

Florida manatees swim in the Three Sisters Springs while under the watchful eye of snorkelers in Crystal River, Florida recently. U.S. wildlife officials plan to announce on January 7, 2016, whether the manatee should be downgraded from endangered to threatened status, following extensive review of Florida's "sea cow," a species long considered at risk of becoming extinct.

## Manatees may lose endangered status

#### Federal officials rethink protection

BY TONY PUGH MCCLATCHY WASHINGTON

BUREAU WASHINGTON — The

West Indian manatee, Florida's beloved sea cow, could be downlisted from endangered to threatened status under the Endangered Species Act, the U.S. Fish and Wildlife Service announced Thursday.

Population growth, improved habitat conditions and a decline in direct threats to the gentle creature have prompted the change in status.

Federal law defines an endangered species as one facing possible extinction throughout all or a signifi-cant portion of its range, while a threatened species is likely to become endangered in the foreseeable future.

"The manatee is one of the most charismatic and instantly recognizable species," said Michael Bean, Principal Deputy Assistant Secretary for Fish and Wildlife and Parks at the Department of the Interior. "It's hard to imagine the waters of Florida without them, but that was the reality we were facing before manatees were

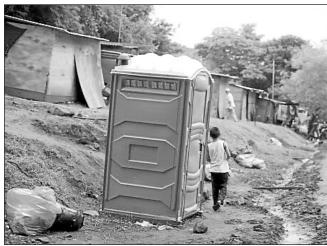
listed under the Endangered Species Act. While there is still more work to be done to fully recover manatee populations, their numbers are climbing and the threats to the species' survival are being reduced.

implemented, the change in status won't affect federal protections the manatee is afforded under the endangered species act. Public comments on the proposal will be taken until April 7,

Rep. Vern Buchanan, R-Florida, sent a letter to the U.S. Fish and Wildlife Service saying the decision would be "misguided and premature."

Buchanan said the government needed to continue to protect the species, citing experts that have projected that the current population of manatees could drop below 500 in the next centu-

"I urge the agency to withdraw its misguided and premature proposal immediately and help save this treasured species," Buchanan said. "The government must not downplay the severity of these threats to the manatee's survival.'



A boy walks past a portable toilet in Paraguay recently. Cranfield University in London is developing a new water less toilet as part of the global "Reinvent the toilet challenge" launched by the Bill and Melinda Gates Foundation.

### New waterless toilet uses nanotechnology

**REUTERS** 

LONDON — A toilet that does not need water, a sewage system or external power but instead uses nanotechnology to treat human waste, produce clean water and keep smells at bay is being developed by a British university.

The innovative toilet uses a rotating mechanism to move waste into a holding chamber containing nano elements. The mechanism also blocks odors and keeps waste out of sight.

"Once the waste is in the holding chamber we use membranes that take water out as vapor, which can then be condensed and available for people to use in their homes," Alison Parker, lead researcher on the project, told the Thomson Reuters Foundation.

"The pathogens remain in the waste at the bottom of the holding chamber, so the water is basically pure and clean.

Cranfield University is developing the toilet as part of the global "Reinvent the toilet Challenge" launched by the Bill and Melinda Gates Foundation.

science of creating and working with materials about one nanometer wide, or one-billionth of a meter. A human hair is about 80,000 nanometers wide.

Parker said that despite "significant" interest from developed countries, the toilet is being designed with those in mind who have no access to adequate

According to the U.N. children's agency UNICEF and the World Health Organization 2.4 billion people, mostly in rural areas, live without adequate toilets.

Poor sanitation is linked to transmission of diseases such as cholera, diarrhea, dysentery, hepatitis A, typhoid and polio, the WHO

Cranfield University says its toilet is designed for a household of up to 10 people and will cost just \$0.05 per day per user.

A replaceable bag containing solid waste coated with a biodegradable nanopolymer which blocks odor will be collected periodically by a local operator, it

Initial field testing of the toilet is likely to take place Nanotechnology is the later this year, Parker said. the company's website con- all for raising sugar beets the groups in the anti-GMO

# Study shows law helps save lives

### Injuries soar after Michigan stops requiring motorcycle helmets

BY MADELINE KENNEDY

In the three years after Michigan repealed a mandatory motorcycle helmet law, deaths and head injuries among bikers rose sharply, according to a recent study.

