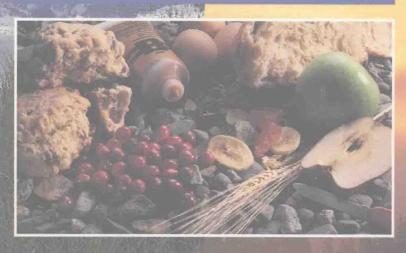


BAKING ON BOAT AND TRAIL



AN AND MUEL ANGENBERG

THE

Portable Baker

BAKING ON BOAT AND TRAIL

JEAN AND SAMUEL SPANGENBERG



International Marine/ Ragged Mountain Press



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PREFACE

n the ten or so years that I've been developing recipes for Adventure Foods, I've had many pleasant opportunities to talk to boaters, kayakers, hikers, speed hikers, expeditionists, skiers, RVers, Boy Scouts, Girl Scouts, campers, and just about any other outdoor sportsperson you can think of.

When a device from Strike 2 called the BakePacker first came on the market sometime around 1989, it was the beginning of a whole new era in baking for the boat or the trail. Up until that time, if you wanted baked items on your trip, you had the choice of the reflector oven, the Dutch oven, the skillet, or baking on sticks and rocks. In other words, the methods were time-consuming, the cooking accessories were heavy, and most consumed too much fuel to make baking practical as an everyday part of your outdoor experience.

Now, in the BakePacker's wake come Cascade's OutBack Oven, the BushBaker, the GSI aluminum Dutch oven, Coleman's collapsing oven, the Sportsman Oven, the Rome pie baker, the Rome double-handle baker and griddle, the Burns-Milwaukee portable Sun Oven, and numerous types of pressure cookers, to name a few.

For boaters, this offers the widest possible range of options to fulfill the desire to bake. Hikers and campers have more limited options because of the weight of the bakers or ovens and fuel, since—unless they are car- or RV-camping—all of this must be carried on their backs.

It has been my goal to introduce boaters and campers to a wide variety of baking devices and options so that you may make a more informed choice. But then, having made your choice, what good is a baking device without great bread recipes? That's where this book proves doubly helpful.

Whether you want to add bread to your menu to boost your caloric intake, or simply to enjoy the taste of it, I think you will find this book invaluable with its wide variety of quick breads, yeast breads, flat bread, batter breads, sweet breads, cakes, and dessert bars.

I'm sure that boaters, without the weight restrictions that back-packing campers have, will be able to cook the yeast breads more often than campers can. I also know that a dyed-in-the-wool baker (that's Southern for someone who loves to bake) will practice his or her art—and it is an art—no matter what the circumstances.

Finally, I'd advise you never to try a new recipe for the first

time on the trail or on the water. Test it at home first. After high levels of physical activity, you don't have the time or energy to face a major flop. Do your homework first; it's part of good trip planning. That way, you'll feel comfortable with your procedure. And remember: All recipes are easier the second time around.

The recipes in *The Portable Baker* are from family and friends, the King Arthur Flour Company, Presto, The Society for Range Management, and White Lily—as well as myself. I have tried to give credit to material from other sources, and any omission is unintended.

Sam and I genuinely hope you enjoy the recipes I have included in this book. We also would like you to share with us your favorite recipes and baking tips; perhaps they could find their way into our next book. You can write to us in care of Adventure Foods, 481 Banjo Lane, Whittier, NC 28789.

Happy baking and bon appetit!

Jean and Sam Spangenberg February 1997

A Note on Recipes

only add water at the campsite or anchorage. These dry ingredients are available from any number of mail-order companies. For a list, see Appendix H, Sources, on page 160.

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ny publishing endeavor requires someone to believe in you and what you have to offer. Sam and I would like to thank the staff at Ragged Mountain Press, with special thanks to Jon Eaton and Tom McCarthy for all their assistance, encouragement, patience, and effort.

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Good Gear for the use of the BushBaker.

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* CHAPTER 1 *

The Baking Impulse

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resh-baked bread! What can compete with the heady aroma of fresh-baked bread? It fills the air and excites your senses, making your mouth water and anxiously await your first bite of crusty warm bread.

