

# Chemical control of birch *Betula* regrowth on heathland at West Moors, Dorset, England

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## SUMMARY

During the winter of 2000-2001, approximately 2.4 ha of dense (75-100% tree cover) and 0.6 ha of medium (25-50% tree cover) birch *Betula* was cut and removed. In August 2002, the cleared birch had regenerated resulting in a dense stand of 2 m high birch. The regrowth was sprayed with Timbrel herbicide using knapsack sprayers. The regrowth kill rate of sprayed areas was 100%; no regrowth was subsequently recorded.

## BACKGROUND

Many tree and scrub species regenerate rapidly from cut stumps, or from seed in areas where trees were previously felled. This presents a problem in habitats such as heathland, where scrub removal and cutting trees (leaving the stumps in the ground) conducted as part of a heathland restoration programme can often result in vigorous regrowth in later years. Chemical treatment is frequently adopted as a way of preventing future re-growth.

The results of herbicide spray treatment of dense, 2 m high birch *Betula* regeneration two years after the trees were originally cut down at a site in southern England is documented here.

## ACTION

**Location:** The chemical control of birch regrowth was undertaken on heathland at West Moors (National Grid ref: SU 090045), Dorset, southern England.

**Treatment area:** Approximately 2.4 ha of dense (75–100% tree cover) and 0.6 ha of medium (25–50% tree cover) birch *Betula* was cut and removed over the winter of 2000–2001. The trees were 20-30 years old, growing over a patchy heather *Calluna vulgaris* and bramble *Rubus fruticosus* under storey.

The trees were felled leaving stumps at ground level. Cut material was either extracted for firewood or chipped and removed from the site.

**Birch regrowth:** In August 2002, the cleared birch had regenerated from the cut stumps, resulting in a dense sward of 2 m high birch regrowth. This regrowth was sprayed with Timbrel herbicide using knapsack sprayers. The Timbrel was used at three-quarters the manufacturers recommended strength (0.21 l Timbrel per 20 l knapsack), matched with an equal amount of Codacide (an adjuvant). All leaf area was sprayed until run-off.

## CONSEQUENCES

**Effectiveness of treatment:** The regrowth kill rate of the summer sprayed areas was 100%. The following year all the sprayed birch regeneration was dead. No new regrowth was subsequently recorded. This method of birch eradication was therefore considered highly effective.

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