RANDOM ORIGINS

121

Once again, the BRI asks—and answers—the question: Where does all this stuff come from?

ATERBEDS The waterbed has actually been developed---unsuccessfully-numerous times. The first was more than 3,000 vears ago, when Persians filled goat skins with water, sealed them with tar, and left them out in the sun to warm the water. The next time was in 1832, when Scottish doctor Neil Arnott filled a rubbercoated, mattress-sized piece of canvas with water, hoping to prevent bedsores. It wasn't a big seller (even in hospitals), nor was it when English doctor James Paget copied the design in 1873. The main reasons: The beds leaked, and they were cold. But in 1926, scientists at B.F. Goodrich came up with a synthetic material that could make waterbeds both leakproof and warm: vinyl. Sold via mail order, they were, once again, a commercial disappointment. Then in 1968, a San Francisco State University student named Charles Hall was trying to create an ultra-soft piece of furniture. After rejecting a gigantic vinyl bag filled with Jell-O, he tried filling it with water (he'd never heard of Arnott, Paget, or Persian goatskin-and-tar beds). Hall called his creation the Pleasure Pit and patented it. Waterbeds finally caught on, at least with Bay Area hippies. They became a national fad in the early 1980s.

NATIONAL GEOGRAPHIC

In January 1888, thirty-three men (including world-renowned explorers, military officers, academics, bankers, and mapmakers) met at the Cosmos Club in Washington, D.C., to organize a group whose mission was to "increase geographical knowledge." Bylaws were written up, and two weeks later the National Geographic Society was officially established. As a first step toward fulfilling their mission, the Society decided to publish a monthly journal, beginning with the first issue of *National Geographic Magazine* in October 1888. It was a dry, academic journal in its early days, but still attracted readers thanks to photographs from exotic places as well as maps and archaeology reports. It didn't become the magazine it is today until Alexander Graham Bell was named president of the Society in 1897. Among Bell's innovations: He had the magazine printed on thick paper so it felt more like a book, devised the yellow-trimmed photographic cover, and solicited rollicking firsthand accounts from explorers like Robert Peary and Ernest Shackleton. He also realized that the magazine's strength was showcasing photos from around the world. By 1908 photos took up half of the magazine, and even more than that after 1910 when National Geographic ran color images for the first time. By 1950 it was one of the top 10 most-read magazines in the world. It's now published in 32 languages, and reaches more than 50 million readers every month.

122

TARTAR SAUCE

Before there was tartar sauce, there was *steak tartare*, a French dish that consists of chopped and seasoned raw beef topped with onions and capers. Whoever invented it (that person is lost to history) named it after the Tatars, a nomadic Turkic group who lived in Russia in the medieval era and, according to legend, were known for eating raw meat. *Sauce de tartare* was created in France the 18th century to accompany the entree. It consisted of mayonnaise, pickles, capers, onions, and tarragon. The thick, goopy sauce made its way to England in the late 19th century, where *tartare* was anglicized to *tartar* and was served alongside a distinctively English dish: fried fish.

RADIATION BLOCKING SUNGLASSES

In the early 1980s, NASA developed original coatings to protect their cameras and telescopes from the sun's heat and radiation while in space. Scientists at the Jet Propulsion Laboratories (at California Institute of Technology) thought the concept might have commercial applications, so they leased the technology from NASA. They adapted the basic scientific principles of the coatings to create a product: a welding mask that blocked more of the harmful, blinding UV light given off in welding than conventional masks did. When NASA heard about it, they made their own improvements, making the coatings lighter and more flexible. In turn, JPL took that technology and created sunglasses that block UV rays. Most famous radiation-blocking sunglasses: Blue Blockers, sold via TV infomercials.

If the Miller Way relayer more the size of Asia our solar system would be the size of a penny.



LEAVE READY ZAGROMYHAT TO US!

Next time you're really bored, try this: Go to an Internet translation page, type a phrase in English and translate it into another language. Then translate the new phrase into another language and then back to English. The results can be quite amusing.

English: "Uncle John's Bathroom Reader." Greek→English: "Divine John, Reader of Baths."

English: "I've fallen and I can't get up!" Russian→Japanese→English: "I described and I have upadenny stand up!"

English: "Who let the dogs out?" Chinese→English: "Who bleeds off the dog?"

English: "Antidepressants may cause dry mouth due to decreased saliva, possibly contributing to the development of tooth decay."

 $Greek \rightarrow Japanese \rightarrow English:$ "You disagree the medicine with cause, for drying saliou reduction of the mouth contributes to the development of possibility, it is carious tooth."

English: "Rolling on the floor laughing." **Russian→English:** "To roll up on to laugh above the sexes."

English: "Mama said knock you out." **Spanish→English:** "The breast said eliminates to him."

English: "Let's get ready to rumble!" **Russian→German→English:** "Leave ready zagromyhat to us!"

English: "Rarely is the question asked, is our children learning?" **Spanish→French→Dutch→English:** "He is seldom the done question, he is our education of the children."



English: "I'd like to buy a vowel, Pat." **Russain→Danish→Japanese→English:** "It is to like to do the vowel which purchases, but it is the pad."

English: "You want fries with that?" Japanese→Hindi→English: "I desire to fritter?"

English: "It was the best of times, it was the worst of times." **Japanese→Korean→Greek→English:** "It is time the waistcoat was ugliest when."

English: "I can't believe I ate the whole thing." **Japanese→Swedish→English:** "I am all for I ate them all, it is possible to believe what is not."

English: "Don't mess with Texas." Japanese→Bulgarian→Polish→Korean→English: "Texas which goes round and is confused."

English: "Pardon me, sir, but do you have any Grey Poupon?" **French→German→Chinese→English:** "Please forgive me, Mr. Chairman, but have you established your gray poupon?"

English: "To boldly go where no man has gone before." Korean→English: "Makes boldmakes bold and also anyone man not going before where in order to go."

English: "Frankly, my dear, I don't give a damn." German→French→English: "Sincerely, my expensive, I do not give swore."

English: "Rubber Ducky, you're my very best friend, it's true!" **Russian→Korean→Swedish→Japanese→English:** "Duck of rubber make, as for you my very bosom buddy, as for that truth!"

English: "Elvis has left the building."

Dutch→French→Chinese→English: "The electronic export license material system departed the construction."

FAST FOOD FLOPS

Fast food is such a huge industry that there's bound to be a flop or two. Here are some of the weirdest business decisions in fast food history.

