

## NTFPs in Scotland: Changing Attitudes to Access Rights in a Reforesting Land

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### INTRODUCTION

Nearly one-quarter of the Scottish population gathers non-timber forest products (NTFPs), according to recent surveys (Heggie, 2001; TNS Global, 2003; West and Smith, 2003; Snowley and Daley, 2005). The practice of gathering wild plant materials and fungi crosses age, class, ethnicity and socio-economic status. It provides a suite of benefits that contribute to health and well-being, while connecting people to woodlands and countryside in direct and intimate ways. For a small but important subset of Scottish gatherers, NTFPs also are a source of income. However, the legal status of gathering often is unclear and tensions have arisen around the terms of access to land and NTFPs in Scotland. The legal context of contemporary gathering in Scotland is a function of formal law and customary practice, grounded in the 20th-century history of Scottish forests.

In the UK, including Scotland, levels of forest cover have declined steadily over the course of centuries. By World War I a crisis was reached, with the UK in danger of running out of timber altogether. The Forestry Commission was formed in 1919 to deal with this crisis, acting on a policy of planting fast-growing exotic species such as Sitka spruce and lodgepole pine to produce timber in large volumes, if not of high quality. This policy began to change with conservation concerns in the 1970s and 1980s, and although exotic conifers still form the majority of reforestation efforts, new plantings contain greater levels of native species and are more likely to be sensitive to topography and other local landscape characteristics. Despite recent increases in planting, levels of forest cover in Scotland remain at 16.4 per cent (Forestry Commission, 2001) compared with a European average of 46 per cent (FAO, 2003).

The use of NTFPs has followed a trajectory similar to that of forest cover. A gradual decline was interrupted by a brief resurgence as the shortage of resources during World War II forced a return to reliance on some wild gathered products. Medicinals in particular were used to a significant extent. For example, rose hips were gathered



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**Figure 5.1** *Map of United Kingdom including Scotland*

to make a syrup rich in vitamin C, and sphagnum moss was used to make antibacterial wound dressings. Wild game such as pigeon, rabbit and venison was used to a much greater extent than it is today. Reliance on NTFPs during the war may have served to encourage a decline in gathering afterwards, as it reinforced negative perceptions of wild harvesting as a desperate measure.

Over the past 20 years there have been ebbs and flows in the popular attention focused on NTFPs. In the 1970s there was a resurgence in gathering, epitomized by Richard Mabey's book *Food for Free* (1972), which influenced a generation of environmentally conscious middle-class people to experiment with wild foods. Today gathering is enjoying another wave of popularity. In addition to harvesting for personal use, commercial harvesting is increasing as well, and a wider range of people are involved. Among the drivers of this renewed activity are the development of global markets for wild fungi, the promotion of wild foods by celebrity chefs, a crafts renaissance and the influx of workers from eastern European countries, many of whom arrive with a strong cultural history of gathering.

Wild mushrooms offer a useful illustration of overall trends in NTFP harvesting and use in Scotland. There is little history of fungus use in Scotland. However, after



Source: Alison Dyke.

**Figure 5.2** *Cep* (*Boletus edulis*), one of Scotland's highest value mushrooms

World War II, a first wave of Polish and Italian settlers brought with them a culture of harvesting fungi that has endured and expanded beyond their immediate families. As the domestic harvesting of fungi increased in the second half of the 20th century, a commercial industry was established. Initially it supplied international markets and London restaurants. More recently, Scottish markets have also developed. A study conducted in 1998 found that the Scottish mushroom industry was worth around £400,000 per year and was responsible for approximately 20 year-round jobs, with some 350 casual pickers benefiting from seasonal earnings (Dyke and Newton, 1999). By 2006, the industry was worth at least double the 1998 figure.

The adaptation of harvesting rights in the face of these changes is the focus of this chapter. We begin by briefly describing NTFP gatherers and gathering in Scotland at the beginning of the 21st century. Then we discuss current legal terms of access to land and NTFP resources, including specific legislation and common law. We note that perceptions of harvesting rights and attitudes to the products themselves have affected the interpretation of formal legal rights and the development of customary rights. Next, we examine the uneasy fit between actual gathering practices and the legal canons that apply to them before outlining the factors that give gatherers, businesses and landowners differential access to both NTFPs and the legal process. Finally, we suggest that there is a need for change in the management of NTFPs and the legal structures governing them. We propose that gatherers and an understanding of gathering be incorporated in the development of Scottish NTFP policy and suggest steps in that direction.

## **CONTEMPORARY NTFP GATHERERS AND GATHERING**

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A recent ethnography of wild harvesting in the Borders and north-east Highlands indicates that today Scottish wild plant materials and fungi are commonly used as

food, beverage ingredients, and craft or decorative materials (Emery et al, 2006).<sup>1</sup> Less frequently, they find use as medicinals, cultural or spiritual items, garden implements and toys. Interviews with gatherers provide examples of the diverse socio-economic backgrounds of contemporary Scottish gatherers. They include a member of the House of Lords, an underemployed gentleman, a retired hotel manager and a young farmer (Emery et al, 2006). Others are a young man scraping together enough cash for a Friday night out, a recent immigrant harvesting moss for a crew boss, and a family on its annual excursion to collect berries for jam-making (Dyke, 2006).

