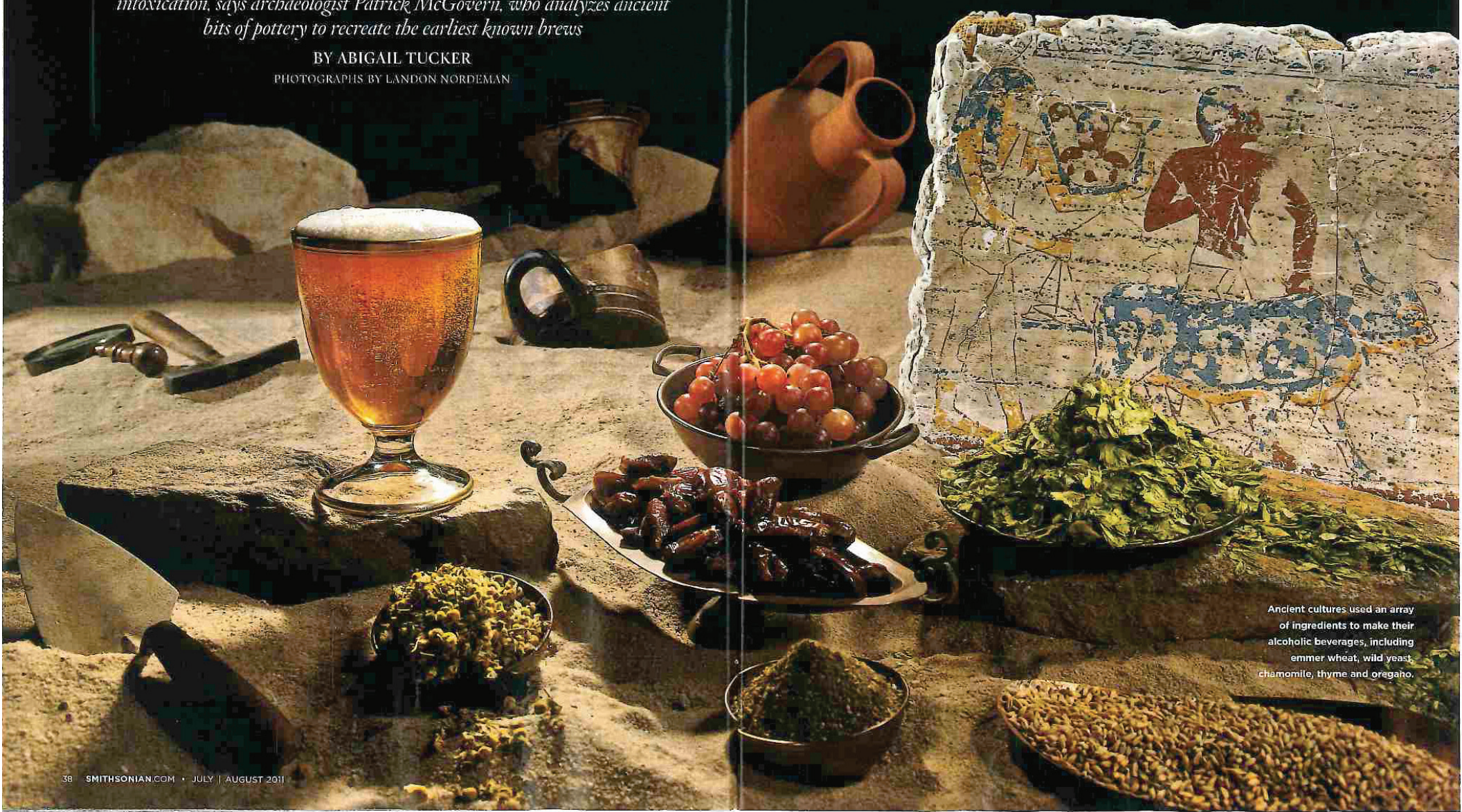


# DIG, DRINK AND BE MERRY

*The driving force behind civilization? It's the quest for intoxication, says archaeologist Patrick McGovern, who analyzes ancient bits of pottery to recreate the earliest known brews*

BY ABIGAIL TUCKER

PHOTOGRAPHS BY LANDON NORDEMAN



Ancient cultures used an array of ingredients to make their alcoholic beverages, including emmer wheat, wild yeast, chamomile, thyme and oragano.

*It's just after dawn at the Dogfish Head brewpub* in Rehoboth Beach, Delaware, where the ambition for the morning is to resurrect an Egyptian ale whose recipe dates back several hundred centuries.

But will the *za'atar*—a potent Middle Eastern spice mixture redolent of oregano—clobber the soft, floral flavor of the chamomile? And what about the dried doum-palm fruit, which has been giving off a worrisome fungusy scent ever since it was dropped in a brandy snifter of hot water and sampled as a tea?

"I want Dr. Pat to try this," says Sam Calagione, Dogfish Head's founder, frowning into his glass.

At last, Patrick McGovern, a 66-year-old archaeologist, wanders into the little pub, an oddity among the hip young brewers in their sweat shirts and flannel. Proper to the point of primness, the University of Pennsylvania adjunct

professor sports a crisp polo shirt, pressed khakis and well-tended loafers; his wire spectacles peek out from a blizzard of white hair and beard. But Calagione, grinning broadly, greets the dignified visitor like a treasured drinking buddy. Which, in a sense, he is.

The truest alcohol enthusiasts will try almost anything to conjure the libations of old. They'll slaughter goats to fashion fresh wineskins, so the vintage takes on an authentically gamey taste. They'll brew beer in dung-tempered pottery or boil it by dropping in hot rocks. The Anchor Steam Brewery, in San Francisco, once cribbed ingredients from a 4,000-year-old hymn to Ninkasi, the Sumerian beer goddess.

