

## Clear-fell sites revealed as a secret haven for biodiversity

Most people looking at a clearfell site think it is a wasteland but a recent survey carried out by members of the British Lichen Society on behalf of Forest Enterprise Scotland has shown that clear-fell sites in forests are of significant biodiversity value.

A total of 19 clear-felled areas were surveyed across Scotland, from Galloway to Sutherland, and an incredible 179 different lichens were identified. This tally included two new species for the British Isles and three species that so far defy identification!

Lichens are a partnership between a fungus and algae; using only water, air and sunlight, the algae produce food, whilst the fungus cells act as a protective shield for the algae.

Species Ecologist with Forest Enterprise Scotland, Kenny Kortland, said;

"Few people have looked at biodiversity on clear-felled sites in forests. Most people think of them as barren wastelands, but the more we look the more we find that they provide habitat for a wide range of species. This is confirmed by the amazing results of this lichen survey."

Lichens are amongst the first organisms to colonise new or significantly changed ecosys-

tems because they can disperse over long distances as spores. Once the trees are removed from a site, the lichens rapidly colonise the remaining deadwood logs and stumps and, when established, then provide a 'micro-habitat' for insects and other small invertebrates.

Kenny added; "We knew that clear fells were used by various birds and mammals, but this survey has really highlighted that these formerly overlooked habitats are full of other biodiversity. There are over 1500 species of lichen in Scotland, making this country important for lichens on a European and even global scale, so the fact that clear fells provide suitable habitat is fantastic news.

"In productive forests, areas are clear felled for timber and then left open for two to seven years. This provides an opportunity for the lichens, until the site is replanted and the trees grow again. However, other areas will be clear felled, meaning that within this cycle of forest management there is always new habitat appearing for these lichen species."

A formal report on this study is being prepared and will be published in 2017. Above: Bacidia saxenii and Lecania cyrtella and below, Cladonia chlorophaea and Hypogymnia physodes



