



SYRACUSE, New York: In this Oct 6, 2016 still image from video, Ph.D. candidate Andy Newhouse looks over young American chestnut trees, some of them genetically modified, growing in a rooftop nursery at the State University of New York's College of Environmental Science and Forestry. — AP

SPREAD BY TRADE AND CLIMATE, BUGS BUTCHER AMERICA'S FORESTS UNDERMINING FOREST ECOSYSTEMS

PETERSHAM, Massachusetts: In a towering forest of centuries-old eastern hemlocks, it's easy to miss one of the tree's nemeses. No larger than a speck of pepper, the Hemlock woolly adelgid spends its life on the underside of needles sucking sap, eventually killing the tree. The bug is one in an expanding army of insects draining the life out of forests from New England to the West Coast. Aided by global trade, warming climate and drought-weakened trees, the invaders have become one of the greatest threats to biodiversity in the United States.

Scientists say they already are driving some tree species toward extinction and are causing billions of dollars a year in damage - and the situation is expected to worsen. "They are one of the few things that can actually eliminate a forest tree species in pretty short order - within years," said Harvard University ecologist David Orwig as he walked past dead hemlocks scattered across the university's 5.8-square-mile research forest in Petersham.

This scourge is projected to put 63 percent of the country's forest at risk through 2027 and carries a cost of several billion dollars annually in dead tree removal, declining property values and timber industry losses, according to a peer-reviewed study this year in Ecological Applications.

That examination, by more than a dozen experts, found that hundreds of pests have invaded the nation's forests, and that the emerald ash borer alone has the potential to cause \$12.7 billion in damage by 2020.

Species going extinct

Insect pests, some native and others from as far away as Asia, can undermine forest ecosystems. For example, scientists say, several species of hemlock and almost 20 species of ash could nearly go extinct in the coming decades. Such destruction would do away with a critical sponge to capture greenhouse gas emissions, shelter for birds and insects and food sources for bears and other animals. Dead forests also can increase the danger of catastrophic wildfires.

Today's connected world enables foreign invaders to cross oceans in packing materials or on garden plants, and then reach American forests. Once here, they have rapidly expanded their ranges.

While all 50 states have been attacked by pests, experts say forests in the Northeast, California, Colorado and parts of the Midwest, North Carolina and Florida are especially at risk. Forests in some states, like New York, are close to major trade routes, while others, like in Florida, house trees especially susceptible to pests. Others, like New Hampshire, Massachusetts and Maine, are experiencing record warming.

"The primary driver of the invasive pest problem is globalization, which includes increased trade and travel," Andrew Liebhold, a Forest Service research entomologist in West Virginia. "But there are cases where climate change can play an important role. As climates warm, species are able to survive and thrive in more northerly areas."

The emerald ash borer, first found in 2002 in Michigan, is now in 30 states and has killed hundreds of millions of ash trees. The gypsy moth, discovered in 1869 in Boston, is now found in 20 states and has reached the northern Great Lakes, according to the US Department of Agriculture.

Native bark beetles have taken advantage of warming conditions and a long western drought to rapidly range from Mexico into Canada. An outbreak in Colorado spread across 3.4 million acres of forest from 1996 to 2013, according to the Forest Service, and in California 100 million-plus trees have died in the Sierra Nevada since 2010.

Bugs damage

Though small, bugs can easily overwhelm big trees with sheer numbers. "They drain the resin that otherwise defends the tree," said Matt Ayres, a Dartmouth College ecologist who worked on the Ecological Applications study. "Then, the tree is toast."

Forest pests in the era of climate change are especially concerning for timberland owners, said Jasen Stock, executive director of the New Hampshire Timberland Owners Association. "We're dealing with pests we've never been around before, never had to manage around before," Stock said. "It's something we're going to be dealing with forever."

Urban forests, too, are at risk from outbreaks. In Worcester, Massachusetts, a city of about 180,000, an Asian long horned beetle infestation in 2008 resulted in the removal of 31,000 trees. "You would leave for work with a tree-lined street, and you come back and there was not a tree in sight," recalled Ruth Seward, executive director of the nonprofit Worcester Tree Initiative. Most trees have since been replaced.

