IV & V KITCHEN & CAMP SETUP

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Gentle Use Guidelines

- Gentle Use Guidelines are only <u>Guide Lines</u>. What is appropriate in one area may not necessarily be so in another.
- Some guidelines are part of regulations, which you can be sited for (check with agency).
- Use common sense!
- Follow the Golden Rule in relations with other users
- Respect everyone's rights to enjoy the backcountry as you do (Others do not always enjoy loud colors and noises, read the situation)

A. Gentle on the Campsite

- Selection of a Campsite
 - a. This is the most important choice you will make.
 - b. The campsite you choose determines many other actions you will take.
 - c. Durability of the ground surface is the most important consideration.
 Choose a site which naturally lacks vegetation, such as gravely or sandy soils. * Durable = dry, exposed bedrock, or forest duff (without seedlings)
 - d. The kitchen is the place where people tend to congregate, put it in the most resilient location possible
 - e. Avoid places where impact is just beginning
- 2. General Rules for campsites: (apply to hardened and/or pristine sites)
 - a. Camp at least 100 feet from any body of water (45 paces)
 - Keep soap out of lakes and streams (biodegradable soap ONLY breaks down in soil)
 - c. Dig a hole and bury all human waste.
 - BCHC recommends a minimum of 100 feet from water and 100 feet away from camp.

- Basic sanitation keeps waste, diseases, and pollutants out of your drinking water
- d. Where wood is scarce, conserve firewood by keeping fires small and using propane or gasoline stoves,
- e. When leaving: Scatter manure, fill in pawed holes, pack-out all trash
- f. Keep manure out of camps
- g. Leave the site as natural as possible.

B. Hardened Site vs. Pristine Site or Best of Both Worlds

Hardened Sites (In Popular Areas - Concentrate Use)

- Objective: is to confine your impact to areas that already show use and avoid enlarging the area of disturbance and reducing unnecessary campsites
- 2. A hardened site concentrates impact to less area " a threshold is reached where the regenerative power of the vegetation cannot keep pace with the amount of trampling. Once this threshold is reached the site will deteriorate more rapidly with continued use. This results in an established campsite."
- Evidence of man having been here before, (acceptable to some but not to others) loss of vegetative cover, leveled tent areas, fire rings, social trails to other sites and from other sites, logs for seating.
- 4. BCHC guideline "if possible, camp in a formerly used site well off the trail (100 ft).

Pristine Site (in Remote Areas - Spread Use)

- 1. <u>Objective</u>: is to minimize the number of times any part of the site is trampled.
- 2. Avoid repetitive traffic routes (Do Not travel single file)
- 3. Move Camp each night.
- 4. When leaving: scatter extra firewood, brush out footprints, and rake matted grass areas

- 5. Remote or Pristine areas are quite fragile, long-lasting damage can be created easily
- 6. Camping in a pristine area is a choice and much more work on your part.

Best of Both Worlds

Following these guidelines for campsite selection allows everyone to make their own choices. Most of us are somewhere in between the extremes of social events versus solitude experience. We need to be open minded to all people (user groups) who enjoy the wilderness. We need to share our skills and knowledge and be good stewards of the land. Some "backpackers" do not want to camp in popular areas. Some "stock users" are not Wiling to move their camp every night. Backpackers have a lot of good ideas and have brought a lot of technology to the stock user: light weight nylon tents and sleeping bags, stoves, lanterns, tables and chairs. Stock users have the ability to carry equipment for trail maintenance, emergency and fire needs, and get those of us who are not as young or strong as we use to be, to where we love to go. Both worlds have much to offer.

