Blaeberries: foraging treasure

More native forest regeneration is the only truly viable way to increase the exploitable blaeberry resource, explains Emma Chapman.

I should go out today, get away from this computer, then ramble back sometime with blue fingers and a stained mouth, bringing a few berries home to share. It is blaeberry season. We have a garden full of soft fruit, but nothing beats a raw sprinkling of berries from *Vaccinium myrtillus*, and there is no plant that is so worth hunting or that feels more intimately and anciently rooted to the landscape. Blaeberries are foraging treasure.

Analysis of their constituent chemicals bears out that feeling: blaeberries are more than twice as high in anthocyanins as mass-cultivated American blueberries, for example, and contain a mass of other active ingredients which see them hailed as a powerful nutraceutical as well as a delicacy. They have longstanding uses in herbal medicine, some of which are now supported by contemporary science.

Blaeberries have made a few appearances during the four-year StarTree project, particularly during the meeting in Finland (see *Reforesting Scotland* issue 52, page 32). The Finnish forest berry resource is famous; the blaeberry crop is around 168 million kilograms a year. These are collected under 'everyman's rights' which allow picking by anyone, for either commercial or domestic use. Supermarket shelves stacked with pastries full of a rather plasticky blue jam showed that this is mainstream food, from a big industrial supply chain. There is a trade association, Arctic Flavours [1], which coordinates bulk orders from as far away as China and Japan.

A woodland species

Leafing through my collection of foraging and plant ID books, I read that blaeberries (also known as bilberries, whortleberries, or hurts) are a common food gathered from moorlands and heathlands, which may be found in woodlands as well. But I am more convinced by a 2001 report, *Project Blaeberry*, which is adamant and eloquent in the view that blaeberry is primarily a woodland species, an indicator of an intact and healthy woodland ecology, which thrives and fruits best under light shade. This is borne out by StarTree research and anecdote.

In Finland, our StarTree colleagues studied the effect of different thinning regimes. Clearfell (i.e. open ground) was not good for blaeberry, which instead did best under the constant, moderate shade of steadily thinned woodland. Their findings will be published on the StarTree website [2] to aid professional foresters in drawing up management plans. While specific to Finnish forests, the same techniques could be used to develop a tool for Scottish conditions.

Piers Voysey, a forester at Rothiemurchus, says: "I am a keen picker of wild berries and also lucky enough to help manage areas of pine woodland where blaeberry is important for capercaillie conservation. The berries are important for a range of wildlife, but it is not so much for the berries that we promote blaeberry, but for the insects that feed on them, which are important food for young chicks that need lots of caterpillars in their first three weeks of life before they go on to a vegetarian diet.

"To manage a woodland for blaeberry and caper we try and get the right balance of light and shade. Too much light to the forest floor and heather takes over. Too much shade and cowberry dominates. I find that blaeberry does not fruit well if there is too much shade, but I have had great pickings from tall plants under birch near Rannoch. Other great pickings I have had are from young plantations or regeneration areas where, after years of sheep or deer grazing, a deer fence prevents grazing of the bushes and the blaeberry plants suddenly take off and fruit like mad before they are shaded out by the young trees."

Project Blaeberry

Wild berry pickers interviewed for StarTree felt a good spot for blaeberries was worth a bit of a drive: "the best places for blaeberry I know are... in some of these big pine schemes and the point there is that

Blaeberries. Photos: Fiona Sinclair.

the deer have been eliminated to help the trees grow and the blaeberries get away...".

Project Blaeberry is a somewhat tongue-in-cheek title for a thorough and passionate piece of research, meticulously argued, which presents a vision of how restoration of blaeberry understorey could both underpin the ecology of new woodland plantings and also make them financially viable for community groups, producing a crop long before the timber trees could.