T AVE IT OUR WAY

To stand out from the competition, in 1992 Burger King briefly converted its restaurants from fast food into sitdown restaurants with table service, but only during dinner hours. Customers would continue to order at the counter, but after placing their order they would find a table, and then an employee would bring them their food—up to 15 minutes later (to help customers pass the time while they were waiting for their food, there was a free basket of popcorn on every table...right next to the burning candle). Special "dinner baskets" offered new items such as fried shrimp, fried chicken, fried clams, and baked potatoes. Many locations even put out white tablecloths. The concept was a complete disaster. It slowed down Burger King's customer turnover rate so much that the company estimates that in the two months it tried table service, it lost \$10 million.

ARTERY-LICKIN' GOOD

Fried chicken may be delicious, but like anything that's deep-fried, it's loaded with fat, which makes it pretty unhealthy to eat. But that's never stopped Kentucky Fried Chicken from trying to convince the public (several times) that *its* fried chicken is healthier than other fried chicken.

• In 1991 the restaurant introduced Lite N' Crispy—fried chicken without the skin. But it was still breaded and fried, so it had almost the same amount of fat as its Original Recipe chicken. (A Lite N' Crispy breast had 22 grams of fat; an Original Recipe breast has 27.) Lite? Hardly. The FDA quickly levied a \$25,000 fine against Kentucky Fried Chicken for misleading the public... which led to the chain's renaming the product "Skinfree Crispy." A few months later, it was gone from the menu.

• At the same time, the chain changed its name to "KFC" to downplay the word "fried." In 2004 the chain began an ad cam-

paign that claimed the "F" in KFC stood for "fresh." Neitherworked—sales were flat.

128

YOU DON'T KNOW JACK

Ralston Purina, the corporate parent of Jack in the Box, was isfied that they were only the fifth most popular hamburger in the United States, and decided that the way to carve out niche was to appeal to an underserved audience: adults where eat fast food because they see it as "too juvenile." So in 155 chain was renamed Monterey Jack's. More than 800 location remodeled at a cost of \$3 million each, the majority of where paid for by franchisees. Brightly colored restaurants were replay with "higher-quality" fare like steak sandwiches and fajitas work. Most stores actually *lost* business. And within a year Monterey Jack's were converted back into Jack in the Boxe 1986 Ralston Purina sold Jack in the Box to an investment of \$450 million. (Before the Monterey Jack's conversion. The chain had been valued at \$500 million.)

McPIZZA

In 1989 pizza was a \$21 billion business and growing at a t 10% per year, but sales at McDonald's were stagnant, estet the dinner hours. McSolution: Sell pizza. McDonald's in: special fast-cook oven that used superhot air streams to z pizza in just over five minutes. Then it spent millions to the test restaurants—fitting kitchens with the new ovens and ing drive-through windows so they were large enough for box to pass through. In 1990 they began the test, selling --(four styles: cheese, pepperoni, sausage, and deluxe) in E Indiana. The pizzas cost from \$6 to \$9.50, making them expensive items on the McDonald's menu, and the same range Pizza Hut or Dominos. And while it took only five minutes :: a pizza, it took more than 10 minutes for it to get to the cust table-not bad for a pizza, but too slow for superfast McDor. Pizza flopped in Evansville. Was that the end? No. McDonal: made such a huge investment in developing the ovens (reput more than \$10 million), that they continued to test market 7 the U.S. and Canada as late as 1997. It never caught on.

It's against the law to play bridge in a hotel in Alabama.

BASKETBALL TEAM NAME ORIGINS

Ever wonder how a team from Utah came to be called the Jazz? Here's how NBA teams got their nicknames.

DALLAS MAVERICKS. Although it makes sense that a Texasbased team would have a western-themed name, it was actually chosen because one of the team's original owners was actor James Garner, star of the TV western show *Maverick*.

DENVER NUGGETS. The Denver Rockets entered the NBA when the American Basketball Association folded in 1976. There was already a team called the Rockets, so Denver executives chose Nuggets after Colorado's gold-mining history.

SAN ANTONIO SPURS. They were formerly the Dallas Chapparals in the American Basketball Association, but team execs wanted a cowboy-themed name when they relocated to San Antonio in 1973.

MINNESOTA TIMBERWOLVES. Minnesota has the largest population of timberwolves in the lower 48 states. The name was suggested by 17 different people in a name-the-team contest.

CHICAGO BULLS. Original owner Richard Klein thought bulls were tough, and so was his team. The name also pays tribute to the city's stockyards and meatpacking industry.

PORTLAND TRAILBLAZERS. A contest was held to allow the public to suggest names. More than 10,000 entries were received, with Pioneers receiving the most votes. But the team decided against it because Portland's Lewis and Clark College used it as *their* nickname. The second-most popular entry, Trailblazers, was used instead.

CLEVELAND CAVALIERS. Team executives let fans vote on the name from five suggestions: the Presidents, the Jays, the Foresters, the Towers, and the Cavaliers. **NEW ORLEANS HORNETS.** Until they moved to New Orleans in 2002, they were the Charlotte Hornets. The city of Charlotte resisted British occupation during the American Revolution. British general Lord Cornwallis reportedly called the city "a veritable nest of hornets."

MEMPHIS GRIZZLIES. There are no grizzly bears in Tennessee, but there are in Vancouver, Canada, where the team started in 1995. (The team first picked the Mounties but was forced to change it when the Royal Canadian Mounted Police objected.)

MIAMI HEAT. More than 5,000 entries were received in a team naming contest in 1987. Among the suggestions were the Palm Trees, Beaches, Suntan, and Shade. Team owners picked the Heat.

BOSTON CELTICS. Original owner Walter Brown named them after an older basketball team, the New York Celtics, in honor of the large Irish (also known as Celtic) population in Boston.

WASHINGTON WIZARDS. They were the Washington Bullets (formerly the Baltimore Bullets) until 1995, when owner Abe Pollin decided that "Bullets" was too violent, especially since Washington, D.C., was experiencing higher than normal murder rates. A fan contest was held, and Wizards won out over Dragons, Express, Stallions, and Sea Dogs.

PHILADELPHIA 76ERS. Named for 1776, the year the Declaration of Independence was signed (in Philadelphia).

ORLANDO MAGIC. Magic beat Heat, Tropics, and Juice in a newspaper contest. (It references nearby Disney World, also known as the "Magic Kingdom.")

UTAH JAZZ. Prior to 1979, the team was based in New Orleans, where jazz music originated.

TORONTO RAPTORS. Team executives wanted to use the name Huskies, but when they saw an early logo prototype, they realized it was too similar to the Minnesota Timberwolves' logo. A contest to name the team was held, and Raptors won. Velociraptors were vicious dinosaurs made famous in the movie *Jurassic Park*, which was released just before Toronto got its basketball team.

Michigan has more than 11,000 inland lakes and over 36,000 miles of streams.