C. Gentle Reminders

- a. Gentle on the Forage
 - Camp only where there is ample forage for your animals
 - Avoid wet or boggy meadows
 - Limit your stay in order to leave feed for the next stock user

b. Gentle Animal Control

- Tying to trees can cause damage and injure.
- Tie for a few minutes while packing and unpacking or stopping on the trail
- Choose trees which are 8" or larger
- When you must restrain stock in camp overnight, take every precaution to minimize your impact on the soil, plants and trees.
- Select a highline area using the same criteria used for selecting a campsite
- Choose durable surfaces away from water and trails
- Use tree saver straps

c. In Camp

- Unload mules and string picket line away from the camp
- In a rocky place if possible, void of vegetation
- Use tree saver straps on trees

- Set up camp 100 to 200 feet away from water in bare soil if possible to prevent damage to vegetation
- Fires in fire ring should be kept small
- Use only dead limb wood 3", or less in diameter
- In a camp that did not have a fire ring, dismantle and scatter rocks before leaving.
- Privy For larger groups, dig a pit or trench well away from camp.
- In smaller groups, human waste can be disposed of by digging a cat hole 6 8 inches deep. After use, fill the hole with loose soil and replace the sod.
- Don't wash or bathe in creek water. Use a basin then properly dispose of gray water.
- Keep camp and kitchen area clean and uncluttered.
- Garbage should be put in plastic sacks and hauled out.
- Don't leave campfires unattended. Make sure they are dead out before leaving camp. * In some areas, campfires are not allowed, be sure you check this regulation
- At night, make sure all access to food, grain, and garbage is secure to prevent bears, other critters of the night, or livestock from coming in and tearing up the camp

d. Breaking Camp

- Fill in privy with dirt and cover with rocks
- Pick up all trash around the campsite and haul it out
- Make sure fire is out before leaving
- Fill and level all stock paw marks and cover with needles and duff Scatter manure
- Dismantle any temporary structures created.
- Take a walk through before you leave. There should be minimum evidence of your having camped there. Leave the camp in better shape than you found it.

HORSES MULES AND GOOD CAMPING RULES

Sequoia National Forest

TELLIN' IT STRAIGHT

To some folks - getting away from it all means loading up their stock and heading deep into the heart of the High Sierra. Traveling with a favorite horse and/or mule may be a pleasurable experience and in a way, revives in us an historical link with the past. Whether for an hour, a day, a week, or a month, that experience can be a great source of enjoyment, many lasting memories and friendships.

Wilderness travel was once unrestricted with few regulations. But with the increased use and popularity of the Sequoia, not only by stock users but other recreationists as well, problems arose. These problems are directly associated with the resources. Each group of backcountry users, whether riders or hikers, needs to be responsible for their actions. "MINIMUM IMPACT" is the current term that relates backcountry use to resource protection. By taking care to protect the basic resources and abide by local rules and regulations, stock users can help to insure the continued use of their horses and mules in Sierra-Nevada wildernesses.

The Forest Service, USDA, has the twofold problem of protecting the natural environment while providing recreation opportunities in the same area. Here are some guidelines and suggestions for minimizing the impact.

This handout does not cover all situations but is a refresher for people experienced with stork and as a guide for newcomers.

GETIN' IT TOGETHER

Before you hitch up the trailer, pack up your gear, and hightail it out of town for your favorite trailhead, take a few days to plan things out. If you do, chances are, your trip will run smoother once you hit the trail.

The first item if you're going into a wilderness, is a Visitor's Permit. No areas on the Sequoia are now on a quota system but advance planning is a must if you want to assure your entry on most Forests on your preferred date. Contact the local Ranger Station as early as possible about how they issue their permits. Also, check on any special regulations in effect. Visitor Permits are always required.

When planning a trip with stock, it is especially important to know the trails maintained for horses and mules, and those for hiking only. You can avoid undue

stress and strain, lost time, and frustration by knowing ahead of time, routes not to take.

Several wildernesses in the Sierra Nevada now have their own topographical maps. Since most of the USGS topo maps are old, they may no longer have current road and trail information. New maps are a great aid in trip planning!

A phone call ahead of time to the local Ranger Station will help in selecting your route.

Unconditioned stock can create undue stress and stain. Saddle and cinch sores, stone bruises, fatigue, and dehydration can easily spoil your trip. To avoid problems, condition your stock before heading out.

