

Weed Treatment & Restrictions

The view from Network Rail

The Task

Britain's Complex Rail Network

20,000 lineside miles.

8 devolved routes

38 individual delivery units

Increasingly demanding on safety and Public Performance targets

A move toward a digital railway will increase the number of trains reducing time between train.

The Task

Britain's Complex Rail Network

220 environmentally protected sites of special interest.

Large number of conservation areas.

A number of sites that fall within Biodiversity action plan zones.

We are informed about these by using our internal web and GEO mapping services to;

- **View Environmentally Sensitive Site Maps**
Guidance for environmentally sensitive sites

The Task

Britain's Complex Rail Network

Vast herbaceous species mix.

Often persistent and rather stubborn

Where biodiversity is greatest these areas are often recognised and protected by law.

Trees are mostly broadleaf self seeded native species with occasional non native garden escapees, or plantings that offer screening.



The Task

Britain's Complex Rail Network

Vulnerable to coastal storm and coastal erosion.

We are more at risk when we are exposed to easterlies.

Growth rates differ but not dramatically

Specific applications include treatment of 4 invasive species that require by law an action plan to control their spread.

Occasional localised treatments are required to deal with a particular pest or disease as they emerge.

Why we Undertake weed treatments

The gauging trees of *somewhere else in the world other than GB hopefully*



Vegetation Control

Chemical application

Where used correctly chemical application is a safe operation

However, good planning is key,

- Too late
- Target species too tall
- Too early
- Too wet
- Too cold
- Too hot
- Too close
- Wrong Method of application
- Wrong active ingredients for target species
- Lets call the experts!!!

=Fail

The Task

Britain's Complex Rail Network

Our railway composition and weather provides condition that require regular ballast interventions



Chemical Treatments

Train Borne Applications;

Multi purpose Vehicle managed by BASIS approved contractor JSD

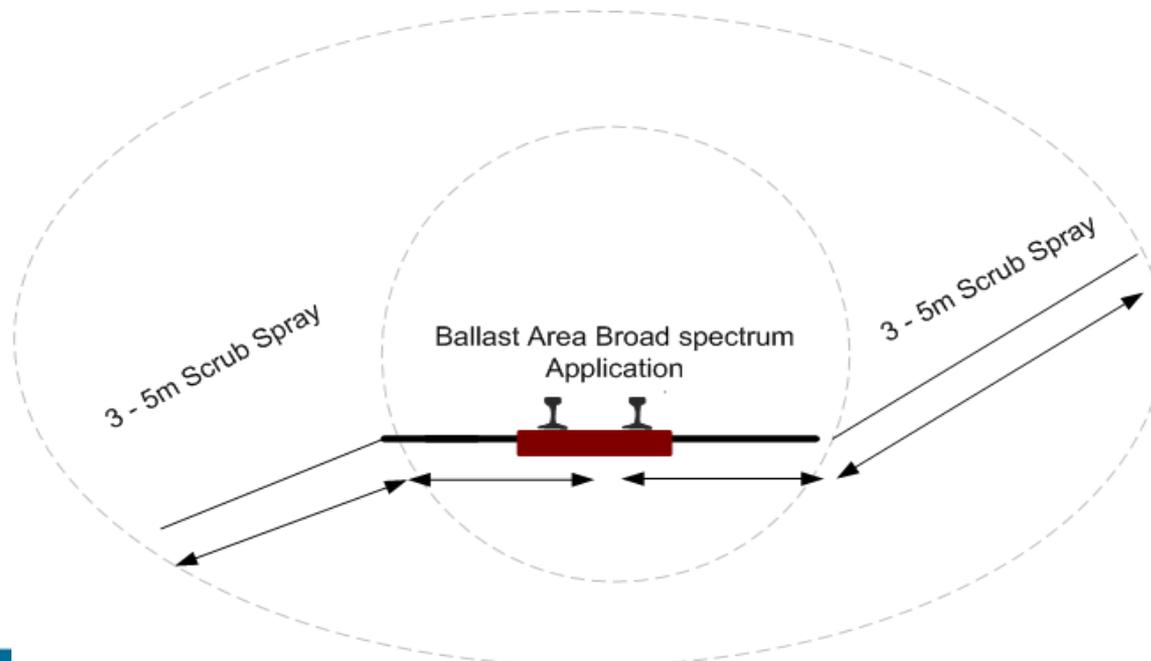
▪



Chemical Treatments

Applications based on glyphosate (AI) products

A scrub spray application use a selective herbicide with a residual compound.



Chemical Treatments

Manual Applications;

- Knapsack applications delivering similar chemical applications by hand
- Or a more specific application to deal with a pest or invaders



Cutting Treatments

Motorised treatments are generally limited to;

- Mobile mowing machines such as the bushfighter
- Flail head and cutting attachments mounted on 360 deg Road Rail excavators.



Cutting Treatments

Specific vegetation removal campaigns are undertaken by local teams or by specialist contractors using motor manual chainsaws and brushcutters.



Alternative Treatments

Problem statement

Methods need to produce similar or better results than current weed control practice under the same operating conditions and constraints.

Feasibility

Concentrated around converting current method to adapt to use new products and new thinking

Thank you

