



MONKEYS WITH HELPING HANDS

PAGE 38

LIGHTNING: NATURE'S TERRIBLE SWIFT SWORD

PAGE 23

August 1987 \$1.79 Reader's Digest

"Just for Kicks"—The Scourge of Vandalism . . .	Jerome Brondfield	33
Monkeys With Helping Hands . . .	Smithsonian	38
You Are What You Think . . .	Claire Safran	44
No Greater Love . . .	Missileer	49
The Unsweetened Truth About Sugar Subsidies	Thomas K. Billington	51
Bertha's Triumph . . .	Pat Jordan	55
19 Hours in "Devil's Icebox" . . .	Drama in Real Life	60
Memos From an Advertising Man . . .	"The Unpublished David Ogilvy"	69
Candlelighters: Help for Stricken Families . . .	Doris Lund	73
Cents Are Nonsense . . .	Business Week	79
Should You Join an HMO? . . .	Report to Consumers	91
Common Sense vs. Miranda . . .	Eugene H. Methvin	96
Mike Bengé and His Marvelous Tree	John G. Hubbell	103
You Can Make Exercise Fun . . .	Health	108
What's Behind the UFO Mania? . . .	An Editorial Review	113
Unforgettable Omar Bradley . . .	C. B. Hansen	118
Seven Truths About Sex . . .	"How to Make Love All the Time"	127
South Africa: Glimmers of Hope? . . .	David Reed	131
The Catbird Seat . . .	"The Thurber Carnival"	138
Split Seconds . . .	Picture Feature	155
How to Escape a Fire . . .	A Reader's Digest Lifesaver	163
"We're Stateniks!" . . .	"In Search of Melancholy Baby"	171

<i>Book Section</i>	It All Began With Daisy	From the book	82
-------------------------	-------------------------	---------------	----

The Power of Positive Procrastination, 9
I'll Sue—That's What I'll Do!, 17

Lightning: Nature's Terrible Swift Sword, 23

News of Medicine, 15—Quotable Quotes, 21—Laughter, 47—
Life in These United States, 67—Toward More Picturesque
Speech, 81—Word Power, 101—Money Savers, 111—All in a
Day's Work, 125—Humor in Uniform, 137—Points to
Ponder, 153—Personal Glimpses, 169

66th Year: World's Most-Read Magazine
Over 28 million copies in 15 languages bought monthly



"You can tell it's going to strike," said a man who had reason to know. "You can smell the sulfur in the air, and then your hair will stand up on end"

Lightning: Nature's Terrible Swift Sword

Condensed from
COUNTRY JOURNAL
JOHN SEDGWICK

WHAT COULD BE more awesome than a burst of lightning on a summer afternoon? The sky goes dark, the air chills. Then, out of nowhere, there is a burst of blinding light and a

deafening roar, and the world is awash in a torrent of water. No wonder the ancients thought it the work of the gods.

Scientists are no less impressed. "It's the scariest and most spectacular thing I know," says Martin Uman, professor of electrical engineering at the University of Florida and author of several books on lightning.

The bolts that pierce the air are really channels of pulsing electric energy two inches across. They may be as short as 200 feet or as long as 20 miles. They zip through the air at 90,000 miles per second, nearly half the speed of light. At that clip, it's impossible to see that the bolt is actually traveling from the ground up to the clouds. In that

glimmering instant, the electricity heats the surrounding air up to 50,000 degrees Fahrenheit, five times the temperature of the surface of the sun.

Although three-quarters of the bolt's energy is used up in heat, enough remains to deliver a full 125 million volts of electricity. Hitting a tree, the blast instantly sets the sap boiling so fiercely the tree just bursts apart. Lightning has been known to blow open ten-foot craters in the ground and split huge boulders in two.

With one hundred lightning bolts blasting the earth every second—that's eight million a day—lightning provides more energy than all the electric generators combined in the United States. Un-

Half the calories?



1-oz. Philadelphia Brand cream cheese = 100 calories. 1-oz. Butter or Margarine = 200 calories.

fortunately, no one has found a way to harness this now-you-see-it-now-you-don't energy source.