There are great differences from case to case in the contribution that gathering makes to household economies. Nearly all gather for personal use, and most do so primarily or exclusively for this purpose. However, some produce value-added items such as baskets or jams for gift-giving or sale, and a small but important subset sell raw or minimally processed products such as wild fungi to wholesalers or restaurants. Survey results suggest that this pattern of livelihood uses for wild harvested materials is typical of Scottish gatherers (Snowley and Daley, 2005). There may also be considerable variety in the knowledge and skills of these individuals, as well as the quantities harvested.

This diversity makes it clear that there is no particular group or groups that can be seen as being more important, typical or representative of gatherers. Indeed, clearly segmented demographic groups of gatherers are not easily identifiable. Categorizing gatherers by the livelihood function of their activities is equally problematic, as a single individual often engages in gathering for a variety of reasons.

The most invisible form of harvesting is probably also the most commonplace: personal gathering, in which individuals and groups of friends or relatives go out to harvest small amounts of food items once or twice per year. These might include brambles (*Rubus fruticosus*) or blaeberrries (*Vaccinium myrtillus*) for jam, elderflowers (*Sambucus nigra*) for cordial, or mushrooms (*Agaricus* spp.) for dinner. Although this may be an infrequent activity involving small quantities of plant materials or fungi, it is perhaps the most direct and intimate way in which people interact with the woodlands they visit. This practice often is recognized by local woodland managers but is generally invisible in national policy and law.

Commercial mushroom harvesting is a comparatively new activity and as such it has attracted the attention of the press. Much of the media coverage is negative and often based on second-hand information that reiterates one or two mutually reinforcing stories: 'rape and pillage of the land' or 'fortune to be made on easy pickings'. Given this public image, people who gather for commercial sale are understandably cautious about drawing attention to themselves.

In fact, most gatherers who collect fungi for sale do so in small quantities to earn income for special purposes. Mary, for example, with the knowledge and tacit permission of a local landowner, harvests fungi for her own household use and for sale. She generally uses the income for special purposes such as holiday spending money. When Mary's young son wanted to buy a new bicycle, he helped with the harvesting and was able to raise half the cost. Other special purposes mentioned by gatherers include charitable contributions and savings for children. Only among those with the tightest household incomes do proceeds go into the general household fund.

Additional examples of the role of NTFPs in lives and livelihoods further illustrate the folly of trying to assign even those who sometimes gather for commercial sale to

a single category. Aleksy, from Poland, is working in Scotland for a short period. He is amazed by the availability of mushrooms in the Scottish woodlands and harvests commercial species such as chanterelles and boletes to sell. He keeps some of these and harvests a variety of other species to preserve and take home when he returns to Poland. Meanwhile, two permanent Scottish residents exhibit high degrees of livelihood dependence on wild fungi and other NTFPs for both household use and occasional sale or barter, albeit with different motivations. Fiona is an avid member of the community woodland movement in Scotland. Her desire to live in closer harmony with the natural environment leads her to harvest extensively from local woodlands for food and other materials. She sometimes trades wild food or craft materials for other items. Michael has had a patch of bad luck lately and NTFPs provide a critical safety net for him. The income helps him make his rent and put food on the table when money would otherwise run short. It also helps maintain his confidence in his ability to provide for his family.

Regardless of the livelihood use to which wild harvests are put, common to all gatherers is personal pride in the skill that it takes to gather and process these products and derive some income or goods for domestic use when times are hard (Dyke, 1998b). The therapeutic effects of taking time off as a group of family or friends is also cited as a reason to gather year after year, as are the break it offers from ordinary life to observe the impact of the weather and seasons on what is available in the woods and the excuse to take some exercise (Dyke, 1998b; Emery et al, 2006). The aggregate effect of these benefits, regardless of the economic intent, is a considerable positive impact on well-being.

## **LEGAL TERMS OF ACCESS TO NTFPS**

Two political changes in the late 20th century condition the legal context for access to NTFPs in Scotland today. Scotland voted for devolution within the UK in 1997 and now has its own parliament with legislative and tax-raising powers. One result has been the passage of some distinctively Scottish laws that reflect the nation's unique cultural and legal traditions. Simultaneously, the process of harmonization under the European Union is trending toward increased homogeneity of laws governing selected issues. Legislation on species protection particularly has been affected by harmonization. Within the UK, too, the adoption of nearly uniform laws on species protection suggests an assumption that conservation need not be culturally specific.

In contrast, legislation dealing with property and access to land and resources has been strongly affected by devolution and now reflects the distinct traditions of Scotland. The passage of this legislation on access reflects both changes in attitudes and the formalization of long-held customary rights. In this section, we describe the common law, legislation, by-laws and general restrictions relevant to gathering NTFPs in Scotland in terms of their effects on access to land and resources, provisions related to property theft or damage, and species protection.

