USA TODAY NEWS

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MOUNTAINS

Sometimes bears cross roads to get garbage



Word from the Smokies

When Asheville's Appalachian Trail star Jennifer Pharr Davis hit a huge bear with her tiny Prius, people began to pay more attention to the need for wildlife crossings in our area. Media coverage of the accident added fuel to a fire started five years ago by two dozen federal, state, tribal, and nongovernmental organizations collaborating as Safe Passage: The I-40 Pigeon River Gorge Wildlife Crossing

To make 20 miles in North Carolina and 8 miles in Tennessee more permeable for wildlife and safer for drivers, Safe Passage undertook extensive research on the travel and mortality patterns of bear, elk, and deer along a 28-mile stretch of Interstate 40 that bisects Cherokee and Pisgah national forests. The study by National Parks Conservation Association and Wildlands Network ultimately resulted in 21 recommendations for departments of transportation to improve existing structures and create wildlife-only overpasses in the Pigeon River Gorge near Great Smoky Mountains National Park.

My organization, Great Smoky Mountains Association, became one of seven members of the Safe Passage Fund Coalition, making it possible for the public to add their own dollars to the effort - and we have raised \$127,000 to date. During the COVID-19 lockdown in spring of 2020, I wrote a children's book, "A Search for Safe Passage," which GSMA published the next year. Set in a fictional microcosm of the Pigeon River Gorge, the book tells the story of 19 animal species working together to try to find a safe way to cross the road.

But my involvement in road ecology how animals and plants are affected when roads are near their homes - didn't begin in the Smokies. It started because I was seeing adult black bears and cubs struck near my own home just north of Asheville, where Interstate 26 crosses from Western North Carolina into East Tennessee. Because animals don't see park or state boundaries, the problem is both interstate and intrastate.

In June of this year, Safe Passage supporters got to meet North Carolina Gov. Roy Cooper in Asheville to share the Pigeon River Gorge research. Joining the gathering were three students from Fern-number one cause of mortality of black leaf Community Charter School in bears in Asheville, likely due to the com-



Fletcher where, as part of a focus on environmental education, classes had read "A Search for Safe Passage." Three girls brought a slew of wildlife crossing advocacy letters from their peers for Cooper, who expressed his support.

Last week, I was privileged to speak to 48 fifth graders at Fernleaf, some of whom are working on their own children's books about wildlife. Their teacher wanted me to share some tips about conservation writing for young audiences. These included "We protect what we love, so make characters lovable," "Use anthropomorphism for a good cause," and "Be inspired by nature, our best

As we looked at images of wildlife living near both I-40 and I-26, I asked the children why animals cross our roads. "To mate," "To find shelter," and "To have space," were the first few answers. Then one enthusiastic girl raised her hand: "Bears also cross the roads to get our garbage," she announced.

She had a great point. Since 2014, the urban bear study in Asheville has been examining how urban food sources - primarily in the form of bird feeders, unsecured garbage, and purposeful feeding by residents - are influencing bear movements and the risk of mortality.

"We expect results by 2024," says Colleen Olfenbuttel, black bear and furbearer biologist with North Carolina Wildlife Resources Commission. "What we know so far is that, unlike other areas of the state, collisions with vehicles are the bination of highways that were not originally constructed with wildlife in mind and movements of bears across road systems to access human-provided foods."

Olfenbuttel says she has observed vehicle-caused bear mortalities near areas where residents are purposely feeding bears. "The NC Wildlife Resources Commission has been collecting information from vehicle-struck bears for decades, and over the years, Buncombe has become one of the top counties in the state in vehicle-caused bear mortality," she says. "In 2020, Buncombe was the top county for vehicle-caused bear mortalities at 41 bears."

Not far from the site of Pharr Davis' accident, which was fatal for the unlucky bear, naturalist and Smokies photographer Sharon Mammoser lives off Long Shoals Road in Arden.

"In my neighborhood I definitely see bears being influenced by human activity," she says. "My neighbors have several outdoor cats that roam freely and are fed outside. From trail cameras and new paths in the forest I know there are a handful of bears (and other animals) going there regularly to check for food."

Mammoser follows the six at-home BearWise Basics: never feed or approach bears; secure food, garbage, and recycling; remove bird feeders when bears are active; never leave pet food outdoors; clean and store grills; and alert neighbors to bear activity.

"Some people think they are helping bears by providing food or allowing them easy access to their garbage, she says. "But any influence - intentional or unintentional – on the part of humans to alter the natural activity of bears is a bad idea. Bears are smart and will readily return to places where they found food - even if that food is not something the bear would naturally consume. Bears that get food rewards may cross roads more often or go into neighborhoods they would normally avoid. These changes can be deadly for bears."

Wildlife crossings are needed to connect lands that have been bisected by roads, creating barriers that can affect species' genetic health. But safe passages will not solve the greater issue of the human-wildlife conflict zone. Our intrastate region desperately needs to wake up to the related issues of habitat fragmentation and wildlife accessing our food if we want to protect what we love about living in Western North Carolina and East Tennessee.

If you want to be part of the solution, visit SmokiesSafePassage.org and Bear-Wise.org.

The NC Wildlife Resources Commission encourages the public to call 1.866.318.2401 to report bears struck by a vehicle, but please gather the information you can see as you pass. For everyone's safety, do not stop or pull off the

Frances Figart (rhymes with Tiger) is the editor of Smokies Life and the Creative Services Director for the 29,000member Great Smoky Mountains Association, an educational nonprofit partner of Great Smoky Mountains National



Space

Continued from Page 1A

ESA specifically sought out people with physical disabilities for a first-ofits-kind effort to determine what adaptations would be necessary to space stations to accommodate them.

Across the Atlantic, Houston is taking note. Dan Huot, a spokesman for NASA's Johnson Space Center, home to the American agency's astronaut corps, told the AP that "we at NASA are watching ESA's para-astronaut selection process with great interest."

Huot acknowledged that "NASA's selection criteria currently remains the same" but said the agency is looking forward to working with the "new astronauts in the future" from partners such

NASA stressed that it has a safetyconscious process for vetting future astronauts who might be put in lifethreatening situations.

"For maximum crew safety, NASA's

current requirements call for each crew member to be free of medical conditions that could either impair the person's ability to participate in, or be aggravated by, spaceflight, as determined by NASA physicians," Huot added.

NASA said future "assistive technology" might change the game for some candidates to meet its stringent safety requirements.

The ESA's groundbreaking hiring campaign didn't specifically address ethnic diversity, but stressed the importance of "representing all parts of our society."

The European agency received applications from all 25 member nations and associate members, though most came from traditional heavyweights France, Germany, Britain and Italy.

The two-day ESA council running in Paris also saw France, Germany and Italy announcing an agreement Tuesday for a new-generation European space launcher project as part of apparent efforts to better compete with rocket programs in the U.S. and China.

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