"Dr. Pat," as he's known at Dogfish Head, is the world's foremost expert on ancient fermented beverages, and he cracks long-forgotten recipes with chemistry, scouring ancient kegs and bottles for residue samples to scrutinize in the lab. He has identified the world's oldest known barley beer (from Iran's Zagros Mountains, dating to 3400 B.C.), the oldest grape wine (also from the Zagros, circa 5400 B.C.) and the earliest known booze of any kind, a Neolithic grog from China's Yellow River Valley brewed some 9,000 years ago.

Widely published in academic journals and books,

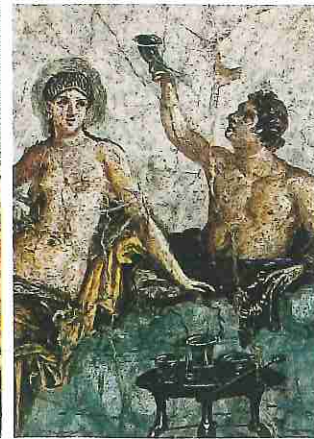
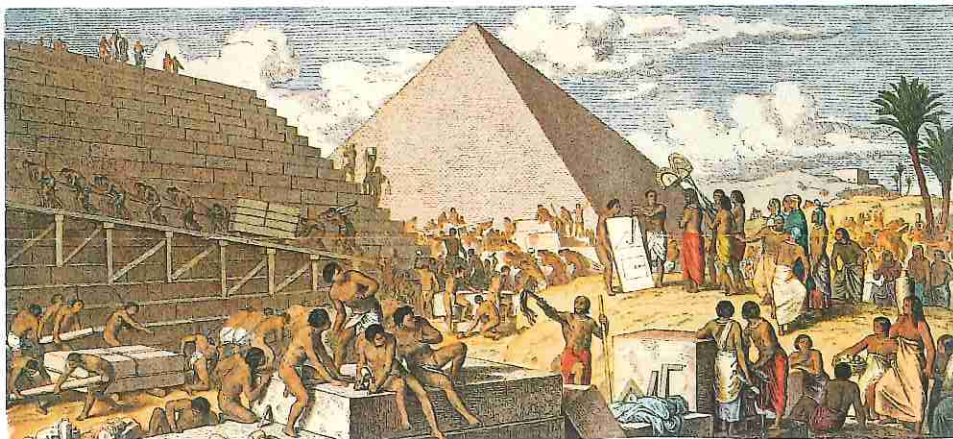
McGovern's research has shed light on agriculture, medicine and trade routes during the pre-biblical era. But—and here's where Calagione's grin comes in—it's also inspired a couple of Dogfish Head's offerings, including Midas Touch, a beer based on decrepit refreshments recovered from King Midas' 700 B.C. tomb, which has received more medals than any other Dogfish creation.

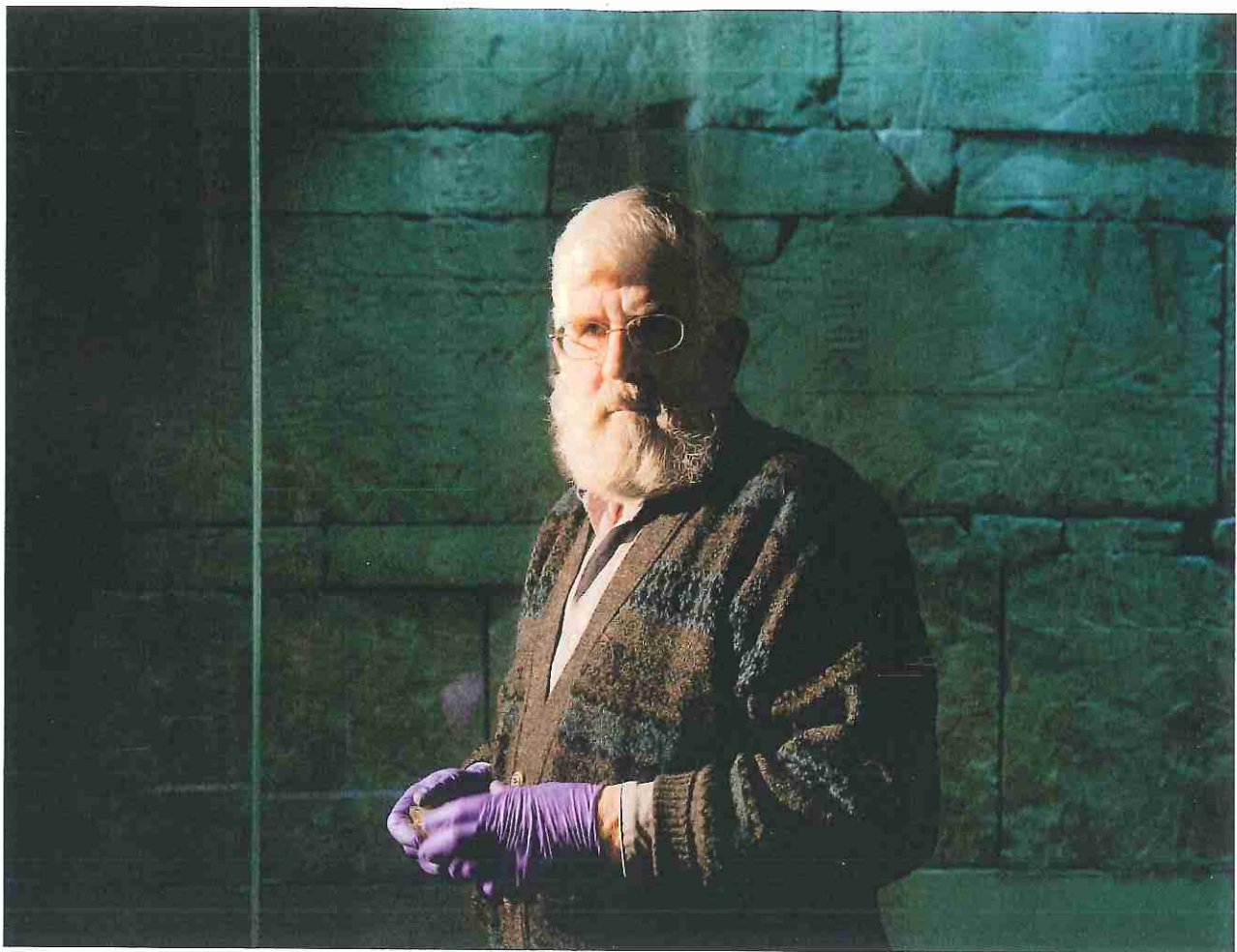
"It's called experimental archaeology," McGovern explains.

