Umpire Martez Thomas sanitizes a baseball between innings during a youth baseball tournament in Cottleville, Missouri. (AP Photo)
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Splattered with color, this image of the Moon looks like it lost a paintball game! But the colors you see are part of a code. This isn’t an artist’s painting. It’s the most comprehensive Moon map ever made. Each color represents a feature of the Moon’s surface. “The darker, more earth tones are these highland-type terrains, and the reds and the purples tend to be more of these volcanic and lava flow materials,” says geologist James Skinner. The Unified Geologic Map of the Moon, as it is called, was released on April 20. Making the map required data from six different Apollo Moon missions as well as new submissions by recent spacecraft. The U.S. Geological Survey based in Flagstaff, Arizona, is responsible for the out-of-this-world map. (GSFC/NASA, USGS)
News Bytes

Canada: Pandas Go Home

A pair of giant pandas were a giant attraction at Canada’s Calgary Zoo. Sadly, the zoo is sending the big bears packing—and it’s a result of coronavirus restrictions. With fewer flights coming to Canada, the zoo can’t get the rapid and voluminous deliveries of fresh bamboo needed to satiate the pandas’ voracious appetites. Bamboo is rare in Canada. The pandas, Er Shun and Da Mao, are picky eaters too. Bamboo from the United States just wouldn’t do. They turned up their noses and chose to go hungry. Each panda eats about 50 pounds of bamboo daily. That’s a lot of shoots and leaves! But bamboo stays fresh for only about four or five days—not much time to work with shipping delays. So the beasts that were on loan from China are going back to their homeland, where their main food source is abundant.

Alaska: Huge Alaska Oil Discovery

An oil exploration firm discovered a deposit of potentially 1.8 billion barrels in Alaska’s North Slope region south of Prudhoe Bay. Pantheon Resources PLC says the deposit is situated along the Dalton Highway and Trans-Alaska Pipeline System corridor. How did the London-based company determine how much recoverable oil is down there? It used an updated evaluation of an old exploration well and information gleaned from recent drilling nearby, officials said. An undrilled oil deposit is called a prospect. This one has also received a name: Talitha. Pantheon CEO Jay Cheatham says at peak production, the prospect could produce about 90,000 barrels of crude daily, lessening demand for the raw fuel component from other nations.

Paris: A Peek into Notre Dame

In a glimmer of hope for a successful restoration, Notre Dame Cathedral’s forecourt opened on May 31 to the public for the first time since the devastating fire of April 15 last year. The reopening was made possible after several deep-cleaning operations took place to remove toxic lead dust. Dozens of tons of lead went up in flames during the fire. That left tons of poisonous lead dust on the surrounding ground. Clearing and opening the forecourt is just one small step—but likely one in the right direction. The Gothic cathedral is still closed. It has several years of renovations yet ahead.
Between the vineyards in the hills of Valpolicella, Italy, lies a mosaic tile floor. Archaeologists found the well-preserved surface made of tiny colorful tiles and bits of glass “in a good state of conservation.” The floor is evidence that the villa that once stood there was bigger than originally thought. The residence was first discovered in 1922. It dates from the third century. Archaeologists now think the home encompasses about 2,700 square feet. This mosaic floor is from the servant’s quarters of the villa. It was briefly uncovered, photographed, and then covered back up for now. Once all coronavirus restrictions lift, officials and landowners will decide how to make the historic site open to the public.

Italy: Roman Villa

Cambodia: Symbolic Turtle Found

“In live long and prosper.” Some people recognize those words as the “Vulcan salute” from Star Trek. Christians and Jews know them as a summary of the blessing Aaron gave to the gathered people of Israel in Numbers 6:24-26. Centuries ago, several Asian cultures also valued long life and wellbeing. Rather than look to the one true God for it, Hindus and Buddhists looked within the creation. They saw the turtle as a symbol of longevity and good fortune. This spring, Cambodian archaeologists unearthed a 10th-century stone turtle from the temple complex at Angkor. The massive artifact measures 22 by 37 inches. The Khmer Empire-era temple stood at the site of Srah Srang, one of Angkor’s several reservoirs. In building the complex, Angkor residents buried symbolic objects like this one underground. They believed the artifacts were sacred and had power to bring blessing and dispel curses.

Cambodia: Symbolic Turtle Found

Israel: Sea of Galilee Filled

In Northeastern Israel, the Sea of Galilee is full for the first time in two decades. The Gospels brim with stories from the area. Jesus called four disciples there. He calmed choppy waves, fed thousands of people, walked on water, and taught the Sermon on the Mount at this lake. Jesus compared water and thirst to spiritual needs. The area around the sea, which is commonly called Lake Kinneret today, has certainly known its share of “thirst” in the last 20 years. Human populations depend on the famed body of water. That demand plus many consecutive dry years had depleted much of the lake’s resources. But an extra-wet winter refilled the Jordan River and the underground aquifers that feed it. Now, the world’s lowest-lying freshwater lake is nearly running over again—and with that come blessings for the people and animals who live there.
Ask Americans to describe a taco, and you’ll get a variety of answers—each one more mouthwatering than the previous. You can enjoy a taco with carne asada (sliced grilled beef) and corn tortillas in East Los Angeles. In Dallas, it might be a flour wrap with pit-grilled pork known as al pastor (“shepherd style”). A Memphis taco could come with albondigas (meatballs!) and collard greens. Really? It’s true. The American love affair with the taco has brought adaptations of the dish across cultures and preferences in the Great American Melting Pot.

José R. Ralat is the Taco Editor (yep, that’s his actual job title) at Texas Monthly. He’s written a book exploring how this simple dish has spread and transformed. Ralat traveled the United States researching the evolution of the taco. He recorded his findings in *American Tacos: A History and Guide*.

“No one owns the taco,” Ralat says. “It’s a living food, and I wanted to see how it is changing as we change.”

The taco is a creation of “the encounter.” That’s the meeting of Spanish and indigenous American peoples. That meeting led to the corn tortilla coming together with meats, beans, and greens. After the Mexican-American War ended in 1848, some ethnic Mexicans became Mexican Americans. The taco north of the new border evolved based on available resources. One example: The Mexican Americans in Texas had access only to yellow cheese. Switching cheeses gave birth to what we refer to as “Tex-Mex cuisine.”

Next door, isolated New Mexico residents used red and green chiles in their tacos. California’s diverse population added its own flavors. Some tacos there incorporate an Asian palate.

Some taco creators say they try to stay true to traditional taco orthodoxy—but no one seems to agree on just what that is. Ralat says the strongest advocates for original traditions come from Texas, the heart of Mexican Americana. “San Antonio does its best” to remain authentic, Ralat says.

The history sparked Ralat’s interest, but he enjoys the diverse epicurean results. He’s tracked the taco through demographic upheavals and mass migrations. He found Indo-Mex tacos in Houston. There, Indian restaurants offer snack-sized versions with potatoes and curry called aloo tikki tacos. In both Oregon and Florida, he stumbled upon K-Mex tacos with Korean fried chicken or bigeye tuna sashimi. Jewish-influenced kosher tacos exist in Los Angeles, and Brooklyn combined its famous brisket into a green salsa taco. “Deli-Mex” is what some dub that melt-in-your-mouth delicacy.

