Dutch Ovens for Backpacking

John W. Russo
Dennis Schmitt
Rising Star District
SHAC
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He’s not heavy,
He’s my oven
There are many cookbooks and internet information files on Dutch Ovens and their uses. We do not intend to repeat that information. We hope only to give some thoughts on the use of oven cooking in backpacking.

Three problems are present with trying to use baking ovens for backpacking. Size, Weight, and Recipe servings.

Size of the Dutch Oven takes physical space in the pack or strapped to the outside.

Weight is dead weight on your pack. As seen from the table below, many of the traditional Dutch Ovens weigh quite a bit. Cast Iron Dutch Ovens are not suitable for backpacking. But there are other options for baking.

Recipe servings are usually for groups of 6 to 8 and may have to be reduced for smaller groups and smaller equipment. A selection of recipes are given showing before and after reductions in serving size.

**Dutch Oven References**

http://www.macscouter.com/cooking

Dutch Oven Cooking (c)1990 by Mike Audleman

*Dutch Oven Cooking, Version 2.3* -- July 1995 Original Compilation in 1990 & copy; by Mike Audleman with additional editing in 1994 and 1995 by John W. Lyver

*Troop 928 Cookbook*, 1998, Houston, TX

Gary A. Yerkes, **FUN WITH DUTCH OVENS, 1996,**


http://www.geocities.com/Yosemite/Trails/4281/cooking.html

*Rising Star District Cookbook*, 1997, Houston, TX

*Dutch Oven Cooking*, second edition by John G. Ragsdale

IDOS (International Dutch Oven Society) 41 East 400 North #210, Logan, Ut. 84321

*Roughing It Easy*, by Dian Thomas, Dian Thomas Company, Holladay, UT

*NOLS Cookery*, Claudia Pearson, NOLS, Lander, WY

BSA Merit Badge books: Cooking, Camping, Backpacking

BSA Outdoor Skills Instruction manuals Cooking, Camping, Backpacking
INTERNET SITES:

The Backcountry Home Page
http://io.datasys.swri.edu/Overview.html
http://io.datasys.swri.edu/Recipes.html

Backpacker Magazines Basecamp page
http://www.bpbasecamp.com/

G.O.R.P  Great Outdoor Rec. Page
http://www.gorp.com/default.htm
http://www.gorp.com/gorp/food/main.htm

Jim Speirs' Scouting Page
http://www.melborponsti.com/scouts/

MacScouter page
http://www.macScouter.com/Cooking/

The NetWoods Virtual Campsite
http://www.netwoods.com
http://www.netwoods.com/Scout_Hut.html

Rising Star District
http://www.geocities.com/Yosemite/Trails/4281/cooking.html

U.S. Scouting Service Project
http://www.usscouter.com/sl/Reference/Cooking/

Weighty Ideas

The given weights for some advertised Dutch Oven are as follows.

<table>
<thead>
<tr>
<th>Size</th>
<th>Material</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>5” diameter</td>
<td>cast iron</td>
<td>3 lb</td>
</tr>
<tr>
<td>8”</td>
<td>cast iron</td>
<td>10 lb</td>
</tr>
<tr>
<td>10”</td>
<td>cast iron</td>
<td>13 lb</td>
</tr>
<tr>
<td>12”</td>
<td>cast iron</td>
<td>20 lb</td>
</tr>
<tr>
<td>12” diameter (deep)</td>
<td>cast iron</td>
<td>22 lb</td>
</tr>
<tr>
<td>14”</td>
<td>cast iron</td>
<td>26 lb</td>
</tr>
<tr>
<td>14” diameter (deep)</td>
<td>cast iron</td>
<td>28 lb</td>
</tr>
<tr>
<td>16”</td>
<td>cast iron</td>
<td>32 lb</td>
</tr>
<tr>
<td>10”</td>
<td>cast Aluminum</td>
<td>5 lb</td>
</tr>
<tr>
<td>12”</td>
<td>cast Aluminum</td>
<td>8 lb</td>
</tr>
<tr>
<td>3 quart</td>
<td>aluminum</td>
<td>2 lb, 8 oz</td>
</tr>
<tr>
<td></td>
<td>aluminum</td>
<td>14 oz</td>
</tr>
<tr>
<td></td>
<td>aluminum</td>
<td>16 oz</td>
</tr>
<tr>
<td>5 ¾” to 7 3/8”</td>
<td>aluminum</td>
<td>4-9 oz</td>
</tr>
<tr>
<td></td>
<td>aluminum, etc</td>
<td>7-24 oz</td>
</tr>
<tr>
<td>9”</td>
<td>aluminum</td>
<td>8 oz</td>
</tr>
<tr>
<td>6 x 12</td>
<td>aluminum</td>
<td>6 oz</td>
</tr>
</tbody>
</table>
Alternatives for backpack baking.