To devise this latest Egyptian drink, the archaeologist and the brewer toured acres of spice stalls at the Khan el-Khalili, Cairo's oldest and largest market, handpicking ingredients amid the squawks of soon-to-be decapitated chickens and under the surveillance of cameras for "Brew Masters," a Discovery Channel reality show about Calagione's business.

The ancients were liable to spike their drinks with all sorts of unpredictable stuff—olive oil, bog myrtle, cheese, meadow-

**A brief history of happy hour (clockwise from top): a 19th-century Japanese geisha holds sake; a Dutch tapestry depicts a wine harvest c. A.D. 1500; in a first-century fresco, Romans enjoy libations, presumably wine; in ancient Egypt, pyramid workers received a daily ration of beer.**





**Archaeologist Patrick McGovern—better known to his brewery buddies as “Dr. Pat”—scours fragments of old vessels for residues that allow him to reverse-engineer ancient beverages. He discovered the world’s oldest-known booze, a Neolithic grog brewed in China some 9,000 years ago.**

sweet, mugwort, carrot, not to mention hallucinogens like hemp and poppy. But Calagione and McGovern based their Egyptian selections on the archaeologist’s work with the tomb of the Pharaoh Scorpion I, where a curious combination of savory, thyme and coriander showed up in the residues of libations interred with the monarch in 3150 B.C. (They decided the za’atar spice medley, which frequently includes all those herbs, plus oregano and several others, was a current-day substitute.) Other guidelines came from the even more ancient Wadi Kubbania, an 18,000-year-old site in Upper Egypt where starch-dusted stones, probably used for grinding sorghum or bulrush, were found with the remains of doumpalm fruit and chamomile. It’s difficult to confirm, but “it’s very likely they were making beer there,” McGovern says.

The brewers also went so far as to harvest a local yeast, which might be descended from ancient varieties (many commercial beers are made with manufactured cultures). They left sugar-filled petri dishes out overnight at a remote Egyptian date farm, to capture wild airborne yeast cells,

then mailed the samples to a Belgian lab, where the organisms were isolated and grown in large quantities.

Back at Dogfish Head, the tea of ingredients now inexplicably smacks of pineapple. McGovern advises the brewers to use less za’atar; they comply. The spices are dumped into a stainless steel kettle to stew with barley sugars and hops. McGovern acknowledges that the heat source should technically be wood or dried dung, not gas, but he notes approvingly that the kettle’s base is insulated with bricks, a suitably ancient technique.

As the beer boils during lunch break, McGovern sidles up to the brewery’s well-appointed bar and pours a tall, frosty Midas Touch for himself, spurning the Cokes nursed by the other brewers. He’s fond of citing the role of beer in ancient workplaces. “For the pyramids, each worker got a daily ration of four to five liters,” he says loudly, perhaps for Calagione’s benefit. “It was a source of nutrition, refreshment and reward for all the hard work. It was beer for pay. You would have had a rebellion on your hands if they’d run out. The pyramids might not have been built if there hadn’t been enough beer.”

Soon the little brew room is filled with fragrant roiling steam, with hints of toast and molasses—an aroma that can only be described as intoxicating. The wort, or unfermented beer, emerges a pretty palomino color; the brewers add flasks of the yellowish, murky-looking Egyptian yeast and fermentation begins.

They plan on making just seven kegs of the experimental



beverage, to be unveiled in New York City two weeks later. The brewers are concerned because the beer will need that much time to age and nobody will be able to taste it in advance.

McGovern, though, is thinking on another time scale entirely. "This probably hasn't been smelled for 18,000 years," he sighs, inhaling the delicious air.

THE SHELVES OF MCGOVERN'S OFFICE in the University of Pennsylvania Museum are packed with sober-sounding volumes—*Structural Inorganic Chemistry*, *Cattle-Keeper of the Eastern Sabana*—along with bits of bacchanalia. There are replicas of ancient bronze drinking vessels, stoppered flasks of Chinese rice wine and an old empty Midas Touch bottle with a bit of amber goo in the bottom that might intrigue archaeologists thousands of years hence. There's also a wreath that his wife, Doris, a retired university administrator, wove from wild Pennsylvania grape vines and the corks of favorite bottles. But while McGovern will occasionally toast a promising excavation with a splash of white wine sipped from a lab beaker, the only suggestion of personal vice is a stack of chocolate Jell-O pudding cups.