Physicists speculate that lightning may well have figured in the creation of life. Laboratory experiments have shown that powerful electrical jolts are capable of breaking down the four gases that formed the world's primordial atmosphere—methane, ammonia, hydrogen and water vapor—to produce amino acids, the building blocks of living organisms. Later on, lightning certainly sustained early man by providing his only source of fire. Even now, thunderstorms are responsible for maintaining the earth's negative charge. And lightning itself helps to produce certain nitrogen compounds that are essen-

tial for the growth of most plants.

Lightning gives and it takes away. It starts half of all fires in our national forests and accounts for hundreds of millions of dollars' worth of property destruction every year. It is a major cause of power outages in this country as well, bursting transformers with its sudden surges of power.

But the biggest threat of all is the threat to human life. At least one hundred Americans are killed by lightning every year. That's more than the death toll caused by tornadoes, hurricanes or floods. Lightning kills by arresting the heart or respiratory system with its blast of current—so powerful it often blows off one shoe as it departs.

Because of all that current, few



Start spreading the news.



© 1987 Kraft, Inc.

LIGHTNING: NATURE'S TERRIBLE SWIFT SWORD

who are struck directly by a bolt of lightning will live to tell about it. But if hit by lightning that has spent itself on a nearby house or tree, a person probably will survive. Roy C. "Dooms" Sullivan, for years a ranger in Virginia's Shenandoah National Park, claimed he was struck no fewer than seven times by lightning, a Guinness World Record. One restaurant in the Shenandoah Valley reportedly refused to let Dooms onto the premises during thunderstorms.

"You can tell it's going to strike," he once explained. "You can smell the sulfur in the air, and then your hair will stand up on end, and then it's going to get you."

ARISTOTLE, unimpressed by the contemporary myths explaining

lightning, postulated in the fourth century B.C. that lightning was a hot "exhalation" from the sphere of fire in the nether regions of the sky. It wasn't until 1752 that Benjamin Franklin, who later invented the lightning rod, demonstrated that lightning was electricity—with his celebrated episode of kite-flying in a thunderstorm.

How does a thundercloud get so charged up with electricity? The process is complex and poorly understood. One theory is that ice slivers and hail swirling within the cloud generate electrical charges, sending positive charges to the top of the thundercloud, negative to the bottom. This activity induces an increasingly strong positive charge directly below on the earth's surface that the negative cloud base finds irresistible. Eventually the

PHOTOS, PAGE 23: (BACKGROUND) C. D. GLEITER/FPG INTERNATIONAL; (INSET) RICHARD E. ORVILLE, STATE UNIVERSITY OF NEW YORK AT ALBANY



RALPH WETMORE



The instant itch reliever *...and a lot more*

Instantly on contact. That's how fast LANACANE® Creme Medication starts working to relieve the itch.

LANACANE contains the special type of anesthetic used worldwide by doctors—who know it's the only way to attack pain and itching instantly.

LANACANE is not a hydrocortisone like Cortaid® and Cortizone-5, which work slowly and indirectly. With no painkillers at all, hydrocortisones don't work on some of your most common itches.

LANACANE works directly on every kind of itch—from bites to dry skin to personal itching. It safely relieves irritated skin, no matter how sensitive. And its antibacterial helps speed natural healing. LANACANE even contains Aloe to moisturize.

Yet, for all this relief, ounce for ounce, LANACANE costs far less than leading hydrocortisones.

No wonder LANACANE is the world's leader in fast itch relief.

LANACANE®

August

cloud base accumulates a whopping potential of 100 million volts, enough to allow an electrical discharge.

At this point, the thundercloud's stored energy spills out from the cloud in what is called a "stepped leader," a latticework of angular streamers, too faint for the human eye to detect. When one comes wriggling to within 30 yards of the ground, the earth can take it no longer and lets loose with a mammoth "return stroke," a tremendous eruption of radiant light that shoots back up the path the leader has broken to the cloud, filling out some side channels and wrong turns on its way, to form a blazing, many-channeled stream of light. This is what we see. The lightning's heat causes a rapid expansion of air to create a massive shock wave—the roar, crack and rumble of thunder. That is what we hear.

You can tell how near the storm is by counting the seconds between the lightning flash, which you see instantly, and the thunder, which travels at the speed of one thousand feet per second. Divide the number of seconds by five to get the distance in miles, or multiply the number of seconds by a thousand to get the distance in feet.