As a child, I don't remember my mother making loaves of bread; but she made biscuits, and cornbread, and wonderful yeast rolls. Everyone loved it when my mother baked yeast rolls. I never ceased to be amazed at the variety of items that could be created from one basic dough: cinnamon buns, pecan twirls, doughnuts, and coffee cake, just to name a few.

One of the reasons that I'm still so fascinated by breads and baking is that there are still lots of new breads waiting to be created, by me or maybe you.

Don't Be Intimidated

My best advice, if you want to bake and have people raving about your breads and cooking, is to never let a recipe intimidate you.

I guess I am really a lazy cook. Don't tell Julia Child (whom I admire as an expert baker and cook), but I never sift my flour, salt, and baking powder or soda together before making a cake. Once you realize that sifted flour has more volume than unsifted flour, you can reduce the amount of flour required in recipes by about one and one-half tablespoons per cup (ten percent) and use unsifted flour. I have done this many times with great results.

I have also intentionally dumped all the ingredients in at the same time and beaten them all together. It did not affect the outcome of the recipes. If you are going to bake, on a boat or on the trail, you have to trust your own judgment about what needs to be done. It's quite simple: You will be there, and the cookbook author will not.

There are exceptions, however, recipes that really do require close attention to detail—for example, angel food cake, sponge cakes, or any other cake that requires the whites to be whipped separately or the yolks to be beaten until they've doubled in volume. I suggest you restrict this type of cake to your home-cooking adventures unless you have a huge galley or a well-equipped base camp for cooking.

Make and Remake

Not all of my culinary investigations or creations have met with success, but that's what keeps me interested. As I mentioned in my book *The BakePacker's Companion*, I often "remake" cakes or cookies. Usually the remade item is better than the original. Just as stuffing or dressing is made from precooked bread, or a mixture of bread and cornbread, other baked items can also be turned into new and delicious desserts. Bread pudding is an example of a remade food, using leftover biscuits or bread.

When I remake a cake or cookies, either because they didn't turn out the way I wanted them to, or because they weren't eaten before they got stale, I add about a cup of boiling water, and beat it back into a batter. I then add whatever I think was missing: oil, if it was too dry; sugar, if it wasn't sweet enough; or—if I'm turning it into cookies—extra shortening or oil and sugar. I think you get the idea. One thing you must do is add enough flour to make up for the water you have added, and baking powder or soda to make it rise again. If the cake was frosted, you may or may not need to add sugar. Have fun experimenting with a remake of your own items. Remember, you were going to throw this out anyway, so if you aren't happy with the results, toss it to the birds, or remake it yet again. I have found it helpful for outdoor cooking to make a small pancake to test the batter before cooking the whole batch.

The main idea of this type of cooking is using what you have. Aside from remade cakes and cookies, you can use your day-old bread or biscuits to thicken soups, stews, and fruit. Simply crumble them up and let them continue to air-dry. Store them until you need them, then just put the crumbs in until your dish is as thick as you want.

The whole idea of giving you the remade cake information is just to show you that recipes are only starting points, they are not commandments carved in stone. I believe that as soon as you realize this, cooking can become exciting.

Nutritional Information, Including Controlling Diabetes

Those of you who have flipped through this book have already noticed that there is more than a little nutritional information included with each recipe and in the appendices. I should like to spend a moment to tell you a bit about it.

In my own business I have found it necessary not only to create nutritious recipes for high activity levels but occasionally to tailor foods to meet the special nutritional needs, or biological intolerance, of my friends and customers. The Genesis R & D nutritional computer database program from ESHA Research has been absolutely essential in this work.

From the database I have generated two sets of essential information for each recipe: recipe totals and dietary exchanges. The recipe totals provide the basic information that people seek most often in retail product labeling. Do you need to increase your protein intake during competition sailing? The information is right there. Need to climb, or bike, or paddle all day? The carbohydrate content is right there. Trying to balance your protein, fat, and carbohydrate intakes to some specific level? Again the information is immediately available.