UNCLE JOHN CLEANS YOUR KITCHEN

145

The BRI library boasts a huge collection of odd cleaning tips. Here are a few tricks that even the cleanest of our clean-freak readers may not have heard about.

T N THE KITCHEN

• Cleaning the Microwave: Fill a spray bottle with water and spritz the inside of the microwave. Then run the microwave for five to seven seconds. (No more than that!) This will heat the water enough to loosen the stains on the walls, floor, and ceiling of the microwave, making cleanup easier.

• Dirty Blenders and Garbage Disposals: You can clean any residual goo off the blades of these appliances with ice—just toss some cubes into the blender or disposal and run it until the ice is crushed. To further clean the garbage disposal, pour a large pot of boiling water down it while it's running, follow up with some liquid soap mixed with lemon juice, and rinse with a second round of boiling water. This should improve the disposal's performance... and its smell.

• Coffee or Tea Stains in Your Favorite Cup or Mug: Mix baking soda with a little salt and water to create a paste; then use a sponge to scour the inside of the mug with the mixture. You'll be surprised (we hope!) how quickly those stubborn stains disappear.

• Burnt Food in a Pot or Frying Pan: A baking soda paste—this time without salt—can work wonders here, too. Rub the paste onto the stain and let sit for at least three hours (overnight is even better). Then try scrubbing the stain out. If you still can't get it all up, mix two tablespoons of baking soda and a 1/2 cup of vinegar with a cup of water, doubling or tripling the formula, if necessary, to immerse the burnt section of the pan. Bring to a boil and keep it there for 10–15 minutes. If that doesn't get out the scorched food, nothing will.

• Removing Fish and Other Smells From Cutting Boards: Cut a fresh lemon in half and rub vigorously with the grain. The acid in

the lemon will help to break down the offensive odors, leaving nothing behind but the smell of the lemon.

• Smelly Refrigerators: Just about everybody knows that an open box of baking soda helps to remove odors from a smelly fridge, but did you know that it's not just the baking soda? The cardboard box has odor-absorbing properties, too. If you're in the habit of pouring the powdery stuff into a prettier container before you put it in the refrigerator, don't! It probably isn't worth the trouble.

• Smelly Kitchens in General: If you've got 1) company coming and 2) an orange and some cloves handy, poke as many cloves as you can into the unpeeled orange and set it on a plate. The clovey orange will give your kitchen a tantalizing scent that will probably last longer than your guests' visit.

AROUND THE HOUSE

• Wax-Encrusted Candleholders: You've got two choices with this one: Start by placing the candleholders under hot running water to melt off the wax. If that doesn't work, put the candleholder in the freezer and leave it there for at least two hours. The frozen, hardened wax will be much easier to remove.

• Ink Stains in the Carpet: Spray the stain with alcohol-based hair spray. (Sounds risky, but experts swear by it.) While it's drying, soak a clean cloth in a solution of three parts water to one part white vinegar. (Don't even *think* of using red-wine vinegar!) When the hair spray is dry, wring out the cloth and use it to wipe up the ink. (This method also works on fabrics and clothing, too).

• Rocking Chair Marks on Wooden Floors: The next time you're cleaning or polishing your floors, turn your rocker on its side and apply furniture polish to the parts of the rocker that contact the floor when the chair is in motion.

• Dog-doo on the Carpet: Clean up as much as the mess as you can with paper towels, then spray the area with shaving cream and let sit for 5–10 minutes before wiping up with an old sponge. Next, pour some club soda on the soiled area, let it fizz, then mop it up. Dab the area with a sponge rinsed in cold water; repeat if necessary.

• Cleaning Ashes From the Fireplace: Ashes can be a surprisingly effective fireplace-glass cleaner. If you have glass screens or doors on the fireplace, before you remove the ashes, dip a damp cloth in them and use the cloth to wipe down the glass. Then wipe off the glass with a *clean* damp cloth. Then use a spritzer bottle filled with clean water to spray down the rest of the ashes before you shovel them out of the fireplace—this will help keep the dust down during this dirty task.

• Algae in Gravity-Fed Water Dishes: Do you have one of those pet water dishes that holds several days' worth of water in an upright container that flows into a dish? If you use it outside, algae can grow inside it. The next time you change the water, dump a handful of uncooked rice into the vessel and fill it about 1/3 full with water. Using the palm of your hand to seal the vessel, shake it vigorously up and down. The grains of rice will scour the algae off the inside of the container. When you're finished, empty out the water and rice and refill with clean, fresh water. Your pet will thank you.

• Ornate, Carved Wooden Furniture That Collects a Lot of Dust: Forget ordinary dust cloths—they don't work fast enough. Take a brand new paintbrush with soft bristles, spray it with dust-collecting spray and brush the dust away. Brushing won't take nearly as long as dusting.

• Make Wooden Tabletops Shine: Why settle for anything less than a mirror finish? Pick up one of those electric shoe-polish buffers and use it instead of an ordinary rag the next time you're applying furniture polish to the table.

HOLY IOKE

An elderly woman had just returned home from church and found a burglar in her home. "Stop! Acts 2:38!" she yelled at him. The burglar stopped in his tracks and sat down, allowing the woman to call the police. When the cops arrived to collect the man, one of the officers asked the burglar, "Why did you just stand there? All the old lady did was yell a scripture at you." "Scripture?" replied the burglar. "She said she had an axe and two .38s!"

BASED ON A "TRUE" STORY

While telling a true story, Hollywood often strays from the truth, embellishing some facts while omitting others. Here are some inconsistencies we found in major motion pictures.

ovie: The Pursuit of Happyness (2006)

Matheometry: Homeless father Chris Gardner (played by Will Smith) is trying to turn his life around. He wows an employee of a stockbrokerage by solving a Rubik's Cube in a few seconds, earning a place in the company's prestigious training program. As he goes through the program, Gardner and his nine-yearold son sleep in churches and the subway. After he nearly misses his big final interview because of too many outstanding parking tickets, Gardner finally lands the stockbroker job.

Real Story: Gardner is a real person and he was indeed homeless while in the training program, but he never had his son with him—he didn't even know where the boy was (he was with his mother). The Rubik's Cube incident was pure Hollywood invention, and while Gardner actually was arrested right before his final interview, it wasn't for parking tickets. It was for spousal abuse.

Movie: Good Morning, Vietnam (1987)

Reel Story: Deejay Adrian Cronauer (Robin Williams) is drafted. into the Army and sent to serve in Vietnam. He is put to work as a disc jockey on Armed Forces Radio, where he delivers long antiwar and antiestablishment (but funny) rants in between songs, ultimately leading to a dishonorable discharge.