## Access to land and resources

In order to gather NTFPs, one must first gain access to land. Scottish law provides a universal right of access (with sensible restriction) through the Land Reform (Scotland) Act 2003, which went into force on 14 June 2004 (Scotland, Parliament, 2003). This Act codified the customary 'right to roam', which was previously supported by the absence of an offence of trespass in Scottish law. The Act is silent regarding gathering for non-commercial purposes, leaving the legal status of such activities ambiguous. However, the Act is explicit in excluding commercial gathering from the right of access. Since the majority of commercial activity, particularly in the wild mushroom industry, occurs *without* the permission of the landowner (Dyke and Newton, 1999), this legislation effectively criminalizes most commercial gathering.

During the consultation period for the Act, the landowning lobby speculated that the formalization of the 'right to roam' would lead to large increases in visitor numbers. In fact, the Forestry Commission's biannual *Public Opinion of Forestry* surveys show a gradual decline in the percentage of the population who had visited woodlands in the preceding few years (Gillam, 1999; Heggie 2001; West and Smith, 2003; Snowley and Daly, 2005). Despite this fact, there is a perception among landowners that visitor numbers have risen and harvesting has increased. While harvesting may have experienced some increase, we suspect that landowner impressions are more the result of heightened awareness of the right to public access and greater attention to visitors and their activities following debates on and the enactment of the Land Reform Act.

## Theft

Under Scottish common law, plants and fungi are included in the 'parts and pertinents' to land, making the produce of the land the property of the owner by 'accession of fruits' (Reid, 1996, p457). Despite such apparent clarity regarding the ownership of resources, user rights are murky. Loss to the owner must be demonstrated in order to establish compensable wrongdoing, and a gatherer's intent to engage in commercial sales must be demonstrated. The latter is a legally challenging task, given that plants and fungi are widely regarded as lacking commercial value. In a suit brought by the Department for Environment, Food and Rural Affairs in England (Box 5.1), the courts found for the gatherer based on the ancient concept of 'right of user' for an individual who has used a resource unchallenged for more than 20 years. However, this right does not exist in Scottish law.

Almost half of Scotland's forest is under the management of the Forestry Commission and therefore is subject to Forestry Commission by-laws, which forbid taking anything away from the land. A strict interpretation of these by-laws, usually invoked to seek remedy in cases of particularly bad harvesting practices, would be out of step with actual agency practice. The Forestry Commission increasingly depends for continued government funding on its position as a provider of public good, through recreational opportunities, environmental protection, etc. Hence it encourages the public to engage with forests by offering events such as fungi forays and wild food walks. Ongoing legislative action may result in the abandonment of Forestry Commission by-laws as more of their provisions are covered by national laws such as the Land Reform Act.

### Box 5.1 Mushroom gathering and the 'right of user'

The case of Mrs Tee's wild mushrooms illustrates the coexistence in the UK of legal and customary rights to gathering. Brigitte Tee Hilman and her employees gather fungi in and around the New Forest in south-east England and import from overseas to supply London restaurants. In November 2002 Brigitte Tee Hilman was arrested in possession of 6kg of winter chanterelles (*Cantharellus lutescens*) gathered in the New Forest. The arrest followed several warnings by Forestry Commission staff after it had responded to increased gathering by developing a policy that prohibited harvest for commercial purposes and established a limit of 1.5kg for domestic use (the time period and geographical area to which this limitation applied were not specified).

Brigitte Tee Hilman was prosecuted under the Theft Act 1968 (applicable to England and Wales) (UK Parliament, 1968), which specifically makes the gathering of fungi, flowers, fruit or foliage for commercial purposes, without the permission of the landowner, theft (section 4(3)). The case was dropped on appeal in May 2006, but Brigitte Tee Hilman still faced civil action. Her defence was based on prescription (Collis, 2005), whereby rights to an easement over land (in this case for picking wild mushrooms) can be established by uninterrupted use over a period of 20 years or more. This use must occur at least once per year, take place without force or secrecy and without permission, and be of a type that could lawfully have been granted. Having gathered regularly and unchallenged in the New Forest for over 20 years, Brigitte Tee Hilman felt that she had established a customary right of use. She won in civil court, thereby establishing that she had a personal right (which did not apply to her employees) to gather mushrooms for her own use and for commercial purposes in the locations where she had previously collected on Forestry Commission-managed land.

This opens up the possibility of additional challenges to the Forestry Commission policy by other long-standing users. Given the considerable sum of public money dedicated to the case, it also suggests that there should be consultation with local gatherers prior to restrictions being imposed.

## Damage

Under common law, deliberate or negligent damage to wild plants is an offence against the landowner. This was recently formalized through amendments to the Wildlife and Countryside Act 1981 (UK Parliament, 1981) under the Nature Conservation (Scotland) Act 2004 (Scotland, Parliament, 2004). In theory, these amendments could make gathering a product or trampling vegetation a civil offence, although the activity would have to be proven deliberate or negligent. Such activities might also provide grounds for prosecution for vandalism under the Criminal Law (Consolidation) (Scotland) Act 1995 (Scotland, Parliament, 1995). In fact, cases that do reach the courts are often tried under the vandalism clauses of the Criminal Law Act rather than legislation formulated for the protection of wildlife, in part because the former is more commonly used and better understood by the police and Crown Prosecution Service, and because it carries stiffer sentences (Nurse, 2003).