No matter your heritage, there’s a taco for you. “The taco is Mexico’s gift to the world,” Ralat says. “And the world is responding,” with a robust ¡Buen provecho!”
For two years, art scholars studied the world-famous painting *Girl with a Pearl Earring*. They scanned and scrutinized. High-tech tests performed by The Girl in the Spotlight Project gave some answers about the artist’s process and materials. But one key question remained: *Who was the painter’s subject?*

Johannes Vermeer is considered one of the greatest painters of the Dutch Golden Age. Many people appreciate the sheer beauty of his 1665 *Girl with a Pearl Earring*. They enjoy details like the shining face, striking costume, and, of course, the lustrous earring.

There has never been an artist like the Creator. Trees, clouds, animals, and especially people—all of His creation is fascinating and beautiful. The ability to appreciate beauty is part of being human, and it’s one of God’s good gifts.

In early 2018, the project researchers placed *Girl with a Pearl Earring* in a glass room. Visitors to the Mauritshuis museum in The Hague, the Netherlands, could watch machines and researchers scan and study the painting.

The project’s findings revealed interesting details. Microscopic paint samples pinpoint the source of Vermeer’s pigments. The white lead of the earring comes from northern England. The red is cochineal, made from bugs that live on cactus plants in Mexico and South America. The ultramarine blue is ground lapis lazuli stone found in present-day Afghanistan.

“It’s surprising how much high-quality ultramarine Vermeer used in the girl’s headscarf,” says conservator and project leader Abbie Vandivere. “This blue pigment was more valuable than gold in the 17th century.”

Research also revealed the order in which Vermeer painted. Infrared imaging showed that he began drawing with shades of brown and black. He then outlined the girl in black before working from the green background to the foreground. Final touches included her face, her yellow jacket, white collar, blue headscarf, and lastly, the quick dabs of white that create the pearl. Upon completion, he signed the canvas at the top left.

Microscopic scans show tiny fragments from Vermeer’s paintbrushes embedded in the girl’s skin. Scans also indicate that Vermeer originally included eyelashes on the girl, but they’ve faded over the years.

One of the most amazing findings revealed that the background is not just dark, empty space. Imaging shows diagonal lines and color changes representing folded fabric in the upper right-hand corner. The girl is sitting in front of a green curtain! The curtain has mostly disappeared, says Vandivere, because of light damage and chemical changes in the green paint.

Some mysteries remain. “The girl has, sadly, not revealed her identity,” says Martine Gosselink, director at the Mauritshuis. “But we have [gotten] to know her better.”
Wish you could have traveled to a faraway island during the coronavirus quarantine? This spring, cooped-up web users had an unusual opportunity: a virtual romp around the Faroe Islands. The option boosted interest in the remote locale—and helped folks in lockdown broaden their horizons.

The Faroe Islands are a Danish semi-independent territory. The 18 major islands (There are 779 total!) lie about 200 miles north of Scotland, halfway between Norway and Iceland. God made these islands rugged, rocky, and wildly beautiful. Fishing and aquaculture are traditional industries. But tourism is growing. Around 120,000 visitors arrived on the islands in 2019. However, during the pandemic, tourist travel ground to a halt.

So the area’s tourist board developed a brilliant marketing plan. Real, live human guides would escort an internet audience around the islands and provide commentary during the trek. According to the website, remote tourists “can explore the Faroes’ rugged mountains, see close-up its cascading waterfalls, and spot the traditional grass-roofed houses by interacting—live—with a local Faroese, who will act as your eyes and body on a virtual exploratory tour.”

Wearing helmet cameras, guides stood at the ready each day at 5 p.m. local time. They awaited instructions from their web audience. The remote-control project was a way to help the industry rebound. “The idea is to whet people’s appetite and get them to want to come and experience this in real life,” Hanssen says.

“If you ask [your guides] to go left, they go left. If you ask them to jump, they jump. If you ask them to run, they run,” says tourist board spokesman Levi Hanssen.

Nearly 50,000 people joined the first free hour-long tours. Most viewers hoped to land a one-minute slot for controlling the guide in real time via computer-game-like controls.

“You’re sort of steering this person and deciding what you want to see and where you want this person to go,” says Hanssen. On one trip, a web user tried to make the guide jump into the ocean. Oops.

“It’s very surreal to know that you’re walking around here in the Faroe Islands being controlled by someone on their sofa,” Hanssen says.

Tours happened via kayak, horseback, and helicopter. Guides traipsed through the capital of Tórshavn, the second largest city of Klaksvík, and other scenic locations.

Guðrið Højgaard is CEO of Visit Faroe Islands. “Now that we don’t have any tourists,” she says of the remote-control tour guide plan, “we have a lot of extra time on our hands.”

A Faroese local equipped with a live video camera lets virtual visitors get an on-the-spot perspective.
Who’s that girl? Lucianne Walkowicz thinks she knows the answer. That’s why the renowned astronomer is posing the question to Mattel’s American Girl toymakers—in court. Walkowicz claims the Wisconsin-based American Girl company stole her likeness to create its astronaut doll. The doll entered the market as American Girl’s “2018 Girl of the Year.”

While Walkowicz studies the stars, the doll character travels among them, according to the fictional book that comes with the plaything’s package. The doll bears the name Luciana Vega. She also sports a bright purple streak in her dark hair and sparkly silver shoes, referred to as “holographic.” She’s described as “an aspiring astronaut ready to take the next giant leap to Mars.”

Lucianne/Luciana—coincidence? Walkowicz thinks not. The similarities don’t stop there.

Walkowicz works at the Adler Planetarium in Chicago. She has spent much of her career collaborating with NASA. She is also a TED senior fellow. TED stands for “technology, entertainment, design.” The TED organization promotes global conferences and distributes videos of speakers sharing knowledge and applications from their areas of expertise. Walkowicz has given numerous TED Talks and has been quoted in or interviewed for many more. Her name and her appearance—which includes streaked blue hair and sparkly, holographic sneakers—are well known to those who closely follow star stuff. While most of her recent work with NASA’s Kepler project has focused on ethical exploration of Mars, she has also lectured on her studies of the star named Vega.

Mars, shoes, Vega, hair, and first-name similarity all aligning unintentionally is a phenomenon of astronomical unlikelihood, Walkowicz and her attorney think. They filed a federal trademark lawsuit in Madison, Wisconsin, in April. The professional stargazer wants American Girl and Mattel to stop selling the Luciana Vega doll.

“The defendants used the name and likeness of Lucianne, a well-known figure in astronomy, space, and STEM, who particularly studied the star Vega, in conjunction with the American Girl doll Luciana Vega without obtaining her authorization,” the lawsuit states. American Girl said in a statement that it “takes great pride in creating original characters for girls. We take any allegations to the contrary extremely seriously and intend to defend the case vigorously.”

Walkowicz’s attorney, Charles Mudd, Jr., says discussions with Mattel have been unproductive. He says there’s no defense for using Walkowicz’s likeness without her approval.
During two world wars, citizens around the globe became farmers. Their so-called “victory gardens” added to food supplies and bolstered wartime morale. Today, many Americans have returned to those gardening roots. They’re fighting another kind of war. But the enemy isn’t a foreign power. It’s a virus.