The scientific director of the university's Biomolecular Archaeology Laboratory for Cuisine, Fermented Beverages, and Health, McGovern had had an eventful fall. Along with touring Egypt with Calagione, he traveled to Austria for a

conference on Iranian wine and also to France, where he attended a wine conference in Burgundy, toured a trio of Champagne houses, drank Chablis in Chablis and stopped by a critical excavation near the southern coast.

Yet even strolling the halls with McGovern can be an education. Another professor stops him to discuss, at length, the folly of extracting woolly mammoth fats from permafrost. Then we run into Alexei Vranich, an expert on pre-Columbian Peru, who complains that the last time he drank *chicha* (a traditional Peruvian beer made with corn that has been chewed and spit out), the accompanying meal of roast guinea pigs was egregiously undercooked. "You want guinea pigs crunchy, like bacon," Vranich says. He and McGovern talk *chicha* for a while. "Thank you so much for your research," Vranich says as he departs. "I keep telling people that beer is more important than armies when it comes to understanding people."

We are making our way down to the human ecology lab, where McGovern's technicians are borrowing some equip-

ment. McGovern has innumerable collaborators, partly because his work is so engaging, and partly because he is able to repay kindnesses with bottles of Midas Touch, whose Iron Age-era recipe of muscat grapes, saffron, barley and honey is said to be reminiscent of Sauternes, the glorious French dessert wine.

In the lab, a flask of coffee-colored liquid bubbles on a hot plate. It contains tiny fragments from an ancient Etruscan amphora found at the French dig McGovern had just visited. The ceramic powder, which had been painstakingly extracted from the amphora's base with a diamond drill, is boiling in a chloroform and methanol solvent meant to pull out ancient organic compounds that might have soaked into the pottery. McGovern is hoping to determine whether the amphora once contained wine, which would point to how the beverage arrived in France in the first place—a rather ticklish topic.

"We think of France as sort of synonymous with wine," McGovern says. "The French spent so much time developing all these different varietals, and those plants were taken all over the world and became the basis of the Australian industry, the Californian industry and so forth. France is a key to the whole worldwide culture of wine, but how did wine get to France? That's the question."

Francophiles might not like the answer. Today wine is so

a bitter, whitish byproduct of brewed barley also known as beer stone, means barley beer.

Tree resin is a strong but not surefire indicator of wine, because vintners of old often added resin as a preservative, lending the beverage a pleasing lemony flavor. (McGovern would like to test the Lattes samples for resin from a cypress-like tree; its presence would suggest the Etruscans were in contact with Phoenician colonies in Northern Africa, where that species grows.) The only foolproof way to identify ancient wine from this region is the presence of tartaric acid, a compound in grapes.

Once the boiling brown pottery mixture cooks down to a powder, says Gretchen Hall, a researcher collaborating with McGovern, they'll run the sample through an infrared spectrometer. That will produce a distinctive visual pattern based on how its multiple chemical constituents absorb and reflect light. They'll compare the results against the profile for tartaric acid. If there's a match or a near-match, they may do other preliminary checks, like the Feigl spot test, in which the sample is mixed with sulfuric acid and a phenol derivative: if the resulting compound glows green under ultraviolet light, it most likely contains tartaric acid. So far, the French samples look promising.

McGovern already sent some material to Armen Mir-

## *A new discipline was born, which scholars jokingly call drinkology, or dipsology, the study of thirst.*

integral to French culture that French archaeologists include the cost of cases in their excavation budgets. McGovern, however, suspects that wine was being produced in Etruria—present-day central Italy—well before the first French vineyards were planted on the Mediterranean coast. Until Etruscan merchants began exporting wine to what is now France around 600 B.C., the Gauls were likely guzzling what their epicurean descendants would consider a barbaric blend of honey or wheat, filtered through reeds or mustaches.

McGovern's Etruscan amphora was excavated from a house in Lattes, France, which was built around 525 B.C. and destroyed in 475 B.C. If the French were still drinking Etruscan vintages at that point, it would suggest they had not established their own wineries yet. The trick is proving that the amphora contained wine.

McGovern can't simply look for the presence of alcohol, which survives barely a few months, let alone millennia, before evaporating or turning to vinegar. Instead, he pursues what are known as fingerprint compounds. For instance, traces of beeswax hydrocarbons indicate honeyed drinks; calcium oxalate,

zoian, a scientist at the federal Alcohol and Tobacco Tax and Trade Bureau, whose primary job is verifying the contents of alcoholic beverages—that, say, the gold flakes in the Italian-made Goldschlager schnapps are really gold. (They are.) His Beltsville, Maryland, lab is crowded with oddities such as a confiscated bottle of a distilled South Asian rice drink full of preserved cobras and vodka packaged in a container that looks like a set of Russian nesting dolls. He treats McGovern's samples with reverence, handling the dusty box like a prized Bordeaux. "It's almost eerie," he whispers, fingering the bagged sherds inside. "Some of these are 5,000, 6,000 years old."

Months later, McGovern e-mails me with good news: Mirzoian has detected tartaric acid in the Lattes samples from France, making it all but certain they contained imported Etruscan wine. Also, the project's archaeologists have unearthed a limestone treading vat from 400 B.C.—what would seem to be the earliest French wine press, just about 100 years younger than the Etruscan amphora. Between the two sets of artifacts, McGovern hopes to pinpoint the advent of French wine.

"We still need to know more about the other additives," he says, "but so far we have excellent evidence."

MCGOVERN'S IRISH ANCESTORS opened the first bar in Mitchell,

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South Dakota, in the late 1800s. His Norwegian predecessors were teetotalers. McGovern credits his relationship with alcohol to this mixed lineage—his interest is avid, not obsessive. In his student days at Cornell University and elsewhere, when McGovern dabbled in everything from neurochemistry to ancient literature, he knew little about alcohol. It was the late 1960s and early 1970s; other mind-altering substances were in vogue; the California wine revolution had barely begun and Americans were still knocking back all manner of swill.