BushBaker
Outback Oven
 Bakepacker
backpack baker
NOLS cookset and twiggy fire, Banks Fry-Bake
Pie Pan Dutch Oven
Cup Cake Pan Oven

Others such as box ovens and tin can ovens are listed in Roughing It Easy, and BSA Outdoor Skills. Solar Ovens are another option.

The BushBaker is a new version of the Miro Backpack oven. A saucepan, circular ring mold, and lid are the components. Its advantage is that the saucepan can be used separately. The handle is a bit awkward to disassemble.

The Outback Oven
The Outback Oven can double as a frying pan and prevents scorching when frying or simmering. It can be used to keep food warm or to fully rehydrate ordinary freeze-dried meals. The outback oven is fuel-efficient by capturing heat that would normally be lost and using it, which saves both, time and fuel.
How It Works

The stainless steel Diffuser Plate disperses heat from the stove which is directed upwards by the Reflector Collar boosting efficiency and shielding the stove. The hot air circulates in the Convection Dome [aluminized fiberglass fabric which is 95% heat-reflective.] concentrating heat around baking pan. The Riser Bar separates pan from the Convection Dome preventing scorching. Hot air vents out the hole in top. Thermometer is at the top.

All Outback Ovens come with the aluminized fiberglass Convection Dome, Diffuser Plate with Riser Bar, Thermometer, Reflector Collar, and Backcountry Baking Booklet. All components nest and fold into the pan, and stow away neatly in the mesh carry sack. Baking breads and cakes are easy to do. It is important to have a stove that has an adjustable flame.

Bakepacker

The Bakepaker lets you create muffins, cakes, pizza and more. Just set the Bakepaker in your pot with only 1 inch of water, mix ingredients in a plastic oven bag, put the bag on the Bakepaker and let simmer 5-20 minutes. Easy recipes are included. Also recommend are the convenient mixes that come in their own bag.

Standard Bakepaker 7 3/8" dia, 9 oz, up to 3C mix, about $15.95
Ultralight Bakepaker 5 ¾" dia, 4 oz, up to 1 ½C mix, about $13.95

Backpack Baker Home made

Uses a steamer action to bake dough in a cooking bag. Crossed metal plates support a wire screen above boiling water. It bakes but do not expect a brown crust. If the bag breaks, it can be soggy. Best used for Breads and cakes. Reynolds cooking bags work in this setup. Heavy weight plastic freezer bags may fail as often as they work. Try it at home first. The metal plates act as a heat exchanger, transferring heat upward to the grid.
**NOLS** (National Outdoor Leadership School) fry pan and twiggy fire lid. A heavy duty fry pan and special lid are used to bake. The lid is indented so the twiggy fire does not fall off. This method can be used with a backpack stove or with a campfire of coals. One problem is removing the lid to check the baking. Leather gloves should be used for handling the lid.