Real Story: Only the basics of Cronauer's story were used—he was a deejay sent to Vietnam, where he worked as a deejay. The zany, antiwar diatribes were added by screenwriters to suit the comic style of Robin Williams. Cronauer says he never performed any humorous or political monologues because 1) it would have gotten him court-martialed, and 2) he wasn't antiwar. He was never kicked out of the Army—he merely returned home to Pennsylvania when his tour of duty in Vietnam ended. Cronauer calls himself a lifelong Republican and he even served on President Bush's 2004 reelection campaign.

Movie: Mask (1985)

Reel Story: Rocky Dennis (Eric Stoltz) is a teenager with a fatal genetic disorder called *craniodiaphyseal dysplasia*. Calcium buildup in his skull makes his head twice the normal size and causes extreme facial disfigurement. Toward the end of the movie, Dennis gets a job as a counselor at a camp for the blind. He falls in love with a blind girl (Laura Dern) and, having experienced love, dies peacefully.

Real Story: Sadly, the most romantic part of the film is pure fabrication. Dennis never worked at a camp for blind kids and never fell in love with a blind girl. In fact, as a result of his condition, Dennis himself was legally blind from the age of six.

Movie: Capote (2005)

Reel Story: This portrayal of Truman Capote (Philip Seymour Hoffman) details Capote's writing of *In Cold Blood*, a book about a brutal murder in Kansas. The title card at the end of the film states that "*In Cold Blood* made Truman Capote the most famous writer in America. He never finished another book."

Real Story: While it's debatable that Capote was the "most famous writer in America," the statement that he never finished another book is simply false. In addition to short stories, newspaper articles, and several anthologies, Capote published several short novels after In Cold Blood.

Movie: Rudy (1993)

Reel Story: Daniel "Rudy" Ruettiger (Sean Astin) dreams of playing football for Notre Dame. Despite his small stature he makes it onto the team in his senior year. But the coach who let him on the team is replaced by Dan Devine (Chelcie Ross), who won't let Rudy play. In the last game of the year, the rest of the team refuses to play unless Rudy gets to play, too. Rudy plays, Rudy sacks the quarterback, Notre Dame wins.

Real Story: Notre Dame players never staged a protest—Devine actually insisted that Rudy play in that last game.

How about you? One in every 10 people in the world lives on an island.

Who was Adriaen van der Donck? The first and only lawyer in New York City in 1653.

KNOW YOUR KNUCKLES

171

All your knuckle kneeds met right here-at KnuckleMart.

NUCKLE SCIENCE

Do your knuckles actually "crack"? Not really. Here's what's going on: Your knuckles, like all the joints in your body, are surrounded by a sac of thick, clear *synovial fluid*. When you stretch the bones of a joint apart, as you do when you crack your knuckles, the sac is stretched. That reduces the pressure in the sac, which causes bubbles to be formed. Stretch it far enough, and the pressure drops low enough for the bubbles to burst—resulting in the loud "pop."

• You've probably noticed that once you've cracked a knuckle, you can't do it again for some time afterward. That's because it takes time for the bubbles to dissolve back into the fluid...usually about a half hour. (According to experts, you can crack them as often as you want—the notion that it is harmful to your joints is an old wives' tale.)

• "Knuckle-walking" is the name for a type of locomotion used by some animals, such as gorillas and chimpanzees. It's a form of *quadrupedalism*, or walking on four limbs (as opposed to our two-legged *bipedalism*), and involves putting weight on the knuckles of the front limbs when walking. Other animals that use it include the giant anteater and the platypus.

KNUCKLE WORDS

The origin of the word *knuckle* goes back more than 2,000 years to Proto-Germanic, the precursor of all Germanic languages, and the word *knoke*, meaning "bone." Somewhere along the line, the German word *knöchel* came to mean "little bone" and in the 1300s migrated to the English language as *knokel*, or *knuckle*, referring specifically to the finger joints.

• To "knuckle down," meaning to apply oneself earnestly, entered the dictionary in 1864 and is believed to have come from the game of marbles, where shooting required one's knuckles to be on the ground.

• To "knuckle under," meaning to submit or admit defeat, first appeared in 1869 and most likely was derived from the image of a person bent or kneeling with their knuckles on the ground.

172

• "Knuckleballs" showed up in baseball around 1910. They're socalled because the ball is held in a bent-fingered, knuckle grip when thrown, making it fly with very little or no spin and therefore erratically.

• The word "knucklehead," meaning a not very bright person, was coined in 1942...by the Three Stooges. It's also the nickname of a Harley-Davidson motorcycle style, known by its distinctive ribbed and knobby engine heads, which someone apparently thought looked like knuckles.

KNUCKLE ENTERTAINMENT

• Knucklehead Smiff was the name of the knuckleheaded dummy used by ventriloquist Paul Winchell in his 1950s and '60s TV shows.

• *Knuckle* is the name of both a 1975 TV movie starring Eileen Brennan and a 1989 BBC film starring Emma Thompson and Tim Roth.

• A "white knuckle" experience, or a white knuckle thrill ride or film, is one that has you gripping the arms of your seat so tightly that the blood leaves your knuckles and they look white. The exact origin of the phrase is unknown.

• The British expression "near the knuckle" refers to anything that is more than a little sexually suggestive or risqué. For example, "I thought his jokes were a bit near the knuckle, considering that the audience was mostly five-year-olds."

KNUCKLEANNEOUS

• "Pork knuckles" aren't knuckles. They're the pig's forefeet and ankles (along with the meat around them, of course). "Beef knuckles" actually come from the hind legs, above the kneecap.

• Are the joints of your toes called "toe knuckles"? They are by some people, and since they don't have a nickname like the finger joints do, we here at the Bathroom Readers' Institute say, "Why not? 'Toe knuckles' it is."

DUSTBIN OF HISTORY: MASABUMI HOSONO

181

We all know the story of the Titanic—we've seen the movies (there have been several), watched the TV specials, and even read the books and magazine articles. But as we at the BRI have discovered over the years, there's always something new to learn about even the best-known stories.

THE LONG TRIP HOME

In 1910 Japan's Transportation Ministry sent an official named Masabumi Hosono to Russia to study that country's railroad system. Hosono finished his assignment in early 1912 and, following a brief stop in London, began the next leg of his trip home by embarking across the Atlantic on the RMS *Titanic*. Needless to say, *that* leg of the trip didn't go quite as planned. On April 14, at 11:40 p.m., just four days into its maiden voyage, the *Titanic* struck an iceberg while traveling near top speed and began taking on water.

RUDE AWAKENING

It's doubtful that anyone on the *Titanic*, which had been advertised by the White Star Line as being "practically unsinkable," realized at first that the ship had suffered a mortal blow. There were plenty of people on board who didn't even know the ship had hit anything. Many of those who noticed felt only a slight shudder followed by the sound of the engines coming to a stop.