During World Wars I and II, posters proclaimed “Food will win the war” and “Our food is fighting.” How? America sent food to European allies and American troops. That left limited food for the home front. But patriotic Americans didn’t fret or complain. They grew their own. Backyards and public parks sprouted gardens bursting with fruits, herbs, and vegetables. Estimates suggest citizens planted more than five million gardens during WWI alone.

Gardening today can also be a shared experience during hardship and uncertainty. In the wake of the coronavirus, would-be gardeners bought seeds, watched how-to videos, and joined online gardening groups.

Historian Rose Hayden-Smith wrote a book about victory gardens. She compares last century’s patches to the current growing craze. She adds, “Not only was there a war, but there was an influenza pandemic,” referring to the deadly flu of 1918-1919.

Sound familiar? Hayden-Smith sees another parallel: Posts about gardening during the pandemic are today’s version of the victory garden poster. She notes, “We don’t have poster art, but we have Instagram.” Indeed, social media brims with images of tilled backyards and raised garden beds.

Of course, the reason behind today’s trend may have more to do with government stay-at-home orders than civic pride.

Emanuel Sferios was self-employed before the virus. His work dried up, but he borrowed a tiller and planted lettuce, beets, kale, and broccoli in his backyard. He’s adding squash, melons, tomatoes, and peppers. “I have all this time on my hands,” he explains. Boredom, lack of exercise, a stagnant economy. Gardening helps cure some emotional and physical ills. But there’s another plus to the garden boom: People are loving, helping, and preferring others—exactly what Jesus commands. (Mark 12:31)

Scores of community gardeners are helping to feed families without income and kids who no longer get meals at school. Computer programs help link gardeners with hungry people nearby. Even backyard gardeners are donating some of their bounty to neighborhood and church food banks.

Laurell Sims co-founded Urban Growers Collective. “When we know that our neighbors are sick,” she says, “we’re able to help them out.”

Before the coronavirus, Bettie Egerton wanted to revive victory gardens in her Oregon community for environmental reasons. Now she says the idea of a victory garden has added meaning. “It’s like victory over all kinds of things.”

In the world you will have tribulation. But take heart; I have overcome the world. — John 16:33
**What’s Up with Youth Sports?**

To play or not to play? Games postponed. Matches canceled. Will athletics ever return to normal? Youth sports events during the coronavirus pandemic are raising plenty of questions—and eyebrows.

On Mother’s Day weekend, Rob Worstenholm held a youth baseball tournament near St. Louis, Missouri. The event featured about 50 teams and strict social-distancing measures. It was among the first sports activities of any kind since the shutdown began in March.

“I’ve never seen anything like this,” Worstenholm said of players at the event. “It was like a joy times a hundred.”

Not everyone was joyful. “I mean, 50% of the people hate me,” he says. “But the other 50%, I could have run for president.”

Meanwhile, in Florida, the Amateur Athletic Union (AAU) planned a volleyball event. Last year, the same tourney drew nearly 3,000 teams. The AAU spent weeks assuring attendees that organizers would check temperatures, ban handshakes, and put plenty of space between courts. Still, hundreds of teams withdrew, so organizers postponed.

“My families are very wary about traveling to states that [are rushing] to open,” says Konrad Ott, who coaches a California girls volleyball club. He and his team were worried about hotels, food, and other issues in a location that perhaps wasn’t ready to host an event safely.

Yet Tony Carrow of a Nebraska volleyball club says his parents were comfortable with the low infection rate in Florida. “We had a very strong voice from certain parents that they wanted their kids to go,” Carrow says. “They want to get back to living their lives.”

There’s the rub: Individuals, families, and teams must weigh the risks of when, where, and how to “return to normal.”

Pediatrician and California state senator Richard Pan calls sports tournaments “high-risk” situations. “You’re drawing people from so many different parts of the country,” he observes. “[We] take all those people, bring them to one place, have them mixed together.”

Scott Kretchmar, a former exercise and sports science professor, points out that physical risk is part of most youth sports. With the coronavirus, some people believe waiting—postponing or canceling—“removes an important, unnecessary risk.”

They believe waiting gives time for slowing the virus’ spread and for new treatments to emerge.

But Worstenholm isn’t waiting. He plans to run events all summer “unless something blows up.”

Early on, he told his staff, “If we do this right, we’re going to be the poster children for showing that this can be done safely. If we get this wrong, I don’t know what we’ll be, but it won’t be good.”

*Trust in the Lord with all your heart, and do not lean on your own understanding. — Proverbs 3:5*
Three private businesses are shooting for the Moon... literally. The companies hope to develop, build, and launch lunar landers. Their goal is returning astronauts to the Moon—and then eventually sending them on to Mars.

U.S. astronauts haven’t set foot on the Moon since 1972. The nation’s past Moon explorations were all NASA projects. NASA (National Aeronautics and Space Administration) is an agency of the United States government. At the dawn of the aeronautics age, funding for NASA space research and programs reached as much as 4.4% of the U.S. annual budget. That percentage has dropped over the last 50 years to less than one-half of 1% of the national budget. So with big plans on the horizon, NASA last fall asked American companies to submit blueprints for human lunar landing systems. The landers would support NASA’s new Artemis program. Artemis seeks to send the first woman and the next man to the surface of the Moon by 2024.

NASA Administrator Jim Bridenstine believes that going commercial encourages positive competition, creativity, and accountability. Altogether, that should drive down costs while increasing access to space travel. The space agency awarded multiple grants for lander development.

Currently, three companies are competing to design the best option: SpaceX, led by Elon Musk; Blue Origin, founded by Amazon’s Jeff Bezos; and Dynetics, a high-tech engineering and research company.

NASA is putting its Moon money to work. NASA granted Blue Origin $579 million for its concept. That was more than four times more than SpaceX’s $135 million. Dynetics received $253 million.

For the next eight months, the companies will refine their concepts. Then NASA will select a winner. The benefit of a successful formula is no secret: The chosen company will be the one most likely to succeed by 2024.

NASA wants the new Artemis Moon-landing program components to be reusable. It hopes to conduct multiple missions and maintain multiple locations on the lunar surface.

NASA will choose only one company to work with Artemis. But the grants are evidence that NASA is investing in all three for the years to come.

Right now, each company seems committed to the space program. SpaceX’s Musk embraced this “potential for an incredibly exciting future in space with a base on the Moon.”

Dynetics’ vice president of space systems, Kim Doering, says her team is excited not only about 2024 but also about the long-term lunar economy.

Blue Origin chief executive Bob Smith calls the opportunity to develop products for the Moon historic. He says, “Going to the Moon is the reason why we got into this business.”

When I look at your heavens, the work of your fingers, the Moon and the stars, which you have set in place, what is man that you are mindful of him? — Psalm 8:3-4
Home is the new office. This became true for many during the coronavirus pandemic. While this is a temporary measure for most, working from home is becoming more and more common. Tech giants such as Facebook, Microsoft, Apple, and Twitter even see financial benefits for their balance sheets by letting employees work from home. And Facebook CEO Mark Zuckerberg has plans to adjust payroll based on employee location—a move that could add many millions to his company’s bottom line.