One summer, during which McGovern was “partly in grad school,” he says with the vagueness frequently reserved for the ’70s, he and Doris toured the Middle East and Europe, living on a few dollars a day. En route to Jerusalem, they found themselves wandering Germany’s Mosel wine region, asking small-town mayors if local vintners needed seasonal pickers. One winemaker, whose arbors dotted the steep slate slopes above the Moselle River, took them on, letting them board in his house.

The first night there, the man of the house kept returning from his cellar with bottle after bottle, McGovern recalls, “but he wouldn’t ever show us what year it was. Of course, we didn’t know anything about vintage, because we had never re-

Iran’s Godin Tepe site showed him a narrow-necked pottery jar from 3100 B.C. with red stains.

“She thought maybe they were a wine deposit,” McGovern remembers. “We were kind of skeptical about that.” He was even more dubious “that we’d be able to pick up fingerprint compounds that were preserved enough from 5,000 years ago.”

But he figured they should try. He decided tartaric acid was the right marker to look for, “and we started figuring out different tests we could do. Infrared spectrometry. Liquid chromatography. The Feigl spot test. . . . They all showed us that tartaric acid was present,” McGovern says.

He published quietly, in an in-house volume, hardly suspecting that he had discovered a new angle on the ancient world. But the 1990 article came to the attention of Robert Mondavi, the California wine tycoon who had stirred some controversy by promoting wine as part of a healthy lifestyle, calling it “the temperate, civilized, sacred, romantic mealtime beverage recommended in the Bible.” With McGovern’s help, Mondavi organized a lavishly catered academic conference the next year in Napa Valley. Historians, geneticists, linguists, oenologists, archaeologists and viticulture experts from several countries conferred over elaborate dinners, the conversa-

*“I keep telling people that beer is more important than armies when it comes to understanding people.”*

ally drunk that much wine, and we were from the United States. But he kept bringing up bottle after bottle without telling us, and by the end of the evening, when we were totally drunk—the worst I’ve ever been, my head going around in circles, lying on the bed feeling like I’m in a vortex—I knew that 1969 was terrible, ’67 was good, ’59 was superb.”

McGovern arose the next morning with a seething hangover and an enduring fascination with wine.

Earning his PhD in Near Eastern archaeology and history from the University of Pennsylvania, he ended up directing a dig in Jordan’s Baq’ah Valley for more than 20 years, and became an expert on Bronze and Iron Age pendants and pottery. (He admits he was once guilty of scrubbing ancient vessels clean of all their gunk.) By the 1980s, he had developed an interest in the study of organic materials—his undergraduate degree was in chemistry—including jars containing royal purple, a once-priceless ancient dye the Phoenicians extracted from sea snail glands. The tools of molecular archaeology were swiftly developing, and a smidgen of sample could yield surprising insights about foods, medicines and even perfumes. Perhaps ancient containers were less important than the residues inside them, McGovern and other scholars began to think.

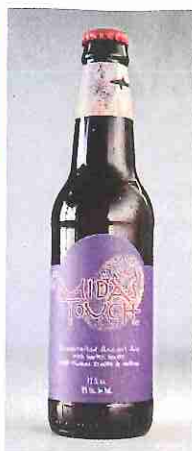
A chemical study in the late 1970s revealed that a 100 B.C. Roman ship wrecked at sea had likely carried wine, but that was about the extent of ancient beverage science until 1988, when a colleague of McGovern’s who’d been studying

tions buoyed by copious drafts of wine. “We were interested in winemaking from all different perspectives,” McGovern says. “We wanted to understand the whole process—to figure out how they domesticated the grape, and where did that happen, how do you tend grapes and the horticulture that goes into it.” A new discipline was born, which scholars jokingly refer to as drinkology, or dipsology, the study of thirst.

Back at Penn, McGovern soon began rifling through the museum’s storage-room catacombs for promising bits of pottery. Forgotten kitchen jars from a Neolithic Iranian village called Hajji Firuz revealed strange yellow stains. McGovern subjected them to his tartaric acid tests; they were positive. He’d happened upon the world’s oldest-known grape wine.

Many of McGovern’s most startling finds stem from other archaeologists’ spadework; he brings a fresh perspective to forgotten digs, and his “excavations” are sometimes no more taxing than walking up or down a flight of stairs in his own museum to retrieve a sherd or two. Residues extracted from the drinking set of King Midas—who ruled over Phrygia, an ancient district of Turkey—had languished in storage for 40 years before McGovern found them and went to work. The artifacts contained more than four pounds of organic materials, a treasure—to a biomolecular archaeologist—far more precious than the king’s fabled gold. But he’s

*Staff writer ABIGAIL TUCKER last wrote about Blackbeard’s treasure. PHOTOGRAPHER Landon Nordeman is based in New York.*



also adamant about travel and has done research on every continent except Australia (though he has lately been intrigued by Aborigine concoctions) and Antarctica (where there are no sources of fermentable sugar, anyway). McGovern is intrigued by traditional African honey beverages in Ethiopia and Uganda, which might illuminate humanity's first efforts to imbibe, and Peruvian spirits brewed from such diverse sources as quinoa, peanuts and peppertree berries. He has downed drinks of all descriptions, including Chinese *baijiu*, a distilled alcohol that tastes like bananas (but contains no banana) and is approximately 120 proof, and the freshly masticated Peruvian chicha, which he is too polite to admit he despises. ("It's better when they flavor it with wild strawberries," he says firmly.)

Partaking is important, he says, because drinking in modern societies offers insight into dead ones.

