

tangled in the gill nets favoured by poachers targeting another critically endangered animal: a fish of similar size called the totoaba. In China, Totoaba swim bladders fetch a lot of money as they are considered a delicacy.

Despite government efforts to crack down on poaching, vaquitas continue to decline. This is due partly to loopholes in regulation that allow the use of gill nets to catch other large fish. "If the vaquita disappears, it is entirely upon the government of Mexico for letting that happen," says Zak Smith of the Natural Resources Defense Council in California.

Statin snafu

IT HAS been branded a farce. A software error means an unknown number of people in the UK have been told to take cholesterol-lowering drugs when they didn't need to – or told they didn't need to consider the drugs when they should have done.

Statins are recommended for those who have not had a heart attack but are deemed to have at least a 10 per cent chance of having one in the next 10 years, because of risk factors like smoking and overweight, or a family history of these factors. There is an online calculator for this heart attack risk, but some doctors in the UK have been using software that may give the wrong result.

About a third of UK family doctors' practices use a program made by the IT company TPP. Last month, the firm told the UK government that there was a problem with the software, and that it has overstated the risk for some people while understating it for others. The government told doctors of this on Wednesday.

"Only a limited number of patients are potentially affected," a government spokesperson said, but admitted the company had not revealed what proportion of test results were wrong.

Microbe moonshot

THE White House is taking an interest in your gut. It has just launched its National Microbiome Initiative, a \$500 million effort to understand the complex communities of bacteria, fungi and other microbes that live on or in everything.

Disruptions to our microbial mix have been implicated in a host of diseases, but the microbiome affects the environment too. Microbial imbalances can lead to zones of low oxygen in oceans – killing off fish – while agricultural depletion of bacteria can result in

barren soils. The plan is to develop technology to optimise such communities (see page 16), says Jo Handelsman at the White House Office of Science and Technology Policy.

The government will provide \$121 million for the initiative over the next two years, and more than 100 universities, charities, foundations and companies will chip in a further \$400 million.

The funding and scope of the project is comparable with – and perhaps larger than – the controversial Human Brain Project, according to a White House spokesperson.

Magic away depression

SHROOM for improvement? The first clinical trial of magic mushrooms for depression has produced some encouraging results, but involved only 12 people and no control group.

The trial aimed to test whether psilocybin – the active ingredient in magic mushrooms – might be a safe treatment for depression. All the volunteers had previously tried at least two other treatments without success.

Each participant underwent two psychotherapy sessions, both conducted after doses of psilocybin. A week after the second session, all of them had reduced symptoms. After three months, five no longer met the clinical criteria for depression (*The Lancet Psychiatry*, DOI:

10.1016/S2215-0366(16)30065-7).

Although there was no placebo group, the results are promising, said Phil Cowen, a psychiatrist at the University of Oxford, who wasn't involved in the study.

Enthusiasts have long believed that the drug's ability to induce profound-feeling experiences could be therapeutically useful. Brain-imaging studies have shown that psilocybin targets areas of the brain overactive in depression.

Team member Robin Carhart-Harris of Imperial College London said that therapists are important for a positive outcome, and has discouraged people from self-medicating. "That kind of approach could be risky," he said.



Hints of promise

60 SECONDS

Private present

The first man in the US to undergo a penis transplant, 64-year-old Thomas Manning, says he looks forward to returning to a normal life after his own penis was amputated as part of cancer treatment. Surgeons at Boston's Massachusetts General Hospital matched Manning's skin tone and blood type with a dead donor.

Floating wind farm

Scotland is to get the world's largest floating wind farm, with five 6 megawatt turbines generating electricity by the end of 2017. Norwegian energy company Statoil has been granted a seabed lease for the development, 24 kilometres off the coast of Peterhead.

Dinosaur drill

The Chicxulub crater, in Mexico's Yucatán peninsula, is about to yield its secrets. It was made by an asteroid that struck Earth 66 million years ago and is thought to have wiped out the dinosaurs. A drilling project has taken samples from the crater, which will be analysed in June.

Paint-on GMOs

A US company, AgGenetics, has developed a technique to custom-design animals' fur patterns through genetic engineering. It hopes to create a heat-tolerant version of Angus beef cattle whose coats are white instead of dark, so the animals can thrive in the hot tropics. The technique could also pave the way for custom-designed pets.

Space fluids

Bodily fluids created in space landed on Earth on 11 May, when Elon Musk's Dragon capsule splashed down in the Pacific Ocean. It was carrying almost 1700 kilograms of scientific material from the ISS, and included bodily waste and other samples from astronaut Scott Kelly, who spent a year on board the station. The material could tell us about the effects of long stints in space.