Hosono apparently slept through the entire thing. The first he learned of it was shortly after midnight, 25 or 30 minutes after the collision, when he was awakened by a knock at the door of his second-class cabin and told to put on his life vest.

Three times when he tried to make his way to the lifeboats, he was turned away by the ship's officers, who ordered him to return to the lower levels of the ship. They likely assumed that, as a Japanese person, he must have been traveling in third class, or "steerage." On his third attempt Hosono managed to slip past a guard and make his way to the lifeboats.



IN THE DARK

Was the *Titanic* sinking, or was it just floating dead in the water, waiting to be assisted by the ocean liner *Carpathia* or one of the half a dozen other ships who'd received her distress calls and were already steaming to her aid?

We know the answer today, of course, but on that fateful night only three men on the *Titanic* did—Edward J. Smith, the captain; Thomas Andrews, the chief designer; and J. Bruce Ismay, the president of the White Star Line. They knew not only that the *Titanic* would sink, but also that it would sink well before help arrived. And they kept the information to themselves, fearing a panic that would cause the passengers to stampede the lifeboats, which when filled to capacity could carry only 1,178 of the more than 2,200 people on board. Even the officers ordered to organize the loading of the lifeboats had no idea the *Titanic* was going down.

THANKS...BUT NO THANKS

A statistical statis Statistical statis

Withholding this information did help to keep the loading of the lifeboats orderly, but probably at the cost of hundreds of needless deaths. Many passengers and even many crew members, not suspecting the gravity of the situation, preferred to remain on board rather than risk climbing into the lifeboats. If you had booked passage on a ship that was said to be unsinkable, would you be willing to leave its warm, dry, and seemingly safe environs to climb into a tiny, swinging lifeboat in the middle of the night, and be lowered on pulleys 65 feet straight down into the freezing, iceberg-filled Atlantic? Even the captain's order to load women and children first must have cost some passengers their lives, because it meant that married women were being asked to separate from their husbands, which many refused to do.

Besides, what was the rush? As far as the crew members loading the boats knew, the *Titanic* wasn't sinking. The lifeboats were simply going to ferry passengers to the rescue ships when they arrived, and that was still hours away. There would be plenty of time to load more people into the lifeboats later, if they didn't want to go now. The crew members filled the boats with as many people as wanted to get in, and then lowered them into the water. In the end, only three of the *Titanic*'s 20 lifeboats were filled to capacity when they set down in the Atlantic. Hosono must have sensed what was happening earlier than many of the passengers did, because as he stood next to Lifeboat No. 10 as it was being loaded, he was already steeling himself for the end. "I tried to prepare myself for the last moment with no agitation, making up my mind not to leave anything disgraceful as a Japanese," he explained in a letter to his wife. "But still I found myself looking for and waiting for any possible chance to survive."

That chance came moments later, when the officer loading No. 10 could not coax any more women or children into the boat. "Room for two more!" the officer called out. Hosono watched as another man jumped into the boat.

"I myself was deep in desolate thought that I would no more be able to see my beloved wife and children, since there was no alternative for me than to share the same destiny as the *Titanic*," he wrote. "But the example of the first man making a jump led me to take this last chance." Hosono hopped in, and at 1:20 a.m. he and 34 other people were lowered to safety in a boat built to hold 65.

FINAL MOMENTS

The *Titanic*, by now sitting very low in the water, had just one hour left to live. Eight of the 20 lifeboats had already launched and only one of them—Hosono's No. 10—was filled even *halfway* to capacity. (Lifeboat No. 1 launched with only 12 passengers out of a possible 40.) Many of the passengers still aboard the *Titanic* were just beginning to realize that the "unsinkable" ship might really be sinking.

When the *Titanic* finally slipped beneath the waves at 2:20 a.m., Hosono watched from Lifeboat No. 10. He described the experience in his letter to his wife, which he wrote on board the *Carpathia* as it brought the survivors to New York. "What had been a tangible, graceful sight was now reduced to a mere void. And how I thought about the inevitable vicissitudes of life!"

AFTERMATH

Of the more than 2,200 passengers and crew aboard the *Titanic*, just over 700 survived, including 316 of the 425 women and 56 of 109 children. Even if every woman and child *had* been accommodated in the lifeboats, there still would have been enough room for nearly 700 of the 1,690 men, yet only 338 men survived. Not





everyone who perished did so because they declined an opportunity to climb into a lifeboat, not by a long shot. But this must surely have been the cause of many deaths.

In the shock and horror that followed one of the worst peacetime disasters in maritime history, many of these subtle details were lost on the newspaper-reading public. As they counted up the 162 dead women and children, many readers wondered how 338 men had managed to find their way into the lifeboats, "displacing" those helpless victims. Hosono received some of the harshest criticism of all. Not from the American newspapers, who expected chivalrous self-sacrifice from well-bred gentlemen of the middle and upper classes, but were dismissive of foreigners and the rabble traveling in steerage. Few American papers even took an interest in Hosono's story. One that did celebrated the good fortune of the "lucky Japanese boy."

SAVED...AND CONDEMNED

No, the harshest attacks against Hosono came from his own countrymen. For in surviving the *Titanic* disaster, he had broken two cultural taboos. Not only had Hosono chosen ignominious life over an honorable death, he had done so *in public*—on a European passenger liner with the eyes of the world upon him.

Hosono was denounced as a coward by Japanese newspapers and fired from his job with the Transportation Ministry. The ministry hired him back a few weeks later, but his career never recovered. College professors denounced him as immoral, and he was written up in Japanese textbooks as a man who had disgraced his country. There were even public calls for him to commit *hara-kiri* —ritual suicide—as a means of saving face.

Hosono never did kill himself, but there must have been times when he wished he'd died on the *Titanic*. He never spoke of the experience again, and forbade any mention of it in his home. After he died in 1939, a broken and forgotten man, his letter to his wife, written on what is believed to be the only surviving piece of *Titanic* stationery, sat in a drawer until 1997, when the blockbuster film *Titanic* staged its Tokyo premiere. Then the Japanese public's interest in the doomed liner's lone Japanese passenger was renewed again, this time with much more sympathy.

THE LAST MEAL

On April 14, 1912, the Titanic struck an iceberg and sank, killing more than 1,500 people. This is the lavish meal served that night to the ship's first-class passengers...which, for many, would turn out to be their last.