Train the stock with different methods of restraint (e.g. hobbles, hitchlines, bells, etc.). Be sure also to plan on packing feed. Early grazing can cause serious damage to meadow grasses. As the summer progresses, and the ground becomes more firm, you can turn stock out for several hours each day. However, to avoid overgrazing, pack in supplemental feed. By mid-September the nutritional value of meadow grasses is quite low. Hay pellets, cubes, and/or grain are best for pack stock in the backcountry. These feeds supply the necessary bulk and nutrients. Accustom your stock with these before leaving home, they will eat heartily and fare better! Again, check with the Ranger Station beforehand for general grazing conditions.

ON THE TRAIL

Consideration of the resources takes everyone's effort. When someone cuts across a switchback, it begins a path for soil erosion and may encourage others to follow. Repairing switchbacks is costly and very time consuming. Please keep your stock on the trails.

Selecting a good wilderness horse camp takes a certain 'Knack". Locate your campsite 100 feet or more from lakes, streams, and trails whenever possible. Poor judgment in the past caused deep depressions by stock bed to and pawing at the base of individual trees and exposing roots. To avoid this, select a site where a highline, i.e. lash or halter rope tied between two trees, will be on firm dry ground. This preferred method of overnight control avoids problems of soil disturbance and root damage. A sturdy set of hobbles is also useful. Horses soon learn to move quite freely, so a close watch may be necessary!

The High Sierra has numerous meadows suitable for grazing. Take care to avoid overuse, excessive camping, and polluting of lakes and streams. As mentioned before, supplemental feeds packed in will reduce impact on these sensitive areas.

Evening campfires are an important enjoyment of any wilderness experience. Unfortunately, firewood is scarce in some areas. To minimize your impact, keep fires small and use existing fire rings at least 100 feet from lakes and streams. Several fire rings in a small area detract from the feeling of solitude. For cooking purposes carry a portable stove. Many small, lightweight types are available at reasonable cost. Be sure to check on any campfire restrictions.

PACKIN'UP AND HEADIN' HOME.

Once you and your stock are ready to "move out", take a few minutes to naturalize your camp. Scatter manure, refill holes dug by stock, and remove any trace left by others (rails, wire, rope, or deer racks). REMEMBER! PACK OUT EVERYTHING YOU PACK IN. This includes all cans, bottles, aluminum foil and other trash you can't burn. The old tradition of burying garbage NO LONGER APPLIES, PACK IT OUT! Take pride in how well you eliminate any visible trace of your camp.

YOUR BUSINESS

Take time to make Fire Prevention your business, too. IT PAYS. Help Smokey by:

- Making sure your campfire is dead out;
- Smoking only in cleared areas;
- Knowing local fire restrictions; and,
- Following common sense fire prevention rules.

Your comments, suggestions or ideas about improving management or conditions in the Sequoia are welcome.

Have a good trip, travel safely! The Sequoia National Forest

THANK YOU FOR CAMPING WITHOUT LEAVING A TRACE!

How To Safely Build And Put Out A Campfire

Sequoia National Forest

PREPARE YOUR SITE

Find a level spot away from overhanging branches, brush, or dry grass. Keep away from the base of a hill. Escaped fires travel uphill fast.

With a shovel, clear a circle 10 feet wide down to bare dirt. Hollow out a fire pit 6 inches deep and 2 feet across at the center of the cleared circle. Pile the dirt around the fire pit. Keep your fire small.

Use existing fire rings where available to reduce the number of disturbed areas and damage to soil cover and vegetation.

BEWARE OF THE DUFF

Duff is the layer of decomposing wood material that lies on the forest floor between pine needles and bare dirt. Many times it may look like dirt, but it isn't. Duff bums dirt doesn't. It allows even the smallest ember to smolder for days, most times underground and unnoticed, until enough heat is built up to produce flames. Don't let the duff fool you!

ATTEND YOUR FIRE

Never leave your campfire unattended, even for a few minutes or If you take a nap.

DROWN THE FIRE

Drown your campfire 1/2 hour before you break camp. Use your shovel to separate the burning pieces of wood in the fire pit.

STIR AND MIX

Stir and mix water with the ashes until the fire is out. Don't try to bury the fire under dirt. It can smolder for hours and then escape.