Though trees can die off quickly, the impact of pests on a forest ecosystem can take decades to play out. Dead hemlocks, for example, are giving way to black birch and other hardwoods. Gone are favorite nesting spots for two types of warblers, as well as the bark that red squirrels love to eat, Harvard's Orwig said. The birds won't die off, he said, but their ranges will be restricted. "It's a great example of how one species can make a difference in the forest," Orwig said. As pests proliferate, scientists seek to contain them. Among the methods are bio controls, in which bugs that feed upon pests in their native lands are introduced here. — AP

'OBAMACARE' REPEAL-ONLY WOULD MAKE 30M UNINSURED

'REPLACE' STALLS

WASHINGTON: Repealing President Barack Obama's health care law without a clear replacement risks making nearly 30 million people uninsured, according to a study released yesterday. Republicans say that won't happen because they are working on replacement legislation for a President Donald Trump to sign. Nonetheless, the complex two-stage strategy the GOP Congress is contemplating has raised concerns.

The plan is for Congress to first use a special budget-related procedure to repeal major portions of the Affordable Care Act, or ACA, next year. The effective date of that repeal would be delayed by months or years to give lawmakers time to write replacement legislation.

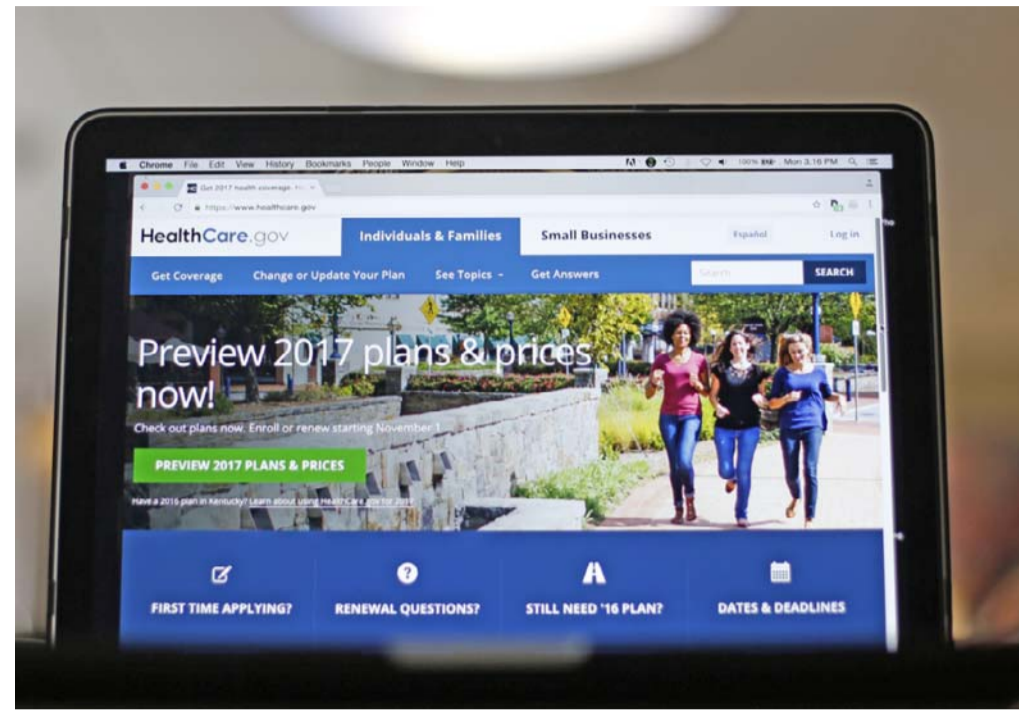
The replacement law would presumably do many of the same things that "Obamacare" does, such as subsidizing coverage and protecting people with health problems. But it would not involve as much federal regulation, and it would eliminate a highly unpopular requirement that most Americans get health insurance or face fines.

