# **Dutch Ovens**



One of the best pieces of advice I can offer anyone looking to purchase their first Dutch oven is to select an oven that is well made. The walls of the oven should be the same thickness all the way around. Inspect the oven's bail. it should be made of sturdy heavy gage wire and be securely attached to molded, NOT riveted, tangs on the side of the oven. Rivets can break off under a heavy load, such as when the oven is full of food. Make sure the bail is long

enough that it can be lowered around one side of the oven without hanging on the lid. The bail should also stand up at a 45° angle on the opposite side which will keep the bail from getting hot, and will also offer easier access to it when positioning the oven or removing it from heat.

Check the Dutch oven lid to make sure it fits tight. It should lie flush with the lip of the oven all the way around. This is to ensure that the steam created inside the oven does not escape. Make sure the lid handle is a loop attached to the lid on both ends with a hollow center so that it can be easily hooked by a lid lifter. Avoid ovens that have a molded solid tab on the lid for a handle because they are hard to lift and manage when they are loaded with coals on top.

There are two basic types of Dutch ovens. The ovens I like to use are generally made of heavy cast iron, have three short legs on the bottom, and a tight fitting lid with a lip or ridge around the outer edge for holding coals and for keeping ash from falling into the food. These ovens are commonly referred to as "Camp" or "Outdoor" Dutch ovens. The second type of ovens are also generally made of heavy cast iron, have a flat bottom with no legs, and have a highly domed basting lid without an outer rim. These ovens are commonly referred to as "Bean Pots" or "Kitchen" ovens. These ovens can be used with briquettes, but their flat bottom is better suited for use on a stove top or in your kitchen oven.

When selecting a "Camp" or "Outdoor" Dutch oven pay particular attention to the legs. Legs maintain the height of the oven above ground allowing air to flow around the coals beneath while cooking. Avoid ovens with short stubby legs or they may sit directly on top of the coals. Also, pay attention to the thickness of the leg where it attaches to the bottom of the oven. Some cheaper ovens have very skinny legs which can punch through the bottom of the oven when much weight is placed on them. I watched this happen at a competition once when someone stacked too many ovens on top of each other and the bottom oven collapsed!

Something else to consider when selecting a Dutch oven is the roughness of the cast metal. Some people recommend purchasing ovens with a smooth cast because they feel food won't stick to it as easily. I on the other hand have found that a rougher surface works out better in the long run. The rougher surface offers more surface area for oil to adhere to when "seasoning" the oven. As the oil builds up and hardens with cooking use it creates a very smooth surface to cook on. I have had several ovens with smooth casts "peel" when I cleaned them because the protective coating had nothing to adhere itself to. I also have had ovens that retained a nice shiny gray spot on the inside bottom because the surface was so smooth the oil could not get into the pores of the metal.

Dutch ovens are manufactured by many companies today and are available in most cities if you know where to look. Outdoor sporting goods, variety, and farm and ranch stores are your best choices. I recommend buying **Lodge** Dutch ovens for regular cooking use, and **MACA** Dutch ovens when cooking for larger groups. Lodge Dutch ovens in my opinion are of better quality than some others available, but they do come at an increased price. Remember, nothing worthwhile in life comes free. MACA Dutch ovens have a thicker cast and are deeper than the Lodge ovens so they are much heavier and a bit more costly. MACA Dutch ovens can also be custom cast with your name, scout troop number, etc... on the lid.

## Selecting The Right Dutch Oven

With so many sizes and shapes of Dutch ovens to pick and choose from, selecting the right oven is a big key to cooking great food. Shorter standard ovens spread heat to the center of the oven faster than deeper ovens so they are good for cooking foods that need higher temperatures. Deep Dutch ovens on the other hand are ideal for cooking foods at lower temperatures or where you want to control the amount of heat on top of the oven for things such as rolls and bread where you want even browning. The oven size in inches (diameter and depth) will determine how much room you have for your food.