For any large company, location matters. An appealing location ensures that people will want to work there, but it comes at a price. The cost of living in the United States varies greatly from place to place. Currently, large tech companies are based in urban centers like San Francisco and New York City. These vibrant cities draw lots of people but are very expensive to live in. The high cost of living means employees demand higher salaries.

With most employees working from home during the coronavirus pandemic, companies got to see what it’s like to have large numbers of employees contributing from off site. The results were encouraging. Many employees are interested in full-time remote work, and working at home allowed them flexibility and family time with no long, hectic commute.

Zuckerberg says Facebook is going to be “the most forward-leaning company on remote work at [its] scale.” This sounds good for the employees. But the biggest incentive for tech companies is that it allows that staff to work from less expensive locales. For example: As of April 2020, the average monthly rent for an apartment in Atlanta was just $1,628, compared to $3,767 for San Francisco.

So Facebook plans to open “hubs” in cities like Atlanta, Dallas, and Denver to employ remote workers outside costly Silicon Valley. That means employees will get more out of their paychecks if they move to less expensive towns, right? Not so fast. Facebook employees will be required to report any moves to their boss. Zuckerberg says their pay could be “adjusted” based on where they move. Over time, Facebook will seek out far-flung remote workers that they don’t have to pay as much, saving the company big bucks.

This change could certainly impact employees who want to enjoy big-city life. But that’s how the free market works. Companies seek the best employees for the lowest price. Remote work will likely change the job market and have a ripple effect on where people decide to live and work.

Whatever you do, work heartily, as for the Lord and not for men—Colossians 3:23

* Median home price (3BR, 2BA) in Atlanta = $365,726
in San Francisco = $1,263,813
How COVID-19 Threatens Rhinos

Armed rangers set off at dusk in pursuit of poachers. The COVID-19 pandemic has brought a new danger, even to Africa’s endangered wildlife. With no tourists traveling to bring funds to the region, protecting black rhinos has become even more challenging. That’s because poachers—desperate to make a living—are becoming more daring.

Long before the coronavirus outbreak, poachers threatened rhinoceros populations. They kill the giant beasts to rob them of their horns for illegal sales. Some cultures mistakenly believe rhino horns have spiritual and medicinal value. People with those beliefs will pay big bucks for the shorn horns. They do not seem to know or care about the animals the horns are harvested from.

Managing animal populations is a challenge given to humankind from creation. It began with Adam naming the individual creatures. God’s great creativity and variety in filling His world with life was on display for Adam to see, understand, enjoy, and care for. After the Flood, God gave Noah and his family permission to use animals for food and clothing. But He never condoned misusing animals. Proverbs 12:10 illustrates one difference between righteousness and evil: “Whoever is righteous has regard for the life of his beast, but the mercy of the wicked is cruel.”

John Tekeles is a patrol guide and head of the dog unit at Ol Pejeta Conservancy in Kenya. He says the financial losses Kenyans are feeling due to coronavirus restrictions have put him on guard. “We are more alert because maybe more poachers will use this time to come in to poach,” he says. Effective law enforcement is helping. The number of black rhinos in Africa has been slowly increasing, even though the species remains critically endangered, says a report by the International Union for Conservation of Nature.

More than 130 black rhinos call Ol Pejeta home. That’s the single largest population in east and central Africa. But protecting them is expensive. Ol Pejeta spends about $10,000 per year per rhino on protection, conservancy director Richard Vigne says.

“That comes to close to $2 million a year,” he elaborates. “In the time of COVID, when tourism has completely stopped, where most of our revenue comes from tourism, . . . it’s a complete disaster. Our ability to look after the rhinos is compromised.”

Conservationists across Africa are now monitoring to see how poachers might try to take advantage, and whether even more rare wildlife will be targeted.
After a year of riots and anti-government protests in Hong Kong, China is clamping down. The country’s government banned certain activities in the semi-independent territory. U.S. officials warn the new law could harm Hong Kong’s favored trade status.

Hong Kong has a complex history. China’s Qing Empire gave Hong Kong Island to Great Britain after the First Opium War in 1842. In 1898, the island was “leased” to Britain for 99 years. As British rule wound down, people fled Hong Kong. They feared a communist takeover. When the British rule ended in 1997, China promised Hong Kong 50 years of freedoms—ones that don’t exist on the communist-ruled mainland. China allowed Hong Kong to maintain its own legal, financial, and trade systems while still belonging to China—at first.

China called this arrangement with Hong Kong the “one country, two systems” principle. The plan helped Hong Kong enjoy a better trade standing with the United States and others. For 22 years, semi-independent Hong Kong operated mostly free from communist control. The territory became a world-class import-export hub, a booming tourist destination, and an important financial center.

Now China seems ready to break its 50-year promise. (See “Hong Kong Freedoms Fading,” teen.wng.org/node/5471.) In May, China’s parliament passed a national security law. The proposal forbids anti-government activities, foreign meddling, and terrorism. It comes after months of intense and sometimes violent pro-democracy demonstrations. (See “Hong Kong Protests,” teen.wng.org/node/5526.) Most observers believe China intends to squelch such dissent with the new law. It’s the latest sign that the “one country, two systems” arrangement is in trouble.

There isn’t much the United States can do about China’s actions. However, if U.S. officials decide that China has violated its 50-year agreement, America might stop playing nice with Hong Kong. U.S. officials would treat the territory as part of China—complete with strict trade sanctions and tariffs.

U.S. Secretary of State Mike Pompeo “strongly urges” China to “respect Hong Kong’s . . . autonomy, democratic institutions, and civil liberties.” He calls these points “key to preserving its special status under U.S. law.”

Hong Kong’s government insists the new law will affect only a few people. But many Hong Kongers either escaped China or have parents who escaped. Having fled communist rule, they’re clinging to liberties forbidden on the mainland.

Seventy-year-old Jerome Lau fears China will crack down on public gatherings and free speech in Hong Kong. “Until I take my last breath,” he says, “I will come out and fight for freedom.”

Righteousness exalts a nation, but sin is a reproach to any people.
— Proverbs 14:34
Tribes in Ecuador’s dense rainforest once followed a brutal killing code based on fear and mistrust. But after one deadly attack, several tribal members became unlikely testaments of grace, love, and the transforming power of the gospel. None were more changed than a warrior named Mincaye.

Mincaye (mink-EYE-ee) Enquedi was born between 1935 and 1938 into the Waodani tribe. No one knows the exact date because the Waodani do not measure time.

The Waodanis’ culture was vengeful and violent. Their language had no word for “peace.” Other tribes called them aucas, “naked savages.” In a small settlement near the Ewenguno (Curaray) River, Mincaye grew up learning: Kill or be killed.

In September 1955, five couples devised a plan to bring Jesus’ teachings to the Waodani. Americans Jim and Elisabeth Elliot, Pete and Olive Fleming, Ed and Marilou McCully, Roger and Barbara Youderian, and pilot Nate Saint and his wife Marj began “Operation Auca.” Their plan was so dangerous that they didn’t tell their mission board about it.

Saint began flying over a Waodani settlement. The jungle was thick. There seemed no place to land, so pilot and passenger dropped gifts—ribbons, pots, clothing—to the startled Waodani below.