For those of you interested in determining the distribution of calories by percent, here is some helpful information:

Each gram of fat contains nine calories. Each gram of carbohydrate contains four calories, as does each gram of protein. Let's use the Beer Yeast Bread recipe on page 36 as an example. It has 2,138 total calories, with 58 grams of fat, 341 grams of carbohydrates, and 38 grams of protein. The total number of calories from fat for this recipe is 522 (58 × 9). With some quick arithmetic, you can determine that 21.4 percent of the Beer Yeast Bread's total calories come from fat (522+2,138 × 100). Using the same process, we find that 63.7 percent of the Beer Yeast Bread's total calories come from carbohydrates (1,364+2,138 × 100).

We have purposely not given the nutritional data based on per serving amounts. Serving sizes listed with recipes are just guidelines, and the true number of servings per recipe will depend on how large or small you make your biscuits or rolls and how thick you cut your bread.

Just remember that you must always divide the recipe's total nutritional data by the number of servings.

The second set of data, dietary exchanges, will be of particular interest to diabetics and those preparing food for diabetics. One of the earliest, non-invasive treatments of diabetes is to attempt

to control caloric intake to avoid the need for more invasive therapies, such as oral or injected insulin. Careful and continuing use of the exchange values permits diabetics to calculate what food category to reduce if something else is eaten from another category. The information here can be lifesaving.

For non-diabetics the information that follows, as well as the exchanges themselves, should also prove instructive. The careful balance of food type intake for diabetics is not significantly different from the carefully balanced food intake (for control of carbohydrates) necessary for good health, exercise, and even professional competition.

There are about 16 million Americans with diabetes, but in 8 million people the disease has never been diagnosed. That means about one person in seventeen has diabetes—and half of them don't know it.

Food Exchange

Normally, food is converted first into glucose cells during digestion. Those cells are stored, or later transformed into immediate energy by the hormone insulin. Diabetics don't seem to have a problem turning the food into glucose, but production of insulin to convert the glucose to energy is a real problem. Some diabetics produce insulin, but it is ineffective. Others produce too little insulin. Still others produce no insulin at all. This lack of insulin is responsible for the continuing high blood-sugar levels characteristic of diabetics.

All diabetic problems call for careful control of glucose levels (through food selection and intake) and insulin levels (by introducing insulin to the body). Most diabetes control begins with the choice and amount of food eaten, because that can reduce the severity, or even the necessity, of insulin medication.

Food exchanges were developed to help diabetics maintain normal blood-sugar levels, thus avoiding hyperglycemia (high blood sugar), the potentially dangerous insulin reactions that might occur in attempting to reduce high sugar levels, and hypoglycemia (low blood sugar).

The diabetic uses the food exchanges to stay within a prescribed diet. Just as you and I might be told to eat only 1,500 calories a day, the diabetic might be told to eat three milk, four vegetable, four fruit, six bread, five lean meat, and seven fat.

Food exchanges are divided into six categories. The following chart gives you the nutritional values that make up one exchange in each category. For example, one fat exchange is five grams of fat and has 45 calories; whereas one milk exchange has 12 grams of carbohydrates and 8 grams of protein and no fat. If a diabetic chose to use one cup whole milk, which has fat, then he or she would be using not only a milk exchange, but 1½ fat exchanges as well.

The exchanges act as a careful balance of foods that give the diabetic 50 percent calories from carbohydrates, 20 percent from protein, and 30 percent from fat.

Category	Carbohydrates grams	Protein grams	Fat grams	Calories
Fat	0	0	5	45
Milk (skim)	12	8	0	80
Vegetables	5	2	0	25
Fruit	10	0	0	40
Bread	15	2	0	70
Meat				
lean	0	7	3	55
medium-fat	0	7	5	75
high-fat	0	7	8	100

Once a person has been tested and found to be diabetic, a doctor will prescribe a diet based on the food exchanges. This diet will be adjusted to stabilize the person's weight, based on individual metabolism and exercise levels. The new nutritional information on labels makes it easier for the diabetic to calculate food exchanges for any food item, but believe me, it takes practice to do it quickly.

Those of us who have suddenly noticed our arms are too short to read the newspaper, and that our family doctor doesn't look old enough to be one, should take the time to attend a diabetes screening (most diabetics go undetected far too long in this country). Then we should write to the American Diabetes Association for their free *Exchange Lists for Meal Planning*. If you have a friend who is a diabetic please pass on the address below.