**Banks Fry-Bake Alpine Model 1 lb.**

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**Reflector Oven**

Good for base camps, the reflector Oven uses a fire to provide heat. Ideal for roasting, baking, broiling, toasting or just keeping foods warm. Folded size 13.25 in. x 13.5 in. x 0.75 in. Open size: 18.75 in. x 9.5 in. x 13.5 in. Wt. 2 lbs. 8 oz. A Reflector oven can be made from Cookie sheets and aluminum foil.
**Pie Pan Oven**
Backpacking requires a balance of usefulness and lightweight for effective equipment. Cast Iron Dutch Ovens are considered more attune to base camping or when you have a pack animal like Billy Bob. A lightweight alternative is the use of (3) 9 inch heavy duty aluminum pie pans. Two if the pans have a hole drilled through them with a brass or non-rusting bolt, 2 washers, and a wing nut to hold them together. The diagram shows the basic setup. The pans are supported above the coals by using rocks, tent stakes, or 3 long nails. The outside of the pie pans can be painted black with automotive engine block paint. Steel pie pans will rust.

The pie pan oven has been around for years. It is mentioned in John Ragsdale’s book and in Dian Thomas’s book. The main thought is to adapt cooking recipes to the different methods of cooking.

**Coffee Can ovens**
A backpack convection oven can be made using the Scoutmaster’s empty “3 lb” coffee can. (please no plastic cans) Remove the top and bottom of the can. Drill some air holes along the base and top of the sides of the can. About 1/3 of the way up the side, drill two sets of holes for rods to be placed through the can to support the baking tin. Use a pot lid or fry pan as a lid. The plastic from a roasting bag can also be used, making a good window to the oven. Heat can be any simmering type heat source, such as a buddy burner or charcoals.
Cooking Fires
Always use low impact methods when camp cooking. Do not construct fire rings with 10 foot diameter cleared areas. Use existing fire rings or build temporary fires on a mound of mineral soil. Place a tarp or plastic sheet on top of the grass. Then 3-4 inches of mineral soil. (Sand and gravel to most folks.) Tuck under the exposed ground cloth so cinders do not burn it. Then build the fire for coals. Afterward, when the coals are out, use appropriate method to disperse the coals and ashes. (This varies with environment) Use the ground cloth to return the mineral soil. Leave No Trace at http://www.lnt.org has additional information for different environments. Always check on the fire danger with the forester or ranger for the area you are in. Leave no fire unattended. All fires are to be dead out when leaving.

TEMPERATURE CONTROL
Different foods and dishes require different cooking temperatures. The following guide is for an aluminum dutch oven. Increase the number of briquettes by about one-fourth for a cast-iron oven. Actual temperatures will vary due to charcoal quality and weather and size of the dutch oven. Size does mater.

<table>
<thead>
<tr>
<th>Desired Temperature Range</th>
<th>Ten-Inch Oven</th>
<th>Twelve-Inch Oven</th>
</tr>
</thead>
<tbody>
<tr>
<td>250-300 - Low</td>
<td>8 on top/6 under</td>
<td>10 on top/8 under</td>
</tr>
<tr>
<td>300-350 - Medium</td>
<td>10 on top/7 under</td>
<td>12 on top/9 under</td>
</tr>
<tr>
<td>350-400 - Hot</td>
<td>12 on top/8 under</td>
<td>14 on top/10 under</td>
</tr>
<tr>
<td>400-450 - Very Hot</td>
<td>14 on top/9 under</td>
<td>16 on top/12 under</td>
</tr>
</tbody>
</table>

When coals are 'hot', they are barely covered with white ash and you can hold your hand near them for only 2 or 3 seconds. You can hold your hand near 'medium' coals for about 5 seconds. Low coals are covered with ash. You should be able to hold your hand near them for about 7 seconds. Use the back of your hand, not your palm to check heat. Some dutch oven cooks use the "three up, three down rule." For 325 degrees in a 12-inch diameter iron oven you need 12 briquettes + 3 = 15 briquettes for the top and 12 briquettes - 3 = 9 briquettes for the bottom. To get 350° F, add one more coal on both the top and bottom. Each two additional coals will give you about 20° F more heat.