Deaths at the scene of the crash more than quadrupled, while deaths in the hospital tripled for motorcyclists. Head injuries have increased overall, and more of them are severe, the researchers report in the American Journal of Surgery.

Senior author Dr. Carlos Rodriguez decided to do the study after noticing an abrupt change in the trauma unit at Spectrum Health Hospital in Grand Rapids, where he works.

The first week after the law was repealed in April 2012, he told Reuters Health, "I just could not help but notice the number of patients that had been in motorcycle crashes with no helmet on, which was enormously different in number and volume than we had experienced the weekend before.

The study team looked at records for patients admitted to Spectrum Health Hospital and at state transportation department records of fatalities at crash scenes for the seven-month motorcycle season (April to November) in 2011, before the law was repealed, and for the same period in 2012, 2013 and 2014.

Among the accident victims brought to the hospital, the proportion of riders who had not been wearing a helmet rose four-fold, from 7 percent to 28 percent, the researchers found.

About 10 percent of nonhelmeted riders brought to the hospital died there, compared to 3 percent of those who had been wearing helmets.

Among riders who died at the crash scene, the pro-



Kerry Smith, from Portland, puts on her helmet before riding her motorcycle in 2012.

Accident victims who had not been wearing a helmet rose four-fold, from 7 percent to 28 percent, the researchers found

portion not wearing hel- the District of Columbia remets rose from 14 percent before the law was repealed to 68 percent afterward.

These are the kinds of things that we wanted to look at to hopefully make legislators see that this was a mistake," Rodriguez said in an email.

Riders without helmets also drank more alcohol after the law was repealed, based on blood tests at hospital admission

The severity of injuries increased for non-helmeted riders, as well as the number of life-threatening head injuries.

Non-helmeted patients tended to stay longer in the Intensive Care Unit and to need machine assistance with breathing.

Overall, hospital costs

averaged \$27,760 for nonhelmeted riders versus \$20,970 for patients who had been wearing helmets.

In the U.S., 19 states and for a cervical spine inju-

quire all motorcyclists to wear a helmet, while 28 states require only some to wear them and three states have no helmet laws at all.

Since the repeal of Michigan's 35-year-old helmet law, riders can go without a helmet if they are over 21, have had their license for at least two years and purchase at least \$20,000 in additional medical insurance coverage, the researchers note.

Dr. Ben Zarzaur, a surgeon who studies motorcycle helmet laws, said that riders may choose not to wear a helmet because they say it is less restricting and they may claim to see or hear better without

"The other argument (riders make), based on a flawed study several years ago, is that wearing a helmet can increase the risk ry," Zarzaur said by email. He noted, however, that

there is no real-world evidence for this claim, while there is plenty of evidence that wearing a helmet reduces the risk of death and head injury. As the study points out,

the cost of injuries and deaths from motorcycle crashes is extremely high, Zarzaur said, adding that taxpayers and other insurance payers often bear this cost. "So, choosing not to wear a helmet has consequences for many more people than just to the person who decided not to wear the helmet.

Although there is an extra insurance requirement in the law, Rodriguez said, that it is rarely enforced.

Rodriguez recommends that all motorcyclists should wear a helmet, because drivers may not see them on the road. "Even if you are the most careful motorcycle driver in the world, if you don't wear a helmet, you are putting yourself at risk for a sig-

## Hershey dumps GMO sugar beets from recipe

BY TOM MEERSMAN

MINNEAPOLIS — Something was different about a lot of the Hershey's kisses in your stocking this Christmas: The popular chocolates no longer contain sugar

made in Minnesota. For decades, the Hershey Co. has used sugar made from both sugar beets and sugar cane, but it decided in 2015 to stop buying beet sugar because it comes from genetically modified, or GMO, seeds that some con-

sumers don't like. Hershey, with 2014 sales of \$7.4 billion and more than 80 brands of candy sold around the world, was a huge customer for beet sugar farmers, and its decision was significant enough to be noted at two annual shareholder meetings

of sugar beet cooperatives. David Berg, president and CEO of American Crystal Sugar in Moorhead, Minnesota, the nation's largest sugar beet co-op, told members gathered in Fargo, North Dakota, that the anti-GMO movement is one of the industry's biggest challenges. And Kurt Wickstrom, president and CEO of Minn-Dak Farmers Cooperative in Wahpeton, North Dakota, said that anti-GMO groups are a real threat whose claims need to be countered.