	Sizes And Capacities Of Lodge Dutch Ovens					
Oven Size	Oven Capacity	Depth	Weight	Types Of Dishes		
8"	2 Quarts	3"	11 lbs.	Side dishes, vegetables, desserts, and sauces. Ideal when cooking for 2 or 3 people.		
10"	4 Quarts	3 1⁄2"	15 lbs.	Side dishes, vegetables, beans, small roasts, desserts, and sauces.		
12"	6 Quarts	3 ¾"	20 lbs.	Roasts, poultry, fish, stews, potatoes, beans, rolls, breads, and desserts.		
12" D	8 Quarts	5"	23 lbs.	Standing rib roasts, hams, whole chickens, stews, potatoes, beans, rolls, and breads.		
14"	8 Quarts	3 ¾"	26 lbs.	Larger roasts, poultry, stews, potatoes, rolls, breads, and desserts.		
14" D	10 Quarts	4 1⁄2"	28 lbs.	Standing rib roasts, hams, hens, stews, potatoes, rolls, and breads.		
16"	12 Quarts	3 ¾"	32 lbs.	Large quantities of meat, stews, potatoes, rolls, breads, and desserts.		

	Sizes And Capacities Of MACA Dutch Ovens					
Oven Size	Oven Capacity	Depth	Weight	Types Of Dishes		
9"	5 Quarts	6"	17 lbs.	Soups and stews, beans, vegetables, and sauces.		
11"	9 Quarts	6 1⁄2"	24 lbs.	Smaller standing rib roasts, small hens, vegetables, stews, potatoes, and beans.		
13"	12 Quarts	6 1⁄2"	41 lbs.	Standing rib roasts, hams, whole chickens, stews, potatoes, and beans.		
15"	18 Quarts	7 1⁄2"	49 lbs.	Small turkeys (up to 15 lbs.), large cuts of meat, stews, and beans.		
17"	28 Quarts	9"	73 lbs.	Larger turkeys (up to 30 lbs.), large quantities of meat, stews.		
22"	49 Quarts	9 1⁄2"	158 lbs.	We call these "drag and drops" because you drag them out of your truck and wherever they drop you cook in them.		

I recommend a 12" Lodge Dutch oven for anyone just starting out. It is a very versatile oven and one that is not overly large. Also, most Dutch oven recipes are written for a 12" oven. A 12" Deep or 14" standard Lodge or 13" MACA Dutch oven would be my next choices.

Cast Iron or Aluminum?

Most people think "Cast Iron" when it comes to Dutch ovens, but they are also manufactured from cast aluminum. Here is a comparison of the two types:

Aluminum is lighter than cast iron. A 12" aluminum oven weighs about 7 pounds as opposed to about 20 pounds for a cast iron oven.

Aluminum is easier to care for. Because it doesn't rust you can wash aluminum ovens in mild soap and water. Cast iron, however, requires protection from rust. Bare cast iron rusts very quickly so it must be "seasoned" to protect the metal. This seasoning is usually done by burning some kind of oil or animal fat into the pores of the metal forming a hard protective barrier. Soap should never be used to clean a seasoned oven because it will dissolve the formed protective barrier and embed itself into the pores of the metal where it will return to taint your next meal.

Aluminum reacts quickly to temperature changes. Aluminum Dutch ovens will heat up much faster than cast iron ovens, but they also cool down much faster after removing them from heat. Aluminum ovens are ideal for cooking foods that need to be cooled down quickly. Cast iron Dutch ovens react more slowly to temperature changes so you don't burn food as easily in them. Cast iron ovens also retain their temperature for quite a while after they have been removed from heat.

Because aluminum reacts quickly to changes in temperature it is much harder to keep at a constant temperature on a windy day. Cast iron, on the other hand, because it retains heat well, fairs better in windy weather.

Aluminum ovens can melt if too much heat is applied to them! The melting point of aluminum cast alloy is around 1200° F. as opposed to cast iron's melting point of over 2000° F. It is possible to reach temperatures of 1200° F. if too many coals are used during cooking, or if the bottom of the Dutch oven is in direct contact with the coals.