MAKING A CARDBOARD OVEN
An effective oven can be made from a heavy cardboard box with the lid still attached so as to open like a refrigerator. Expect to lose heat if you keep opening the door. Line the box and door with aluminum foil. Fasten the foil in place with duct tape. Make shelf supports by punching coat hangar wire through the sides. Two or three shelves usually work fine. The lowest shelf should be about an inch from the oven floor. Place items to be baked on the upper shelves. Place hot coals in a small foil pan on the lowest shelf. Each charcoal briquette yields about 50 degrees in this oven, so plan 7 to 8 briquettes for a 350-degree oven. The cardboard oven works well for baking biscuits, cookies, cakes, etc. It may take excessive time and charcoal changes for items such as a roast. For that, get out the dutch oven.
Pie Pan Dutch Oven

Upper Pan for coals

Brass bolt and Wing Nut

Hole for Bolt

3 Steel or Heavy Aluminum Pie Pans

Use metal clips to hold pans together

Lower Pan for Food

Use Stones or metal tent stakes for legs to keep above coals
Cup Cake Oven

Take an Aluminum Cup cake tray and cut in halves or quarters. Use the paper binder clips to hold 2 halves together. Line with paper cups and support the oven above the coals with metal tent stakes. Coals are placed on top and beneath. 4 long nails or metal tent stakes can be used to support the tray above the coals.

Make muffins and small cakes of course. Try baked eggs, quiches, and meat pies. Times are about 20-30 minutes.

Cooking at Altitude with attitude

The boiling point of water decreases with increasing elevation due to decreasing air pressure. The boiling point of water decreases 1 degree C for each 1,000 feet of elevation. Cooking times increase with increasing elevation at 6,000 feet to about 125% of the time needed to cook at sea level. Time is dependent on the type of food and the method of cooking.
<table>
<thead>
<tr>
<th>Altitude</th>
<th>Fahrenheit</th>
<th>Celsius</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sea Level</td>
<td>212</td>
<td>100</td>
</tr>
<tr>
<td>2,000 ft</td>
<td>208</td>
<td>98</td>
</tr>
<tr>
<td>5,000 ft</td>
<td>203</td>
<td>95</td>
</tr>
<tr>
<td>7,500 ft</td>
<td>198</td>
<td>92</td>
</tr>
<tr>
<td>10,000 ft</td>
<td>194</td>
<td>90</td>
</tr>
<tr>
<td>15,000 ft</td>
<td>185</td>
<td>85</td>
</tr>
</tbody>
</table>

Very high altitudes may increase boiling times to 30% more than at sea level. Therefore quick cooking foods such as minute or quick rice and instant noodle soups are easier to use than raw foods.

The thing that most seriously affects baking is altitude. The higher you go the less leavening agent (baking powder) you will need. So when making your Baking Mix, either at home or on the trail, think about your altitude and adjust your ingredients appropriately. A trip that climbs 8,000 feet may require different baking mixes at the base and top. Also, buy double-acting baking powder. It releases its leavening in two stages so cakes won't rise too fast. If you do not adjust for the altitude your baked goods will expand out of your pan, crumble into a small pile, and be otherwise inedible without rolling them into crumb balls or eating them with a spoon.

**Baking Powder:** Use double-acting.

- **0-3500 feet:** Use 4 tsp. per 2 cups of flour.
- **3500-6500:** Use 3 1/2 tsp. per 2 cups of flour.
- **6500-8500:** Use 3 tsp. per 2 cups of flour.
- **8500-10,000:** Use 2 1/2 tsp. per 2 cups of flour.
- **Over 10,000:** Use 2 tsp. and an extra egg (2 Tbs. powdered egg) per 2 cups of flour.

These are working estimates, Altimeters are not necessary for exact adjustments.

**Commercial Mixes**
Commercial mixes are prepared for sea level. You must add extra flour to the mixes. Also, add some extra water to compensate or the extra flour. Practice makes perfect. So go let them eat cake. Use the guidelines below to adjust your commercial mixes before baking.

