



Controlling and Eradicating Rhododendron: online training event, 24 August 2021, 11.00 – 12.30

Introduction

This free CWA online training event covered the planning, funding, delivering and monitoring of programmes to control and eradicate *Rhododendron ponticum* and included presentations from Gordon Gray Stephens of the Native Woods Coop and Grant Holroyd from the Knoydart Forest Trust.

Rhododendron is the most important non-native invasive species of forests and woods in Scotland, and has proved difficult and expensive to tackle. It is exceptionally adaptable, growing well across the country from upland peat to coastal sand dunes, but is particularly prevalent on the west coast, where along with deer it is the major threat to the health of native woodlands, forming a dense and impenetrable understorey, crowding out ground flora and preventing regeneration of trees.

Agenda

10.30: Welcome, introduction and housekeeping – Jon Hollingdale, CWA.

10.35: Planning & delivering rhododendron control programmes - Gordon Gray Stephens, Native Woods Cooperative.

11.00: The Knoydart Experience - Grant Holroyd, Knoydart Forest Trust.

11.30: Q & A / discussion

12.00: close.

Event report

Jon Hollingdale welcomed delegates, explained housekeeping arrangements and gave a brief introduction to the day. Delegates were invited to introduce themselves and their community groups.

Gordon Gray Stephens of the Native Woods Cooperative outlined the main elements of planning and delivering rhododendron control programmes, drawing in particular on his experiences in Glen Creran. A theme throughout Gordon's presentation was that successful programmes focus as much on people as on plants.

Direct funding for rhododendron control through the Forestry Grant Scheme concentrates on delivering biodiversity outcomes and is tightly focussed on designated native woodland sites and projects that work on a landscape scale, rather than trying to pick off small bits and pieces.

There are other motivations for rhododendron control in addition to its impact on biodiversity: it blocks paths, obscures landscape features and views, overruns restock sites and can obstruct hut sites or other woodland developments. Outside the Priority Control Areas community groups may have to develop projects that fund the process by seeking support to establish, equip, train and lead volunteer groups, focusing on the health and well-being benefits of outdoor activity.

Possible funders for larger projects include the People's Postcode Lottery and the Heritage Lottery Fund, whilst the Scottish Forestry Community Fund can support the establishment of volunteer groups. Most funders like to fund positive projects, so it is important to emphasise what will be gained, not just what is "taken away". You can add value through education, outreach, walks and public events and deliver a legacy of people trained, etc.

The best time to deal with rhododendron is as soon as possible, and the best way to do it is in collaboration with your neighbours, but this can take some persuasion, especially where it is seen as a positive feature (attractive flowers, shelter and screening from traffic noise, light pollution); this may require some compensation for property owners for their loss of amenity.



Collaboration with neighbours is essential. pics © Gordon Gray Stephens & Bob Black

Project development can take a long time and involve a wide range of costs: in addition to practical control work you may need to pay for survey, engagement, contingencies and make adequate provision for long-term follow up.

There are a range of control techniques, each has pros and cons. Different approaches will be required for different sites and scales / nature of landholding. Mechanised mulching can be very effective on flatter sites but requires a major follow-up spraying commitment. The standard method in Scotland has been cut and burn, with follow-up spraying of glyphosate; most contractors are familiar with this method. With increasing concern about carbon emissions a better alternative might be windrowing, with larger stems used for firewood (where it can be extracted) and the rest of the brush and branchwood stacked, although some operators think this makes follow up more difficult.

Use of glyphosate is becoming increasingly problematic; it is likely that it will not be available in the future, so we need to get a move on with work and hope that alternatives are found. Stem injection requires much less glyphosate: bushes can be left to rot or cleared once dead. Eco-plug capsules cost a little more but minimise chemical use and give better protection to operators. The lever and mulch method, which capitalises on rhododendron being a shallow rooted plant, can be very effective, but even the main proponents will use stem injection on some sites to optimise work. Large diggers can remove rhododendron very effectively on accessible sites where there are no other conservation concerns.

Rhododendron control projects need to take a holistic view, reducing herbivore numbers as well as invasive plants. Large deer populations will inhibit natural regeneration of trees and other ground flora on cleared sites, leaving a mossy sward which is perfect for rhododendron regrowth.

There's a role for both volunteers and contractors; supervision is critical in both cases. Volunteer outputs can vary enormously, depending on sites, motivation and capability. It's important to pick the right contractors, which is difficult if funders want you to choose on price. Using contractors from far afield can be challenging, especially for follow-up spraying, where timing work with suitable weather conditions is essential.

Most rhododendron control projects have initial large capital expenditure and then a "long tail": the slow war of attrition against regrowth. Communities can make a real difference here if motivated and trained. Eyes and boots on the ground to find new growth quickly and then tackle it are critical.

Grant Holroyd from Knoydart Forest Trust (KFT) described their experience of tackling rhododendron over the past twenty two years. Grant's first rhododendron work was in 1984 and he has been the forester at Knoydart since 1994.

After the community buyout of the ~7000ha Knoydart Estate in 1999 the initial woodland management plan aimed to control rhododendron: clearing paths and other key habitat areas and preventing further spread. Eradication wasn't thought realistic and wouldn't have been popular. After five years of work, however, it became evident that this might be possible and after community discussion eradication became the aim. This was contentious, with some falling out but a lot of support. It also required thinking beyond the community owned land, including private homes and gardens.

The Knoydart programme has (almost) eradicated rhododendron from the 7000ha landscape. The work covered 556ha of woodland and cleared a net area of 129ha of rhododendron, of which 35ha was very dense, and involved 8 woodland owners plus multiple gardens. The main clearance operations took ten years and follow up works are still ongoing. Total costs have been in excess of £250,000. Funding for work came mostly from Forestry grants (WGS and SFGS) with additional assistance from EU and Lottery funds and SNH.