"I don't know if fermented beverages explain everything, but they help explain a lot about how cultures have developed," he says. "You could say that kind of single-mindedness can lead you to over-interpret, but it also helps you make sense of a universal phenomenon."

McGovern, in fact, believes that booze helped make us human. Yes, plenty of other creatures get drunk. Bingeing on fermented fruits, inebriated elephants go on trampling sprees and wasted birds plummet from their perches. Unlike distillation, which human beings actually invented (in China, around the first century A.D., McGovern suspects),

**Vintage science: Bowls recovered from King Midas' 700 B.C. tomb (left) led to the creation of Midas Touch beer (center top). Vessels like those found near the head of a skeleton buried 9,000 years ago in China (right) inspired Chateau Jiahu (center bottom), a blend of wild grapes, hawthorn, rice and honey.**

fermentation is a natural process that occurs serendipitously: yeast cells consume sugar and create alcohol. Ripe figs laced with yeast drop from trees and ferment; honey sitting in a tree hollow packs quite a punch if mixed with the right proportion of rainwater and yeast and allowed to stand. Almost certainly, humanity's first nip was a stumbled-upon, short-lived elixir of this sort, which McGovern likes to call a "Stone Age Beaujolais nouveau."

But at some point the hunter-gatherers learned to maintain the buzz, a major breakthrough. "By the time we became distinctly human 100,000 years ago, we would have known where there were certain fruits we could collect to make fermented beverages," McGovern says. "We would have been very deliberate about going at the right time of the year to collect grains, fruits and tubers and making them into beverages at the beginning of the human race." (Alas, archaeologists are unlikely to find evidence of these preliminary hooches, fermented from things such as figs or baobab fruit, because their creators, in Africa, would have stored them in dried gourds and other containers that did not stand the test of time.)

With a supply of mind-blowing beverages on hand, human

civilization was off and running. In what might be called the “beer before bread” hypothesis, the desire for drink may have prompted the domestication of key crops, which led to permanent human settlements. Scientists, for instance, have measured atomic variations within the skeletal remains of New World humans; the technique, known as isotope analysis, allows researchers to determine the diets of the long-deceased. When early Americans first tamed maize around 6000 B.C., they were probably drinking the corn in the form of wine rather than eating it, analysis has shown.

Maybe even more important than their impact on early agriculture and settlement patterns, though, is how prehistoric potions “opened our minds to other possibilities” and helped foster new symbolic ways of thinking that helped make humankind unique, McGovern says. “Fermented beverages are at the center of religions all around the world. [Alcohol] makes us who we are in a lot of ways.” He contends that the altered state of mind that comes with intoxication could have helped fuel cave drawings, shamanistic medicine, dance rituals and other advancements.

When McGovern traveled to China and discovered the oldest known alcohol—a heady blend of wild grapes, hawthorn, rice and honey that is now the basis for Dogfish Head’s Chateau Jiahu—he was touched but not entirely sur-

ologists let fresh air into the vault, the tapestries’ vivid colors began fading before their eyes.

Archaeology is, at heart, a destructive science, McGovern recently told an audience at the Smithsonian’s National Museum of the American Indian: “Every time you excavate, you destroy.”

That may be why he likes dreaming up new beers so much.

DOG FISH HEAD’S TA HENKET (ancient Egyptian for “bread beer”) was unveiled last November in New York, in the midst of a glittering King Tut exhibit at Discovery Times Square. Euphoric (or maybe just tipsy) beer nerds and a few members of the press file into an auditorium adorned with faux obelisks and bistro tables, each with a bowl of nuts in the center. The words dog, fish and head in hieroglyphics are projected on the walls.

Onstage beside McGovern, Calagione, swigging an auburn-colored ale, tells the flushed crowd about how he and the archaeologist joined forces. In 2000, at a Penn Museum dinner hosted by a British beer and whiskey guidebook writer, Michael Jackson, McGovern announced his intention to recreate King Midas’ last libations from the excavated residue that had moldered in museum storage for 40 years. All interested brewers should meet in his lab at 9 the next morning, he

*“Fermented beverages are at the center of religions all around the world. [Alcohol] makes us who we are in a lot of ways.”*

prised to learn of another “first” unearthed at Jiahu, an ancient Yellow River Valley settlement: delicate flutes, made from the bones of the red-crowned crane, that are the world’s earliest-known, still playable musical instruments.

ALCOHOL MAY BE AT THE HEART of human life, but the bulk of McGovern’s most significant samples come from tombs. Many bygone cultures seem to have viewed death as a last call of sorts, and mourners provisioned the dead with beverages and receptacles—agate drinking horns, straws of lapis lazuli and, in the case of a Celtic woman buried in Burgundy around the sixth century B.C., a 1,200-liter caldron—so they could continue to drink their fill in eternity. King Scorpion I’s tomb was flush with once-full wine jars. Later Egyptians simply diagramed beer recipes on the walls so the pharaoh’s servants in the afterlife could brew more (presumably freeing up existing beverages for the living).

Some of the departed had festive plans for the afterlife. In 1957, when University of Pennsylvania archaeologists first tunneled into the nearly airtight tomb of King Midas, encased in an earthen mound near Ankara, Turkey, they discovered the body of a 60- to 65-year-old man fabulously arrayed on a bed of purple and blue cloth beside the largest cache of Iron Age drinking paraphernalia ever found: 157 bronze buckets, vats and bowls. And as soon as the archae-

said. Even after the night’s revelry, several dozen showed up. Calagione wooed McGovern with a plum-laced medieval braggot (a type of malt and honey mead) that he had been toying with; McGovern, already a fan of the brewery’s Shelter Pale Ale, soon paid a visit to the Delaware facility.