**For every two cups of mix add:**

- **3500-6500 feet:** 2 Tbs. each flour and water.
- **6500-8500 feet:** 3 Tbs. each flour and water.
- **8500-10,000 feet:** 4 Tbs. (1/4 cup) each flour and water.
- **Above 10,000 feet:** 4 Tbs. (1/4 cup) each flour and water and an extra egg. Or 2 Tbs. Powder egg
Reduced Recipes

Many Dutch Oven recipes need to be reduced for the smaller equipment and groups. Recipes for 8 servings can be cut in half, thirds, or quarters for the smaller groups normal for backpacking. Several examples follow showing both 8 and 2 servings

Title: Sausage Balls
Categories: Camping, Dutch Oven, Appetizers
Yield: 8 Servings >>> 2 Servings

- 1 lb Jimmy Dean* sausage
- 2 FD sausage patties
- 1 lb cheddar cheese - grated
- 4 oz grated cheese
- 3 cup Bisquick*
- 2/3 cup Bisquick

In a large bowl mix all ingredients together with your hands. When thoroughly mixed form into walnut sized balls. Bake in a Dutch oven for 10 - 15 minutes or until done. The uncooked sausage balls can be made ahead and frozen.

Rehydrated the freezed dried sausage patties, then mix as above.

Title: Dutch Oven Pizza
Categories: Camping, Dutch Oven, Appetizers
Yield: 8 Servings >>> 2 servings

- 1 Canned biscuits
- 1 small can
- Prepared pizza or spaghetti sauce
- Pizza sauce leather
- Pizza fixing's
  - pepperoni, sausage, mushrooms, etc
- Grated mozzarella cheese
- Pam* spray

Line Dutch oven with foil making sure there are no air pockets. Spray with Pam* Make a pizza crust by pressing biscuits onto the bottom of the Dutch oven. Spoon sauce over crust and top with desired fixings and cheese, Bake in Dutch oven for 10 - 15 minutes or until done. Check often to prevent burning

Title: Tortilla Pizza
Categories: Camping, Dutch Oven, Appetizers
Yield: 8 Servings >>> 2 servings

- Large flour tortillas
- 2 small tortillas
- Prepared pizza or spaghetti sauce
- pizza leather
- Pizza fixing's
- Pizza fixing’s
- Grated mozzarella cheese
- Cheese
- Pam spray

Line Dutch oven with foil and spray with Pam. Place large flour tortilla in oven and spoon on sauce. Top with desired fixings and cheese. Bake in Dutch oven for 5 - 10 minutes or until cheese is completely melted and sauce is bubbling.
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Title: **Onion Soup Swiss Steak**
Categories: Camping, Dutch Oven, Main Meal
Yield: 8 Servings >>> 2 servings

- 2 lb tenderized round steak
- 2 pk onion soup mix
- Flour
- 2 cans (10 oz.) tomatoes
- Salt and pepper to taste

Cut steak into serving size pieces. Lightly coat with flour and braise in a small amount of oil. Season with salt and pepper. Sprinkle soup mix over meat and add tomatoes. Cover and cook over low to medium heat for 2 to 3 hours or until meat is tender.

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Title: **Meat Loaf**
Categories: Camping, Dutch Oven, Main Meal
Yield: 8 Servings >>> 2 servings

- 1 1/2 lb ground beef
- 1 c dry bread crumbs or cracker crumbs
- 1 egg
- 1/4 ts Salt
- 1 pk onion soup mix
- 1 tb Worcestershire sauce

Mix all ingredients, form into loaf shape, and put into an ungreased loaf pan. Place pan in Dutch oven and bake, covered, for 1 hour or until done. Options- Cover with 1/2 c barbecue sauce, or tomato sauce prior to cooking.

