

Winter 2018 Environment Newsletter

Plastic Pollution of our Oceans

Inspired by South African anti-apartheid revolutionary leader Nelson Mandela and Indian activist Mahatma Gandhi, Mijsen partnered with her sister to form Bye Bye Plastic Bags, a platform to engage citizens on supporting a plastic-bag ban, raise awareness and distribute educational materials for primary schools in Indonesia. Mijsen's impactful work has attracted the attention of local government leaders, and in turn, Gov. Made Mangku Pastika announced a commitment to make Bali plastic-free by 2018. While that goal has yet to be reached, Mijsen is undeterred in her mission, reported CNBC.

She has visited with the United Nations, and was an inspirational speaker at the recent International Monetary Fund and World Bank meetings, according to the report. During her gap year following high school graduation, she intends to get 1,000 Bali-based businesses to reduce the use of single-use plastic bags. In just three months, she already has commitments from more than 350 entities.

Bali teenager takes on plastic pollution elimination



Microplastics Yikes!

- The suspicion that we're consuming our own plastic pollution was recently reconfirmed when researchers discovered microplastic particles in human stool samples
- The stool samples were tested for the presence of 10 different types of plastics, of which nine were found in the samples. On average, participants had 20 microplastic particles per 10 grams of stool

- Tests reveal both tap water and bottled water contain microplastics, as does your household dust and many foods, especially seafood and sea salt, but also any food that has been stored in plastic packaging
- Research suggests microplastic may have an adverse effect on your gut microbiota; polystyrene microplastics affected the gut barrier, microbiota and metabolism

Where does all of this Plastic Come From?

- Ninety-five percent of the riverborne plastic flowing into the ocean comes from just 10 rivers
- Large rivers with dense populations along their shores delivered a disproportionate amount of mismanaged plastic waste into the ocean
- Eight of the rivers (the Yangtze, Yellow, Hai, Pearl, Amur, Mekong, Indus and Ganges Delta) are found in Asia while two (the Niger and Nile) are in Africa
- The worst polluter of the bunch is the Yangtze, located in China, which releases 1.5 million tons of plastic waste into the Yellow Sea annually (more than is released by the other nine rivers combined)

Good News: Many Groups and Governments are Eliminating Plastic Pollution

. Chile Approves a Nationwide Ban on Plastic Bags

Chile became the first country in the Americas to ban plastic bags when the country's president Sebastian Piñerasigned the legislation into law on June 1. The plastic crisis has had a visible impact in Santiago, where people use 62.2 million single-use bags each year, while a trash island the size of Mexico forms along its coast. Chile is joining countries like Kenya and Morocco that previously eliminated plastic bags.

. Airlines Announce They Will Ban Single-use Plastics

As cities across the US and around the world work on legislation to ban single-use plastics, airlines are also stepping up to the plate. Major airlines — Alaska, American, and Delta — all made pledges to reduce their plastic footprint.

. Corporations Take Action on Plastic

McDonalds and Starbucks were among the corporations who stepped up this year to reduce their plastic footprints. McDonalds plans to remove all plastic straws from more than 1,300 locations in the UK and Ireland by 2019. Soon after, Starbucks announced it will be phasing out plastic straws at all its stores by 2020 — a move that could eliminate 1 billion straws from the global supply chain every year.

Why are alligator gar disappearing?



- Individual gar can live more than 50 years. They are primarily river dwellers and they are suffering from human-induced changes. Once common in the U.S. throughout the larger rivers that drain to the Gulf of Mexico, they are now increasingly rare, although still doing OK for now in parts of Louisiana and Texas.
- Alligator gar mostly spawn when large rivers overflow their banks during rainy periods. During those high river flows, or *overbank flows*, adults move out into the floodplain to lay eggs, which allows the new hatchlings a place to hide from predators during the [first days of life](#) before they move into the river.
- Modification of rivers has resulted in lower flows and fewer of the overbank flows alligator gar require. That happens because dams and reservoirs built for water supply are catching more and more of the river flow. In addition, when homes and other structures are built close to a river, overbank flows can damage them. As a result, rivers are managed to reduce overbank flows through measures like building flood control storage and dikes to keep flows out of the floodplain.

Islamic Society of North America and Blessed Tomorrow Launch New Video

ecoAmerica's Blessed Tomorrow program and the [Islamic Society of North America](#) (ISNA) have partnered to promote climate solutions and creation care among Muslims in America. ISNA launched this new partnership and program at their 55th Annual ISNA Convention this month. The launch included a premiere of our new film, [The Earth As Our Mosque](#), directed by award-winning filmmaker Mawish Raza. Created in collaboration with ecoAmerica and Blessed Tomorrow, it features Muslim families in Houston sharing how their faith calls them to care for creation.

[Click here to watch.](#)

Sea Turtles and Shrimp



Sea turtles are some of the most majestic, long-living animals in the ocean, yet hundreds of thousands of them are accidentally caught and die in fishing nets and other gear each year. Fortunately, a growing number of shrimp and other seafood fisheries are using better equipment to reduce the incidental catch of sea turtles, dolphins, sharks, and other animals. Consumers can look for the Marine Stewardship Council logo on seafood at their grocery store fish counters, on packaged seafood, and on restaurant menus to ensure their food comes from fisheries that prioritize reducing bycatch.

What's the world's fastest mammal?

The fastest mammal on earth is not the cheetah. True, the cheetah has been clocked at 75 miles per hour, and can reach speeds of 60 mph in just three seconds. It's an exceptional sprinter on grassy plains, capable of overwhelming prey in a short burst of speed.

The runner-up in the fast mammal contest is the pronghorn, capable of speeds around 60 mph hour. The springbok, an antelope species of southern Africa, can run up to 55 mph.



In 2016, [a paper published by University of Tennessee researchers](#) found that the Mexican free-tailed bat could reach speeds up to 100 mph, making it by far the fastest mammal on earth. Free-tailed bats typically hunt insects more than a half mile in the air. At that height, they don't have to pivot around trees, terrain, houses and other obstacles. This allows them to maximize their speed with little threat of injury.