so they don't think it's about them
  - ① Make sure drivers get a good night's sleep and don't drink to excess
5. Driver is also part of the group
  - ① Driver's interaction with tourists
  - ① Introduce drivers to his passengers
  - ① Language need not be a barrier to communication
  - ① Even learning a few words of the tourists language will help tremendously
  - ① Pit stops & photo stops
6. Speed is secondary to safety
7. Stay together and keep at least one other vehicle in sight
8. Designate a lead driver and rotate lead vehicle a few times a day to give each client a chance to be in the lead vehicle and get a dust-free view
9. If some vehicles are better you should rotate clients so all have a chance to sit in the better vehicle
10. If lead vehicle slows down, the rest of the vehicles slow down as well
11. If time allows, it's a good idea to make stops and let the clients walk for a while, 15-20 minutes, to stretch their legs
12. Remember to keep enough distance between vehicles so clients don't have to eat dust
13. Packing the vehicles
  - A. Guide should oversee the loading of the vehicles
  - B. Make sure emergency equipment and first aid kit are easily accessible on top and not on bottom in the back of each vehicle
  - C. Do not pack any food on top of clients gear
  - D. Handle client's gear carefully, do not throw it around

- E. Pack gear well so it doesn't rattle or slip forward into the vehicle
- F. Make sure pack lunches are distributed among the vehicles
- G. All cooking and kitchen equipment should be in one vehicle
- H. If cooking gear is needed for lunch, make sure it is packed on top. Do as much preparation in the morning before leaving camp
- I. Make sure all gas or fuel containers are sealed and secured. Do not pack next to food items
- J. Take along some handi-wipes for clients to wipe off the dust.
- K. Make sure to keep the vehicles clean and maintained

#### 14. Navigation

- A. Have appropriate maps and be familiar with the routes
- B. Learn to use compass and GPS

## APPLYING LEAVE NO TRACE PRINCIPLES TO LOW IMPACT LAND USE

1. Planning Ahead and being prepared.
  - A. Helps prevent disasters
  - B. Cuts down on trash and garbage
2. Hiking
  - A. Stay on the trail to reduce damage – avoid fragile terrain
  - B. Walk in single file
  - C. When off-trail, spread out group members to disperse impact
3. Selecting and using a campsite
  - A. Confine campsite to well-worn, impacted areas to concentrate use
  - B. Don't camp too close to water, camp at least 200 feet away
  - C. Avoid damage to the land, a perfect campsite is found not made
  - D. In pristine areas, disperse impact by camping in a spot that has never been used
  - E. Avoid sites altogether where signs of use are moderately to barely visible – this will give the land a chance to heal
  - F. If a site is so heavily used that the ground is barren and eroded, and tree roots are exposed, camp somewhere else so the land can heal
  - G. No matter where you camp, you can reduce trampling to the site by wearing lightweight shoes when in camp
  - H. Pack out all your trash, as well as litter left behind by others
  - I. Fluff up the grass and fill in tent-stake holes when vacating a pristine campsite
4. Fires and stoves
  - A. Choose to not have a fire for cooking or for heat – fires destroy the organic matter and sterilize the soil to a depth of 4 inches
  - B. Use a stove for cooking and rely on warm clothing and a well insulated sleeping bag for staying warm.
  - D. If you do use a fire, build a low-impact fire
    - ① The ideal low-impact fuel is loose twigs and branches that are no thicker in diameter than your wrist
    - ① Never break off branches from standing trees, even if they appear dead
    - ① Build a fire in a way that will leave no lasting impact on the environment – on a flat rock
    - ① Make sure plenty of dead and downed wood is available for fuel
    - ① Use existing, primary fire rings to concentrate impact
    - ① Dismantle secondary fire rings at established campsites
    - ① Use a fire pan
    - ① Try a mound fire – 6" to 8" mineral soil on a plastic bag
    - ① Keep fires small
5. Meal planning
  - A. One pot meals
  - B. Repackage food in resealable bags to reduce trash

## 6. The Kitchen

- A. At an existing site, concentrate use by cooking within the area that is visibly impacted, rather than on the periphery
- B. At a pristine site, the cooking area should be located on trampling-resistant surfaces like a rock outcropping or mineral soil
- C. Keep a clean camp by avoiding dropping food on the ground and by packing our all food wastes
- D. Consider rinsing bowl with hot water and drinking the broth – good for the environment and good for rehydration
- E. Wash dirty pots with hot water and a scrubbing sponge or sand; avoid using soap if possible
- F. Strain gray water and scatter or dump it well away from the campsite and 200 feet from any water source

