

Monarch butterflies are in danger. In California, people have a plan to help the insects.

> A monarch butterfly sits on a flower in Ragged Point, California.

NEWS BRIEF MAPPING CORAL REEFS

BY BRIAN S. MCGRATH

Scientists have completed the first detailed online map of the world's coral reefs. The Allen Coral Atlas was made using more than 2 million satellite images. It provides data for conservationists working to protect these delicate ecosystems.

Coral reefs are home to ocean animals, including fish and crabs. Reefs provide food and economic benefits for hundreds of millions of people. They also protect coastlines.

Before the atlas, most of the world's reefs had never been mapped in such an in-depth way, Greg Asner says. He's a scientist at Arizona State University (ASU). He's also the atlas's managing director. The atlas gives users detailed views of reefs and other underwater features, like sand, rocks, and seagrass. And it



MAPPED OUT Coral reefs are found in oceans around the world. This reef is in French Polynesia, in the South Pacific. It is included in the new Allen Coral Atlas.

has a coral bleaching monitor. This tracks changes in the health of coral reefs in real time.

The Allen Coral Atlas is the work of scientists at ASU. They partnered with other schools, groups, and private companies. "It really was a global effort," says Helen Fox, who is with the Coral Reef Alliance. "There were huge efforts in terms of outreach and helping people be aware of the tool and the potential scientific and conservation value."

Stop and Think!

WHAT information about the atlas do you find in the first paragraph? How does the rest of the article add to your understanding of the atlas?



AT THE TOP Emma Raducanu (right) beat Leylah Fernandez to win the Grand Slam women's final on September **11**.

TEEN TENNIS TAKEOVER

By Allison Singer

Emma Raducanu, 18, won the Grand Slam women's final at the U.S. Open on September 11. The tennis player from the United Kingdom beat 19-year-old Canadian Leylah Fernandez 6–4, 6–3. It was the first time since 1999 that two teens competed in a major tennis tournament final.

When she entered the U.S. Open, Raducanu was largely unknown to tennis fans. Then she won 10 matches to finish undefeated. Now she has people's attention. Queen Elizabeth II wrote to Raducanu to applaud her "remarkable achievement at such a young age."

Tennis star Billie Jean King handed Raducanu the championship trophy at Arthur Ashe Stadium, in New York City. Raducanu celebrated by carrying it around the court. "I can't believe it," she said.

COVER: EHUGHES—GETTY IMAGES

FUN FACT

Why are tennis balls fuzzy? So they ...

A) feel like a hug.

B) don't go too fast or bounce too far.

) don't scratch the court.

Tennis balls are made of rubber. Without a felt covering, they would bounce too far and move too fast. The fuzz creates drag in the air and friction on the racket or court.

WHAT DO YOU THINK?

TIME for Kids spotted this lemonade stand in Beacon, New York, last month. Lucas (left) and Abe let us snap a photo. Have you seen something that you read about in TFK? Tell us! Send your photos, drawings, or thoughts to tfkeditors@time.com for a chance to appear in a future issue.



NEWS STORIES MAY INCLUDE REPORTING FROM THE ASSOCIATED PRESS



a eucalyptus tree on the California coast in 2018.

BY THE BUCKET A total of 4,500 milkweed

PLANTING TIME A crew from River Partners plants milkweed in California's Yolo Bypass Wildlife Area.



WHAT'S FOR LUNCH? Monarchs need milkweed to survive. The plant is food for monarch caterpillars.







Power Words

inland adverb: away from the coast

rhizome noun: a thick plant stem that grows underground and has shoots and roots growing from it

SAVING MONARCHS

The western monarch butterfly population has dropped 99% since the 1980s. California hopes 30,000 new milkweed plants will save the species.

In the 1980s, about 4.5 million monarchs spent winter on the coast of California and northern Mexico every year. "There would be these forests full of monarch butterflies looking like leaves on trees," Elizabeth Crone told TIME for Kids. Crone is a professor at Tufts University, in Massachusetts. She studies the species.

In 2020, fewer than 2,000 monarchs were counted in California. This means their population has dropped more than 99%. "The decline has been pretty staggering," says Hillary Sardiñas of the California Department of Fish and Wildlife (CDFW). In the West, "folks haven't seen monarchs in a number of years."

To change that, CDFW, River Partners, and other groups began last year to plant 30,000 milkweeds in California. Monarchs need milkweed to survive. Will this plan save the insect from extinction?

MONARCHS AND MILKWEED

Monarchs have a "very specific relationship" to milkweed, Sardiñas says. They breed only where milkweed is growing. Females lay eggs on it, and monarch caterpillars eat it. The plant is poisonous to many animals, but not to monarchs. Its toxins build up in the butterfly's body, making the monarch deadly to predators.

In California, milkweed is "virtually gone" because of farming, says Cheryl Schultz, of Washington State University. She's an adviser on the project. The goal, Schultz says, "is to get enough milkweed into the landscape so that when monarchs are migrating and leave the coast, they can find places to breed." Wildflowers such as lupine have also been planted. They provide the nectar monarchs need to fuel their migration.

