

Hello, again, welcome back, and happy new year. I'm Jim Tedder in Washington. Today we go in search of killers. Not the kind with guns and knives, but those with very sharp teeth. The kind that swim in the ocean. They have names like "Great White" and "Tiger."

Then we are off to the fair, a maker's fair. There are no rides and popcorn and clowns, but it is a lot of fun. Would you like to make a robot, or some other thing that would make your science teacher proud? Then stay with us. You can even learn how to improve your American English at the same time with "As It Is" on VOA.

Officials in Western Australia have ordered fishermen to catch and kill sharks over three meters long. The order followed the deaths of two people who were surfing - riding the waves on a surfboard. The deaths made a total of six deadly shark attacks in Western Australia during the past two years.

In reaction, the state government is creating safety zones in waters around the city of Perth and along popular coastal areas to the south. Officials say sharks seen in those waters will be considered an immediate danger to surfers and swimmers, and will be killed.

Commercial fishermen will be paid to hunt for and kill sharks bigger than three meters in the restricted areas. The fishermen will be adding food to their hooked lines to catch smaller shark.

Troy Buswell is Western Australia's fisheries minister. He says the measures will make coastal areas safer for people using the water. He says the new measures are not meant to reduce the population of the animals.

"This response does not represent what you would call a culling of sharks. It is our view that it is a targeted, hazard-mitigation strategy. In other words, removing the shark hazard (danger), or attempting to remove the shark hazard from where they present the greatest danger to the public..."

Tourism businesses in Western Australia have welcomed the policy of catch and kill. They say many visitors have decided to stay away from coastal areas in the southwestern corner of the country after the most recent attack.

A large shark killed surfer Chris Boyd near the community of Gracetown. The attacker was thought to be a great white shark. Other surfboard riders have said reducing the number of big sharks in the area would decrease the threat of further attacks.

But the Greens Party offered a measure in the Australian Senate for the federal government to oppose the killing of sharks off the nation's west coast. The measure says more research is needed before any catch-and-kill policy is enacted.

Environmentalists say that protected species such as the great white shark should not be hunted and killed. Greens Party members say swimmers and surfers should understand that they enter the water at their own risk.

Also in Australia, the state government in New South Wales is investigating the use of aircraft to search coastal waters for sharks. It began the investigation after a surfer died at Coffs Harbor, north of Sydney. In that incident, a 19-year-old man died after an attack by a three-meter long tiger shark.

We're Off To The Fair

If you like to make things -- especially things that involve science -- then you might like to attend a Maker Faire. You say you have never heard of one? Well, you are in luck. Caty Weaver joins us with everything you will need to know.

Maker Faires are held every year in different cities around the world. The recent one in New York City had hectares of colorful demonstration tables, science-based games, performance stages and "play islands."

Eleven-year-old Genevieve Beatty, her 13-year-old sister, Camille, and their father Robert stood proudly next to a robot. It was a model of a Mars lander, about a meter and a half high. Genevieve says they built it themselves.

“Most of the ones that we built roll, like they have wheels, and some crawl and a few fly. It’s just fun to work with my dad and my sister. I do all the, like, inside, like the electronics and like soldering.”

Robert Beatty says Genevieve’s sister, Camille, had a natural interest in mechanical things. She would take apart household machines to understand how they worked. Robert, Camille and Genevieve began building items with transistors and LED lights. Before long, the two girls asked to build a robot.

“And that was pretty scary, but I thought, OK, if we really do a lot of research we will be able to figure out how to do it. So we just started learning on YouTube and various websites and trying to construct a little robot.”

In two years, the family has made nearly 35 robots, including several that science museums asked them to build. But Robert says the main point is fun, family and education.

“I often don’t know the subject of what we’re trying to learn, but we learn it together, or I teach it to them and then they do all the work. And that way they stay super engaged. As soon as I take over and try to do it myself, that’s boring, and they go off and do something else. So the key is to get them to do the work themselves.”

Three-dimensional printing was one of the most-popular areas of this year’s Maker Faire in New York. At one booth, a young designer named Todd Blatt sold brightly-colored jewelry that he made with software and nylon powder.

“I focused on designs that couldn’t be made with traditional manufacturing methods. So I have things that are linked together with no seams and metal pieces that are 3-D-printed in shapes that you couldn’t make molds out of. So it is really exciting to make these things that couldn’t exist otherwise.”

He uses software to draw the object he wants. Then he sends the design to a 3-D printer. It melts the nylon powder with a laser and builds the physical object one thin layer at a time.

“You can make products or you can make earrings, jewelry and movie prop replicas and clothing accessories -- anything you want!”

Not everyone at the Maker Faire is high-tech. A group based in Brooklyn, New York called “The Fixer’s Collective” had a table. Vincent Lai showed people how to repair a toaster and rewire a lamp.

“And we feel very comfortable being here because we also believe that fixing and repair is a strong part of the making process. Because as you create, and as you shape, and as you whittle and scrape, you’re gonna run into roadblocks. And so that’s when your fixing skills need to come into play.”

That sounds like fun. Our thanks to Caty Weaver for telling us all about a maker's faire. And thank you for spending some time with "As It Is" on this first Thursday of the new year. There are more Learning English programs headed your way just seconds from now. And, of course, you can catch up on all the news from around the world at the beginning of the hour on VOA. I'm Jim Tedder in Washington.