When weight is not an issue, I prefer to use a cast iron Dutch oven over an aluminum oven.

# **Dutch Oven Care**

#### Seasoning Your Dutch Oven

Cast iron Dutch ovens, if properly cared for, will last for many generations. Constant and proper Dutch oven care beginning from the day the oven is purchased will keep it in service for many years. All quality ovens are shipped with a protective coating that must be removed prior to seasoning. Removing the protective coating requires a good scrubbing with a little soap, some hot water, steel wool, and a little elbow grease. **This is the only time you will ever use soap on your Dutch oven.** Once the oven has been cleaned, it should be rinsed well, then towel dried and allowed to air dry.

You can use your kitchen oven to season a Dutch oven but just a word of warning, **You will smoke up your house if you season your Dutch ovens indoors**. I recommend using an outdoor gas barbecue in a well ventilated area. Preheat your barbecue or kitchen oven to 375°. After your Dutch oven is dry, place it on the center rack with the lid ajar. Allow it to warm slowly so it is just barely too hot to handle with bare hands. This preheating does two things, it drives any remaining moisture out of the metal and opens the pores of the metal.

**Note:** You can also season a Dutch oven in your fireplace. I installed a cast iron pot hanger to the back wall of my fireplace so I could hang my ovens over the fire. If your chimney flu has a good draw you won't get much grease smoke in your house, however, I still recommend opening a few windows and doors.

Now, using a paper towel or a clean 100% cotton rag, apply a thin layer of cooking oil. I prefer using vegetable oil over peanut and olive oils because the burning point of vegetable oil is lower so it will set up and harden at lower temperatures. Tallow or lard can also be used but they tend to break down over time so are not recommended on ovens that will be stored for long periods of time. Make sure the oil covers every inch of the oven, inside and out and replace it on the center rack, this time upside down with the lid resting on top of the legs. This will keep oil from pooling in the bottom of the oven. Bake the oven for about an hour or so at 375°. This baking hardens the oil into a protective coating over the metal. After baking, allow the Dutch oven to cool slowly. When it is cool enough to handle, apply another thin coating of oil. Repeat the baking and cooling process. When the oven can be handled again apply another thin coating of oil. Do not leave any standing oil in the oven! Standing oil can turn rancid ruining the protective coating you just applied. Allow the oven to cool completely. Now it should have three layers of oil, two baked on and one applied when it was warm. The oven is now ready for use. This seasoning procedure only needs to be done once, unless rust forms or the coating is damaged in storage or use. This baked on coating will darken and eventually turn black with age. This darkening is a sign of a well kept oven and of it's use. The seasoning's purpose is two fold, first and most important, it forms a barrier between moisture in the air and the surface of the metal. This effectively prevents the metal from rusting. The second purpose is to provide a nonstick coating on the inside of the oven. When properly maintained, this coating is as nonstick as most of the commercially applied coatings.

**Note:** Avoid cooking anything with a high acid content such as tomatoes, or a lot of sugar such as cobblers for the first 2 or 3 times after seasoning your oven. The acid and sugars can break down the protective covering before it has a chance to harden properly.

Aluminum Dutch ovens do not require a "seasoning". Most aluminum ovens are shipped with a protective coating and a simple washing with soap and hot water will remove it. Since aluminum doesn't rust, no further protection is required. However, if you season an aluminum oven like you do a cast iron oven, food will not stick in it as often as it would if left untreated.

## **Cleaning Your Dutch Oven**

Dutch oven care starts with the seasoning of the metal, but the second step is to make sure you clean your ovens properly after each use. More often than not, cleaning cast iron Dutch ovens is much easier than scrubbing pots and pans. For cast iron, the cleaning process is in two steps. First, food is removed and second, maintenance of the protective coating. To remove stuck on food, place some warm clean water into the oven and heat until almost boiling. Using a plastic mesh scrubber or coarse sponge and **No Soap**, gently break loose the food and wipe away. After all traces have been removed, rinse with clean warm water. **Soap is not recommended because it will break down the protective covering and will get into the pores of the metal to taint the flavor of your next meal.** After cleaning and rinsing, allow the oven to air dry. Then heat it over the fire just until it is hot to the touch. Apply a thin coating of oil to both the inside and outside of the oven and the top and underside of the lid. Allow the oven to cool completely. If you do not oil the outside of the oven, then with use, the protective barrier will break down and the oven will start to rust. As a suggestion, it is a good idea to keep a scrubber for cast iron and never use it with soap.