I have given only basic general information regarding diabetes. If you need further information, contact the American Diabetes Association, Diabetes Information Service Center, 1660 Duke Street, Alexandria, VA 22314. Their toll-free telephone number is (800) 232-3472.

Boldly Go, Boldly Bake

Now you are asked to accept the challenge: Boldly go where few bakers have gone before (except, perhaps, on a chuck wagon or aboard the Federation Starship Voyager), into the woods, out on a boat, up in a plane, on the trail, or to the nearest, or farthest, camp site. Here's to becoming happy bakers wherever you may choose.

Bread's Early Beginnings

Breadmaking is an ancient craft—Egyptians and Mesopotamians were known to be making bread at least five thousand years ago. The Bible indicates that there was leavened bread before the Hebrews' exodus from Egypt, and it says they fled before their bread had time to rise, so they had to eat unleavened bread or matzo.

Egyptians discovered that untended dough would begin to ferment after a few hours, forming gas bubbles in the dough that remained during the cooking process. The baked-in bubbles we know so well today made the bread softer, lighter, and more palatable.

The Egyptians may also have discovered that the froth from their beers and other fermenting beverages could make bread dough rise. In any case, they were well versed in the craft of breadmaking, and they continually developed better ovens in which to cook their bread more efficiently.

Paintings and hieroglyphics on tombs demonstrate that Egyptians took a keen interest in the growing and harvesting of grains and breadmaking. In fact, a loaf of bread 3,500 years old was found in one of the tombs—surprisingly well preserved, but probably the stalest bread in history.

But the Egyptians and Mesopotamians were not the first humans to bake bread. For example, we know that ten thousands years before the birth of Christ, Swiss lake dwellers were making some form of crude bread. Here are a few other significant dates in breadmaking history:

8,000 B.C. Women in the Near East were using sticks to dig holes in the ground and plant wild grass-seed. It was the beginning of agriculture and the end of the human hunter-gatherer era.

7,000 B.C. By now, humans were deliberately cultivating grains such as emmer wheat, barley, and millet.

4,000 B.C. Wheat crops were being grown under irrigation.

3,500 B.C. The invention of the plow, drawn by domesticated animals, vastly increased the amount of wheat and other grains available for bread.

100 B.C. By now, a hundred years before the birth of Christ, breadmaking had become a commercial industry. At this time, there were 258 bakeries in Rome alone.

During the reign of Roman Emperor Julius Caesar, bread flour was made available on a class basis. The kind of flour you received was determined by your social status. High-ranking people received white flour; the lower classes had to make do with coarse dark flour. The grades of flour and their dispersal were governed by law.

Caesar's regulations seem unfair to us now, but unintentionally (and ironically) he was doing the peasants a favor, because the coarser flours were healthier—much higher in fiber and nutrients.

During four hundred years of Roman rule, Britain became the granary of the Roman Empire. When the Romans left, they destroyed all they could, to negate Britain's agricultural advantage. But the Scandinavian and Saxon conquerors of Britain introduced a grain that had been a staple in their countries for centuries. That grain was rye, and it quickly became one of Britain's main cereal crops.

In Europe, the town baker enjoyed considerable standing in his community and people often took their own bread to him to be baked. But in America, bread baking among the immigrants started off as a home industry because settlements were not large enough to support a baker.

American "thirded bread," made from a mixture of wheat, rye, and Indian meal (cornmeal), was a variation on the mixture of wheat and rye flours known by the British lower classes as maslin. (Wealthy British ate only white bread, of course.) The thirded bread mixture has endured and remains popular even today as Boston Brown Bread.

These coarser breads were usually leavened by sourdough alone, but sometimes by sourdough used in conjunction with ale yeast. The brewing of ale and beer was the duty of the housewife, and explains the use of barm (ale or beer froth) in early yeast breads.

THE PORTABLE BAKER

The colonists did their baking over an open fire, and it was backbreaking work indeed, but eventually the fireplace became common and it spurred the development of many innovative cooking devices. The swinging crane enabled the housewife to move large cauldrons of food toward or away from the fire. Footed pots allowed food to be cooked at the side of a fire, or over the embers, as did long-handled pans. French braising dishes featured an ingenious concave lid that held glowing coals or embers. Double-glazed earthenware dishes with tight-fitting lids could be buried in the hot ashes. Gradually, the process of cooking, and especially baking, became easier and more predictable.