However, successful prosecution requires the demonstration of substantial loss. The case illustrated in Box 5.1 was first brought under the Theft Act and then as a civil action for theft. In both instances, prosecution for the theft of mushrooms with such a small commercial value was widely regarded as a waste of public money and the court's time. Public reaction to the plaintiff's case might have been different had the case been brought under conservation legislation.

## Species protection

The Wildlife and Countryside Act also makes it an offence to uproot or destroy any wild plant without the permission of the landowner (section 13(1)(b)),<sup>2</sup> and thus could serve as the basis for legal action to protect localized plant populations and/or the interests of landowners. Some species have complete protection from gathering (including seeds or spores), disturbance and sale or possession with or without landowner consent under Schedule 8 (sections 13(1)(a) and (2)(a)) of the Wildlife and Countryside Act. Bluebells illustrate the application of this provision (Box 5.2).

In addition to national laws, special restrictions apply to land under some types of ownership and designation. For example, plants may not be picked in some nature reserves or on the properties of the Ministry of Defence and the National Trust, which together encompass approximately 1 per cent of the national land area. Picking is also prohibited on sites of special scientific interest (commonly known as SSSIs and covering almost 13 per cent of Scotland's land area) without permission from the appropriate government agency. In addition, nature reserve managers often ask visitors not to gather wild products, arguing that it diminishes the experience for future visitors and reduces habitat quality for wildlife. Aesthetic considerations are another commonly cited reason for restrictions on gathering, justified by instances of gatherers collecting every mushroom they could find, later identifying those they wanted to keep and discarding the remainder in the car park.



Source: Alison Dyke.

**Figure 5.3** *Native bluebell (Hyacinthoides non-scripta), a controversial wild harvest*

### Box 5.2 Bluebells

Native bluebells (*Hyacinthoides non-scripta*) have iconic status in the UK, with their swaying blue flowers that carpet native woodlands in the spring. Britain is home to somewhere between 25 and 49 per cent of the world's population of the species. Bluebells are also a popular garden plant: there is a sizable trade in their bulbs as well as transplantation from the wild to domestic gardens. Both of these activities are illegal under Schedule 8 of the Wildlife and Countryside Act, which prohibits the 'sale or advertising for sale' of listed species. One solution to the demand for bluebells in the light of the ban on harvesting native bulbs has been the import of both native and non-native bluebell species, mainly from Spain.

Another solution would be the cultivation of native bluebells from seed. In theory, it should be possible to obtain a licence to gather bluebell seed, and such licences have been issued in England in the past. However, no licences for seed collection are available currently. It is difficult to distinguish native bluebells from non-native Spanish bluebells (*Hyacinthoides hispanica*) and hybrids of the two by any readily visible physical characteristics. As a result, the in-county agencies responsible for issuing seed collection licences have suspended doing so until a reliable genetic test is available. Meanwhile, planting projects that require native provenance seed are unable to obtain bluebells, and illegal gathering from the wild, of both native bluebell and Spanish bluebell, continues.

Poor labelling of marketed bulbs is an additional problem. Considerable efforts are being made to educate the public about the difference between native, Spanish and hybrid bluebells. But this understanding is hampered by plant breeders' poor labelling. Bulbs are sold with obsolete Latin names, illustrated with pictures of the wrong species, or simply under the wrong name. This poor labelling has resulted in some unfortunate errors. The village of Clent in Worcestershire spent £1000 on bluebell bulbs only to discover that they had bought (and planted) 7000 Spanish bluebells owing to misleading labelling. Obtaining sustainably sourced supplies of native bluebells is only half the problem, then. Ensuring that those supplies are, indeed, the native species is an even greater task.

Under common law, access and harvesting rights appear relatively straightforward: landowner permission is required to undertake harvesting for any purpose. Formal legal codes make these terms less clear. As previously noted, the Land Reform Act specifically excludes commercial harvesting from rights of access while making no mention of gathering for non-commercial purposes. The Wildlife and Countryside Act is silent on the issue of landowner permission for harvesting that does not involve the destruction of the organism. There is, for example, no explicit requirement to obtain permission prior to harvesting reproductive parts or foliage, which are the most commonly gathered materials. Understandably, a majority of harvesters have not made the considerable effort required to establish the exact legal position of their activity. Landowners are no better informed, and considerable confusion exists.

The arguably artificial distinction between much commercial and non-commercial gathering activity in the Land Reform Act may reflect a desire to preserve customary rights to gather for personal use. But the failure to provide explicitly even for non-commercial harvesting aggravates the murky, tenuous status of customary rights, which go largely unrecorded and receive little consideration in formal venues. Government publications describing the rights and responsibilities of access for the general public illustrate this tendency. For example, a Scottish Natural Heritage document on the implications of the Wildlife and Countryside Act states: ‘Technically, wild flowers belong to the owner of the land and taking them may be theft’ (Reid, 1998). Here the use of the word ‘may’ indicates the uncertainty of the position and the extent to which it may or may not be overridden by customary rights.