In North America, there are two groups of monarch butterflies. Eastern monarchs live east of the Rocky Mountains. They migrate south to Mexico in the fall and fly back north in the spring. Western monarchs live west of the Rockies. In the fall, they migrate to California and northern Mexico. In the spring, they fly inland.

Both groups are in decline. Scientists blame habitat loss, climate change, and pesticides. But monarch butterflies aren't on the endangered-species list. The United States Fish and Wildlife Service said last year that monarchs deserved protection but that other species needed more help.

IN THE FIELD

On a windy day in March, Asia Jones, of River Partners, led a 15-person crew at the Yolo Bypass Wildlife Area. The Northern California site is one of eight planting locations. Each person carried a bucket of 100 milkweed rhizomes. "They'd walk in a straight line down a row, and every three feet, they'd dig a quick hole and throw in a rhizome," Jones says. Together, they planted 4,500 rhizomes. They also spread lupine seeds.

Data from the next western monarch count, by the Xerces Society, is due in January. "People like to see these bright-colored orange butterflies," Crone says. But Schultz thinks it will take "at least a decade" to note a significant increase in their numbers. "Restoring the habitat takes time," she says. "We're not going to see results overnight... But I have an incredible sense of hope that we can do this." -By Jaime Joyce

YOU CAN HELP

Do your part to protect monarch butterflies. "What I want kids to do is get engaged," says Hillary Sardiñas, of the California Department of Fish and Wildlife. Plant native milkweed. Grow wildflowers. If you are in the West and see a monarch, take a photo. Upload it to the Western Monarch Milkweed Mapper. "You can help track the migrating monarchs and understand where they are during the year," Sardiñas says. "That's super valuable information to us."



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TEDDI YAEGER PHOTOGRAPHY/GETTY IMAGES; MARKO GEBER—GETTY IMAGES (INSET BUTTERFLY); COMPOSITE BY STEPHEN BLUE FOR TIME FOR KIDS

LEGAL LEMONADE More states are making it easy for kids to run lemonade stands.

TAKING A STAND

In most states, kids need a permit or license to run a lemonade stand or other short-term business. Many people want to change that.

Last year, a 9-year-old boy from Philadelphia, Pennsylvania, set up a lemonade stand. He got lots of customers. "They all took a sip of lemonade and either gave a thumbs-up or said it was really good!" he told TIME for Kids. Even so, this boy did not want to share his name for this article. That's because he found out that by operating a business without a permit, he'd broken a state law.

In most states, it's illegal for kids to open a lemonade stand without first applying for a permit or license. These laws are meant to stop business owners from disregarding foodsafety standards and local traffic rules. But applying for permits and licenses costs time and money.

The good news for young entrepreneurs is that in recent years, several states, including Texas and Iowa, have made it easier for kids to run lemonade stands. And more lawmakers are getting on board.

PASSING A BILL

Pennsylvania is now supporting lemonade sales by kids. John Hershey is a state representative there. In February, he introduced a bill. It was nicknamed Free the Lemonade Stand. The bill exempts kids from having to get a permit or license before starting most small, short-term businesses.

Hershey got the idea for the bill after reading about a family in Montgomery County, Maryland, that was threatened with a \$500 fine for allowing kids to run a lemonade stand. Hershey didn't want that to happen in his state. He says running a lemonade stand is an "opportunity that young kids should have."

Tom Wolf is Pennsylvania's governor. On June 30, he signed Hershey's bill into law.

REAPING THE REWARDS

There are many reasons for a kid to start a small business. These include

raising money for charity and keeping busy during long summer days. Some kids simply want to pick up extra cash. Victoria Hanson, 11, is a former TFK Kid Reporter. She lives in Chadds Ford Township, Pennsylvania. Victoria supports the new law in her state. "Children are not old enough to apply for jobs," she says. "Selling lemonade is an easy way for kids to make money."

Hershey says that kids who run a business learn valuable skills, such as marketing and bookkeeping. "The American dream is to want to build something for yourself," he says. And this new lemonade-stand law "helps kids do that at an early age." —By Rebecca Mordechai

Power Words

entrepreneur *noun*: a person who starts a business

exempt verb: to free from an obligation



SHOULD KIDS RUN BUSINESSES?

Running a business can be both complicated and rewarding. Should kids be allowed to take on that task? Some say running a business lets kids earn money and learn how to manage it. It's never too early to pick up such skills. Others say that in the long run, kids benefit more from focusing on school and extracurricular activities. Running a business can be distracting.

Should kids run businesses? TFK Kid Reporters Ethan Zhang and Via Ryerson weigh in. What do you think? -R.M.