First Course

Various hors d'oeuvres, oysters

Second Course

Consommé Olga (beef broth, port, celery, leeks, carrots, gherkins) Cream of Barley Soup

Third Course

Poached Salmon with Mousseline Sauce (hollandaise with whipped crcam) and Cucumbers

Fourth Course

Filet Mignon Lili (steak served on baked potato slices and topped with artichoke pieces, foie gras, truffle slices, and a veal reduction sauce) Sauté of Chicken Lyonnaise (an onion, white winc, and veal sauce) Vegetable Marrow Farci (stuffed squash)

Fifth Course

Lamb with Mint Sauce, Roast Duckling with Apple Sauce Sirloin of Beef with Château Potatoes (potato nuggets cooked in butter) Green Peas, Creamed Carrots, Boiled Rice, or Parmentier (potato soup)

Sixth Course

Punch Romaine (white wine, rum, sugar syrup, and citrus juices)

Seventh Course

Roast Squab (young pigeon) and Cress

Eighth Course Cold Asparagus Vinaigrette

Ninth Course Pâté de foie gras with celery

Tenth Course

Waldorf Pudding, Peaches in Chartreuse Jelly, Chocolate and Vanilla Eclairs, or French Ice Cream

There are about 550 hairs in one of your eyebrows.

All the treasures of earth cannot bring back one lost moment. -- French Proverb

STATE QUARTERS

Have you been collecting the state quarters? Here's what's on the backs of all of them.

ACKGROUND

In 1999 the United States Mint began its nine-year plan to release 50 commemorative quarters, one for each of the states. The quarters had two purposes: to celebrate American history at the dawn of the 21st century, and to generate new interest in coin collecting. The quarters were released, one every few months, between January 1999 and fall 2008, beginning with the 13 original states, and then according to the order in which the states entered the Union. Each state decided what would go on the back of its quarter, be it a local monument, state icon, historical event, or important figure. Here's what they chose, in order of their release.

• Delaware. A portrait of Caesar Rodney on horseback. A delegate to the Continental Congress, Rodney rode 80 miles to Philadelphia in a thunderstorm (while suffering from asthma and cancer) to cast the deciding vote that made the colonies send the Declaration of Independence to England.

• Pennsylvania. Commonwealth, the statue atop the state capitol building. Her right arm extends as a gesture of kindness and her left hand holds a ribbon to symbolize justice.

• New Jersey. A rendering of Emmanuel Leutze's 1851 painting Washington Crossing the Delaware. In 1776 Washington and his troops crossed that icy New Jersey river to surprise (and defeat) British troops stationed in Trenton.

• Georgia. The live oak (the state tree) and the Georgia peach (the state fruit).

• Connecticut. In 1687 King James II of England revoked the state's charter. A colonist hid it for safekeeping in the hollow of a giant oak tree, now known as the Charter Oak, which adorns the coin.

• Massachusetts. The Minuteman, a statue commemorating Revolutionary War soldiers in Minuteman National Historic Park in Concord.



• Maryland. The dome of the Maryland State House, built in 1772 and still used by the state legislature. The United States Congress met there from 1783 to 1784.

• South Carolina. The yellow jessamine (state flower), the palmetto (state tree), and the Carolina wren (state bird).

• New Hampshire. The state emblem, a rock formation on Cannon Mountain called the Old Man of the Mountain. Until it collapsed in 2003, it looked like an old man's face.

• Virginia. The three ships the Susan Constant, Godspeed, and Discovery—that in 1607 brought the first settlers to Jamestown, the first permanent English settlement in the New World.

• New York. The Statue of Liberty.

• North Carolina. A rendering of the Wright brothers' first airplane flight in 1903 at Kitty Hawk, North Carolina.

• Rhode Island. A sailboat (representing the state's most popular sport) on Narragansett Bay.

• Vermont. A man tapping trees to get raw maple syrup, with Camel's Hump Mountain in the background. • Kentucky. The state is known for horse racing, so a horse is shown. (Ironically, it's a Thoroughbred, not a Quarter Horse.)

• Tennessee. The state's musical heritage is depicted with a fiddle to represent Appalachian music, a trumpet for the blues, and a guitar for country music.

• Ohio. With the caption "the Birthplace of Aviation Pioneers," an early wooden airplane (the Wright brothers were born in Ohio) and an astronaut in full space suit (Neil Armstrong and John Glenn are both from Ohio).

• Louisiana. An outline of the 1803 Louisiana Purchase (it doubled the size of the United States), the state bird (the pelican), and a trumpet (to represent the state as the birthplace of jazz).

• Indiana. A race car, as Indiana is home to the Indianapolis 500.

• **Mississippi.** The state flower, the magnolia.

• Illinois. Abraham Lincoln, who grew up and practiced law in the state.

• Alabama. A portrait of native Helen Keller sitting in a chair, reading a braille book.

• Maine. Pemaquid Point lighthouse (built in 1826) guiding a ship safely into harbor.

• Missouri. Lewis and Clark are seen returning from their Western expedition in a riverboat on the Missouri River (they returned in 1806), going through St. Louis' Gateway Arch (built in 1965).

• Arkansas. Reflecting its major industries, Arkansas's quarter shows rice stalks, a diamond, and a duck.

• Michigan. A map of the state with the Great Lakes highlighted.

• Florida. On the left is a Spanish galleon (Spain explored and settled Florida in the 1500s); on the right is the Space Shuttle (it launches from Florida's Kennedy Space Center).

• Texas. A map of Texas with a large star, referencing its nickname "the Lone Star State," which comes from the Texas flag—red, white, and blue with a single star designed when it was an independent republic in the 1840s.

• Iowa. A one-room schoolhouse with students outside planting a tree. It's a rendering of the painting *Arbor Day* by Iowan artist Grant Wood. • Wisconsin. Three of the state's biggest commodities: a cow, a wheel of cheese, and an ear of corn.

• California. As 19thcentury naturalist John Muir gazes at Yosemite National Park's granite Half Dome monolith, a California condor soars overhead.

• Minnesota. A lake (Minnesota is the "land of 10,000 lakes").

• Oregon. Crater Lake, a crystal-blue body of water that sits in a caldera (a volcanic crater) and is the nation's deepest lake.

• Kansas. A buffalo (the state animal) and a sunflower (the state flower).

• West Virginia. The quarter depicts the state's 3,030-foot long, 876-foot high New River Gorge Bridge—one of the longest and highest steel-span bridges in the world.

• Nevada. Three mustangs running free. Nevada is home to more than half of the country's wild horses.

• Nebraska. Passing by landmark Chimney Rock is a family in a covered wagon headed west on the Oregon Trail.

• Colorado. The Rocky Mountains.

... the Tomb of the Unknown Soldier, and Pearl Harbor.

• North Dakota. In 1906 President Roosevelt signed the Antiquities Act, which set aside the state's Badlands as a nature preserve for endangered bison. Today, 400 bison roam the area (and two of them are on the quarter).