After months of flyovers, the missionary men landed on a sandbar in the Ewenguno River and set up camp in January 1956. Some shouted basic Waodani phrases into the jungle. All hoped the Waodani would become curious and visit.

Mincaye and other Waodani came. Some tried to talk with the missionaries. One even took rides in Saint’s yellow plane. But after several days, confusion and fear spooked the tribespeople. Sadly, six warriors speared all five of the missionaries to death. Mincaye himself speared two men, including Saint.

Many people believed Operation Auca was a failure. Few understood why God let the killings happen. Yet years later, Steve Saint, Nate’s son, called the tragedy a shining example of Genesis 50:20: “What man meant for evil, God meant for good.”

“At first blush, their death was needless,” James Boster, an anthropologist who studied the murders, told a reporter in 2006.

But God’s love and supernatural forgiveness was on display, large and in your face and stronger than any warrior or weapon.

The media followed the story of the massacre with photographs, film footage, and interviews with the bereaved families. Articles told how some of the women stayed on in Ecuador after the killings. The efforts of Nate Saint’s sister, Rachel, and widowed Elisabeth Elliot led to the salvation of some of the very men who’d speared their family members.

“In the long run, the fact that their kin went back in peace to teach was a strong signal that the [Waodani]
could trust both the messengers and the message," Boster said.

Mincaye accepted Jesus shortly after Rachel Saint moved in with the tribe. (She stayed for 30 years!) Mincaye chose “God’s trail” instead of the trail he’d been following—one of anger, murder, and hate. He once said through an interpreter, “[God] took a very strong blood that Jesus His Son dripped and dripped for me. And with that very strong blood, He washed my heart until it was clean like the sky when it has no clouds in it.”

Nate’s son, Steve Saint, spent summers with the tribe from the age of nine. Mincaye became a tribal grandfather to him. Steve eventually began Indigenous People’s Technology and Education Center (ITEC). That organization still helps small tribes, including the Waodani, through practical instruction and the gospel.

On April 28, 2020, Mincaye died in the tiny village of Tzapino. He is survived by his wife Ompodae, 13 children, over 50 grandchildren, many great-grandchildren—and tens of thousands who marvel at his story. Several of Mincaye’s children and grandchildren are “coming-after ones.” That is what the Waodani call someone who accepts Jesus and truly lives His teachings.

Mincaye is remembered as a “sweet, silly, always smiling, always teasing, constantly giggling grandfather to many,” says Jessica Saint, wife of one of Nate’s grandsons, Jaime Nate Mincaye Saint.

Mincaye’s conversion is remarkable—as is the salvation of every sinner saved by grace. The forgiveness and acceptance that the Holy Spirit enabled in the Saint family is perhaps even more remarkable. So far, God’s amazing work in the jungles of Ecuador has included the second and third generations of at least two families.

Mincaye made several trips to America. Together, he and Steve Saint spoke to audiences about their story. “If you keep walking your own trail,” he would ask through Steve, “when you come to the end, what’s going to happen to you?” Mincaye has reached the end of his earthly trail. To God be the glory! Great things He has done!
Closures, bankruptcies, infections. The United States will likely be dealing with fallout from the coronavirus for some time. But this summer, many Western states are facing another threat on top of that one: wildfires.

In firefighter lingo, anything burnable is “fuel.” That includes grasses, leaves, shrubs, and trees. When fuels pile up, wildfire risk does too. And more fuel makes fires bigger, hotter, faster, and more dangerous.

Fuels management is the planned removal of burnable materials. National parks, wildlife reserves, Native American reservations—all practice fuels management to keep wildfire threat low.

During the COVID-19 pandemic, firefighters for the U.S. Department of the Interior continued managing fuels. Now some agencies are changing guidelines to help fight the coronavirus while fighting fires. They’ve waived certain training for returning crew members. They may limit fire engines to only a driver and one passenger; other crew members must ride in extra “chase” vehicles—to keep team members more distanced.

Fighting fires is so difficult that it’s mostly done by younger, physically fit people. But the nature of the job also works against them: Firefighters regularly experience high stress, inhale smoke and dust, and deal with poor sleeping and personal hygiene.

Because of this, wildland fire camps have always been well known for spreading illness. Virus and illness outbreaks happen yearly for many wildland firefighters. A suck-it-up and tough-it-out culture doesn’t help either, according to Jessica Gardetto, spokesperson for the National Interagency Fire Center in Boise, Idaho.

Austin Williams is a forestry technician for the U.S. Fish and Wildlife Service. He’s tall and lanky with a toothy grin. It’s not surprising that he works for an organization with “fish” in its title. He is an avid fisher.

Part of the year, Williams’ team works at a wildlife refuge in South Carolina. His fuels management team employees conduct controlled burns to clear fire-prone land. They use drip torches (tools that drip flaming fuel). Helicopters drop fire-starter orbs the size of ping-pong balls in other areas. (See “Drones: Fighting Fire with Fire” at teen.wng.org/node/2087.) During wildfire season, Williams heads west to fight fires at the Mid-Columbia River Wildlife Refuge in Burbank, Washington.

Williams signed up for the forestry technician job for the fun and the travel. As a person who enjoys being outside (He’s camped with nothing but a sleeping bag in the Mojave Desert!), he thought fighting fires, clearing brush, and performing other hands-on work sounded like good life experience.

After a year on the job before the COVID-19 rules, Williams finds the new guidelines for wildland firefighters “interesting.” His team usually runs a four-person engine. Tasks must be done quickly upon arrival at a fire. He says chase trucks cost teams valuable time. “It is also preached to us all the time that driving is the most dangerous part of our job,” Williams says. “Statistics back that up, so having another truck on the road doesn’t seem helpful.”
Agencies normally spend months preparing for wildfire season. But that’s not happening in many places because of social distancing guidelines. Additionally, to help folks with COVID-19 to breathe more easily, firefighting agencies are trying to lessen smoke from prescribed (planned) burns.

Casey Judd, president of the Federal Wildland Fire Services Association, says the major problem of the new rules is “the prescribed burns aren’t getting done.” He adds, “That’s going to increase the fire load.”

There’s yet another plan that some agencies are implementing to deal with the virus. It involves scrapping camp catering tents in favor of military-style vacuum-packed MREs, or “Meals, Ready-to-Eat.” Since firefighters eat in common tents with shared food service utensils, it’s hoped the MREs will reduce spreading germs. “It would be sad,” Williams says of losing the catered food. But thinking about the crowded and unsanitary conditions, he admits, “That would probably be a smart decision.”

“Talk about a threat! The Bible calls the tongue a fire that can set an entire life ablaze. (See James 3:3-9.) Like fighting land fires, managing one’s mouth can help avoid a world of danger and destruction.”
Baker Karl De Smedt is obsessed with bread—especially sourdough. But De Smedt is allergic to flour. So he needed a way other than baking to turn his doughy passion into a profession. De Smedt rose to the occasion, becoming the world’s only sourdough librarian. His research traces bread’s past—and studies how to make better bread in the future.

Fizzing, bubbling jars line the shelves of the Puratos Sourdough Library in St. Vith, Belgium, where De Smedt works. Unlike most libraries, you can’t borrow anything here. Instead, each jar holds a different starter, a fermented flour-water mixture that gives sourdough its tangy taste and helps it rise.