There are those who argue, on a variety of grounds, that commercial gathering is also a customary right. Some gatherers reject the notion of private landownership with exclusive rights to any and all resources on that land. These individuals may go so far as to view their commercial gathering as a form of protest against what they regard as an unjust distribution of benefits from the land. Others contend that ownership is defined by use and that landowners who do not use or manage a product themselves forfeit their right to it. Indeed, landowners themselves, when questioned, profess little concern about the harvest of fungi by unauthorized individuals provided the proprietor has no wish to exploit the resources and there is no long-term damage associated with the activity (Dyke, 1998a).

## **GATHERING PRACTICE AND LEGALITY**

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Contemporary NTFP-gathering and business practices fit uneasily into current law in Scotland. Official publications notwithstanding, customary rights often override formal legal measures, not least because the spatial and technological patterns of most harvesting make it hard to police and the laws themselves are difficult to implement. Fundamentally, the legal acceptability of gathering is a function of landowner permission. In practice, the need for explicit permission tends to increase with the degree of commercialization, the scale and mechanization of harvests and the distance gatherers travel to a harvesting site.

### **Degrees of commercialization**

Much of the NTFP literature defines commercial activity in opposition to non-commercial harvesting (Schreckenbergh and Marshall, 2006), implying a series of related binaries: commercial/non-commercial, cash exchange/personal consumption, economic/cultural. The assumption of these hard-boundaried distinctions is effectively codified in Scottish law. However, as illustrated above, in Scotland, as in most of the world, including the United States, a majority of gatherers’ activities fall somewhere between strictly commercial and non-commercial activities (Carroll et al, 2003). One individual may gather for income, household consumption, gift-giving and trade or barter, even in a single outing. Collected materials may have considerable cultural importance while simultaneously providing much-needed cash.<sup>3</sup>

Scottish law governing NTFP enterprises is predicated on formal business models and exhibits a mismatch between the intent of legislation and the characteristics of many, if not most, of the enterprises to which it applies. NTFP businesses are often marginal in conventional economic terms, though they may be quite important socially, culturally and in terms of their contributions to household livelihoods. Research experience suggests that the great majority of NTFP-based businesses are cottage industries and microenterprises, employing no more than two or three individuals, if any, aside from the owner (Paul and Chapman, 2007). The volumes of plant material and fungi tend to be small and economic activity is frequently intermittent. As with gatherers, much of the exchange may take place in informal economic venues such as local fairs and personal social networks. However, a move to promote NTFP commercialization as an economic development initiative might well result in the formation of more formalized enterprises of the sort envisioned in legislation.

### **Scale and mechanization of gathering**

The scale, or volume, of harvesting is often assumed to be a function of the degree of commercialization, but this is not always the case. An individual or family gathering fungi to make up a substantial portion of their diet may harvest more than someone seeking pocket money for a weekend outing, for example. Nevertheless, there is a widespread assumption among landowners and managers that commercial harvesters gather large quantities. For this reason, some commercial mushroom gatherers report using ‘decoys’; they may carry binoculars so as to appear to be birdwatching tourists while in the harvest area, transferring their mushrooms to the crates that make them identifiable as commercial gatherers only when at a safe distance (Dyke, 1998a).

The degree of mechanization also is assumed to be a function of commercialization, but actual practices are considerably more complex. In general, NTFP harvesting is a manual process using only the most basic tools, if any, regardless of the livelihood use to which gathered materials are put. However, there are instances of highly mechanized gathering in Scotland. In particular, some commercial operations seek moss and bulbs in such large quantities that bulldozers are used for harvesting and tracked vehicles for removing plant materials from the site. The potential for damage to the resource and to the habitat as a whole from such mechanized harvesting is obviously high, and there have been examples of this type of harvesting activity being carried out without the permission of the landowner. But the use of mechanization also increases the visibility of harvesting, and, as a consequence, moss harvesting is one of the few areas where the use of harvesting agreements is relatively common.

### **Insider/outsider status and access**

Formal law does not distinguish between gatherers on the basis of their place of origin or residence, but common practice often does. Many landowners support the tradition of local people gathering products for their own use but object to what they see as the appropriation of resources by non-local gatherers, especially when commercial sale is involved. These objections are based on twin apprehensions: first, that local people will suffer from the competition, and second, that outsiders’ harvesting practices may be less sustainable. Harvesting by non-local people tends to be more visible by virtue of

the identity of the individuals involved. A local car parked in a lay-by is generally unremarkable and could as easily be a dog walker's as a mushroom picker's. In contrast, an unfamiliar vehicle, especially if driven by unknown or 'foreign-looking' people, is more likely to be noticed and elicit some sort of response.

Numbers of non-local harvesters are likely to increase as markets for wild foods grow and increasing numbers of immigrants from Eastern Europe settle in urban Scotland, bringing strong traditions of fungi harvesting with them. The issue of gatherer identity and access will probably become more active in response to these changes. At present, the regulation of access based on place of origin depends on individual landowners, and no clear customary practice has emerged. There is, however, an obvious and as yet unanswered ethical question: is it acceptable to exclude people because they are not long-time residents of a local area, or can the concerns that might lead landowners to attempt to exclude non-local gatherers be adequately addressed through the regulation of harvesting practices and measures to address potential competition?