The work has been delivered by a mix of employees, contractors (some locals, some eastern European) and volunteers (again, some locals, some as part of organised groups through e.g. BTCV). In 2009 their Mega Rhodie Bash attracted ~50 volunteers over two weeks – teams of cutters worked beforehand to provide plenty of cut material for volunteers to get stuck into. It's important to look after volunteers: both in terms of health and safety, and in making sure they get satisfaction from the work.

The majority of the work used the traditional cut-burn-spray method: one of the most effective systems was to have one employee with a chainsaw working with three volunteers, not all of

whom responded to the same motivation. If you are going to spray then you need to make sure it is done successfully. In retrospect it's unclear why so much burning is required by regulators, when stacking seems a better and easier option. However the work is done it's important to break it down into manageable chunks.

In the future stem injection and lever and mulch will be important alternatives to spraying. Adjacent to streams, follow-up can be by pulling or cutting and hammering stumps to destroy the dormant buds. Work is still on-going controlling new growth but they feel that they are on top of the problem. KFT have initiated a scheme for people to report rhododendron: one issue is that because most of it has gone people don't remember (or weren't there) when it was a big problem.



Knoydart rhododendron control: before, after, and now

The formal presentations were followed by a **Q&A and discussion** session. Key questions included:

Can you explain the lever and mulch a bit more? Regrowth comes from the stump and because rhododendron is very shallow-rooted, if you can cut the plant to leave a long lever (c1.5m), you can pull/lever a very large bush out the ground. The mulch element is stacking the brush on any stumps which can't be removed, which suppresses regrowth.

Do you need specific training or certification for stem injection? Yes, training is available, e.g. <http://www.landskills.co.uk/training/pesticides-and-spraying-courses/pa6-pesticides-variousunits/>

Is there a best time of year to deal with rhododendron? It does depend on the stage of control involved. It's best to avoid the bird nesting season for primary clearance (this also avoids the

midge season). Spraying regrowth should happen during the growing season, so avoid periods of frost: autumn and spring are therefore preferred.

Are there areas in Scotland where recovery of habitat after rhododendron removal can be seen in a renewed understory. And does this take a very long time? Yes, there are a number of areas where this can be seen, including the woods along Glen Creran and Knoydart (see pictures above). Control of herbivores, especially deer, makes a big difference to recovery and timescales.

Can similar methods be used for other invasives (laurel, snowberry, etc)? Most of the planning considerations will be very similar: developing and funding projects, getting community buy-in, the need for monitoring and follow-up, although there will be some differences in technique: laurel is more deep-rooted than rhododendron so manual level and mulch isn't an option, although a digger could be used, albeit with more soil disturbance

Can tree poppers be used effectively on rhododendron? There is only anecdotal experience from a Forestry and Land Scotland trial with contractor, where they work on smaller bushes but not on larger plants.

Can the link with Phytophthora help make the case for controlling rhododendron? Yes, it can help strengthen the argument, as people respond to tackling plant diseases, although the funding support is likely to be limited.

Resources

An Approach to Prioritising Control of Rhododendron in Scotland:

<https://forestry.gov.scot/publications/26-an-approach-to-prioritising-control-of-rhododendron-in-scotland>

Managing and controlling invasive rhododendron:

<https://www.forestresearch.gov.uk/research/managing-and-controlling-invasive-rhododendron/>

Event recording

The event recording is available on our YouTube channel: <https://youtu.be/2gxHa9dNR48>

CWA events and services

CWA organises regular training events on a broad range of topics: see our website for details of upcoming events <https://www.communitywoods.org/newsandevents> Please get in touch jon@communitywoods.org if you have an idea for a training event that we could organise.

We send out a monthly e-bulletin with details of relevant funding opportunities, news, events and jobs & a quarterly e-newsletter with updates and stories from Scottish community woodlands. Sign up to our mailing list here eepurl.com/g-JJ0L

Follow CWA on social media for regular updates on relevant funding opportunities, news, events and jobs: Facebook www.facebook.com/Communitywoods and Twitter @CommunityWoods

CWA moderates a Google Group where people involved in community woodlands can come together to share their experiences, advice & ideas. Email joanna@communitywoods.org to be added to the e-group.

Registered delegates	Organisation (where known)
Gina O'Brien	Aulnaskiach Dell
Steve Rowan	Aulnaskiach Dell
Amos Higgins	Cambusbarron Community Development Trust
Tom McBain	Cambusbarron Community Development Trust
Richard Norman	Cambusbarron Community Development Trust
Jon Hollingdale	Community Woodlands Association
Alastair Moodie	Cormonachan Community Woodlands
David Chiffers	Culduthel Woods Group
Caroline Phillips	Culduthel Woods Group
Arthur MacDonald	Dunain Community Woodland
Gisela MacFarquhar	Forres Community Woodlands Trust
Steve Hull	Forres Community Woodlands Trust
Grant Holroyd	Knoydart Forest Trust
Gordon Gray Stephens	Native Woods Coop
Claire Williams	Northern Corridor Community Volunteers
Rob Dewar	National Trust for Scotland
Mick Bird	Old Luce Development Trust
Maggie Payne	Stewarton Woodland Action Trust
Davy Thompson	Strathnairn Community Woodlands
Craig Young	TCV, The Conservation Volunteers
Phil Knott	West Highland College UHI
Simon Furmage	
James Murray-Brown	
Dorothy Bryden	