Some starters in De Smedt’s sourdough vault are very old. Some are new but unusual for reasons such as origin or rarity. #100 is from Japan. It is made from rice. #43 is from a famous San Francisco sourdough batch.

De Smedt started out as a baker at the Puratos Bakery. After several years, his allergy became a problem. De Smedt asked to begin displaying the various starters he and others were collecting. The sourdough library began officially in 2013. Today, there are 105 foaming specimens.

To begin a starter, bread makers place flour and water in a jar and set it aside. But it must be “fed” regularly. That means half the mixture gets scooped out and discarded (or used in another recipe), and then new flour and water is added. Over time, those simple ingredients undergo an amazing change. They’ll become bubbly and double in size—over and over. This is fermentation.

Fermentation happens because of two different living single-cell organisms: bacteria and “wild” yeast. That’s right—starters are alive! That’s why they must be fed regularly.

Both bacteria and yeast exist naturally in flour, air, and even on human hands. Mixed with water, they break down sugars and starches in the flour. This produces carbon dioxide. The gas makes bread rise and also affects its shape, color, and density.

The research has found connections among sourdoughs from around the globe. Two starters, one from Switzerland and one from Mexico, share a wild yeast that none of the others has, perhaps because both came from high altitudes.

Last year, the Puratos Sourdough Library sent identical flour and recipes to 16 bakers from 16 countries. Microbiologist Anne Madden found that bacteria from the bakers’ hands made each starter a bit different.

Remember the gospel song “He’s Got the Whole World in His Hands”? It’s true. God’s hands control everything, including the microscopic particles on the whole world’s hands.
Giant “murder hornets” are buzzing in the news. Experts advise remaining calm about the big bug with the scary nickname—unless you’re a honeybee. Asian giant hornets, *Vespa mandarinia*, are often called “murder hornets.” But don’t worry too much. These one-and-a-half-to-two-inch members of the wasp family aren’t after humans. They kill other insects, mostly honeybees. Each monster hornet can chomp the heads off 40 honeybees per minute. Fewer than 50 hornets can wipe out an entire beehive in under an hour!

Murder hornets have orange noggins and striped abdomens. Bee breeder Susan Cobey says the pumpkin-headed wasps look “like something out of a monster cartoon.”

The large flying insects are equipped with quarter-inch stingers. Those can threaten humans because they inject a stronger-than-normal venom. Multiple giant hornet stings could kill a human—though experts agree that such attacks happen rarely.

“It’s a really nasty sting for humans,” says bee expert Keith Delaplane. “A dozen [stings], you are OK; 100, not so much.”

Creation is full of strange and frightful creatures: snakes, sharks, murder hornets. Yet God tells His children not to fear things that can kill the body. Christians should stand in awe of (fear) Him alone, the one with authority to save or condemn! (Luke 12:5)

Most bug-savvy scientists say murder hornet stories are overstated. Some compare them to 1970s headlines about African “killer bees.” The bees were real, but they didn’t match the horrifying news stories.

“This is 99% media hype and frankly I’m getting tired of it,” says entomologist Doug Tallamy. “Murder hornet? Please.”

Experts say the real story involves a handful of the bugs on North American soil: two dead hornets found in Washington last December, another in May, a single live nest found (and wiped out) in Canada last September, and another live wasp that was quickly crushed by the woman who found it in April. The United States has no documentation of other live hornets in the country this year.

Another thing: Insect scientists want to lose the nickname, despite the hornets’ brutal treatment of bees. “They are not ‘murder hornets.’ They are just hornets,” says entomologist Chris Looney.

Entomologist May Berenbaum says, “People are afraid of the wrong thing.” Asian giant hornets may kill a few dozen people worldwide each year. The real killer of the insect world is the common mosquito. Mosquitos likely kill at least a million people annually by spreading dengue fever, malaria, and other diseases.
Folks living along the shores of Lake Michigan always anticipate the end of winter. After the ice melts, some have a window into another world—as frigid springtime waters reveal thousands of ghostly shipwrecks.

For hundreds of years, cargo ships have sailed Michigan’s Great Lakes. They carried coal, grain, salt, steel, stone, and wood along several important shipping routes. During Michigan’s lumbering heyday, the passage between the North and South Manitou Islands in Lake Michigan boomed. The islands offered shelter. But their sandy shallows could be treacherous during violent storms.

“A time for everything,” says the Preacher of Ecclesiastes. Turns out, Solomon’s observation is true of shipwrecks too. Michigan historians estimate that most Great Lake wrecks—some 6,000 of them—happened during October or November.

The U.S. Coast Guard still patrols the shipping lanes. Lieutenant Commander Charlie Wilson says crews often see submerged ships while on helicopter patrol. The water is so clear that visibility from the air is remarkable. This April, Vintage News, a popular history website, reported on the photographing of several historic wrecks in the Manitou Passage.

Of the five wrecks photographed by the Coast Guard team, only two are known shipwrecks. One is the James McBride. Researchers believe it was the first ship to navigate the entire passage from the Great Lakes to the Atlantic Ocean. This 121-foot wooden ship became stranded on sand on October 19, 1857.

The second photographed wreck is the Rising Sun. It was a 133-foot passenger steamer that ran aground October 29, 1917, as the result of a fall snowstorm. Caught on the rocks near shore, the ship listed to one side and filled with water. According to some accounts, everyone escaped except for one crewman . . . who slept through the entire incident in an unsubmerged part of the vessel. He was rescued the next day.

Scientists say extremely cold water is one reason sunken ships last longer in the Great Lakes. That’s because rust is a reaction of metal atoms with their environment. Higher temperatures make ions react—and therefore rust—faster. Cold water also keeps certain kinds of algae and bacteria at bay.

Another preservation factor in the Great Lakes is fresh water. Salt water speeds up rust formation because electrons react more easily than in fresh.

With a trove of historic shipwrecks, Michigan created an underwater preserve system in the 1980s. Divers who don’t move or remove underwater objects are welcome to explore the wrecks. And with thousands out there, that could take quite a while.
GLOW WITH THE FLOW

It wasn’t man-made lights along a seaside boardwalk that caused this glow in late April and early May. This light show on Southern California and northern Mexico’s Pacific shores was all natural. The bright blue gleam in the crashing waves was caused by bioluminescent plankton tumbling in the surf.

The affected section of the Pacific experienced an algal bloom commonly called “red tide.” By day, the algae, which are a type of phytoplankton, give the water a rusty orange appearance. But at night, they glow neon blue. The phenomenon was a nighttime gift to evening beachgoers—but sadly, with beaches mostly closed, not so many were able to enjoy the rare event. Law enforcement quickly dispersed the crowds that did try to gather. With beach parking areas closed, cars congested roadways along the shoreline, creating potentially dangerous traffic situations. Officials also worried that large groups of spectators might increase transmission of the novel coronavirus.

Surfers did get to enjoy the glow up close as they took advantage of the waves at the beaches of San Diego. There, swimming, surfing, and paddleboarding were all allowed activities despite the stay-at-home orders. Dolphins and sea lions were spotted leaping and diving in the midst of the bloom, churning up the water and causing the algae to flash and sparkle with colored light with each splash and dive.