## 7. Sanitation

- K. Cat holes are best for small groups staying one night at the same site
- L. Latrines are better for large groups with a longer stay
- M. Average human produces about 1 liter - some 2 pounds worth – of excreta (half of which is solid) per day
- N. Human feces buried in a group latrine can take more than three years to decompose
- O. Pathogens (i.e. *Giardia lamblia*) in human feces buried in shallow cat holes can remain a potential health hazard for at least a year
- P. Human urine can brown leaves and attracts animals (it's the salt) but, generally, it is not a health hazard
- Q. Purify water before drinking it
- R. Wash your hands after using toilet and before preparing food or eating
- S. Give your solid wastes a proper burial
- T. Dig latrine hole at least 200 feet from any water sources or drainages
- U. Maximum conditions for decomposition are achieved when the hole is dug in organic soil (rich in microorganisms) and in a spot that is somewhat moist but receives a fair amount of sun
- V. Hole should be wider than it is deep and at least 1 foot deep
- W. Make the hole rectangular so it accommodates squatting
- X. Minimize use of toilet paper
- Y. Do not burn toilet paper, either pack it out in plastic bags or put it in the latrine
- Z. Small amount of soil should be throw in the hole after each use, not to much or it will fill too quickly and another hole must be dug
- AA. Hole should be covered up with dirt when the waste accumulation is within 4 – 6 inches of the surface
- BB. Try to return the filled hole to its original condition

## 8. Bathing

- A. With the exception of hand washing, bathing should be considered optional in the backcountry because it has inevitable environmental impacts
- B. Any washing activities should take place at least 200 feet from natural water sources and, preferably on a durable surface such as gravel or slickrock.

- C. If you use soap, try to make sure it is phosphate free and biodegradable
- D. If you do not use soap, washing in a natural body of water is acceptable by LNT standards only if it is a large lake or river
- E. You can minimize tooth-brushing impact by using salt or baking soda instead of toothpaste
- F. If you do use toothpaste you can minimize impact by diluting it with water and spraying it through your teeth

#### 9. Waste disposal

- A. Pack it in – Pack it out
  - ① Try to reduce litter at the source – before you leave
  - ① Don't burn it, pack it out – this includes both trash and garbage; leftover food, food scrapes, spilled food, fruit peels, nut shells, apple cores, and the like
- B. Waste that can't be packed out should be disposed properly
  - ① See “the kitchen” above for proper disposal of dish washing water
  - ① See “sanitation” above for proper disposal of human waste and toilet paper
  - ① Do not dispose of trash or garbage in latrines or fires
  - ① It's better to bury fish and game viscera (guts) than dispose of them in rivers or lakes

#### 10. Respecting Wildlife – fauna and flora

- A. Never give wildlife food
- B. Hang or secure all food, garbage, and scented items to avoid habituating area wildlife to forage at campsites
- C. Minimize trips to the water source
- D. Don't pick wildflowers
- E. Leave what you find

#### 11. Be Considerate of Others

- A. Respect the goals of other visitors
- B. Minimize crowding
- E. Let nature's sounds prevail – keep a check on excessive sounds
- F. Remember others who seek quiet and solitude

## **APPLYING LEAVE NO TRACE PRINCIPLES TO TOURIST GROUP TRAVEL IN THE FOLLOWING SITUATIONS:**

### **1. Deserts**

- ① Hike on established trails and avoid the clumpy, black soil called crytobiotic crust. It looks fairly insignificant. But, in fact, these irregularly raised pedestals in the sand are self-sustaining biological communities that are essential to the ecology of arid lands. Crytobiotic crusts, (also called cryptogam or cryptogamic soil) prevent erosion, enrich the soil, and allow new plants to take root. A mature crytobiotic garden can take hundreds of years to develop, and human trampling can destroy it in just a few seconds.
- ① Conserve water – plan on at least 4 to 5 liters of water per day
- ① Animals need to conserve water too – chasing antelope across the Gobi in a jeep is exhausting for the antelope and could be fatal.
- ① Beware of flash floods – don't camp in washes
- ① Use a stove – the lack of downed wood makes fires inappropriate and any downed wood lying around is likely the irreplaceable home of a variety of desert critters
- ① Avoid animal and bird burrows or nests

### **2. Rivers and Lakes**

- ① Washing in a natural body of water is acceptable only if it is a large lake or river and if you do not use soap
- ① If traveling by boat, secure your load to avoid littering in the event of a capsizing
- ① Try to camp in the rivers floodplain, unless there is a risk of flooding
- ① Cook with a stove and avoid a campfire
- ① If you do build a fire, use a fire pan and either bring wood with you or pick up driftwood for fuel over the course of the day
- ① Be aware of trampling impacts to vegetation, and follow established trails when venturing away the river corridor
- ① Wear life jackets
- ① Carry a whistle

### **3. Alpine areas – mountain ranges above the tree line - the terrain, like the desert is least able to withstand impacts from human visitors – trampling impacts can last several hundred years, rather than years or decades as in a forest or meadow environment**

- ① Stay on the trail
- ① Follow the switchbacks
- ① Don't take shortcuts – these “volunteer” paths can literally destroy the delicate alpine environment
- ① Wear gaiters, and crampons if necessary, so you can walk through mud, snow, and ice, on the trail rather than around it – staying on the trail is a land management regulation in various parks in the US
- ① Use a stove – the lack of downed wood makes fires inappropriate
- ① Be especially careful of trash – high winds can send wrappers and even freestanding tents sailing off the mountain
- ① Avoid disturbing vegetation and do not move rocks around – these are important micro-habitats in an alpine tundra environment