'Replace' stalls

Yesterday's analysis from the nonpartisan Urban Institute looks at a scenario where "repeal" goes through, but "replace" stalls. It predicts heavy collateral damage for people buying individual health insurance policies independent of government markets like HealthCare.gov. Though nonpartisan, the Urban Institute generally supports the goal of extending coverage to all Americans. Previously it has criticized some of the subsidies provided under Obama's law as insufficient.

The new analysis warns that repealing major parts of the health law without a clear replacement could upend the health insurance market for people buying their coverage directly, outside of the workplace. That group has grown substantially under the health care law, but also includes millions of other customers.

The study found that 22.5 million people would lose coverage directly due to repeal of the law's subsidies, Medicaid expansion, and its in-



WASHINGTON: In this Oct 24, 2016, file photo, the HealthCare.gov 2017 web site home page. — AP

vidual requirement to carry health insurance.

Another 7.3 million would become uninsured because of the ripple effects of market upheavals. That could happen if insurers lose confidence in the Republican promise of a replacement and abandon the individual market. A key industry worry is that a repeal law would get rid of subsidies and mandates but still leave insurers on the hook for covering people with health problems.

The number of uninsured people would rise to nearly 59 million in 2019, and the nation would have a higher uninsured rate than when the ACA passed in 2010, the study found. Federal and state governments would save tens of billions of dollars, but the potential price would be social dislocation and a political backlash. "This scenario does not just move the coun-

try back to the situation before the ACA," the study concluded. "It moves the country to a situation with higher uninsured rates than was the case before the ACA's reforms."

"To replace the ACA...with new policies designed to increase insurance coverage, the federal government would have to raise new taxes, substantially cut spending, or increase the deficit," the authors added. That's because the taxes used to finance Obama's coverage expansion would also be repealed. Republicans say they won't allow chaos to happen. "We are not going to rip health care out of the hands of Americans," House Ways and Means Chairman Kevin Brady, R-Texas, said in a recent interview with Associated Press reporters and editors. "Republicans are going to give Americans choices and an appropriate transition." — AP

CAPTIVE ELEPHANTS HELP SAVE WILD COUSINS ON FOREST FRONTLINE

LAMPUNG, Indonesia: It was the middle of the night when the villagers sounded the alarm: a huge Sumatran elephant was raiding their rice fields, and they needed urgent help to drive it back to the forest.

Dodot-a veteran Indonesian elephant keeper trained to handle such emergencies-rushed to the scene, fearing villagers would take matters into their own hands if he didn't get there in time. "It was the king," Dodot said of the hungry bull male that had strayed from the forest in southeast Sumatra in search of food. "He's not afraid of humans, or weapons. He owns the territory."

It was the third such intrusion in a month. Confrontations between elephants and humans can quickly turn violent in Sumatra, where competition for space has intensified as the island's forests have been rapidly cleared for timber and farming. Nearly 70 percent of the Sumatran elephants habitat has been destroyed in a single generation, says conservation group WWF, driving them into ever-closer contact with humans.

Villagers have been trampled and killed by stampeding herds, but it's the elephants that have suffered most as their habitats have shrunk. In 25 years, half of Sumatra's wild elephants have been wiped out. The species was upgraded to critically endangered in 2012, with experts blaming the twin drivers of deforestation and conflict with humans. Ivory poachers have long hunted bulls for their



INDONESIA: This photo taken on November 8, 2016 shows a ranger atop a patrol elephant with her calf in Way Kambas National Park, where human settlements border a tranche of lowland forest home to an estimated 250 wild Sumatran elephants. — AFP

tusks but many elephants are killed simply for trespassing on land. This month an elephant was found dead near a palm oil plantation in the

island's northeast. Authorities believe it accidentally ingested fertilizer but an investigation is continuing, the local conservation head told AFP. — AFP

CLINIC PAGE



Kuwait Times
248 33 199

Dr. Fahad Al-Mukhaizeem
ر. فهد علي المخيزيم

استشاري أطفال
M.B. Bch. FRCPC. FAAP. PEM

Al-Jabriya - Block 1A - St. 1 - Mazaya Building - 15th Floor - Clinic B - Tel.: 22269369 - Fax: 22269368