What makes the algae glow? The microscopic organisms contain chemical molecules called luciferin. The glow may be a defense mechanism for the plankton. When water is turbulently churned up—as it might be if a predator descended on the algae—the algae expends precious energy to release an enzyme called luciferase. When luciferase, luciferin, and oxygen all meet up, a chemical reaction occurs and heatless light results. Scientists speculate that the flashes of light might startle would-be predators, causing them to turn away from the glowing plankton.

Sometimes red tide algae blooms are toxic to other marine life. But that’s not the case with this one, which stretched from Baja California as far north as Los Angeles. This bloom was dominated by a phytoplankton called Lingulodinium polyedra, or L. poly for short. It is a nontoxic alga, even when it is as prolific as this one.
One of the great wonders of the natural world is in hot water . . . literally. Warm ocean temperatures are destroying Australian coral at the Great Barrier Reef. Innovative scientists hope to help by engineering the clouds. They are testing a concept called “cloud brightening” to cool the water and protect the vital marine structure.

Off the coast of Queensland, Australia’s Great Barrier Reef stretches for over 1,400 miles. Billions of tiny soft-bodied animals called coral polyps built the reef, which is home to millions of other sea creatures and plants.

By themselves, coral polyps are clear. But healthy corals aren’t usually alone. Colorful algae live inside their tissues, giving corals their beautiful hues.

God made corals and algae to depend on each other for survival. Corals provide algae a safe home, and algae make food products for corals. As long as the ocean environment stays fairly stable, the two get along just fine.

However, corals under stress sometimes expel the vibrant algae, an event called “coral bleaching.” Without their main food source, bleached corals begin to die. The flora and fauna that depend on reefs also lose habitat and suffer. Many things can stress corals, including high air and water temperatures, coastal development, chemical runoff, and invasive human activity such as over-fishing.

The Great Barrier Reef has endured four major bleaching events since 1998. Some scientists fear recent coral death rates could be the worst ever. They’ve been experimenting for years with ways to cool ocean water in hopes of preserving the world’s reefs. Daniel Harrison is part of a team experimenting with cloud brightening. The idea is to alter clouds in Earth’s atmosphere so that they reflect warming sunlight away instead of letting it through.

“We’re trying to look at all the different ways that we could prevent bleaching on the Great Barrier Reef,” Harrison says. “When we did all the analysis, cloud brightening came out as really one of the better ideas.”

The approach involves shooting tiny saltwater droplets into the air using giant boat-mounted blowing machines. When the mist evaporates, tiny salt crystals remain. According to Harrison, “hundreds of trillions” of crystals drift into the atmosphere, “brightening existing clouds and deflecting solar energy away from the reef waters.”

Think of the crystals as tiny mirrors redirecting the Sun’s beams back up into the sky—one minute reflection at a time.

Harrison’s team has tested cloud brightening successfully on a small scale. But no one is sure whether the method is possible to recreate over much larger areas. Where to place the misting machines and how much the concept will cost are unknown also.

O Lord, . . . the Earth is full of your creatures. Here is the sea, great and wide, which teems with creatures innumerable, living things both small and great.

— Psalm 104:24-25
Technology gets blamed for being one of the biggest distractions drivers deal with today. A glance at a text, a scroll through a playlist, a tap to change the GPS, and uh-oh... someone’s car drifts out of the proper lane, putting passengers, cyclists, and pedestrians at risk.

In 2018, distracted driving led to the deaths of 2,841 people, according to data from the National Highway Traffic Safety Administration. So why are carmakers looking to add even more high-tech features to cars?

Experts at Edmunds automotive information service selected five car technologies that they say will reduce distraction and produce more focused drivers.

Sound like your future car has control issues? Don’t fret. Remember, it’s all done in the name of keeping you—and others—secure, so that you arrive at your destination safely.
NASA has a far-out proposal—on the Moon, to be exact. Scientists plan to embed a giant telescope on the lunar surface, cradled in an existing crater. They say the Moon’s celestial craters seem ready-made for such a device.

The idea came from Saptarshi Bandyopadhyay. He is a robotics technologist at NASA’s Jet Propulsion Laboratory. He calls his concept the Lunar Crater Radio Telescope (LCRT). The lab’s goal is to place a 3,281-foot radio telescope (an instrument that detects radio emissions from astronomical objects) inside a crater on the Moon’s dark side.

The Moon’s “dark side” is the side always facing away from Earth. It’s not lacking sunlight. In this case, the dark in “dark side” means “not seen” instead of “without light.” A telescope on the dark or far side could offer an uncommon peep into what’s happening in other parts of the galaxy.

What’s so special about the far side? Earth’s atmosphere reflects certain radio wavelengths. That keeps those wavelengths from reaching Earth-bound telescopes. But a dark-side lunar telescope could allow scientists to study wavelengths that have “not been explored by humans,” Bandyopadhyay claims.

The telescope would also avoid interference from Earth’s human-made radio waves, satellites whizzing around, and the swooshing of the Sun’s ever-churning sunspots. Without all that space noise, researchers hope to use LCRT for observing the universe in detail. Some even wonder if the telescope could allow scientists to look back in time to detect faint “fingerprints” of past events.

Christians don’t need anyone to explain Earth’s origins. They’ve already got the firsthand inside scoop in Genesis. Any fingerprints belong to the Creator-God, for the universe, including planets and the stars, were made by Him! (Psalm 8:3-4)

According to NASA, the LCRT would be the largest radio telescope ever. It would use a single giant dish for data collection instead of many smaller dishes. A receiver hanging in the telescope’s center would hopefully pick up radio frequencies from the cosmos.

LCRT plans involve NASA’s DuAxel Rovers, or wall-climbing robots. The bots will lay a half-mile-wide wire mesh telescope across a two- to three-mile-wide crater. And since radio telescope dishes must be curved in order to capture outer-space soundwaves, a crater makes an ideal locale.

When I look at your heavens, the work of your fingers, the Moon and the stars, which you have set in place, what is man that you are mindful of him, and the son of man that you care for him? — Psalm 8:3-4
Thousands of years ago, a forest of bald cypress trees grew on the banks of a river near the Gulf of Mexico. As the massive trees aged, they fell into the soft soil along the river. They sank deep into peat and river sediment. Over more time, sea levels rose, covering the embedded trees with salt water. For millennia, the fallen forest remained undisturbed off the coast of Alabama.

As storms churned up the Gulf waters, evidence of the forest emerged. “What secrets might the submarine forest hold? What potential for new resources for medicines?” scientists asked.

Last year, a team of scientists formed from Northeastern University and the University of Utah. With funding from the National Oceanic and Atmospheric Administration (NOAA), the team sent divers into the fallen forest. They retrieved samples of the well-preserved ancient wood to study in laboratories.

Hundreds of creatures thrived inside the naturally (or miraculously!) preserved material. Scientists removed, photographed, and identified more than 300 different animals. Of particular interest for the team are wood-eating shipworms. These sea creatures aren’t actually worms. They are wood-boring clams. Shipworms devour wood as they drill into it, digesting it and turning it into animal tissue.