• South Dakota. Mount Rushmore and a ring-necked pheasant.

• Montana. A bison skull, which is both a Western icon and a symbol of the state's Native American heritage.

• Washington. A leaping salmon and Mount Rainier.

• Idaho. The peregrine falcon, once endangered but now abundant in Idaho.

• Wyoming. A bucking horse and a rider, symbolizing the Wild West.

• Utah. Two trains and a railroad spike. In 1869 the Union Pacific and Central

Pacific railway lines were joined in Promontory, Utah, completing the transcontinental railroad.

200

• Oklahoma. The state bird, the scissortail flycatcher, flying over a field of wildflowers, and the state flower, the Indian blanket.

• New Mexico. Over a topographical map of the state is the sun symbol of the Zia Pueblo tribe. Emanating from a circle are four points, which represent the four directions, the four seasons, and the four ages of man (childhood, youth, middle age, old age).

• Arizona. The Grand Canyon and a saguaro cactus.

• Alaska. A grizzly bear eating a salmon.

• Hawaii. A portrait of 19thcentury Hawaiian king Kamehameha I, who united the islands into one kingdom.

*

*

*

HYPERMILING 101

Some people call it "ecodriving," others call it penny-pinching. Whether you're doing it out of environmental conscience or financial necessity, saving gas has become a way of life. Here are some tips from the experts.

T OTOR MISERS

For as long as people have been driving cars, there have been a dedicated few motorists who try to squeeze as many miles as they can out of a single tank of gas. During good times, when gas was plentiful and cheap, they did it for the fun of the challenge, or just for the principle of preserving a limited natural resource. In harder times, such as World War II, when gasoline was strictly rationed, or during the oil crisis of 1973, when gas cost more than ever before, people couldn't afford not to save gas.

Lucky for us they did do it, because over the years they've developed a lot of gas-saving techniques that we can use today. Many involve nothing more than common sense, and you may be surprised how many of these "secrets" you knew already without even realizing it. Now all you have to do is put them into practice.

FIRST THINGS FIRST: FIGURING FUEL ECONOMY

Many cars now come equipped with onboard computers that track fuel mileage continuously and give an estimate of how much fuel a car is consuming at any given moment. If your car has such a computer, all you have to do is follow the instructions in your owner's manual that tell you how to get the computer to display continuous mpg. Aftermarket computers are also available; they work on most vehicles made after 1996 and sell for under \$200.

For those who drive older cars or don't have \$200 to spend, calculating a car's mpg at any given moment won't be possible. But it's still possible to calculate the average miles per gallon for each tank of gas using the trip odometer. You probably know this, but just in case...

• The next time you gas up, remember to reset your trip odometer to zero. Then, after you've used up that tank of gas, make a note of how many miles you've driven and how many gallons of gas it takes to fill back up. Divide the miles by the number of gallons to get your average mpg. (Remember to reset your trip odometer to zero, so that you can calculate average mpg again the next time you fill up.) If you drove 300 miles and had to buy 12.5 gallons of gas, for example, your average miles per gallon on that tank of gas were roughly 300/12.5=24 mpg.

• If your car doesn't have a trip odometer, it will still have an ordinary odometer that tells you how many miles the car has been driven over its lifetime. Make a note of the odometer reading every time you buy gas, and subtract the previous reading to calculate the number of miles you drove on your last tank of gas.

• However you calculate your car's average mpg, it helps to keep track of the information in a notepad or pocket calendar, so that you can measure how your fuel economy improves over time as you put hypermiling tips into practice.

YOUR FIX-IT CHECKLIST

• **Repairs.** If you aren't already in the habit of keeping your car properly tuned up and fixing mechanical problems as they arise, start now. Just by doing so, you can improve your car's fuel efficiency by anywhere from 4% to 40%, depending on the severity of the problems that need to be fixed.

• Tires. Keeping your tires inflated to the proper pressure (listed in the owner's manual and on the inside edge of the driver's side door) can increase fuel economy as much as 3%. Tires that are underinflated require more energy to move because more of their surface area touches the road, increasing friction or what's known as "rolling resistance," which harms fuel economy. Keeping your tires properly inflated saves additional money by reducing wear and extending the life of your tires.

• Oil. Be sure to use the correct grade of motor oil; using the wrong grade can reduce your mileage by as much as 2%. Change the oil as often as the auto manufacturer suggests: the longer the oil is in your car, the thicker it becomes with dirt and grime. And the thicker it gets, the more energy is required to push it through the engine.

SLOW AND STEADY WINS THE RACE

The good news: you can save gas in a car that's already tuned up.

In 1989 the Space Shuttle Discovery carried 32 fertilized chicken eggs into orbit.

The bad news: you do it by *slowing down*. If you drive 65-75 mph on the highway, the biggest step you can take toward increasing your car's mpg is slowing to 55 mph. Most passenger cars are most economical at between 40 and 55 mph. Then fuel economy drops rapidly as speed increases above 60 mph, due to the fact that aerodynamic drag increases exponentially as speed increases. At high speeds, more than half the gas your car burns is spent overcoming wind resistance. And your lead foot may cost you more than you realize: The Department of Energy estimates that when gas is priced at \$4.08 a gallon, every 5 mph you drive over 60 is the same as paying an extra 30 cents per gallon of gas.

In a test conducted by *Consumer Reports* magazine, simply decreasing the speed of a Toyota Camry from 75 to 55 mph resulted in a nearly 30% increase in fuel economy, from 30 up to 40 mpg. And if 55 mph is asking too much, when the Camry slowed from 75 to 65 mph, fuel economy still increased from 30 to 35 mpg.

MELLOW OUT

• If you have aggressive driving habits, such as rapid acceleration and frequent braking, back off a little. Don't accelerate hard just to brake again a short time later; it uses extra gas and wears out your brake pads. It's better to try to maintain a constant speed, with no unnecessary acceleration.

• When you do need to accelerate, do so gently—slow acceleration uses less gas than rapid acceleration. One simple trick for moderating your rate of acceleration is to use the resume/accelerate switch on the cruise control to speed up, instead of stepping on the gas. Cruise control is designed to accelerate at a slow rate, and when you accelerate slowly you use less gas. (Study your owner's manual first if you don't know all the ins and outs of your cruise control system.)

• By eliminating unnecessary acceleration and applying the gas a little more moderately when you need to speed up, you could save an additional 2 to 3 miles per gallon—that's 30 additional miles for every 10 gallons of gas in your tank.



HYPERMILING 102

A few more tips on how to get the most bang for your buck when you're buying gas for your car. (Part I is on page 202.)