For aluminum ovens, the cleaning is the same as for ordinary pots and pans. Use soap and water and scrub them as you would your other pans.

# "Ready To Use" Cast Iron Care

It was inevitable that someone would eventually figure out a way to produce cast iron cookware with the same type of heirloom finish that made your grandmother's cast iron skillet such a prized possession. The manufacturers of these "Ready To Use" cast iron products have taken the work out of having to season your new cast iron skillets and Dutch ovens by seasoning them for you. Lodge, Camp Chef, Cabela's, and Cee Dubs are just a few of the manufacturers and retailers of these fine products. With proper care and maintenance these cast iron utensils will service you well for many generations. I have outlined the proper care instructions for these products below.

- 1) Before using your "Ready To Use" cast iron cookware for the first time simply rinse it out with hot water (do not use soap as it will remove the seasoning). Towel dry the utensil thoroughly.
- 2) Before each time cooking, prepare the cooking surface by wiping it down with vegetable oil or spraying it with non-stick cooking spray.
- 3) After each time cooking, clean your utensil with a stiff brush under hot water (do not use soap) and towel dry thoroughly.
- 4) After the utensil is dry and while still warm from cleaning, wipe all surfaces down lightly with vegetable oil or spray all surfaces lightly with non-stick cooking spray.
- 5) Allow the utensil to cool and then store in a cool, dry place. Do not store pots or ovens with the lid on top to allow for air circulation.
- 6) If you notice a metallic taste or notice signs of rust on your cookware simply follow the steps for Stripping Rusty Or Rancid Dutch Ovens outlined below then follow the steps for Seasoning Your Dutch Oven outlined above.

## **Stripping Rusty Or Rancid Dutch Ovens**

Inevitably there will come a time when you will need to strip and re-season a rusting or rancid Dutch oven. Relax! It's not that difficult. I've found the easiest way to strip an oven is to place it upside down on the bottom rack of a self cleaning oven with the lid placed on top of the legs. Set the oven to self clean for 2 hours and let it be. Allow the oven to cool completely before removing the Dutch oven.

If you don't have a self cleaning oven or would prefer not to heat up your house then you can use an outdoor propane stove to accomplish the same thing. I like to use my Cache Cooker for this because it has a large burner that generates a lot of heat. The secret to successfully stripping an oven over a propane burner is to keep moving the oven around so every surface of the oven has a chance to be diretly over the burner, this also helps prevent warping should the metal become to hot. Light the burner and adjust it to generate a medium blue flame. Place the Dutch oven upside down over the flame and let it slowly heat for 10 minutes or so. Once the oven is hot turn up the burner to it's hottest setting and let the oven heat until it smokes heavily for about 5 minutes then rotate the oven to burn a new surface. Make sure to burn both the inside and the outside of the oven. As the metal burns it will take on a shiny oily look and may look white in some areas which is fine, keep heating the oven until all surfaces inside and out have this look then remove the oven from heat and allow it to cool slowly.

Once the Dutch oven has been burned and allowed to cool the remaining detritus must be removed from the oven surfaces. This is done by scrubbing the oven with a piece of steel wool or a metal scouring pad under hot running water until all surfaces are clean. Once clean, towel dry the oven then allow it to air dry. The Dutch oven is now ready to re-season.

Recently I came across this interesting web page authored by Bill Dickerson entitled Rust Removal By Electrolysis where Bill has documented how to clean rusty metal and cast iron using electricity, water, and a little washing soda. He has included pictures of his setup so you can see how the process works. The setup takes a little time and a few items but the results look fantastic (he's cleaning car parts but rusty Dutch oven's or cast iron pans will clean just as well).