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Title: **Taco Pie**
Categories: Camping, Dutch Oven, Main Meal
Yield: 8 Servings >>> 2 servings

- 1 1/2 –2 lb ground beef
- 4 lg corn tortillas
- 1 cn (8 oz.) tomato sauce
- 1 md jar taco sauce
- 1 sm onion, diced
- 8 oz grated cheddar cheese

Sauté onions until clear, add ground beef, brown until done, remove from heat and drain. Combine tomato and taco sauce. Line Dutch oven with foil. Place 2 tortilla shells in Dutch oven. Place 1/2 of the beef on top and cover with 1/2 sauce and sprinkle with cheese. Place 2 more tortilla shells on top and cover with the remaining meat and sauce. Sprinkle with remaining cheese. Cover and bake until cheese is melted. Options- Add chopped chilies or jalapenos to taste. For enchilada casserole substitute canned or homemade enchilada sauce for the tomato/taco sauce.
Title: **Arroz con Pollo (Chicken with rice)**
Categories: Camping, Dutch Oven, Main Meal
Yield: 8 Servings

- 3 - 4 lb chicken, cut up
- 1 cup chopped onion
- 1 cup green pepper, chopped
- 2 oz pimento, diced
- 1/4 ts chili powder
- 2 cloves garlic, minced
- 3 1/2 oz stuffed green olives, drained

Mix salt, pepper, and paprika together. Season chicken with this mixture. Put all ingredients except rice and peas in Dutch oven. Cover and cook for 2 to 3 hours. Add rice and peas, cover and cook for an additional hour. Water may be needed during the final stage of cooking.

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Title: **German Pizza (Supper in a Skillet)**
Categories: Camping, Dutch Oven, Main Meal
Yield: 8 Servings

- 1 1/2 tbs fat
- 3 md potatoes, thin sliced
- 1/2 cup chopped onion
- 3 eggs
- 1/2 cup chopped green pepper
- 2 cup julienne strips of ham
- Salt and pepper
- 1/2 cup shredded cheddar cheese

Melt fat in 10" Dutch oven. Spread half the potato slices over bottom, sprinkle with salt and pepper. Top with a layer of half the onion and half the green pepper. Top with half the meat. Repeat the layering with the potatoes and vegetables, reserving the remaining meat for garnish. Cover and cook over low heat until potatoes are tender, about 20 minutes. Break eggs into bowl and stir with fork until yolks are broken. Pour eggs evenly over top. Add meat, spoke-fashion. Cover and cook until eggs are set, about 10 minutes. Top with cheese, cover until cheese is melted, about 2 minutes. Cut into wedges and serve.

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Title: **Ham and Potatoes Au Gratin**
Categories: Camping, Dutch Oven, Main Meal
Yield: 8 Servings

- 1 1/2 c Diced cooked ham
- 3 cup potatoes, diced
- 4 tbs margarine or butter
- 1 onion, chopped
- 3 tbs. flour

1 1/2 cup Diced cooked ham
1 cup potatoes, diced
1 tbsp margarine or butter
1/3 onion, chopped
1 tbs. flour
2 cup milk
2/3 cup milk
Seasoned salt and pepper
1/4 cup grated cheese
1/2 c grated cheese
Seasoned salt and pepper
2 tbs. fine bread crumbs
1 tbs. fine bread crumbs

Melt butter and sauté onions. Blend in flour to make a light roux. Gradually add milk and cook, stirring constantly until thickened. Add pepper and seasoned salt. Pour over ham and potatoes in Dutch oven. Sprinkle cheese and bread crumbs over top. Bake for 20 minutes, or until potatoes are done.

Title: Bacon / Hominy Casserole
Categories: Camping, Dutch Oven, Main Meal
Yield: 8 Servings >>> 2 servings
4 medium cans yellow hominy
1 can hominy
1/2 lb bacon
2 tablespoons Real Bacon
1 md onion, diced
2 Tablespoons dried chopped onion
1 1/4 lb Cheddar cheese. shredded
6 oz shredded cheddar
2 cans green chili's
1 small can green chili

Sauté bacon and onion. Crumble bacon. Pour hominy into Dutch oven. Stir in bacon pieces, diced onion, chiles, and cheese. Cover and cook for 20 minutes or until cheese is completely melted.