ON'T EVEN THINK ABOUT IT

A lot of us have dreamed of doing it: One of the most tempting ways to save gas may be to simply shut off the engine anytime you're traveling downhill. Even if you've felt the urge to do it, don't—driving with the engine off can be very dangerous, not to mention illegal in many states, and can even do thousands of dollars of damage to your car. How?

• Many automatic transmissions are lubricated by a pump that is powered by the car's engine. If you turn off the engine while the car is moving, you can severely damage the transmission.

• Power steering and power brakes also rely on the engine for their power. Once the engine has been shut off, your car's steering will become very stiff, and so will the brakes after just a few pumps of the brake pedal. In an older car, you also risk damaging the distributor. So if you're in your car and it's moving, leave the engine on.

AVOID THE DRAFT

治疗防病的原始的原始检查检查检查检查检查检查检查

Are you old enough to remember the oil crisis of the 1970s, and the fanciful tales of VW Beetles "drafting"—another word for tailgating—so closely behind 18-wheeler trucks that drivers could put their cars in neutral, shut off the engine, and be sucked down the road by the big rigs? This is an urban legend that can get you killed, with the added insult that your gas savings, if any, would be negligible. Don't tailgate big rigs and other large vehicles under *any* circumstances. It's illegal, ineffective, and very dangerous. You'll save a lot more gas just by slowing down, and that increases your safety as well.

The minimum safe distance behind any vehicle is the distance that gives you at least three seconds of reaction time in an emergency. At highway speeds that can be as much as 150 feet. You're probably too close already—stay back!

RUNNING COLD...

• Automobiles that are already warmed up operate more efficiently than cars that are cold, if for no other reason than cars are designed to run on a richer mixture of fuel and air until they are warmed up. Note: this *doesn't* mean you need to let your car sit and idle until it's warm. Warming up in your driveway before starting off can actually be counterproductive. It makes more sense to start driving as soon as the engine is running smoothly, which in most cars, especially newer ones, means almost immediately. The drivetrain (all the parts that transmit the power from the engine to the wheels) also needs to warm up to work efficiently. Believe it or not, so do the tires. The fastest way to warm everything up: Start driving.

• The improved efficiency of warmed-up cars is one of the reasons that stringing all of your errands together into one long trip can save gas. In addition to driving fewer miles by making one big trip instead of several shorter ones, you can save as much as 4 mpg by running the bulk of your errands in a car that's already warmed up rather than one that starts each trip cold.

...AND HOT

Air conditioners get blamed for using a lot of gas. So does rolling down the windows of a car that's traveling at highway speeds, on the theory that a car with its windows rolled down has more aerodynamic drag than one that has them rolled up.

• Turns out there is some truth to the air conditioner claim—in one test by *Consumer Reports* magazine, a Toyota Camry traveling at 65 mph lost about 1 mpg of fuel economy when the air conditioner was turned on.

• But there's no truth to the claim that rolling down your car's windows harms its fuel economy. When *Consumer Reports* rolled down the windows of their test Camry at 65 mph, they didn't notice any change in fuel mileage at all. So roll down your windows to your heart's content, and use the air conditioner if you need to—it's not using as much gas as you might have thought.

IDLE TALK

• Anytime your engine is running and your car isn't moving, you



are getting 0 mpg. If you expect to be idling for 10 seconds or more, shutting off the engine—provided that it's safe to do so will save fuel. It also helps to avoid situations where you might spend a lot of time idling, such as at the drive-up window of a fast food restaurant.

• If you drive an automatic, you probably know that when you're stopped and the car is in drive, your foot on the brake is the only thing stopping the engine from slowly pushing the car forward. Whenever you're going to be stopped for more than a few seconds, shift the car into neutral and you'll save a little gas. If you're worried about forgetting to shift back to drive, keeping your hand on the shifter will help you remember.

• Another simple trick: if you're like Uncle John, you're occasionally guilty of the practice of starting your car as soon as you get in it and then spending 30 seconds or more fastening your seat belt, adjusting the mirrors, tuning the radio to your station, and so on. You can save gas by taking care of this stuff *before* starting the car.

LOCATION, LOCATION, LOCATION

• Anytime you have two or more lanes to choose from, figure out which one is the "lane of least resistance" and get in it. The lane of least resistance is the hypermiler's term for the one that requires the least amount of braking or changes in speed, which over time can make a big dent in your fuel economy. On a street where lots of cars are turning right into driveways or parking lots, stay in the left lane. If a lot of cars are stopping in the left lane to make left turns, move into the right lane. On a three-lane street, the lane in the middle is often the clearest.

• Taking back roads, where the speed limits are lower and there are fewer cars around, gives you the flexibility to drive efficiently in ways that aren't possible on busy streets or highways. Just getting out of stop-and-go traffic will improve your gas mileage, and you may save gas even if the backroads route is a little longer.

WEATHER REPORT

• In the winter, any snow on the ground can provide extra rolling resistance to your car, requiring you to use more gas than would be necessary if there were no snow on the road. Because of this, the

most fuel-efficient time to drive is right after the road has been plowed, if you can wait until then.

• If your car is covered in snow, clear off as much as you can before you start driving. All that snow can add a lot of weight to the car, and if it's piled up on the roof it can also make the car less aerodynamic. It also cuts down the time you need the electric defroster, which uses a lot of energy.

• Water on the road also increases rolling resistance. For this reason, hypermilers like to practice something known as "ridge tiding." If the road has water collecting in tire tracks worn into the road surface, driving just to the left or the right of these ruts—provided the lane is wide enough and it is safe to do so—takes you out of the water onto a part of the road surface that offers less resistance.

ODDS AND ENDS

• If you drive an automatic, when you take your foot off the brake, pause just a second before stepping on the accelerator, to give the transmission a chance to start the car moving. It takes less energy to accelerate your car once it is already moving.

• Coasting in situations where it's appropriate can save gas, too. Keep a close eye on the brake lights of the cars ahead of you as well as the traffic lights in approaching intersections. Anytime you see brake lights flash or a green light turn to yellow, and you know you are going to have to brake soon, it's more fuel efficient for you to take your foot off the accelerator immediately and coast until you need to apply the brakes. Your car uses less gas when your foot is off the accelerator. Once you know you're going to have to stop, it's wasteful to continue accelerating right up to the point where you do need to brake.

• Some fuel-saving techniques that work fine when you're alone on the road or in very light traffic, such as driving below the posted speed limit or coasting slowly up to red lights in the hope that they'll turn green before you come to a complete stop, can be counterproductive on busier roads, even if you don't take road rage and potential collisions into consideration. You may be saving gas, but by disrupting the flow of traffic around you, you may also be causing other drivers to waste more gas than you're saving.

the weight of insects eaten by spiders every year is greater than the weight of all humans alive.

!