THE GEO-SAMPLER



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Here at the GeoSampler, we love fire. Big fires. Small fires. In-between fires. Speaking of in between fires, some of us are even firemen when we're not here in the lab. But, as many of you know, fire is not really a good mix with the lab. So we get our flaming kicks elsewhere. Hey, it's summer. So let's fire up the grill.

GRILLS JUST WANNA HAVE FUN

Go ahead, grill us on this stuff

Not surprisingly, the history of grilling begins shortly after the domestication of fire, some 500,000 years ago. But the classic backyard cookout we know and love didn't really catch on until the 1950s, with the advent of suburbs, lawnmowers and, most importantly, lighter fluid. Sure, during the 40s, you'd find some open flame cooking at campsites and picnics, but home grilling was just an idea.

Then along came George Stephen, Sr. A frustrated - yet determined - backyard griller, he grew tired of the flat, open-style grills available at the time. A metalworker by day and dreamer by night, he spent his weekends inventing a grill that would allow him to control the flame and temperature, as well as grilling conditions during foul weather with the advent of a lid. His creation, termed "Sputnik" by his Chicago neighbors, became the first Weber kettle grill. More than 50 years after buying out his employer, Weber Bros. Metal Works, George's firm has become a leading grill exporter, selling Weber products throughout the world.

Sparking a national pastime?

According to the Hearth, Patio & Barbecue Association (and yes, we'd like to party with those guys), barbecues have been a White House tradition since Thomas Jefferson. It was Lyndon Johnson, the 36th president of the United States, who hosted the first cookout featuring Texasstyle barbecued ribs. And Jimmy Carter hosted a "pig pickin" for about 500 guests, including visiting international dignitaries.

Today, more than 85 million American households own an outdoor grill and many have more than one, as grills have advanced to include thousands of charcoal and gas models in a wide range of sizes, shapes, colors and prices.

Because it's hot

For obvious reasons, outdoor cooking is most popular during the summer months, with 71% of Americans grilling for the 4th of July holiday. In order of popularity, we Americans most frequently cook on the grill, in order: burgers (85%), steak (80%), hot dogs (79%) and chicken (73%).

While we Americans agree that we love a good barbecue, we have very different taste preferences based on where we live, according to the Food Network.

- Carolina-style is split largely based on sauces into South-Carolina-style (a mustard sauce), Western (a sweeter vinegarand-tomato sauce) and Eastern.
- Memphis barbecue is probably what most of us conjure up when thinking of BBQ pork ribs with a sticky sweet-and-sour tomato-based mopping sauce.
- Texas, being cattle country, has always opted for beef, usually brisket, dryrubbed and smoked over mesquite with sauce on the side.

■ Kansas City lies at the crossroads of the BBQ nation, so naturally you'll find a little of everything there. Beef and pork, ribs and shoulder – all come together with its classic sauce. Sweet-hot, tomato-based KC BBQ sauce is the model for most supermarket offerings

Whether you grill with gas or charcoal, lighter fluid or a chimney, burgers, steaks or dogs, all of us here at Geotechnics wish you a happy grilling season. And if you find yourself with a few extraitems on the grill, give us a shout. We're always happy to help.

Red meat is not bad for you. Now blue-green meat, that's bad for you! ~Tommy Smothers



Over the coals

"It is better to have burnt and lost, then never to have barbecued at all" - William Shakespeare

"It is a far, far better barbecue that I have now, than I have ever had before" - Charles Dickens, A Tale of Two Cities

"The creation of a thousand BBQ's is in one gas bottle" - Ralph Waldo Emerson

"Ich bin ein Barbequer" - *J F Kennedy*

"Always wear something sensible when cooking at the barbecue" - Lady Godiva

"Spare rib anyone?" - Adam

"To BBQ or not to BBQ, that is the question" - William Shakespeare

"Give a man a bbq feed him for a day. Teach a man to bbq and feed him for the summer" - Jesus

"Invite couples with children, everyone loves children —especially if they are cooked properly" - WC Fields

> "Strong the sauce in this one truly is" - Yoda







we salute the man who would be king-sford

Ellsworth B. A. Zwoyer of Pennsylvania patented a design for charcoal briquettes in 1897. After WWI, the Zwoyer Fuel Company built charcoal briquette manufacturing plants in the United States with plants in Buffalo, NY and Fall River, MA. Not without

controversy, there are stories circulating that Henry Ford invented the very first briquette in 1920 with the help of Thomas Edison.
However, the 1897 patent obviously predates this.
Ford, who popularized the gas-powered car in America and invented the assembly line for automobile manufacturing, also created a briquette from the wood scraps and sawdust from

his car factory. E.G.
Kingsford bought
Ford's briquette
and placed it
into commercial
production.

king of the road

For those of you who embrace the journey as well as the destination, consider the emerging discipline of engine-mounted cooking. Pretty much every thing you need to know is contanied in the recently published *Manifold Destiny — The One! The Only! Guide to Cooking on Your Car Engine!* Authors Chris Maynard and Bill Scheller have gone to great lengths to figure out recipes and cooking times (generally quoted in miles) for a wide variety of dishes. Here's a quick taste:

Cruise-Control Pork Tenderloin

Cooking distance: 250 miles

Ingredients:

1 large pork tenderloin, butterflied

3 tbsp Dijon mustard

2 tbsp dry white wine

1/2 cup red onion, minced

2 tsp rosemary (fresh), crushed

Salt & pepper

Blend together all of the ingredients (except the pork) and spread across the inside of the pork tenderloin. Close up the pork, triple-wrap in foil and place on a medium-hot part of the engine. Turn once (125 miles) during cooking.

ASHES, ASHES What do you get when you burn coal? Ashes, of course. And here at Geotechnics, we test a lot of Coal Combustion Products during the course of a week. Fly ash. Gypsum. Bottom Ash. And we're happy to help our clients determine the unique qualities of each variety. To learn more about testing CCP's or ask a question to stump the expert, give Dave Backstrom a shout at (412) 823-7600.

