CONSERVATION REPORT

RED LIST STATUS NEAR THREATENED

European common ash

This month, Richard Buggs shines the conservation spotlight on a troubled stalwart of the UK countryside.

What's the problem?
Ash dieback is a fungal disease imported from East Asia that is killing our native European common ash trees. It causes leaf loss, crown dieback and bark lesions. It has now spread throughout the UK.

Is there any hope?
The surviving trees could be resistant to the fungus, or perhaps they just haven't been infected yet. In countries such as Poland and Lithuania, where dieback has been around for years, they still have a few ash trees – the highest mortality reported in these areas is 85 per cent, so 15 per cent of ash trees are still alive, which does give us hope. My feeling is that, over the course of 70 years or so, natural selection will do its job and we'll have lots of young ash trees that are pretty resistant. But if emerald ash borer gets here, all bets are off.

Tell us about emerald ash borer
It's another East Asian species, a wood-boring beetle, which also seems to be heading our way. It's already reached Western-European Russia. In the US, it has spread like wildfire and killed many millions of ash trees since arriving in Detroit in wood packaging. There's also the worry that the borer will exacerbate the dieback problem by transporting spores between trees, in the same way that Dutch elm disease, another fungal disease, is spread by elm bark beetles. We don't yet know enough about how the borer and the fungus interact in ash.

What can be done?
We've identified genes in European ash and in East Asian species that seem to be associated with resistance to the fungus and the beetle. Selective breeding is the most straightforward way to apply that knowledge, but gene editing is also a possibility. Ideally, we'd stop the borer getting here at all. It will be almost impossible to stop the borer getting into the east of the EU, but the Channel provides a natural barrier for the UK. We will need to maintain good biosecurity measures after Brexit to stop this and other pests and pathogens entering.
Stuart Blackman

RICHARD BUGGS is professor of evolutionary genomics, Queen Mary University of London, and senior research leader in plant health at Kew Gardens.

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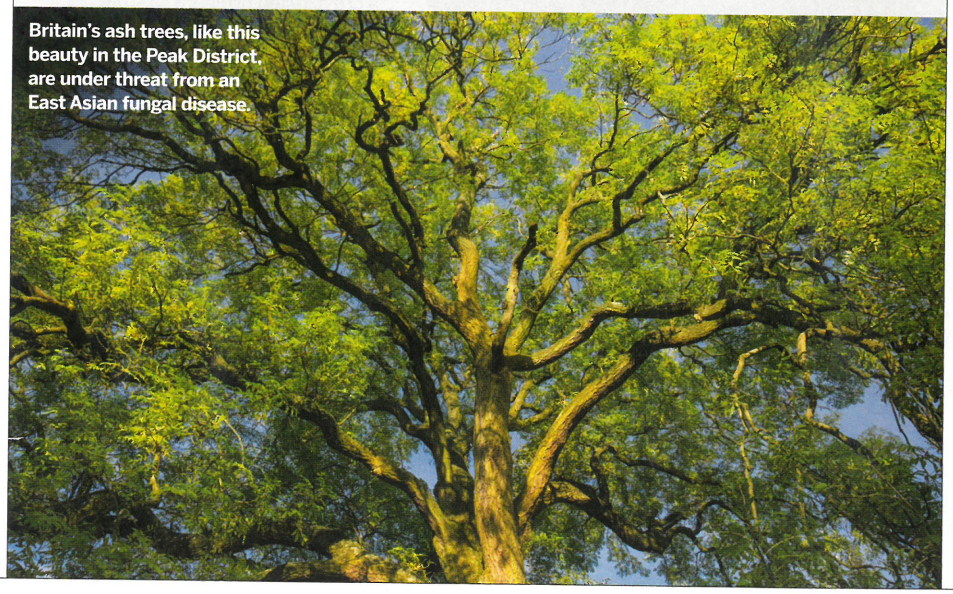
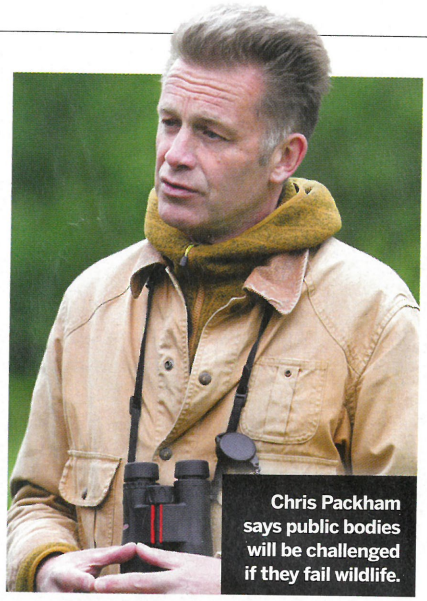


Britain's ash trees, like this beauty in the Peak District, are under threat from an East Asian fungal disease.



Chris Packham says public bodies will be challenged if they fail wildlife.

WILDLIFE LAW

Conservation trio join forces

Natural England and other government agencies should expect to find themselves the targets of Wild Justice, according to one of its founders, campaigner and writer Mark Avery.

With natural history presenter Chris Packham and anti-raptor-persecution campaigner Ruth Tingay, Avery has set up Wild Justice to take legal cases against public bodies that they believe are failing to protect wildlife. "It's possible that Natural England might find itself more often in the firing line, but we aren't picking on them," Avery says. "If we lose every case, then we will be demonstrating what a great job they are doing."

In the past year, Natural England has regularly found its decisions challenged in the courts. Avery took out a Judicial Review over brood management of hen harriers, while ecologist Tom Langton fought the agency over its licensing of badger culling.

Packham says Natural England exists to protect wildlife for the public. "If it is failing through negligence or because it is under-resourced, then we have a right to question its decision-making," he says.

Though under fire, there is hope on the horizon for Natural England, according to Avery – the appointment of Tony Juniper as its new chair. "Tony has got a difficult job, but he is one of the best people they could have chosen for the role," Avery says. "I hope he improves the morale of the staff and focuses them on the job of nature conservation."**James Fair**

FIND OUT MORE Wild Justice: **wildjustice.org.uk**