Breads

Title: Monkey Bread
Categories: Camping, Dutch Oven, Desserts
Yield: 8 Servings >>> 2 servings
4 cans Biscuits
1 can Biscuits
1 cup brown sugar
1/4 cup brown sugar
1 stick margarine
1/4 stick margarine
1 cup sugar
1/4 cup sugar
4 tbs cinnamon
1 tablespoon cinnamon

Cut biscuits into quarters. Mix sugar and cinnamon in large Zip-lock baggie. Drop biscuit pieces into sugar/cinnamon mixture and coat well. Place pieces in Dutch oven. Melt margarine and pour over biscuits. Cover and bake until done, about 30 minutes.

Title: Homemade Biscuits
Categories: Camping, Dutch Oven, Desserts
Yield: 8 Servings

<table>
<thead>
<tr>
<th>1 cup + 2 tb flour</th>
<th>1/2 cup flour</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4 ts baking soda</td>
<td>1/8 teaspoon baking soda</td>
</tr>
<tr>
<td>1 ts baking powder</td>
<td>1/2 teaspoon baking powder</td>
</tr>
<tr>
<td>pinch of salt</td>
<td>dash salt</td>
</tr>
<tr>
<td>2 tbs shortening</td>
<td>1 tablespoon shortening</td>
</tr>
<tr>
<td>1/2 cup buttermilk</td>
<td>1/4 cup buttermilk</td>
</tr>
</tbody>
</table>

Place 1 tbs. shortening in bottom of Dutch oven. Place coals on oven to bring the temperature up while making the dough. Combine flour, baking soda, baking powder, and salt in a bowl. Cut in shortening until mixture is grainy. Add buttermilk and mix with fork until the dough is formed. Turn out on a floured board and knead briefly. Do not over knead. Flatten dough to 1/2" thickness. Cut biscuits out with a glass or cup. Place biscuits in oven and turn once to coat on both sides with shortening. Cover and bake until done, about 10 minutes.

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Title: Cornbread
Categories: Camping, Dutch Oven, Desserts
Yield: 8 Servings

<table>
<thead>
<tr>
<th>2 cup yellow cornmeal</th>
<th>1 package cornbread mix</th>
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</thead>
<tbody>
<tr>
<td>1 ts soda</td>
<td>cooking oil</td>
</tr>
<tr>
<td>1 ts salt</td>
<td>1 egg (2 Tbs. powdered egg)</td>
</tr>
<tr>
<td>2 eggs, beaten</td>
<td>1/3 cup milk</td>
</tr>
<tr>
<td>2 tbs bacon drippings</td>
<td></td>
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<tr>
<td>2 cup buttermilk</td>
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</tbody>
</table>

Grease Dutch oven with 2 tbs. bacon drippings. Mix all ingredients together and stir until batter is smooth. Heat greased Dutch oven until very hot, add cornmeal batter and leave on heat for just a minute. Cover and bake until done, about 30 minutes.

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NOLS Basic Quick Bread

<table>
<thead>
<tr>
<th>2/3 cup whole wheat flour</th>
<th>2/3 cup white flour</th>
</tr>
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<tbody>
<tr>
<td>1/3 cup powdered milk</td>
<td>1 1/2 tsp. Baking powder</td>
</tr>
<tr>
<td>1/2 tsp. salt</td>
<td>2 heaping Tbs. Margarine</td>
</tr>
<tr>
<td>1 1/2 cups water</td>
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</tr>
</tbody>
</table>

Mix all ingredients. Pour into a fry pan, cover, and bake over a twiggy fire about 15 minutes or until done.

Variations: add 2 Tbs. Brown sugar and ½ cup chopped fruits and / or nuts.