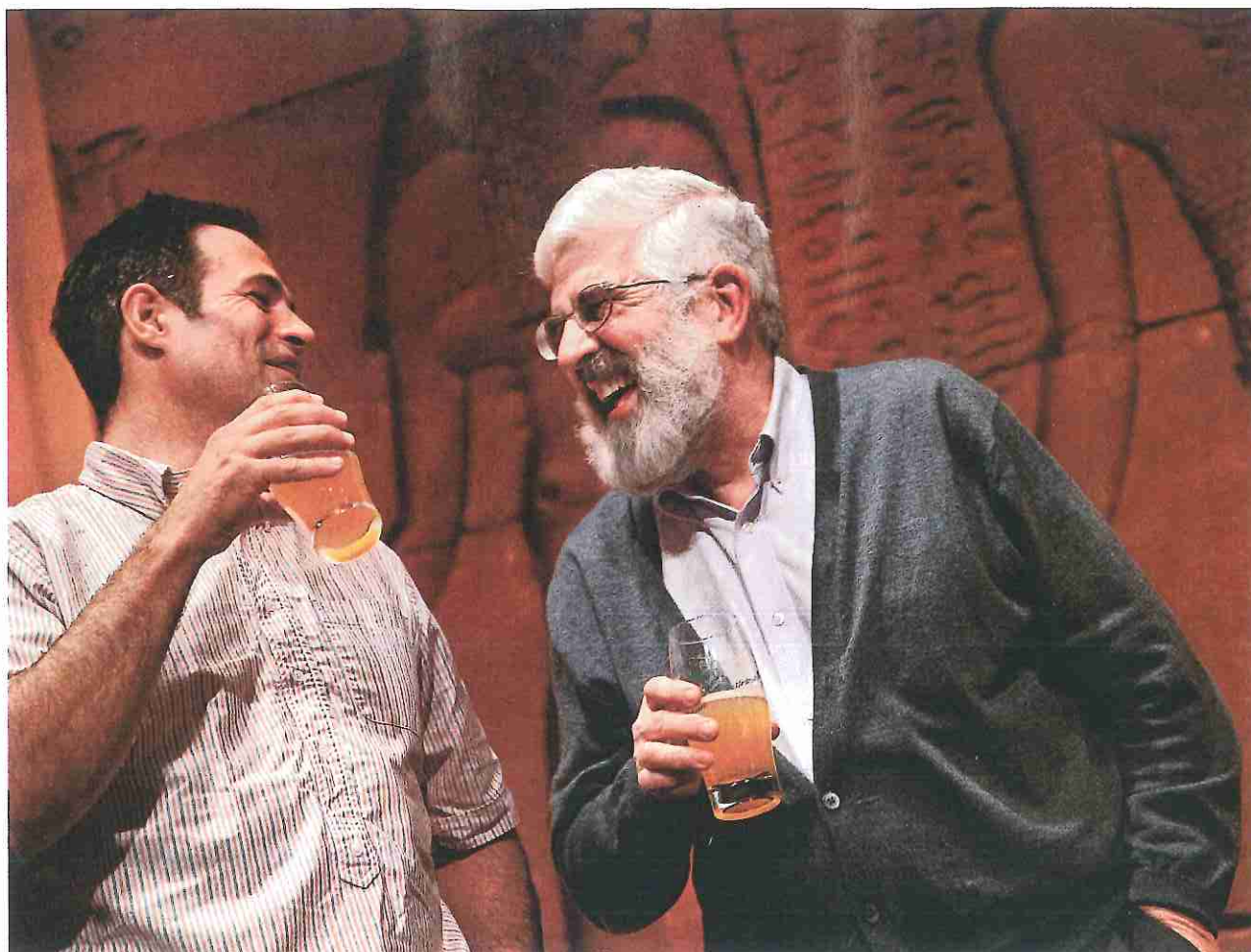
When he first met Dr. Pat, Calagione tells the audience, “the first thing I was struck by was, ‘Oh my God, this guy looks nothing like a professor.’” The crowd roars with laughter. McGovern, buttoned into a cardigan sweater, is practically the hieroglyphic for professor. But he won over the brewer when, a few minutes into that first morning meeting, he filled his coffee mug with Chicory Stout. “He’s one of us,” Calagione says. “He’s a beer guy.”

Ta Henket is their fifth collaboration—along with Midas Touch and Chateau Jiahu, they’ve made Theobroma, based on an archaic Honduran chocolate drink, and chicha. (All are commercially available, though only five barrels of the chicha are made per year.) McGovern is paid for his consulting services.

Now the inaugural pitchers of Ta Henket are being poured from kegs at the back of the room. Neither Calagione nor McGovern has yet tasted the stuff. It emerges peach-colored and opaque, the foam as thick as whipped cream.

The brew, which will be available for sale this fall, later receives mixed reviews online. “Think citrus, herbs, bub-





blegum,” one reviewer writes. “Rosemary? Honey? Sesame? I can’t identify all the spices.”

“Nose is old vegetables and yeast,” says another.

As soon as he has sampled a mouthful, McGovern seizes a pitcher and begins pouring pints for the audience, giving off a shy glow. He enjoys the showmanship. When *Midas Touch* debuted in 2000, he helped recreate the ruler’s funerary feast in a gallery of the Penn Museum. The main course was a traditional lentil and barbecued lamb stew, followed by fennel tarts in pomegranate *jus*. Midas’ eternal beverage of choice was served with dessert, in wine glasses that showed off its bewitching color—a warm caramel with glimmers of gold.