DROWN BRIQUETTES

Charcoal briquettes should be extinguished by dumping into a pail of water, mixing thoroughly, and then placed in the fire pit.

FEEL THE ASHES

Feel the ashes to be sure the fire is out. Before you leave the campsite, check the area within 50 feet of-the fire for sparks or embers that may have escaped.

IT CAN COST YOU

You will be held liable for the cost of suppression and damages caused by any wildfire that starts through negligence on your part.

COME PREPARED

Obtain your campfire permit, bring your shovel, and a pail for Water.

Wilderness Facts: How Long Will It Last?

How long will it last if you leave it behind?

Orange peel: 3 months

Paper container: 5 months

Wool socks: 1-5 years

Milk carton: 5 Years

Plastic bag: 20 years

Nylon fabric: 3040 years

Plastic bottle 50-50 years

Wilderness Facts:

- Wilderness Is managed by the U.S. Forest Service, the National Park Service, The Fish and Wildlife Service, and the bureau of Land Management.
- Nationwide, there are 500 Wildernesses totaling 95 million acres, or 4 percent of all U.S. land.
- The largest Wilderness is the 8.7 million-acre Wrangell-St. Elias National Park in Alaska.
- The largest Wilderness outside of Alaska is the 2.3 million-acre Frank Church-River of No Return Wilderness in Idaho
- The smallest Wilderness is the 5-acre Oregon Islands,
- Ten percent (4.2 million acres) of Washington State is Wilderness.

TREAD LIGHTLY HERE'S HOW

The wilderness is a magic place of fragile beauty and peaceful serenity. For thousands of years, it was unscarred by human tread. We want to keep it that way.

Commit yourself to minimum trace camping.

- Travel and camp in small groups.
- Plan your trip with care know where and when and obtain proper maps
- Check with the appropriate agency for rules and regulations i.e. fire and group size restrictions feed conditions, water and fuel supplies.
- Know the abilities and limitations of your stock.
- Use hobbles and highlines with tree savers.
- Avoid damaging stream banks when watering.
- Avoid cutting switchbacks.
- Choose your campsite with care away from trails and shorelines.
- Use processed feed for stock.
- If it doesn't burn, pack it out i.e. foil, cans, cigarette butts, orange peels, etc.
- Use only dead or down wood for fires.
- Never cut live trees for firewood or lean-tos.
- Repair the trail when you call.
- Keep a neat and clean camp so others won't have to look at your mess.
- Bury human waste 6-8 inches deep and 200 feet from water spread horse manure.
- Make sure your fire is dead and remove evidence of fire ring.
- Leave the dog and the boom box at home.
- When the trip is done, report hazards or poor trial conditions to tile local ranger.

If you respect the wilderness and other user groups, we will be able to enjoy the wilderness for generation to come - or not - your choice!!

Happy Trails!

Gary Culler
Education Chairman - Tread Lightly Crew
Backcountry Horsemen of Washington

Pack Trip Meals Planning And Preparation By Ann Lange

HOW TO BEGIN?

Basic questions, which need to be answered:

- 1. How many Pack animals?
- 2. How many days?
- 3. How many people?

BASIC COOKING EQUIPMENT

UTENSILS

- 2 Skillets
- 3 Pots or combination aluminum set
- 1 Coffee pot
- 1 Grill or grate
- 1 Cutting board
- 2 Mixing bowls
- 1 Dutch oven (optional)
- 3 Dish pans

SILVERWARE, DISHES AND MISCELLANEOUS IN CANVAS WRAPPER

- Plates
- Cups
- Forks, knives & spoons
- 1-large serving spoons
- 1 Spatula
- 1 Large cooking fork

MISCELLANEOUS

- Plastic Zip Lock bags
- Plastic trash liners
- Paper towels
- Tang
- Matches
- Small cooking oil/butter or margarine

- Spices and condiments mustard, catsup & mayo
- Other tools as needed

STOVE

- Propane stove
- Propane canisters or propane tank
- MISCELLANEOUS
- Dishtowels
- Dishrags
- Scouring pads
- 2 Potholders
- 1 Can opener
- 1 Sharp knife in leather case
- Dish soap
- Small Clorox bleach
- Aluminum foil
- Coffee, tea, and Kool-Aide Salsa

FOOD

HOW MANY DAYS? HOW MANY PEOPLE?