If you are outdoors in a thunderstorm, take precautions. Lightning normally strikes the tallest object, because that provides the shortest path to the ground. In an open field, that's you. So try to keep a low profile.

Best of all, get in your car and roll up the windows. If lightning strikes, you'll be protected from the blast since the lightning will be conducted to the ground by the metal shell of the car. Keep your hands off that radio dial and other metal parts of the interior, though. The charge wouldn't necessarily kill you, but it could give you a nasty shock. Incidentally, it's not, as many people believe, the rubber in the tires that protects you. Lightning that has shot through 20 miles of air isn't going to be put off by a couple of inches of rubber.

Since only one percent of lightning deaths occur indoors, it's a safe place to be during a storm. The walls of most houses are crammed

with electrical wires, which provide a convenient channel for lightning to pass through without blasting a hole in the roof. That's not too good for your wiring system, so you might want to consider investing in lightning rods, particularly if you live in a lightning-riddled area like Florida. That state has more thunderstorms than any other in the United States—about 90 a year. (It could be worse; Uganda gets 242.)

The chances of a frame house in a fairly built-up neighborhood being hit by lightning in any one year are about one in a hundred. And don't think that just because lightning has already struck your house it won't strike again. Remember what happened to Dooms Sullivan?



New Sominex® Liquid. Rest assured.

Introducing Sominex Liquid.
With the one sleep ingredient that doctors
recommend most to help you fall asleep
safely, gently, without worry.
Have a good night.

Read and follow label directions.

© 1987 Beecham Inc.

40¢	MANUFACTURER COUPON	EXPIRES 10/31/88	40¢
-----	---------------------	------------------	-----

Save 40¢ on Sominex® Liquid or Tablets
(excluding trial size)

TO DEALER: As our agent we will pay you the face value of this coupon plus 8¢ handling provided you received it from a consumer purchasing the product specified. ANY OTHER USE CONSTITUTES FRAUD. Proof of sufficient purchase to cover the coupons submitted to us for redemption must be provided on request. Coupon is nonassignable, void where prohibited, taxed or restricted by law. Consumer must pay any tax. Send to BEECHAM PRODUCTS, DEPT. #5938, EL PASO, TEXAS 79966. Cash value 1/20¢. LIMIT ONE COUPON PER PURCHASE.

105682



40¢ PURCHASE 5 53100 51040 0

Still, don't get the wrong idea. The chances of being killed by lightning this year are less than one in 2½ million. It's 50 times more likely that you will die in a drowning accident. Take precau-

tions, sure. But don't get carried away and start hiding under the bed with all the shades down. For all its hazards, lightning is still the greatest show on earth. Don't miss it.



Marriage Encounters

MY WIFE AND I celebrated our fifth wedding anniversary at an elegant restaurant. After dinner, I asked Marie if she would do it all over again. "Yes, of course," she replied, "but this time I'd have the broiled lobster."

—Ira Goodman, quoted by Jonathan Mandell in *New York Daily News Magazine*

BEING A PERFECTIONIST, my father has a habit of gently correcting any inaccuracies in my mother's conversation. But one night, my mother had about had it with his "critiques." They were at a family gathering. Mother said something, and my father corrected her. In utter disgust, she said, "Oh, David, sometimes you make me feel like a blundering idiot!" My father responded in his typical low-key manner, "Dear, that's blithering idiot."

—Contributed by Robert DeBres

FOR MY WIFE'S BIRTHDAY I bought a richly decorated chocolate cake. My wife was pregnant and, as we sampled the cake, we talked about the odd cravings that pregnant women can have. I had read somewhere that they were sometimes due to a deficiency in the diet. "I wonder," I said, cutting myself a generous second slice, "what *my* body lacks that makes me want more of this."

"Willpower?" my wife replied.

—Contributed by R. A. H. Morrow



Bard's-Eye View

As WILLIAM SHAKESPEARE would report the sports news:
Baseball: "Have all his ventures fail'd? What, not one hit?"

—*The Merchant of Venice*

Football: "'Tis sport to maul a runner."

—*Antony and Cleopatra*

Golf: "If you will . . . see the fruits of the sport, mark his first approach . . ."

—*Twelfth Night*

Boxing: "What a blow was there given!"

—*The Tempest*

Wrestling: "He would make you believe it was done in fight . . ."

—*Henry IV, Part I*

—William Garvin in *Sting*