

Innovative by nature

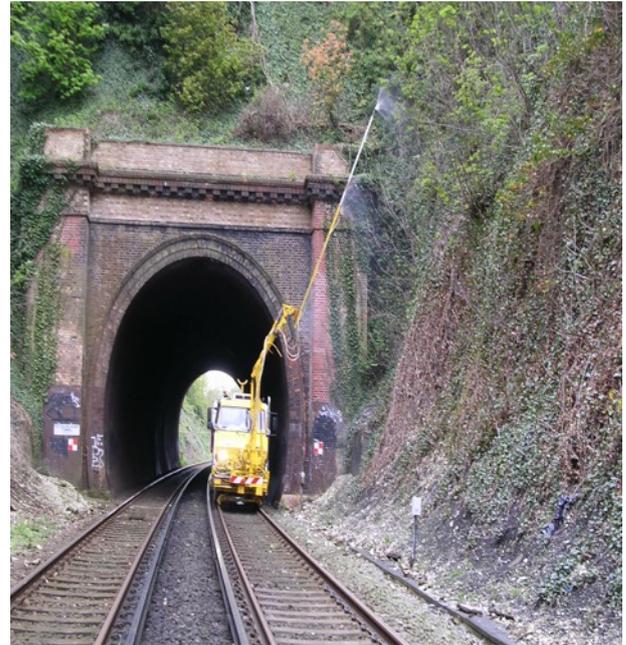
PROBLEM

Established trees and woody vegetation on steep cuttings with their shallow root systems above the rail infrastructure can be an unpredictable and dangerous hazard to trains and costly to remove on restricted budgets. In addition vegetation in cuttings creates micro climates caused by poor air movement held by the trees and in winter holds cold and frosty conditions causing poor track adhesion that can take several hours to clear causing slippery conditions and train delays.

In the past the costly approach of occasionally manually clearing cuttings of vegetation has been adopted but nature returns the growth more vigorously than before requiring regular costly maintenance and even periodic sanditing to create track adhesion for train wheels.

SOLUTION

Avondale believes it has the most cost effective solution to date using its unique Cutting Spray Unit designed and developed in-house for the Rail Infrastructure. This unique VAB approved Spray Unit has been awarded with the prestigious NWR Environmental Award. It accurately applies selective herbicide to control woody vegetation while encouraging grass and wild flora development required to bind loose surfaces such as chalk cuttings.



Fitted to Avondale's renowned road/rail Unimog the Spray Unit is driven straight to site where it can quickly access the track via any road or farm crossing. The spray boom can be unfolded out to the near side of the Unimog within minutes without obstructing the adjacent line allowing single line working.

Spraying can be carried out up to 10mph pending height for a quick application completing several miles within an hour. The procedure using Avondale's Spray Unit has already been adopted by NWR Kent with successful results that will pay significant dividends by reducing vegetation cutting clearance costs in the future and help prevent 'leaves on the line' and micro climates.

Avondale has adopted modern technology with a computer controlled electronic chemical dilution system mixing from water and chemical reservoirs on board the Unimog. Spraying is monitored in real time automatically calibrating the vehicle's speed with water and chemical application ensuring a consistent and accurate application. Specialized large droplet nozzles create a dense water curtain with minimal drift allowing spraying to a height of up to 30m. A full electronic record of spray treatment to meet stringent COSHH regulations is provided from the on board computer and GPS tracking system.