## **Storing Your Dutch Ovens**

It is important when storing your Dutch ovens to keep the lid cracked so that air can circulate into it. This can be accomplished by laying a paper wick, made from a napkin or paper towel folded accordion style, across the rim of the oven leaving a small amount outside, and then setting the lid down on top of it. The wick also acts to draw any moisture out of the oven. If air cannot circulate into the Dutch oven, the oil used to protect it will turn rancid and will permeate the pores of the metal with a sour odor. **DO NOT** cook anything in a rancid oven, you will not be able to stomach the food! A rancid oven must be stripped of its protective coating and then be reseasoned again.

When storing my Dutch ovens I like to put them in a protective cover to keep them from collecting dust, and to keep anything that might brush up against them from getting dirty. The covers also help protect the outside finish on the ovens from being scratched up in transit when camping or transporting ovens.

## A Few Cast Iron No-No's

- 1. Never, and I repeat, **NEVER** allow cast iron to sit in water or allow water to stand in it. It will rust despite a good coating.
- Never use soap on cast iron. The soap will get into the pores of the metal and won't come out very easy, but will return to taint your next meal. If soap is used accidentally, the oven should be reseasoned, including removal of the present coating.
- 3. Do not place an empty cast iron pan or oven over a hot fire. Aluminum and many other metals can tolerate it better but cast iron will crack or warp, ruining the metal.
- 4. Do not get in a hurry to heat cast iron, you will end up with burnt food or a damaged oven or pan. Never put cold liquid into a very hot cast iron pan or oven. They will crack on the spot!

## **Regulating Oven Cooking Temperature**

Regulating cooking temperature is by far the hardest thing to master when learning to cook in a Dutch oven. Hopefully the few tips I have to offer will help you out.

**First and foremost, always use high quality briquettes**. I recommend using Kingsford charcoal. Kingsford is packed tighter than most other brands so it won't pop and spit, and it tends to burn longer than other brands. Avoid using "Match Light" charcoal as it burns hot so it doesn't last as long. Kingsford charcoal will generate good heat for about an hours time. For recipes that take more than an hour to cook, after an hour remove the remaining briquettes and ash from the oven and replenish them with new briquettes. **Note: because the Dutch oven is already hot, you will not need as many briquettes as when you started cooking**. I usually remove 2-3 briquettes from the top and bottom the first time I replenish them.

The general rule of thumb to produce about a 350° heat is to take the size of the Dutch oven in inches, double the number, and use that many total briquettes. So, for a 12" oven you would use 24 briquettes, for a 14" oven you would use 28 briquettes, etc.. Remember this is just a rule of thumb and does not work for all makes of ovens! This rule for instance does not work when cooking with MACA deep Dutch ovens because they are much deeper and they are manufactured with more metal. This will be better explained below.

Generally speaking each briquette will produce about 10° - 15° F. worth of heat on a moderately warm day with no wind. However, do not use these numbers to try and formulate how many briquettes you should use to generate internal oven temperatures. Instead, use the general rule of thumb to calculate the number of briquettes to reach 350° F. and then add or subtract briquettes to reach the temperature you desire. Why shouldn't you use the heat values to determine temperature? The answer is, other factors such as the amount of metal used to manufacture the oven, the size of the oven (volume), and the amount of free airspace inside the oven affect the final internal temperature the oven will reach when using a set number of briquettes. The more metal, volume of food, and internal air space you have to heat up, the more heat will be required to bring your oven to the desired temperature. Other factors such as ambient air temperature, humidity, altitude, and wind all influence how much heat is generated by burning briquettes. Cool air temperatures, high altitudes, shade, and high humidity will decrease the amount of heat generated by briquettes. Hot air temperatures, low altitude, direct sunlight, and wind will increase the amount of heat generated by briquettes. Also note that in windy conditions briquettes will burn faster due to the increased air flow around them, so they will not last as long.