First plan individual meals. Then plan food for each meal.

Example - Thursday evening through Sunday noon (4 Days)

- 3 Dinners
- 3 Breakfasts
- 3 Lunches

SIMPLE MENUS FOR A 4-DAY PACK TRIP

Thursday Dinner

Spaghetti Garlic bread

Green Salad

Pre-cooked cake or cobbler

For dinner on the evening you come in, you want something easy and quick to fix. HANDY HINTS Pre-cook spaghetti sauce and seat in bags. Prepare garlic bread and wrap in Foil.

Have lettuce on top of packs so easy to find. Pre-cooked cake or cobbler for desert. 30 minutes until meal is ready maximum.

Friday Breakfast *(We usually prepare hearty breakfasts)

Sausage & eggs
Hash browns/onions
Toast with butter & jelly
Tang or fresh fruit

Friday Lunch

Beef chicken or lunch meat sandwiches Cheese slices with apples or raisins Granola bars

Friday Dinner

Stew (meat pre-cooked)
Salad
Bread and butter
Desert - cobbler or pudding

Saturday Breakfast

Biscuits and gravy Bacon/sausage Scrambled eggs

Saturday Lunch (In camp)

Soup and sandwich Crackers & cheese Apples Trail mix or granola bars

Saturday Dinner

Tri Tip BBQ (Left-overs used for Sunday lunch)

Beans Salsa Salad

Dessert - zucchini bread and sauce

 Handy Hint: If you don't like beans, do a veggie pack. Carrots, potatoes, and onions wrapped in aluminum foil and cooked over coals. Sunday - Big Breakfast or Quick Breakfast

Sheepherder breakfast Instant oatmeal, milk & brown sugar

Salsa

Fresh fruit or tang

Toast & jelly

Sunday Lunch

Pack out burritos or sandwiches

Burritos: Chop left over Tri Tip

Refried beans and cheese (from left over beans or canned)

Onions Salsa Can also put in left over Sheepherder breakfast Wrap in foil and bag 2 per person. You want to use up all the leftovers you can here

HANDY HINTS

Plan meals and take easy to cook foods with disposable containers. Pre cook and freeze as much as you can = lighter weight

Examples:

- Spaghetti sauce
- Stew Pre cook meat, onions and spices only
- Beans add potatoes, carrots, canned tomatoes, etc. at camp

For cold box

Dry ice on bottom (10 lbs) Cover with newspaper and place meats and other perishables on top. They will freeze in this box.

Place meat in cryo packs if possible or get it as cold as you can before you leave. Wrap it good (not in plastic) and keep it in with ice.

Layer meals so the ones you will use first are closest to the top of the cold box. You want to open the cold boxes as little as possible during the day.

Shelf Milk and dried milk taste almost like fresh. Good for gravy, to drink, for pudding, etc.

Always take a little extra in case you have more people for dinner. I always take a small box of rice. It can be added to several things to expand a meal.

- Take extra oatmeal etc.
- Take a few extra dried soups, granola bars, raisins.
- Take an extra box of Jell-O. It is easy to make a Jell-O/fruit dessert by mixing and placing it in zip lock bags, in bowl or pan, in stream.

Romaine Lettuce is the best to take on trips. It lasts the longest. Take it out of plastic bag and wrap in newspaper.

Pack eggs in grain. Pack bread or other light stuff on top of eggs.

In general figure 2 eggs per person, or 4 people = 3 breakfasts = 2 dozen eggs 1 - 2 pounds of potatoes per person. 1/4 pound of meat per person for each meal

Hard Basque cheese keeps very well and has a variety of uses. It can be obtained at Smart and Final Food outlet.

Handy fire starters

Whatcha Got? In the pack box By Deborah Pierce Montana BCH, Flathead Club

Handy food items for that pack trip can be found at your local food store at different prices.