Hershey communications director Jeff Beckman confirmed that the kisses and many other products stocked on shelves since Halloween no longer contain beet sugar. The company also is transitioning away from artificial to natural ingredients, he

"More than three-quarters of the sugar we are using today is cane sugar," which is not genetically modified, he said, "and as we get into 2016, our expectation is to be at or near 100 percent."

No matter how or where the company sources the sugar, it's still just going to say "sugar" on the product ingredient labels, he said.

Beckman said the sourcing switch has nothing to do with the safety of beet sugar, and



REUTERS FILE

A Hershey's chocolate bar is shown in Encinitas, California. The chocolate maker has decided to stop buying GMO beet sugar to make its products, which is unpopular with con-

tains references to numerous today," he said. scientific groups that have concluded that GMO sugar is safe to consume.

"This is really just a matter of listening to and being responsive to what consumers want us to put into their prod-

ucts," he said. Minnesota is the top sugar beet producer in the nation, followed by Idaho and North Dakota, and industry officials would not disclose how much of their sugar is sold to candy companies. About 55 percent of domestic U.S. sugar is produced from sugar beets, and nearly 100 percent of the beet seeds are genetically modified to tolerate the herbicide glyphosate, the active ingre-

dient in Roundup. Berg said in an interview that Hershey is the only national brand that has dropped beet sugar, although other companies have been asking questions and there has been a lot of chatter about GMOsugar on social media.

"This could be a concern if it gets bigger and bigger, but at this point that's all very speculative," Berg said.

Even if it reached the point that other companies followed Hershey, Berg said, sugar beet growers can't get non-GMO seed anymore, and it would take years to produce.

'The supply of seed that is not genetically modified is extremely outdated and just not a viable option at

Dean Bangsund, an economist at North Dakota State University, said the beet sugar industry generates nearly \$5 billion annually in total economic activity in Minnesota and North Dakota, but it can't afford to lose too many customers.

"If it's just one domestic consumer, maybe there's ways around that," he said, but there's reason to worry if rejecting beet sugar becomes a consumer trend

"If the industry is forced to cut back production because it can't find a market for its sugar, the economic effect would flow back through all stages of production here in the (Red River) Valley," Bangsund said, affecting jobs of those who grow, process, transport, package and sell the sugar.

Part of the pressure on Hershey came from a coalition of groups called GMO Inside that began a campaign in 2013 suggesting that consumers tell Hershey and Mars, another large candy manufacturer, to drop all GM ingredients from their products.

Hershey made its decision as part of other changes in February. Mars has not made any announcements.

"Right now we don't have immediate plans to target other companies, especially with sugar," said Elizabeth O'Connell, campaigns director for Green America, one of

O'Connell and others contend that consuming geneti cally modified ingredients poses possible health risks and that growing GMO (also called GM) crops damages the environment and gives too much power and money to agricultural giants such as Dow and Monsanto.

Those claims are countered fiercely by industry leaders, who say that there's no scientific evidence of health problems and that GMO seeds grow more productive crops and use fewer weed-killing chemicals.

"There's this perception out there that GMO is bad for people and bad for the environment, when that's just not what the science says," said Todd Geselius, vice president of agriculture at the Southern Minnesota Beet Sugar Cooperative. "To the best of my knowledge, nobody's ever gotten so much as the sniffles

from eating a GMO product.' O'Connell said consumer groups will continue to pressure companies to remove GMO ingredients from food, or at least to label them so consumers know what they're buying. A current priority is dairy products, she said, because cows are fed mixtures of soy meal, corn and other products from GMO seed.

The groups previously targeted General Mills, asking it to drop GM ingredients from its original Cheerios. Oats, the main ingredient, is not grown from GMO seeds. General Mills did switch to non-GMO sugar, even though original Cheerios is one of the least-sweet cereals on the

The groups are now asking General Mills to convert its top-selling Honey Nut Cheerios to a GMO-free product. That would include several ingredients, including sugar. Honey Nut Cheerios contains nine times more sugar per serving than original Cheerios.

General Mills declined interviews on the topic because the company does not discuss its future sourcing strategies, a spokeswoman said.