## **PROCESSES AND MECHANISMS OF ACCESS**

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While legal and customary rights constitute the formal basis on which individuals may access resources, actual practices may bear little resemblance to the law, reflecting a wider range of factors. The main processes and mechanisms that influence access to resources in the Scottish context are explored below in accordance with Ribot and Peluso's theory of access (2003).

### **Knowledge and lack of knowledge**

Knowledge and lack of knowledge are perhaps the main factors determining access to NTFPs. Gatherers, business people and landowners tend to possess distinct bodies of knowledge that reflect their personal involvement with NTFPs. Gatherers' knowledge derives from ongoing interaction with fungi in the landscape. The specialist knowledge that distinguishes them and is essential to successful gathering gives them privileged access to fungi. Not uncommonly, it also conveys special social status through gifts to family and friends that embody the knowledge and effort that has gone into gathering and processing.

In addition to what might be thought of as traditional knowledge, new patterns of use and management are emerging around products that were not widely gathered in the past. Fungi are particularly noteworthy in this regard. With the increase in commercial and domestic culinary use, growing numbers of people are learning to identify and harvest edible fungi. Over the past 20–30 years an international network of craft workers who use fungi for dyeing has developed, including a strong contingent in Scotland. Through the sharing of knowledge within countries and across continents, it is now possible to produce almost the full spectrum of colors from fungi dyes. This type of expertise is termed 'new expert knowledge'.

Traditional and new expert knowledge often overrides legal and customary rights in conveying the ability to access resources. At present, individual gatherers are aware

of the advantage their knowledge provides them in obtaining and using NTFPs. That authority enjoys no formal status, however, and there is little awareness on the part of gatherers that by combining efforts they might influence the legal terms of access.

Market knowledge also provides an advantage in gaining access to and making use of fungi. The owners and managers of more commercial businesses tend to be one step removed from the practice of gathering and, as a result, may lack the knowledge base that gatherers possess. But buyers and wholesalers often enjoy strong market knowledge. This expertise affords them a privileged position as middlemen when dealing with landowners and facilitating negotiations for access on favourable terms. Indeed, many well-established fungi buyers in Scotland have used their market knowledge to access international markets, importing fungi from other parts of the world when they are unavailable in Scotland, in order to provide a year-round supply to their customers.

In contrast, landowners generally lack knowledge of the NTFPs on their property and the markets that may exist for them. Landowners are accustomed to using professional advice with regard to other resources on their land, but at present there is little comparable data on NTFPs and there are few professionals to consult. Further, efforts to systematize scientific information on NTFPs or gatherers' traditional and new expert knowledge have been limited. Without such knowledge landowners are at a comparative disadvantage with regard to making use of fungi and other NTFPs. We note, however, the risk that the professionalization of this knowledge might entail for gatherers and buyers. The power conveyed by their gathering and market knowledge would probably be eroded if it were widely available to landowners, although it is not clear that landowners would wish to undertake gathering for their own or commercial purposes.

## Representation

Representation in deliberative processes is closely related to questions of knowledge and power. Gatherers, buyers and processors are accustomed to operating as independent individuals and generally do not see themselves as constituting a group (or groups) joined by common interests. There is little sense of the potential for cumulative effects from their actions or the possibility that policy changes could impact on them individually. Not surprisingly, then, there is no organizational structure representing gatherers, buyers and/or processors in Scotland and there was no particular effort to engage these groups in consultations on the Land Reform Act. The absence of representative bodies for gatherers in particular also means that there are no clear groups for landowners to interact with and involve them in resource management.

Other stakeholders are also affected by the lack of any mechanism for communicating among interest groups. Landowners have no means of representing themselves and their perspectives to gatherers, and this contributes to their inability to benefit from the resources in their possession. Non-governmental organizations, which played a significant role in consultations on the Land Reform Act, are also hampered in their attempts to disseminate information by the lack of an easily defined and accessible audience. On an institutional level, the lack of representation aggravates the dissonance separating legislation and regulation from actual practices.

## Scales of policy and implementation

NTFPs are a largely unmanaged resource in Scotland, in part because no one is quite sure whose responsibility they are. NTFPs are addressed in international policy documents such as the Convention on Biological Diversity (UNEP, CBD 1992), the Helsinki General Declaration (MCPFE, 1993) and the Global Strategy for Plant Conservation (UNEP, 2002). At the level of the European Union, their importance is well noted in the Pan European Criteria for Sustainable Forest Management (MCPFE, 2002). At the UK level, however, NTFPs scarcely receive policy mention. There is a time lag, as decisions taken at the international and European levels are subject to a series of delays in translation to national policy and legislation, and then into procedures for institutional implementation prior to being put into practice at the local level.