The author, Fiona Sinclair, searched literature, travelled, spoke and wrote to many people, and observed many blaeberry stands to piece together an understanding of both their uses and how they could be managed. Research in both Italy and Norway has shown that the species is relentlessly wild, intimately linked to mycorrhizae and the woodland environment and fails to thrive under true domestication. But it is a wildness which responds to management. Mulching, removing grazing pressure, adjusting the levels of light, shade and moisture-retaining shelter, all can enhance yields. In America the lowbush blueberry (*Vaccinium augustifolium*) is regularly cut or burned, echoing the land-management practices of the First Nations Americans. A cutting regime might work with our native blaeberry as well.

Fiona's argument, that more native forest regeneration is the best, and indeed the only truly viable way to increase the exploitable blaeberry resource, creates a tantalising vision of a 'new' crop to encourage on poorer soils, one with a history of use going back millennia, one which demands an increase in the area of native woodland with intact ground layer and one which would provide food for wildlife as well as food, medicine and timber for us.

Harvesting

The biggest limiting factor is the time cost of picking. In the 1950s, Baxters used to pay people to gather blaeberries and other wild fruits around Fochabers and Deeside. These days, the economically viable route is to buy in concentrates from abroad. In Finland, until recently, cheap labour would migrate over the border from Russia for the berry harvest. Now the Russians' wage expectations have increased, so the migrants come instead from Malaysia and Thailand.

Anne Thomson of Ella Drinks, Brechin, has tried over the years to find a source of Scottish berries. She found some willing pickers, but they moved back to Eastern Europe. Mostly, people are willing to pick a few berries for upmarket restaurants to use as a delicate sauce or a garnish, but not the quantities, and for the prices, that would make juice production viable. If you think you can crack this problem, Anne would be very interested to hear from you [3].

The simplest tool for speeding up picking is the berry rake. When I was excitedly discovering them, a colleague remonstrated, describing how special it was to pick them by hand, one by one, while out in the forests with her family in Norway. Rakes are "cheating", and decidedly controversial. Some people despise them – some countries even ban them – for dislodging insects and ripping off twigs and leaves along with the actual berries, harming the resource and contaminating the fruit. Other people take the opposite view, arguing that specialised mechanical pickers are what is needed to create a viable industry. The StarTree project is compiling a database of all the laws and customs relating to harvesting around Europe – to be published on our website.

Generally, wild food businesses in Scotland are far from operating at a mass commodity level; they mostly range from small to tiny, making artisan, value-added products and earning a living which is acceptable because of the appeal of the lifestyle involved. Blaeberries certainly have much to offer to people who run businesses partly for the love of it, and to people who want food for themselves, their families, their communities. *Project Blaeberry* gives a fine example: "Every autumn, Finnish children get a day off lessons to pick wild berries and take them into school, where they are emptied into enormous deep freeze rooms. The schools stock up with berries for the long winter months ahead when the children then benefit from regular healthy desserts. The Finns, as a whole, consume a lot of wild berries. Cancer rates in Finland have dropped by more than 60 per cent in the last 25 years. From having one of the worst health records in Europe – as bad as the Scots – they now have one of the best. It is more than probable that their imaginative approach to health promotion has enabled the Finns to improve their health so dramatically."

Good company, or a need for contemplation, can turn picking from a chore into a pleasure. If picking is part of your recreation, your meditation, your community or your learning about plants and nature, you may spend hours picking, but those hours are not wasted, and they do not need to be quite so strictly accounted for.

Where next?

In the 15 years since *Project Blaeberry* was written, and featured in *Reforesting Scotland* issue 27 (page 42), interest in wild food, in restoring native woodlands, and in healthy eating, has increased dramatically. Less progress has been made with the kind of trials which the report calls for. The potential is still there, and Fiona once again has time to take an interest. Reforesting Scotland has gained her permission to make the report available on our website. If you would like to discuss taking any of the ideas forward, contact Fiona on fiona.sinclair@humanthought.plus.com or myself.

star-tree.eu

References

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