ETHAN ZHANG. 9 MCLEAN, VIRGINIA

YES Did you know that Warren Buffett, one of the world's greatest businessmen, sold chewing gum and soda to his

neighbors when he was a kid? Running a business at a young age can teach you skills that will benefit you in the future. According to a Gallup survey published in 2017, 40% of kids in grades 5 through 12 plan to one day start a business. Giving it a try early on can help you learn and get you ready for new opportunities. Becoming a young entrepreneur also teaches



you important lessons. These include how to set and meet goals and how to manage money. Finally, running a business teaches problem-solving, critical thinking, and persistence. These skills can help you excel in school.

VIA RYERSON. 9 PHILADELPHIA, PENNSYLVANIA EMONADE: JENIFOTO/GETTY IMAGE:

Kids should not run businesses. They should be expanding their knowledge by focusing on school. They

learn an array of subjects at school—more than they'll learn from a business. The more subjects kids learn, the wider the range of things they can do when they get older.

When kids aren't busy running a business, they are more likely to join after-school clubs or sports teams. These activities can help kids build mental and physical strength.

They can also teach kids how to solve problems and collaborate with their peers.

NO

Plus, kids who are running a business have less time to spend having fun with family and friends. Kids should just be kids.

THE NEXT DEBATE

Should we still have zoos? Email your opinion to tfkeditors@timeforkids.com by October 27. Your response might be featured in an upcoming issue.



A LIVELY ADVENTURE

Vivo is a new animated musical. It's out now in theaters and on Netflix. The title character is a kinkajou. That's a rainforest mammal also known as a honey bear. In the film, Vivo spends his days playing music in Havana, Cuba, with his human, Andrés.

Then Vivo sets off on an adventure: He needs to deliver a letter to Marta, Andrés's long-lost love. Vivo must travel to faraway places to reach Marta. To do that, he gets help from a 10-year-old named Gabi.

YNAIRALY SIMO, 14, voices Gabi. Ynairaly has been acting since she was 5. She also loves music. *Vivo* features a song called "My Own Drum," which Ynairaly got to perform solo. "It was so much fun! It was my first time at a recording studio recording



a song," she told TIME for Kids. "I've always loved to sing."

Playing Gabi wasn't hard, she says, because she and the character are so similar. "I admire that she doesn't care what anyone thinks about her and that she does whatever makes her feel happy," Ynairaly says.

—By Karena Phan



In Fast Pitch, by **NIC STONE**, 12-year-old Shenice Lockwood is captain of a softball team: the Fulton Firebirds. It's the first all-Black team in Georgia's Dixie Youth Softball Association.

Shenice is determined to take her team to the championship. But she loses focus after discovering a family secret. Years ago, Shenice's great-grandfather JonJon was accused of theft and kicked out of his baseball league. Her great-uncle insists JonJon was framed. Can Shenice unravel her family history and still lead her team to victory?

Like Shenice, Stone played softball as a kid. She told TFK she wrote *Fast Pitch* because she "never saw books about Black girls playing sports" when she was growing up. She wanted that to be different for kids today. —*By Rebecca Mordechai*

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PANIMAL SPOTLIGHT

THE CHIMPANZEE

Often found swinging from the treetops in Africa, chimpanzees are highly intelligent apes. These mammals usually give birth to one baby at a time. They care for their young for many years, teaching them how to find food and build nests. Chimpanzees are omnivores, which means their diet includes meat and plants.

Chimpanzees and humans are very similar. Like people, chimpanzees are social animals. They gather in groups called communities. When playing, chimpanzees might laugh. They know how to use tools, such as sticks and stones, for finding food, for grooming, and as weapons. LIKE HUMANS, CHIMPANZEES HAVE OPPOSABLE **THUMBS**. THAT MEANS CHIMPS CAN PLACE THEIR THUMBS OPPOSITE THEIR OTHER FINGERS. THIS HELPS THEM GRASP THINGS. CHIMPS ALSO HAVE OPPOSABLE TOES.

CHIMPANZEES HAVE BROWN OR BLACK FUR. THEY GROOM ONE ANOTHER'S FUR AS A WAY OF BONDING.

A CHIMPANZEE HAS 32 TEETH. THEY ARE SIMILAR TO A HUMAN'S TEETH. CHIMPS HAVE MOLARS FOR CHEWING PLANTS AND LARGE CANINE TEETH FOR TEARING FOOD AND FOR PROTECTION.

> CHIMPANZEES USE THEIR STRONG **ARMS** TO SWING FROM TREES IN THE FOREST. WHEN ON LAND, CHIMPANZEES USUALLY WALK ON ALL FOURS.

Pulles Walk

NIMAL SPOTLIGHT

SCIENTIFIC NAME: Pan troglodytes

AVERAGE LIFE SPAN: 40 years

COMMONLY FOUND: Western and central Africa

FUN FACTS:

- Chimpanzees are one of the five great apes. (The others are bonobos, gorillas, orangutans-and humans!)
- In captivity, chimpanzees can be taught American Sign Language. A chimp named Washoe knew at least 150 signs.
- Chimpanzees and humans share nearly 99% of their DNA.
- Adult chimps stand three to five and a half feet tall.