In addition, there is a disparity between the spatial scale of authoritative policy and that of allocative management (Geores, 2003). The legal structures discussed earlier set out to govern authoritative rights over resources nationally, but policy documents fail to make provision for implementation and allocation at the local level. These spatial and temporal mismatches are manifested in a missing policy and management layer that makes it difficult to govern resources at an operational level. At a very practical level, the size of units used for managing forests is too large to be of much use in the management of sites where NTFP species are found. Additionally, gatherers work on a wider scale than do woodland managers or landowners, often ranging across woodlands and ownerships in search of a variety of products from diverse habitats.

## RECOMMENDATIONS

In practice, there is strength in the flexibility that the current system of ad hoc unregulated access affords gatherers. But it is also extremely vulnerable to unanticipated changes in circumstances. The increasing popularity of gathering, the involvement of urban and new immigrant populations, and the development of new products and appetites suggest that it may be time to consider changes in the legal instruments and management practices applied to NTFPs and their gathering in Scotland. The rights of old and new gatherers, the sustainability of NTFP species and their habitats may not be well served by the current system over the long term. Access rights and perceptions of access rights will probably be forced to evolve – not for the first time – to take account of changing circumstances.

One recent adaptation to changing NTFP dynamics is the development of gathering guidelines, initially for fungi and more recently for mosses and bulbs. Box 5.3 offers further discussion on guidelines for good practice and the process by which these may be developed, with reference to the Scottish Wild Mushroom Code. Our research suggests a number of additional actions that would provide for continued benefits from Scottish NTFPs while contributing to their sustainable management.

### **Box 5.3 The Scottish Wild Mushroom Code**

In 1999, increased mushroom picking for domestic and commercial purposes was generating controversy in Scotland. Commercial gatherers tend to stick to species they know they will be able to sell in good condition. In contrast, those gathering for their own use may collect a wide range of species, in an attempt to improve their identification skills, before deciding what to keep. This practice generated the concern on the part of conservation organizations that an absence of fungi harvesting expertise could endanger particular species and habitats. Another concern was the potential for increased conflict between gatherers and landowners as more people went into woodlands in search of fungi. With consultations for the Land Reform Act getting under way, a code was commissioned with the aim of clarifying the confused picture of legal and customary rights to gather wild mushrooms.

The Scottish Wild Mushroom Code was developed by a group known as the Scottish Wild Mushroom Forum, which included gatherers (both recreational and commercial), landowners, mycologists, entomologists, conservation organizations and regulatory bodies (Scottish Natural Heritage, 2003). The code was developed prior to the Land Reform Act, but is based on similar principles, which include placing the responsibility for good conduct and personal safety on the gatherer and emphasizing courtesy and communication with other woodland users, particularly the landowner.

Guidelines are only a starting point; they also need to be implemented. Broad acceptance of the guidelines in the gatherer community will aid in this process, but the guidelines have no real teeth. In order to effectively influence gatherer and landowner practices, guidelines need to be accompanied by measures that allow gatherers to police one another's conduct and ensure that landowners consider the impacts of broader land and forest management practices on NTFP species.

## **Guidelines for gathering practice**

As would be expected, there are examples of both good and bad gathering practice for each NTFP. Bad practice often takes the form of accidental damage by poorly prepared new gatherers and, in some cases, is due to the absence of long-term interest in productivity. Good practices tend to result from the knowledge and personal investment of gatherers and can form the basis for the development of guidelines on gathering practice for both new gatherers and land managers.

Guidelines are only as good as the process that creates them, however. The cooperation of many groups – gatherers, buyers, wholesalers, landowners and non-governmental organizations – is required to produce workable approaches that will be regarded as legitimate. The paucity of biometric data on NTFPs increases the importance of drawing on gatherers' knowledge of what has proven to be sustainable and unsustainable over time. Invoking their experience also heightens the likelihood that guidelines will be regarded as accurate and reasonable by the individuals who are asked to follow them. This, in turn, improves the chances that such guidelines on gathering will be accepted and voluntarily observed, factors that are crucial to their success.

However, guidelines alone are not enough to influence practice. The factors identified in the section above on ‘Processes and mechanisms of access’, including the impact of broader resource management decisions on NTFPs, must also be addressed in order to achieve broad acceptance and compliance. The process of creating guidelines initiates coordination and communication across the range of stakeholders, but more robust systems are needed to realize the potential for self-governance, including a way of monitoring the use of guidelines. Incorporating guidelines into broader resource management systems would provide mechanisms for enforcement beyond peer pressure and ensure that land managers take the actions and interests of gatherers into account.

## **Representation and communication**

Many of the challenges to the sustainable management of NTFPs in Scotland stem from a lack of communication between parties. The fact that NTFPs rarely feature on the agenda of forestry policy processes exacerbates this problem, and a concerted effort is needed to ensure that NTFPs are addressed as part of broader forest policy. It is also important for the various stakeholder groups – gatherers, buyers, processors, landowners, non-governmental organizations and statutory bodies – that currently lack a forum in which they can communicate to develop methods and processes for doing so.

## **Systems of governance**

As interest in managing NTFPs increases, the question of *how* these resources should be managed arises. In posing this question, it is imperative that we ask not only what changes might be made to current practices, but also according to what judgements and values any changes would be made and through which forms of governance. In particular, how can the governance of NTFPs be integrated into existing processes and mechanisms for natural resource management?