Heat placement around the Dutch oven is crucial to yield the best cooking results. Briquettes placed under the oven should be arranged in a circular pattern no less than 1/2" from the outside edge of the oven. Briquettes placed on the lid should be spread out in a checkerboard pattern. Try to avoid bunching the briquettes as this causes hot spots.

The number one question I am asked is **"How many briquettes should I put on the lid and how many should go underneath the oven?"**. The answer is **"It depends on what you are cooking"**.

**For food you wish to simmer** such as soups, stews, and chili's; place 1/3 of the total briquettes on the lid and 2/3 under the oven.

For food you wish to bake such as breads and rolls, biscuits, cakes, pies and cobblers (rising); place 2/3 of the total briquettes on the lid and 1/3 underneath the oven.

For food you wish to roast such as meats, poultry, casseroles, quiche, vegetables, and cobblers (non-rising); use an even distribution of briquettes on the lid and underneath the oven.

The golden rule of Dutch oven cooking is "go easy with the heat". If the oven isn't hot enough you can always add more briquettes, but once food is burned, it's burned.

#### **Campfire Cooking Tips**

I have received a lot of response from people asking how to use their Dutch ovens over a campfire. I have two separate campfire cooking methods I like to use, each depending on the amount of time I want to spend tending my ovens.

The first method involves using charcoal briquettes which are lit in the campfire. I prefer to use charcoal for cooking as opposed to cooking over an open fire because temperatures can be easily regulated with briquettes whereas an open fire is riddled with hot spots that can lead to burned food if your Dutch ovens are not watched carefully. I simply add a pile of charcoal to the center of the campfire to be started by the flames. Once the charcoal is lit, the briquettes are removed from the fire and arranged for cooking near the edge of the fire pit away from the campfire flames. Then cooking proceeds just like it would at home.

The second method entails burying your Dutch oven in coals and is about like cooking in a crock pot set on low heat. I usually use this method when out hunting or fishing (in a campfire safe area) and I don't want to spend a lot of time over my ovens. It starts by digging a hole 18-20 inches deep and 20-24 inches in diameter in the center of the campfire pit. Line the sides of the hole with flat stones and check to make sure the oven will fit in the hole. Next, start a campfire in the bottom of the hole to get coals going. Keep adding wood to the fire until the hole is 1/2 - 2/3 full of coals. Next kick the fire out and remove the larger pieces of remaining wood. Dig a hole in the coals that the Dutch oven containing the evening meal can be set in then cover the Dutch oven with the remaining coals (you want at least 2-3" of coals on top of the lid) followed by a 2" layer of dirt spread out over the coals. Spread 2 wet burlap bags over the dirt and cover them with rocks so they won't be blown away in the event a wind comes up. The burlap bags will help to hold the heat in. Then leave the oven to sit for the day. When you return to camp in the evening the food will be ready for eating. Simply dig the oven up and brush it off with a whisk broom prior to opening it.

# Helpful Dutch Oven Cooking Tips

Many problems can be avoided by watching your ovens while you are cooking so don't be afraid to lift your oven lids to check on your food. If you see steam escaping from around your oven lids then your ovens are to hot. Dutch ovens act as a sort of pressure cooker steaming the food from the inside out making it more tender. If you let the steam out of your Dutch oven, it doesn't help the food and more often than not the top or bottom will be burned.

To keep from generating hot spots which cause uneven browning and burned spots, rotate your Dutch ovens every 15 minutes by turning the oven 90° in one direction and the lid 90° in the opposite direction. The easiest way to manage this is to lift the lid, rotate the oven 90° clockwise, then put the lid back on so it is facing the same way it was when you lifted it. I usually look at the number cast on the lid when I do this. When rotating the oven properly **the number on the lid should stay in the same place during the whole cooking process.** 

When I lift the lid to rotate my ovens I usually peek inside to see what the food is doing. This way I know if the oven temperature is right or if I need to adjust the number of briquettes.

"Stacking" your Dutch ovens is a convenient way to save space and share heat. Stacking is best done when ovens need the same amount of heat on top and bottom. (I.E. - Do not mix and match ovens that require different amounts of heat on top and bottom. Placing an oven with a cake, pie, or rolls in it, on top of an oven loaded with coals on the lid is not a very good idea.)

