colleagues plan to start updating the forest-change maps on their website more frequently — just hours after new deforestation is detected. A paper detailing the team's methodology has been accepted for publication in *Environmental Research Letters*.

The World Resources Institute, an environmental group in Washington DC, will provide access to the deforestation alerts on its Global Forest Watch website, beginning in early March. When trees disappear between successive Landsat passes, a pixel representing that location on an online map will turn red. Users will also be able to sign up to receive e-mails when land cover changes in a specific area, such as a park, an indigenous territory or a privately owned forest, which could facilitate rapid responses to small-scale deforestation.

But the alert system is limited in some important ways. Landsat detects only visible light and short-wave infrared, so it cannot see through clouds. This means that in the planet's cloudiest areas — such as many tropical rainforests — the satellites could go months without collecting images of the underlying land. Nor can the probes reliably detect damage from activities that leave the forest canopy intact, such as selective logging and the gathering of wood for fuel.

Because such forest degradation can yield carbon emissions that approach half those from all-out deforestation, tracking this damage is important in understanding the role of forests in climate change, says Alessandro Baccini, a remote-sensing expert at the Woods Hole Research Center in Falmouth, Massachusetts.

And then there is the difficulty of ensuring that deforestation alerts reach not only government officials, but also people who live in or near affected forests. "We will have faster detection, but OK, so what, what do you do next?" says Carlos Souza, a research scientist at Imazon, an environmental research institute in Belém, Brazil. He would like to see residents of remote forests trained to check the veracity of satellite-driven alerts on the ground. That could also help countries to improve their estimates of greenhouse-gas emissions from tree loss.

In the meantime, the Landsat-based alerts represent a significant step forward for the fight against deforestation, says Frances Seymour, a senior fellow at the Center for Global Development, a think tank in Washington DC. "In the context of law enforcement, timeliness is everything," she says. "A couple weeks later, not only is the forest gone, but so is the equipment and all the evidence you might be able to use for a successful prosecution." ■

RAYMOND GEHMAN/CORBIS

European bison in Białowieża Forest, where Poland's government is considering increased logging.

POLAND

Pristine forest at risk

Researchers suspect motives for a logging proposal are commercial, but forest administration cites pest control.

BY QUIRIN SCHIERMEIER

A Polish proposal to increase logging in the ancient Białowieża Forest is drawing fresh criticism from scientists. They suspect that the motives are partly commercial, and dispute claims that an outbreak of bark beetle threatens the forest. The Polish Ministry of the Environment says that there is no commercial benefit to the proposed logging and insists that it is needed for pest control.

The 1,500-square-kilometre forest, which straddles the Poland–Belarus border, has remained largely unchanged for centuries, making it a matchless stomping ground for researchers tracing the behaviour and ecology of insects, birds and mammals, including the largest population of European bison (*Bison bonasus*).

It is also a source of ecological measurements, for example on regeneration after disturbances, that inform forest management elsewhere, says Rafał Kowalczyk, director of the Polish Academy of Sciences' Mammal Research Institute in the village of Białowieża.

A Białowieża management plan limits logging in the forest to 48,000 cubic metres of wood per year — enough to allow locals to gather firewood. But on 10 November, the local forest administration proposed an amendment that would allow large-scale logging in sections outside the central 17% of the forest that is a national park. They cited an outbreak of the bark beetle pest (*Ips typographus*) in Białowieża's Norway spruce (*Picea abies*). In one forest district where logging is currently limited to 6,000 m^3 per year, the allowable yearly volume would increase to 53,000 m^3.

On 18 November, scientists with Poland's State Council for Nature Conservation condemned the proposal; public protests have followed. This week in *Nature*, Polish biologists express other concerns in two Correspondence articles (P. Chylarecki and N. Selva *Nature* **530,** 419; 2016; P. Michalak *Nature* **530,** 419; 2016).

Conservation council member and Correspondence author Przemysław Chylarecki, who is an ornithologist at the Museum and Institute of Zoology in Warsaw, suspects that commercial considerations, not just pest control, are behind the plan. Poland's government was elected in October — and the environment minister referred to the wasted commercial potential of unlogged trees in his election campaign, notes Chylarecki.

But an environment ministry spokesman, Jacek Krzemiński, says that there is no commercial incentive because the wood is only good for firewood, and the costs of logging and transport make it unprofitable to sell the wood on.

Kowalczyk, who also opposes the logging proposal, says that the pest-control argument is misguided. Recurring bark-beetle outbreaks do not endanger the forest at large because more-resilient tree species spread and replace spruce, he says. "That's a perfectly natural process and endlessly preferable to cutting down trees." But Jarosław Krawczyk, spokesman for the regional state forest directorate in Białystok, says that the current outbreak is unprecedented in scale and has already begun to attack other tree species.

A detailed assessment of forest health is under way, says Krzemiński. Earlier this month, a regional environment agency suggested that the amount of extra logging be reduced to half of the volume proposed in the new management plan, whereas Poland's national forest authority has yet to weigh in. Depending on its opinion, the ministry will decide on the amendment later this year, Krzemiński told *Nature*. ■