In 1862, more than 150,000 settlers received land distributed under the new Homestead Act. Most often they had to cross hostile territory to reach their grants, so these early settlers took with them their hopes, their dreams, and a three-legged pot called a "Dutch oven" that had a concave, lipped lid. Dutch traders brought large quantities of these pots to exchange for other goods; and pretty soon, explorers, trappers, traders, and later cattlemen, came to depend upon the Dutch oven. In 1813, a used Dutch oven sold for four dollars—a week's wages.

CHAPTER 2 *

Baking Equipment

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When I first started thinking about doing a book about portable baking devices, I imagined there would be only a handful to consider. But as I started to list them, I was surprised at just how many options do exist for those of us who want a little more out of our cooking experiences while backpacking, boating, RVing, camping, and kayaking. I have tried to include all of the baking devices on the market. If I have excluded any, the omission was not intentional.

Food is a major part of the getaway experience. Food can salvage a bad trip, or at least make it more tolerable. If you add wonderful homemade bread to the equation, well, just the thought of fresh bread makes most people perk up. It's the ultimate comfort food. You only have to mention that it's made-from-scratch bread (no store mixes) and people start imagining they can smell it coming out of the oven. They can actually feel their teeth crunching into that crust.

I'd like your adventure baking experiences to be as successful as possible, but for that to happen you'll have to make some choices about the best baking device for your particular outdoor activity.

CHOOSING A BAKING DEVICE

The successful outdoor baking device for your activity should meet the following criteria to be a successful part of your gear.

- Light enough for you to manage easily. For example, you wouldn't want to carry a cast-iron Dutch oven on your back for six weeks. But you might want to carry one if you were boating or camping in an RV.
- 2. Able to cook the types and quantities of breads you want to cook. For example, if you wanted crispy sourdough bread, you wouldn't take a pressure cooker to do the baking.
- 3. Easy to put together, clean up, and store conveniently.
- 4. Relatively simple to operate.
- 5. Compatible with your budget, considering the life of the baking device and its overall usefulness. For example, can you use it at home, too? Can it be used for more than just baking?

- 6. Able to work with your current heat source.
- 7. Safe to operate.

HINTS FOR SUCCESSFUL OUTDOOR BAKING

Once you have selected your baking device or devices (most outdoor folks wind up with several types for their varying needs), a few tips for making your outdoor baking easier and more successful might be in order. I suggest you review this list before each trip, until it is part of your planning routine.

- Try the recipe at home first. You will have better success outdoors if you know how the recipe should turn out and the quantity it will produce. You can then adjust serving sizes.
 Remember, the serving sizes listed with the following recipes are just guidelines, and the true number of servings per recipe will depend on how large or small you make your biscuits or rolls, how thick you cut your bread, and so forth.
- 2. Regardless of the type of baking device you use, you'll find it more convenient to pre-mix all your dry ingredients in a plastic bag at home. Then label it well, or write your instructions on a slip of paper and place it, and the bag of mix, inside another plastic bag. If you are using dry yeast, you can blend it into the dry mix also.
- 3. Whether you are using baking powder, yeast, or sourdough, take along some extra baking powder that you have tried at home, just in case the yeast or sourdough doesn't rise. You can then work some baking powder into the bread dough and salvage it for dinner. It won't be exactly the same, but it will be fine for averting a breadless meal.
- 4. It's a good idea to carry one or two extra cups of flour in a plastic bag. For a start, it will come in handy for making drop biscuits. Make a simple dough, drop spoonfuls into the flour, and shape on the baking surface to eliminate the need to roll out rolls or biscuits. It will also come in handy for dusting your pastry cloth, for dusting your bread dough as you knead it, and for many other uses. Determine how much flour to take by how much and how often you plan to bake, then put an extra half-cup of flour in the baggie for each time you plan to bake on your trip. Remember you can always use the leftover flour for gravy, thickening, coating fresh fish, and so on.
- If you're making pancakes, tortillas, or other fried breads, you can carry single-portion packs of mayonnaise to use for your