Shipworms also harbor bacteria. God designed the clams and bacteria to work together. This is called a symbiotic relationship. The bacteria produce enzymes that help to break down the wood that the clams eat. One type of bacteria discovered previously in shipworms led to development of a new antibiotic. This group of researchers is looking for more such potential from the bacteria contained by the underwater forest. They believe there could be many pharmaceutical solutions just waiting to be discovered, adapted, and used.

Margo Haygood is a research professor of medicinal chemistry at University of Utah. She told CNN that the shipworm bacteria could open doors to pursue “pain drugs as well as anti-cancer drugs.”

Medicines developed from symbiotic microbes are often safer than drugs developed from “free-living” bacteria. That’s because the symbiotic bacteria aren’t toxic to their hosts. But free-living bacteria sometimes cause illnesses or poisoning for other creatures that contract them.

The team is culturing approximately 100 strains of bacteria gathered from the clams within the cypress wood. The team says many are “novel,” meaning they’ve never been identified before. That may sound like a lot of “new” to work with, but so far, the group has explored only a very small amount of the ancient forest site. There could be years’ worth of discovery yet ahead.
Slave Ship Found

The last slave ship known to have landed in the United States has a new owner. A federal judge granted ownership of the Clotilda shipwreck to the Alabama Historical Commission. The decision means the state has final say over remnants of the ship. It was found on a muddy river bottom north of Mobile last year. The Clotilda, a two-masted Gulf schooner, sailed to West Africa on an illegal trip financed by a wealthy businessman prior to the start of the Civil War. It delivered about 110 kidnapped Africans to Mobile before it was burned in a bayou in 1860 to hide evidence of the crime. A few pieces of the ship will be part of an exhibition planned for later this year in Mobile, near where the freed captives settled after the Civil War. They formed a community called Africatown. Descendants of the Africans still live in the area.

Hard Work Pays Off

Lashawn Samuel’s hard-sought dream is coming true. He’s going to college. The Columbus, Ohio, teenager walked three miles round trip to a library daily for five years. He did it to get help with his homework. This spring, all 12 colleges and universities that he applied to sent him acceptance letters. Several offered him full scholarships—including his top pick, Ohio State. In an interview with WCMH-TV, Samuel said his story proves what perseverance can produce. He also said he leaned into his community for help—and that it came through for him. Samuel grew up in poverty, but he took seriously the words of his hero, tennis star Arthur Ashe, who said, “Start where you are. Use what you have. Do what you can.” To that, Samuel adds, “I never would have achieved it without God, my family, my friends, and this environment I have around me.”

Beach Wedding Hero

A delivery driver arrived just in time to save a North Carolina couple’s beach wedding. Savannah Kulenic and Dylan Perkins’ dream wedding in Hawaii was curtailed by coronavirus restrictions. So the lovebirds organized a last-minute beach ceremony with just five people present. The company making the groom’s wedding band had shut down due to the outbreak, but it said it could overnight the ring the day before. Would it make it on time? Midafternoon rolled around, and the wedding party waited anxiously on the beach. At almost the last moment, driver Joe Engel pulled up to the bride’s condo. A note on the door asked him to head to the beach with the parcel, saying, “You have the ring.” Rather than drop the package at the door and rush to his next delivery, he hit the sand. “There are still good people in the world,” says the bride’s friend Amy Shores. “In the end, love wins.”
Special Ingredient for Moon Concrete

The European Space Agency is looking ahead to one day building on the Moon. But carrying heavy materials—including water—is costly. It takes a lot of fuel to break from Earth’s gravity, and the heavier the payload, the more boost needed. So the best bet for building is to use materials already on site. Lunar regolith is the perfect starting point for making concrete—but what to mix it with? There’s no water on the Moon. The agency says it has a solution: human urine! Researchers have found that not only would astronaut urine provide needed moisture, but the main compound in it, urea, also makes for a more malleable mixture! That means it can be manipulated into shape more readily before hardening into its final form. The “liquid waste a person generates each day could become a promising by-product for space exploration,” the agency said.

Pack-n-Go E-Scooter

Need to get somewhere fast? Just open up your backpack and whip out your handy inflatable electric scooter! Haven’t heard of that yet? Well, meet POIMO. It’s a new invention from the University of Tokyo’s Corporate Sponsored Research Program. POIMO stands for Portable and Inflatable Mobility.” When deflated, the entire thing, with wheels, the electric motor, and a bring-along pump, weighs about 17 pounds. This POIMO is just a prototype, but developers hope to reduce the weight further with technological advances. Proponents say POIMO is better for the environment than gas-powered vehicles, plus—no need to worry about parking! Upon arrival, just pack it up again and take it with you.

Templeton Prize Goes to NIH Director

Francis Collins, director of the National Institutes of Health, was honored by the John Templeton Foundation for his contribution to the human condition that values faith and science working together. The foundation gives its Templeton Prize every year. In the past, it has chosen the Reverend Billy Graham as well as Mother Teresa, a Catholic nun who spent her life working with the poorest residents of India. Dr. Collins is a physician and geneticist. He’s also a professing Christian. Much of his work today focuses on finding treatments and a vaccine for the novel coronavirus. The foundation selected Collins even before the pandemic. It says Collins demonstrates how his religious faith motivates his scientific research. He will receive a cash prize worth a little over $1.3 million.

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Quiz My Reading

1. How did Tex-Mex cuisine come to be?
   a) After the United States won the Mexican-American War, some Mexicans living north of the new border began integrating American ingredients into their traditional foods.
   b) Famous Mexican and Texan chefs began collaborating on dishes in the mid-1900s, to maximize variety along the Texas-Mexico border.

2. What is a "remote-controlled tour" of the Faroe Islands?
   a) Tourists operate drones with mounted cameras to record video footage of all 18 of the Faroe Islands.
   b) Live tour guides escort an internet audience around the islands in real time. Viewers control the guides by telling them to turn, run, or jump.

3. What did scans of Vermeer’s painting Girl with a Pearl Earring reveal?
   a) The background is not just dark and empty: There’s a green curtain behind the girl.
   b) The girl in the painting is Abbie Vermeer, one of the artist’s daughters.

4. What does astronomer Lucianne Walkowicz claim Mattel’s American Girl company did without her authorization?
   a) used her study findings on the distant star, Vega, and her recommendations for traveling to Mars in one of its American Girl books
   b) used her appearance, name, and references to her work to create its “2018 Girl of the Year” doll

Viz-Quiz

Where are the Faroe Islands located?

Mind Stir

1. Do you think American Girl should be restricted from selling the Luciana Vega doll? Why or why not?
2. When it comes to cultural food, is it important to try to honor the heritage and traditions of the recipe, or is it better to take freedoms with alterations and additions?

Words To Bank

1. epicurean
   a) neatly manicured
   b) having fine culinary preferences
   c) old and traditional

2. scrutinized
   a) ignored
   b) jumbled
   c) examined closely

3. lustrous
   a) radiant
   b) silent
   c) flowing

4. whet
   a) dampen
   b) satisfy
   c) stimulate

5. surreal
   a) dreamlike
   b) rational
   c) literal

6. aspiring
   a) exhausted
   b) lazy
   c) ambitious

Quiz answers page 29
TAYLOR UNIVERSITY

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