IN HIS LABORATORY, MCGOVERN keeps an envelope containing Neolithic grape seeds, which he wheedled out of a viticulture professor in Georgia (the country, not the state) years ago. The man had six desiccated pips in good condition, ideal for DNA analysis.

“I said, ‘Maybe we could take some of those back and analyze them,’” McGovern recalls. “He said, ‘No, no, they’re too important.’” “This would be for the cause of science,” McGovern persisted.

The Georgian left the room for a moment to agonize, and returned to say that McGovern and science could have two of the ancient seeds. Parting with them, he said, was

**A King Tut exhibit in New York City was the venue for unveiling Dogfish Head’s latest brew, Ta Henket, ancient Egyptian for “bread beer.” It was the fifth collaboration between Calagione and McGovern. “He’s one of us,” Calagione says of the archaeologist. “He’s a beer guy.”**

like “parting with his soul.” The scholars raised a glass of white Muscat Alexandrueli to mark the occasion.

But McGovern has still not tested the seeds, because he’s not yet confident in the available DNA extraction methods. He has just one chance at analysis, and then the 6,000-year-old samples will be reduced to dust.

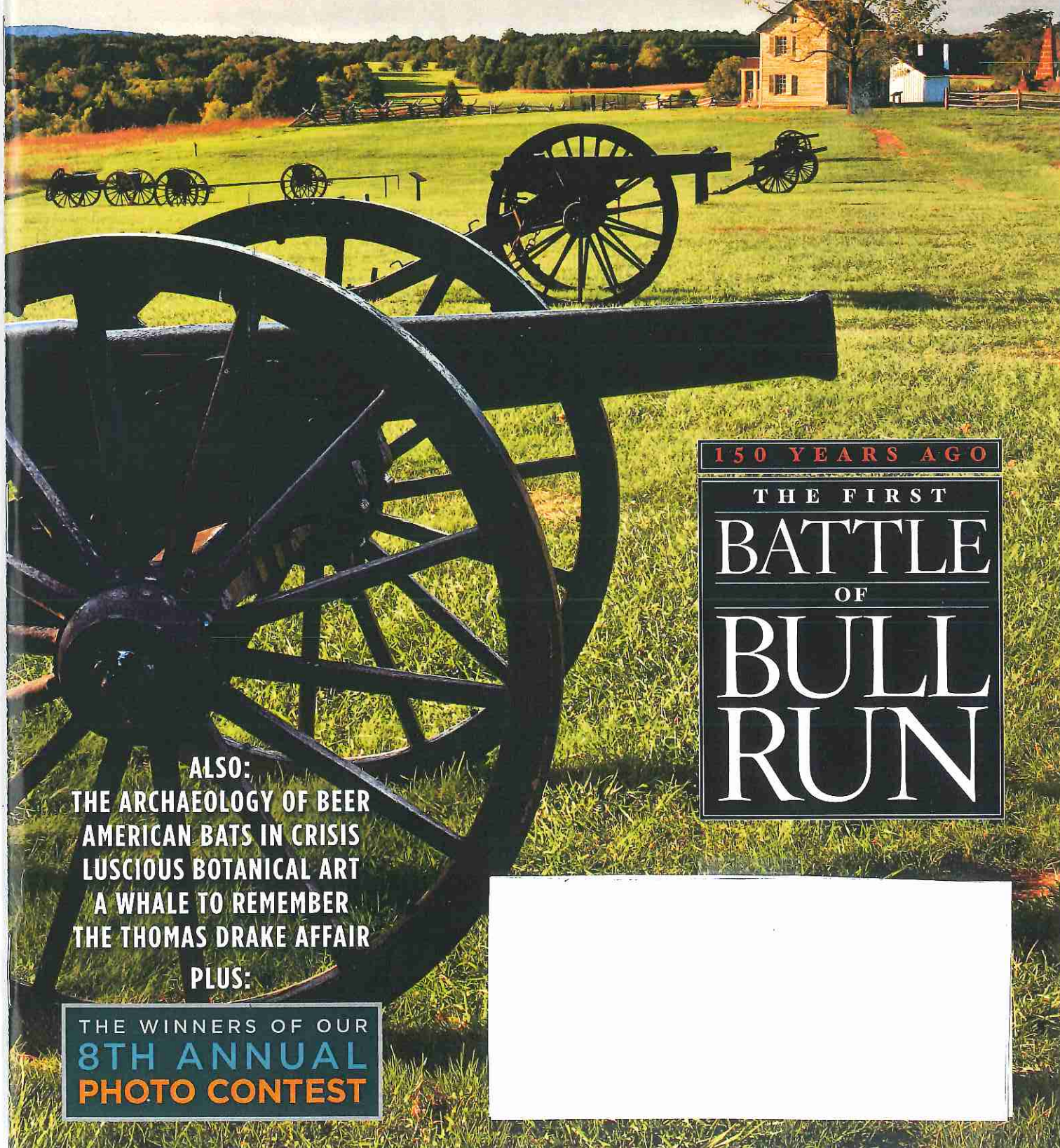
One day I ask McGovern what sort of libation he’d like in his own tomb. “Chateau Jiahu,” he says, ever the Dogfish Head loyalist. But after a moment he changes his mind. The grapes he and his wife helped pick in the summer of 1971 turned out to yield perhaps the best Mosel Riesling of the last century. “We had bottles of that wine that we let sit in the cellar for a while, and when we opened them up it was like some sort of ambrosia,” he says. “It was an elixir, something out of this world. If you were going to drink something for eternity you might drink that.”

In general, though, the couple enjoys whatever bottles they have on hand. These days McGovern barely bothers with his cellar: “My wife says I tend to age things too long.”

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8TH ANNUAL  
PHOTO CONTEST