A Dutch oven lid can be placed over the fire or stove upside down and used as a skillet or griddle. Using the lid in this fashion, you can make virtually error free pancakes and eggs that don't run all over. This is because most lids are shaped like a very shallow bowl so things naturally stay in the center, even if the lid is not level.

Many people have asked me how to turn an upside down cake out of an oven without getting cake everywhere. Here's the method I use: First, let the cake cool for 10 minutes or so in the oven with the lid cracked. Next run a rubber spatula around the inside edge of the oven to loosen the cake. To turn the cake out, first lay a piece of parchment paper across the top of the oven so it lays flat and replace the lid so that it holds the paper in place. Make sure you have an available lid stand resting on your table for the next step. Using gloved hands place one hand on the oven lid and your other hand under the oven and carefully flip the oven over so the cake falls onto the lid. Rest the oven upside down on the lid stand and tap the bottom and sides of the oven lightly with your hand to make sure the cake didn't stick. Then lift the oven off the lid. The cake will be resting on the parchment lined lid and can be cooled this way or slid off the lid using the parchment paper.

## **Tools You Will Need**

	Make sure to have some wooden utensils on hand for stirring your food. Avoid using metal utensils in your ovens as they can scratch off the protective coating. Heavy plastic utensils can also be used, but remember, they are plastic and will melt if left resting against a hot oven for any period of time. Plastic is also hard to clean off the oven once it has been baked on.
	A good pair of leather gloves will prove invaluable around a hot fire. A pair of work style gloves will do, but I recommend using either camp or welders gloves. Although these typically cost more, they offer thicker leather and an inner insulated lining. The camp gloves pictured to the left are manufactured by Lodge.
P	A charcoal starter or "chimney" offers a fast way of lighting briquettes without using lighter fluid. Simply place your charcoal in the chimney, then wrinkle up 3-4 pieces of newspaper and place under the chimney. Light the paper with a match stuck through the vent holes in the side. That's it, in 10-15 minutes your charcoal is hot and ready for use. Charcoal starters can be purchased at most outdoors sporting goods stores.

1	Long handled metal tongs work well for moving and placing briquettes. The long handle keeps your hands away from the flame and heat. If you are using coals from a fire, you can use a standard garden or fireplace shovel.
Ĩ	Another item that will prove useful is some sort of lid lifter or hook. A large pair of pliers will also do the job. I prefer to use Mair lifters, pictured at left, because they allow you to control the lid easily and securely.
F	A lid stand offers a nice place to rest your lid and keep it out of the dirt while you are stirring your ovens. They can be made easily, a $#2\frac{1}{2}$ aluminum can will work, or there are a number of them available on the market. The lid stands pictured at left are manufactured by Lodge.
	A whisk broom does a good job removing ashes from the top of your lids before serving your food. This will help keep ashes from falling into your tasty dishes.

# Other Helpful Items

PP	Cooking tables can eliminate back strain by getting your Dutch ovens up off the ground at a level where you can work with them easily without having to bend over. Tables come in many shapes and sizes. I advise people when purchasing a table to make sure it comes with a wind screen. The table pictured at left is manufactured by Lodge. (A flat bottomed charcoal barbecue can also be used, just remove the cooking rack and use the bottom of the barbecue like you would a cooking table. Open the vents and close the lid and you have an effective wind screen.)
<b>S</b>	Dust covers will help keep dust off your ovens when in storage. They also protect your clothing and vehicle from picking up oil from off the oven when lifting or transporting it. The cover pictured at left is manufactured by <u>Kirkham's Outdoors Products</u> and is my favorite choice. These covers are made of heavy duty canvas with brass grommets in the bottom that the oven legs pass through so they don't wear holes in the bottom of the cover.
	Volcano cook stoves allow you to cook your favorite dishes using fewer briquettes. These cook stoves are of the finest quality and are very durable. The ventilated design keeps the outside of the stove cool to the touch even when loaded with coals.