

New leaf-busting technology fitted to Northern trains ahead of autumn

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Northern is fitting new technology to a number of its trains to help combat leaves on the line and stop disruption for passengers during autumn.

Leaf fall can cause chaos across the rail network during the autumn. Leaves stick to damp rails and are compressed into a smooth, slippery layer, reducing trains' grip. This can cause delays to services and which lead to disruption for passengers.

At present, railway lines are cleaned using railhead treatment trains, also known as RHTTs, but there are only a limited number of these trains available.

RHTTs are also expensive to run, so they are mainly used to clean high-traffic, intercity lines, which means some lines are left untreated.

But Northern is now fitting new 'leaf-busting' technology to 16 of its 170 passenger trains will operate between Leeds, Harrogate, and York as well as routes between Sheffield, Doncaster, Hull and Scarborough. These areas are some of those most affected by poor autumn conditions.



The technology – Water-Trak – has previously been tested on the Northern network and creates rainy-day conditions on the rail surface by spraying a small amount of water from the train onto the track when a slippery rail is detected.

This might seem as if it has the opposite effect – but the team discovered that leaf coated rails only become slippery if damp, noting that trains still stop safely in heavy rain.

Two of Northern's Class 319s fitted with Water-Trak have been successfully operating in passenger service since late October 2021. The trials with Northern are being run thanks to funding from Network Rail's Performance Innovation Fund.

Rob Cummings, seasonal improvement manager at Northern, said: "This is the next step in finding a solution to tricky autumn conditions. One of the biggest risks to our performance during October and November is leaves on the line, but by helping to develop new innovative technology we aim to deliver the very best service for our passengers."

John Cooke, Co-founder at Water-Trak, said: "We are really excited to be working with Northern to show how Water-Trak can help to solve the age-old problem of leaves on the line."

Photo and video credit: Northern