



HEATHLAND ARISINGS CASE STUDY

Patch of the planet | Heath & Hedgerow

Site details

Patch of the Planet is a 5 acre permaculture project and small holding near Llys-y-Fran, owned run by Dina and Neil Kingsnorth. They have been established for 2 years and run educational courses, a campsite, a tree nursery and sell veg on a small scale. They have never used heathland products before and have been using cardboard or a weed-suppressing membrane until receiving the arisings.



PHOTO: Neil investigating the success of the arisings mulch (April 2023)



PHOTO: Dina spreading out the arisings across the pasture using a mini digger (November 2022)

Outcomes

The arisings were used as mulch to kill off pasture grass as planned and worked well – Neil and Dina were happy with the results.

It killed all of the grass, plus the surface soil was also covered in organic matter, which would be good for the soil. Fungus and beetles have been seen, and they are hopeful ecosystems are developing, and the nitrogen from the Gorse may have been pulled down into the soil. Dock and Creeping Buttercup have grown in some places, but they feel that's not an issue. In the area that was additionally covered in the weed-suppressing membrane, there are fewer Docks, but the plastic membrane wasn't necessary to achieve the results hoped for.

Aim

The arisings were taken to kill off pasture grass to develop a tree nursery and tree lanes with diverse growing paths, not just grass. The land has been pasture for a long time and the soil is degraded, a bit compacted and needs improving.

A silage truck load of arisings were spread approximately 30cm deep on to a 13m x 9m patch of pasture using a digger in November 2022. Part of the patch was additionally covered in a weed-suppressing membrane for comparison. It was left with no intervention for 6 months.

Fire Breaks on the Frenni Fach

The firebreak work on the Frenni Fach is an essential undertaking aimed at preventing the spread of wildfires and protecting the surrounding ecosystem. Firebreaks are strategically created clearings or barriers that are free from vegetation, designed to impede the progress of fires. In this particular case, the Frenni Fach area is being carefully cleared of flammable materials, such as dry vegetation and deadwood, to create a buffer zone. This helps to minimize the risk of fire spreading rapidly, allowing for better fire management and safeguarding the natural habitat. The firebreak work plays a crucial role in maintaining the balance between fire safety and preserving the ecological integrity of the area.



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Learning

In the process of receiving the arisings, they realised it was a lot of human power to spread them! A digger was helpful for moving them where they need to be within a reasonable timeframe.

After sitting for 6 months with no intervention, it was apparent that the arisings are definitely not suitable if you're looking for a mulch that will breakdown in a year. On the upside, they can potentially be reused. Dina and Neil wondered if a chipper would be good to create better mulch and remove chunkier bits. This would, however, likely kill invertebrates and is therefore not the best option for biodiversity.

The most uncertainty and concern for Dina and Neil was around whether the bracken would take hold, set spores and spread. They felt there wasn't a solid answer on this from CARE but they offered to provide feedback on this in the months and years to come.



PHOTO: The arisings being delivered to Patch of the Planet (November 2022)

PHOTO: Daniel on Frenni Fach (November 2022)



Next Steps

Dina and Neil are planning to reuse the arisings as mulch on a different patch for the same purpose. Any smaller and more crumbly matter will be used on the veg patch. They are hoping for 2/3 years of use, plus the added benefit of the arisings breaking down and feeding the soil throughout that time. Any remaining material can be used as habitat, perhaps with some material for dead hedge.



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