Apple sauce, in lunch tubs, comes in 100% fruit by the six pack and averages 25 cents per tub - add to oatmeal, hot cereal or alone with meals. Fruit leather is 100% fruit and 20 cents each in many flavors. By careful reading, there are "no added sugars" - save those calories for something that counts, like M&M's.

A small can of pork and beans, or spaghetti, is an acceptable lunch item for some in place of a sandwich, as is a can of fruit and two spoons of peanut butter. There is no rule in the book that one has to have bread and lunch meat.

Costco, just to mention one food outlet, has individually wrapped cookies by the case. They stay fresh and travel better than loose cookies. They also have fat-free Newtons, corn nuts, no fat granola bars, 100% juice cartons and a big selection of sweets and nuts in small packages.

Eye those containers of syrup, sugar, flour, coffee, and mustard. How much will you need for just three days or five? Whenever possible, reduce amounts into smaller containers. Mustard squeeze bottles with tight lids work well. Even jelly will squirt nicely from one of these (but not jam).

Good morning! One big pot of boiling water can make quick oats and fruit, and your nonfat powder milk with huckleberries. Make them by the bowl. Tea or coffee bags, decaf or full lead. Hot chocolate, cream of wheat, grits, 7-grain, etc. You'll have a quick cleanup with the remaining hot water, and you'll be slapping leather before sunrise.

Pre-cooked bacon before a trip. Yuck - wouldn't that have been a mess in camp and a bear and insect attractant. There will still be enough fat to grease the pan when it is reheated. Bacon bits left? Toss in with instant mashed potatoes, on the backed beans, or on the veggies.

Jim Guppy serves a dandy breakfast at hunting camp. Toast bread or sourdough English muffins in a dry pan. In a separate skillet scramble eggs, bacon bits and pepper or Tabasco. Heap on bread, add a slice of cheese (make mine no fat please), cover with bread and consume. One pan and one turner to cleanup.

I select items based on their lower calories, salt, fat, or sugar content whenever possible. Most packaged items are extremely high in salt and sugar. Weight of items vs. taste and general overall nutrition is always a consideration. Most important is who's in the wilderness to cook or hang their food in trees?

Shelf life is a concern with summer heat. For longer trips, think ahead and plan to eat fresh first, packaged last. Cabbage, carrots, onions, potatoes, and apples store and pack well as does celery, cauliflower, and broccoli. Chop up a relish selection and enjoy.

Dutch Oven Cooking High Sierra Style

By Alice Kampen & Rosemary Reeder BCH High Sierra Unit

Hello and Welcome to the Rendezvous Demonstration, Dutch oven Cooking High Sierra Style. We're Rosemary Reeder and Alice Kampen, were excited to be here today to share about Dutch oven cooking. If you are a new Dutch oven cook, we hope we can give you a few tips. If you are a seasoned Dutch oven cook, maybe you can throw a few our way! In no way do we claim to be professional cooks, but we love going to the backcountry, enjoy cooking, and our families like to eat!

As with our mules, horses and kids, the way to get the best results from your Dutch oven is to spend some time with it. Cook dinner on Saturday night. Invite a friend - if they don't cook in a Dutch oven they will want to by the time the night is over. There is just something about gathering around an open fire watching dinner cook. For fun we gather about once a month to cook in our ovens at home. It started as a small circle of Dutch oven lovers, but the circle grows all the time. We all try out new recipes and different menus on each other. Just like heading for the high country, Dutch oven cooking is an adventure, but once you get the bug you'll go back time and time again.

In the following pages, we have a few tips regarding selecting, caring for, and cooking in your Dutch oven. While there are suggestions pertaining to cooking in a cast oven, for packing into the backcountry we prefer an aluminum oven. This is based mainly on the considerable weight difference between cast and aluminum.

DUTCH OVEN COOKING

Dutch oven cooking is fun and easy!! Almost anything made at home in your own kitchen can be duplicated in a Dutch oven. Whether you are cooking in your own back yard or in the backcountry, there is nothing better than "black pot" cooking!