## **Accreditation and certification**

In order to be effective, guidelines for good practice and sustainable gathering require enforcement. An accreditation scheme for gatherers would establish a public standard of good gathering practice that could be enforced by consumer demand and subject to peer monitoring by other gatherers. Accrediting gatherers rather than products has the advantage of being relatively easy to set up and administer. Similar schemes have been developed in Finland and are applied there as voluntary standards.

Ensuring that woodland management benefits NTFPs should go hand in hand with insisting on good gathering practices. At present, the certification of NTFPs under available schemes (such as the Soil Association’s Woodmark scheme) is not practicable, since all such schemes require separate certification for each species gathered at each site. The ecological information needed to assess the impacts of gathering generally is not available, and the cost of administering such certification schemes is borne by the landowner and would be difficult to recover. New methods of certification, using groups of products and groups of landowners, might improve the situation. Standards

requiring consideration of the impacts of forestry operation on NTFP species under the UK Woodland Assurance Standard would be more accessible and widely applied.

## **Subsidy**

Without financial incentives, it is unlikely that forest managers will engage with the management of NTFP species. At present, however, there are no government programmes to encourage the management of these resources, although they would fit within the objectives of forestry grant aid. The Scottish Forestry Grant Scheme currently includes an element of support for recreational use, but NTFP gathering for personal consumption – a major recreational use of woodlands for many – receives no recognition in the way of grant aid. As a consequence, public and private landowners receive no financial incentive to incorporate NTFP gathering into woodland management. Grant aid programmes could create incentives for the management of NTFPs by requiring that all woodlands receiving subsidies be in compliance with the criteria for forestry practices set out in the UK Forestry Standard and by including consideration of the impacts of forestry operations on NTFP species in the standard.

## **CONCLUSION**

NTFP gathering is widespread in Scotland today, and the practices associated with it reflect the vibrancy of contemporary culture in the nation. Gathering also offers benefits that address several national policy concerns. The micronutrients obtained and physical activity involved in harvesting wild plants and fungi contribute to health and well-being. By providing livelihood resources and cultural satisfaction, NTFPs contribute to the sustainability of rural lives. Gathering also involves people in environmental protection through direct engagement with the natural world.

In spite of these contributions, NTFPs are poorly incorporated into policy, in part due to conceptual boundaries between timber and non-timber, woodland and non-woodland, commercial and non-commercial. These distinctions do not reflect actual practice and serve to increase the difficulties that NTFP practitioners have in engaging with the development of national policy.

The most effective policy approaches to NTFP sustainability will be those that work with gatherers and incorporate their passion for the activity, allowing them to use their knowledge and building on the majority's desire to ensure that resources are available in perpetuity. This requires an element of trust that the state may find difficult to muster. Legislation will be of value in dealing with the extreme cases of bad practice that occur from time to time. Nevertheless, given the dispersed, low-technology nature of the vast majority of gathering, long-term prospects will be best served if gatherers retain the responsibility for managing NTFP resources and police themselves. Like the history of gathering in Scotland, present practices are dynamic and policy solutions will need to be flexible, accommodating the fluid and evolving nature of these activities.

## NOTES

- 1 The ten vascular plant species mentioned most frequently by interviewees in the ethnographic study are all used as edible and/or beverage ingredients. Seven of the ‘top ten’ are berries: brambles (*Rubus fruticosus*), raspberry (*Rubus idaeus*), blaeberry (*Vaccinium myrtillus*), elder (*Sambucus nigra*), sloe (*Prunus spinosa*), rowan (*Sorbus aucuparia*) and rose hip (*Rosa* spp.). The ten most frequently mentioned fungi are the easily identifiable chanterelle (*Cantharellus cibarius*), bolete (*Boletus edulis*), field and horse mushroom (*Agaricus campestris*, *A. arvensis* and allies), hedgehog fungus (*Hydnum repandum*), puffball (*Lycoperdon* spp., *Calvatia gigantea* and close allies), parasol (*Macrolepiota procera*), ink cap (*Coprinus comatus*) and wood blewitt (*Lepista nuda*). Holly (*Ilex aquifolium*), ivy (*Hedera helix*) and conifers find use as Christmas decorations. Mosses and bulbs (winter aconite (*Eranthis hyemalis*), snowdrop (*Galanthus nivalis*) and bluebell (*Hyacinthoides non-scriptus* and *Endymion hispanicus*)) are employed for horticultural purposes, while the young growth of various tree species is used in basket-making and a wide variety of vascular species and fungi find their way into dye pots. Chanterelles, boletes, hedgehog fungi and winter chanterelles (*Cantharellus lutescens*) are the most widely traded of the expanding variety of fungi for which commercial markets have developed.
- 2 Fungi are not directly referred to in the Wildlife and Countryside Act, but may, for purposes of the Act, be considered plants.
- 3 For examples from the United States, see Anderson et al (2000) about ferns, Carroll et al (2003) about huckleberries and Hinrichs (1998) about maple syrup. Wynberg and Laird (2007) provide a similar example on marula in South Africa.

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# Wild Product Governance

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