#### **4. Snow and Ice**

- ① Pee away from trails and pack out human waste, burying it in the snow is pointless because it will just stay frozen until the spring and then it will reappear in full form
- ① Avoid building a campfire when deep snow prevents you from reaching downed wood - use a stove
- ① Avoid camping where there are signs of wildlife – running away from humans can stress wildlife and uses up valuable energy reserves needed to survive winter; during a particularly harsh winter it can be fatal
- ① Upon leaving camp fluff up the snow and return your campsite to it's more natural state

#### **5. Traveling with horses, camels or yaks**

- ① Pack light – especially if there is no jeep support
  - 1. Use modern, light camping equipment, including lightweight tents, sleeping bags and stoves
  - 2. Use as much freeze-dried and dehydrated food as you can and pack in reusable plastic bags rather than food in heavy cans and glass containers
- ① Use weed-free feed
- ① Minimize trampling
  - 1. If you come upon a muddy patch, try to get your horse to go through the middle of it rather than around the muck
  - 2. During rest breaks, hobble your horses rather than tying them to trees
- ① Never tie animals to a tree – the damage horses cause to root systems and bark as a result of this longtime practice has killed trees in areas heavily used by pack stock. Tying horses in this manner also damages the soil around the tree, creating a telltale “doughnut” pounded into the earth by the restless animal
- ① At camp
  - 1. Minimize impact by choosing the most durable site available
  - 2. Confine your horses with a highline
  - 3. Scatter horse dropping when vacating the site

## LASTING LITTER

Paper: 2-4 weeks  
Banana Peel: 3-5 weeks

1 year Wool Cap: 1 year  
Cigarette Butt: 2-5 years

15 years Disposable Diaper: 10-20 years

25 years Hard Plastic Containers: 20-30 years

75 years Rubber Boot Soles: 50-80 years

100 years Tin Cans: 80-100 years

Aluminum Can: 200-400 years

Plastic Six-Pack Holder: 450 years

500 years

**GLASS BOTTLES**

1,000 years

**LOTS AND LOTS**

1,000,000 years

**OF YEARS**

**THINK BEFORE YOU THROW**

# EQUIPMENT LIST FOR INDIVIDUAL CLIENTS

## Luggage

- 1 duffle bag or soft suitcase - the duffle should be strong and durable, preferably made of nylon about 31" x 15". With full-length zipper and handles.
- 1 small padlock for each duffle or soft suitcase
- 1 daypack (backpack) for camera gear, water bottle, and personal items needed each day
- (optional) 1 small, fold-up bag to carry home purchases

## Clothing

- Comfortable walking shoes or light hiking boots**
- Beach thongs (rubber sandals) for use in bath and toilet facilities at ger camps
- Rain jacket, poncho or water proof windbreaker with hood
- Warm parka or jacket
- Scarf, hat, gloves
- Casual clothes, slacks/skirt and shirt/blouse for city wear
- 2-3 short sleeved shirts or t-shirts
- 1-2 long-sleeved shirts or turtlenecks
- Sweater, sweatshirt, or pile jacket
- 2 pairs of lightweight, long pants, or skirts (quick drying)
- Socks, underwear, sleepwear
- 1-2 bandanas

## Equipment

- Sleeping bag, if camping
- Sleep bag liner
  - Stuff sacks or plastic bags to compartmentalize items within duffle
- Sunglasses with case
- Spare glasses
- Plastic water bottle, 1 quart or 1 liter capacity
- Pocketknife
- Personal toiletries, including biodegradable soap
- Towel and washcloth, thin, quick drying
- 1 small flashlight or headlight with extra batteries
- Travel alarm clock with extra batteries
- Personal first aid and medical supplies, sunscreen, feminine products

## Optional Items

- Camera gear, film, binoculars
- Reading and writing material, sewing and repair kit
- Money belt
- Snacks-bring whatever you love, although food throughout the food is very tasty

## **EQUIPMENT LIST FOR TREKKING GROUPS**

First aid kit

Toilet tent and toilet seat, 2 if the group is large

Enough toilet paper for the group

Shower tent, for longer treks, buckets for warm water or heating system

Dinning tent, in case it rains or for bad weather

Dinning table

Dinning chairs

Water basin with purified water (with iodine) for clients to wash before meals

Hand soap for clients to wash hands and towel to dry after washing before meals

Lights for evening meals

Cooking shelter, if it rains

Cooking utensils, pots, pans, serving spoons, cutting boards, and cutting knives

Eating utensils, plates, bowls, cups, spoons, forks, and knives for each client

2 large water containers, 1 for drinking water and 1 for washing water

Water purification system, iodine and neutralizer or water filters

Basins for clients to wash up

Dish washing basins and dish washing liquid

Strainers for food particles in plates and cooking pots

Plastic garbage bags to pack out litter and garbage

Whistle

2-way radio

Maps & Compass

GPS

Sat phone

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