As with all parts of planning your backcountry trip, you must be prepared to cook in your Dutch oven. It is important to know about fire restrictions in the area you're heading for and what kind of wood source is expected (see page 18).

WHAT YOUR DUTCH OVEN CAN DO

Cooking techniques such as roasting, baking, simmering, stewing, frying, boiling, steaming, and many others are easily done on the campfire with only a single utensil -the Dutch oven. Think of the possibilities, delicious fresh baked bread that will rise up and lift the lid, cobblers made from berries picked fresh at the campsite, stews, quiches that melt in your mouth, Cornish game hens roasted to perfection, and imagine a chocolate cake a foot in diameter. These and many, many more are very possible and sometimes easier than they are at home.

All recipes use one of two Dutch oven techniques, cooking with your Dutch oven or cooking in it. The first is when the food is place directly in the bottom of the Dutch oven. In the second method, food is place in a second dish and this dish is then place on to a trivet in the bottom of the Dutch oven. The reason for the trivet is to elevate the dish above the bottom of the oven to prevent burning. The lid will also double as a griddle by turning it upside down and setting it

CHOOSING A DUTCH OVEN

There are two basic styles of Dutch ovens, aluminum and cast. Die-hard Dutch oven cooks will always tell you that nothing cooks like cast. In some cases this may be true, but for those headed for the backcountry, nothing packs like aluminum. A cast oven can weigh as much as 18 pounds or more. Aluminum ovens average 6 ½ to 7 pounds. Aluminum is also easier to clean and maintain. On the down side aluminum tends to heat faster cutting down on preheating time, but it will not retain the heat very long after the coals are removed. Also because aluminum reflects more heat than cast iron, more coals will be required to reach and maintain a set temperature.

Whether you buy a cast or aluminum oven some things to look for are:

- ✓ Only buy a Dutch oven with legs. (Except in the case of a 10" aluminum, made to nest in a 12"). Some are manufactured with flat bottoms and are difficult to use. The three legs should be cleanly attached to the bottom of the oven, not bent or broken off.
- Check the fit of the lid. It should lie flush with the lip of the oven all the way around the pot.
- ✓ Check the thickness of the metal, especially around the rim. Inconsistencies can cause hot or cold spots and could cause the pot to warp or crack.
- ✓ Make sure the lid has a loop handle, which must be attached to the center of the lid.
- ✓ Check the bail (the wire handle) attached to the oven itself. It
 should be easily moved and strong enough to use for carrying or
 hanging a heavy pot full of stew without difficulty.

Another consideration is the size of the oven. Dutch ovens range in size from 5 to 16 inches in diameter. The most commonly used are 10-inch, 12-inch, and 14-inch ovens. The large size of course will feed more people but are sometimes difficult to handle. If you can only buy one oven, choose a 12-inch and add the 10-inch later.



DUTCH OVEN SIZE	OVEN CAPACITY	TYPES OF DISHES	# PERSONS SERVED
5"	1 Pint	Any	1-2
8"	2 Quarts	Vegetable Dishes	2-4
10"	4 Quarts	Beans, Rolls & Cobblers; Testing Recipes	4-7
12"	6 Quarts	Main & Side Dishes, Rolls & Deserts	12-14
12" Deep	8 Quarts	Turkeys, Hens, Hams, Standing Rib Roasts	16-20
14"	8 Quarts	Main & Side Dishes, Rolls, Potatoes & Deserts	16-20
14" Deep	10 Quarts	Turkeys, Hens, Hams, Standing Rib Roasts	22-28
16"	12 Quarts	Anything For a Large Group	22-28

PREPARING YOUR OVEN

The only way to successfully cook in a Dutch oven is to properly season it. For Aluminum, your pretreatment is simply washing well with soap and water. Some aluminum ovens are shipped with a protective coating and simple washing will remove it. Since aluminum doesn't rust, no further protection is required. For a cast oven seasoning is somewhat more time consuming.

- I.Warm the oven and peel off any labels.
- II. Wash with a mild soap, rinse and dry completely.
- III.Grease inside and out (pot, legs, and lid) with olive oil or vegetable oil. Do not use lard or animal products, (as they could spoil or turn rancid,) or spray coating.
- IV.Place upside down on an oven rack, with lid separate, and put aluminum foil under to catch any excess oil.

V.Bake 300-350 degree oven for at lease 1 hour. It will probably smoke. It is possible to do this outside on a gas grill.

VI.Cool the oven and store in a dry spot.

If you use too much oil while seasoning your oven, it will become very apparent the next time you take out the oven. If your oven smells a little rancid it is easy to fix, just heat it up in your kitchen oven or over some coals and wipe out the excess oil with a paper towel.

SOME OTHER THINGS YOU WILL NEED

There are few items you will need for cooking in your Dutch oven. When heading for the backcountry we only take the absolute essentials.

- ✓ A very important tool is a lid hook or lid lifter. They are available in many forms from the spring-loaded kind to a simple hook. Find what works well for you. (A pair of fencing pliers will do the job if your lifter gets left at trailhead!)
- ✓ A small shovel is also a necessity for shoveling out coals. The small gardening variety or a child's shovel work well. It is possible to use the old Army-issue folding shovel, but those handles tend to get a little short when shoveling coals.
- ✓ A pair of leather gloves or oven mitts can save your hands when using those short handled shovels.
- ✓ A fire blanket something new' to us but seems to be a great ideapack a piece of the fire cover forest fire fighters use. Lay the blanket down in a clear spot, cover with a layer of sand and go ahead and cook. When done cooking douse your fire well and stir, sprinkle the cooled ashes and sand away from your campsite or better yet bury them. There should be no trace of your cook fire. (Please see attached for more helpful fire building tips.)

Some other things that are helpful but that we don't usually pack are:

- ✓ Briquette starter or briquette tower-available in most hardware stores.
- ✓ Lid stand something to put the lid on when working in the pot. This can double as a serving hot pad to protect your table or counter tops.
- ✓ A cooking table to hold your ovens while cooking, the taller the table the shorter the distance you have to lift your oven. A 55-gallon drum cut in half or old BBQ fire pan with legs will also work.

TEMPERATURE

Heat is the hardest thing to master when learning to cook in a Dutch oven. But here are few things to remember:

- ✓ Start with a moderate temperature. You can always add more heat!
- ✓ When camping we always use wood coals. It is important to remember that the flame will be much hotter than the coals. Avoid direct flames on your Dutch oven or turn the oven often. Wood coals will not retain the heat that a briquette will so you will need to pay close attention to how your food is cooking.
- ✓ If using briquettes, a high quality is recommended. They usually light easier and tend to burn longer. Briquettes will last for about an hour and will need to be replenished if longer cooking times are required.
- ✓ In all cooking situations you will need to take into consideration the weather conditions in adjusting your needed heat and cooking time.
- ✓ To figure the amount of coals or briquettes needed a good general rule of thumb is take the Dutch oven size, for example a 12-inch. Add three more briquettes to the top for (15), and subtract three from the bottom for (9).

Heat placement is an important factor also, some tips to remember:

- ✓ Stews, soups, chili, and other liquid dishes require more heat on the bottoms than the top. General rule for stewing: Place 1/3 coals on top and 2/3 on bottom.
- ✓ Meat, potatoes, beans, vegetables, and cobblers require even distribution of heat on top and bottom.
- ✓ Cakes, breads, biscuits, and cookies require most of the heat on top and little heat on the bottom. General rule for baking: place 2/3 coals on top and 1/3 on bottoms.
- ✓ Each briquette adds between 10 & 20 degrees of heat.
- ✓ Place the required # of briquettes under the oven bottom in a circular pattern so they are at least ½ " inside the oven edge. Arrange briquettes on top in a checkerboard pattern.
- ✓ To minimize hot spots during cooking, get into the habit of turning your oven a ¼ turn and turning your lid a ¼ turn in the opposite direction every 10 to 15 minutes.
- ✓ A good source for more Dutch oven info is International Dutch Oven Society, IDOS, www.idos.com, 41 East 400 North # 210 Logan, Utah 84321