FUNDING NATIONAL PARKS

INTERNATIONAL EXPERIENCE OF RELEVANCE TO SCOTLAND

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INTRODUCTION

The international network of national parks has been steadily growing in both the developed and developing world. Driven by the objectives of conserving fine landscapes and ecosystems, promoting well managed recreation and tourism and as an aid to sustainable economic development, national parks have proven to be an irresistible model worldwide – recognised by the general public and with wide popular and political support. There are now an estimated 6,000 national parks in almost 100 countries.

Increasing emphasis on the need to tackle climate change and protect biodiversity worldwide has led to a global target to protect 30% of the planet for nature by 2030. This target is included in the post-2020 Global Biodiversity Framework, agreed at the recent Convention on Biological Diversity (CBD) at COP15 in Montreal, 2022. Countries will be expected to contribute to this global goal through action to increase coverage of effectively managed protected areas. More than 200 countries have now signed up to the commitment, including the UK.

Many countries have seen their network of national parks as being an important contributor to this 30/30 target and new national parks have been declared or are planned in numerous countries. For example:

Norway is planning to create 10 new national parks along its western edge. Four of them will be brand new, while six will see currently designated conservation areas upgraded into fully protected national parks.

In **Australia** the different states declared 17 new national parks in 2021/22 with climate change issues at their heart

Chile created 5 new national parks in 2018 covering more than 10 million acres, bringing the total to 44 national parks.

France established its 11th national park in 2020 - The Parc National de Forêts in Burgundy, just 3 hours from Paris.

Belgium is to establish two new national parks in 2023 in the Walloon district as part of their post Covid national recovery and resilience plan.

In 2022 the Scottish Government committed to declaring at least one more National Park to add to the existing two established under the 2000 National Parks (Scotland) Act. The Scottish Campaign for National Parks together with the Association for the Protection of Rural Scotland and others have argued for a number of years that Scotland should have more National Parks and they hope that not just one but a series of new parks are established over a number of years (see Unfinished Business, 2013). This inevitably raises the question of how these parks should be funded and so this paper is offered as a reference point for those considering the future economics of National Parks in Scotland.

Scotland's existing two National Parks cost the Scottish Government £17.5 million per annum in core funding in 2021/22 and they also attract a further XX through other means including planning application fees, car park charges, rental income on property and grants for specific projects.

It is clear that the future funding of National Parks in Scotland will be a consideration influencing the speed with which more parks can be established and their effectiveness once in place. National Parks cannot operate effectively without adequate staff numbers and budgets for specific activities and for projects. Relying solely on central government funding is probably not the best way forward so this paper explores how national parks are funded in a number of other countries to provide some examples that could influence thinking for Scotland.

It should be noted that National Parks usually result in an overall financial benefit to their areas and the socio-economic benefits of National Parks in Scotland are summarised in an earlier SCNP/APRS paper (Barrow, 2015) and the specific socio-economic case for a new National Park for Galloway is explored in another SCNP/APRS paper (Barrow, 2019). Increased economic activity and increased visitation bring with them higher local spending and higher tax take so whilst they cost money to manage they bring more financial benefits than they cost.

Although writing about urban parks, Peter Neal in 2013 stated the following, which can also be applied to national parks.
"The single biggest issue facing parks across the UK this decade is the need to diversify and expand sources of income and resources needed for their management and maintenance. Without this, there is the real risk that diminishing year–on–year operational budgets will have a lasting impact on the fabric of many parks. This puts at significant risk substantial investment that has been given to many parks in recent years and may well put into question the viability of many neighbourhood parks in the future. Many parks and park services have already risen to meet these challenges – generating income through fundraising; concessions and events, creating ambitious public private partnerships; exploring cooperatives that put local communities at the helm and bringing new technologies in to reduce running costs. The good practice from around the UK and abroad can be replicated, adapted, scaled up and adopted. But it also provides inspiration for the next generation of parks innovators."
Rethinking Parks. Exploring New Business Models for Parks in the 21st Century. Peter Neal 2013

To achieve their objectives national parks require adequate budgets for staffing and management. This has led a number of governments and institutions to explore ways to generate income from a variety of sources, as well as requiring sustained support from their central governments.

Creating more national parks is clearly an international trend, but getting them the budgets they require to be successful and effective is a big challenge.

Scotland also aspires to create more national parks in the future but how will they be funded?

Most of the world's national parks are state owned where charges can be made and income generated directly by the park authority which owns and manages its natural resources. In the UK this is not the case and our form of national park with the majority of the land in private ownership and being managed for agriculture or field sports means funding options are more restricted.

FUNDING METHODS

The International Union for the Protection of Nature (IUCN) published a report - *Sustainable Financing of Protected Areas - a global review of challenges and options* (2006), whilst in the UK the Heritage Lottery Fund and Nesta published a report on the funding of urban parks (Neal 2013). Both reports have lessons which could be applied to national parks. Peter Neal's report was entitled: *Rethinking Parks. Exploring new business models for parks in the 21st Century.*

Using these two reports and other on-line sources it is possible to identify a number of broad ways that national parks can theoretically be funded. In reality a combination of some of these methods is possible but a core of central government funding is clearly critical to support a designation with national and international objectives. Augmenting this with other funds will become increasingly important as Scotland expands is national park network.

In broad terms funding for national parks core and project funding can come from one or more of the following:

1. Direct funding from central government taxation which could be linked to a single stream or be multi-agency (environment, health, economy)
2. Hypothecated taxes from central and/or local government
3. Endowment funds established for long term financial support, utilising legacies where possible
4. Entry charges to the whole or part of the park
5. A tourism tax – raising finance through accommodation providers and retail sales. Sometimes referred to as "visitor payback".
6. Charges for the park authority directly providing services. The most common being car park charges, camping sites and accommodation.
7. Planning charges and the compensation payments for granting planning permission for developments
8. Membership schemes with benefits
9. Sponsorships
10. Voluntary contributions of both time and money
11. Sale of produce owned by the park authority e.g. timber, fish
12. Payments for the provision of ecosystem services such as the management of bogs, clean water or protecting forests

1. CENTRAL GOVERNMENT DIRECT SUPPORT

Almost all national parks are supported by having an annual allocation of funding from their central governments. This is often felt not to be sufficient to match the objectives and aspirations of the park and there is a constant tension between many national park authorities and their central governments about the level of funding required. In times of financial constraint it is not uncommon for national park services to experience cuts, which result in staff redundancies and the shelving of important park programmes.

The **United States** has one of the best supported national park services in the world and is a country which has a GDP well above the international average. The National Park Service develops a budget each February for the next fiscal year, which starts on 1st October. The budget, published in what they call the *Green Book*, defines the goals and objectives and the funding necessary to accomplish them. The National Park Service budget is rolled up into the budget for the Department of the Interior and then with the rest of the Executive Branch and submitted to Congress for its review and approval. A lengthy 500-page report accompanies the budget request each year entitled the “budget justification”.

The budget proposal for 2023 is $3.6 billion – an increase of $492 million. The government states….

> *“The National Park Service maintains and preserves 423 national parks, 23 national scenic and national historic trails, and 64 wild and scenic rivers. These places of natural and historic significance provided inspiration and recreation for almost 300 million visitors last year and are economic engines for nearby communities where $14.5 billion in sales supported 234,000 jobs, generating $9.7 billion in labor income, $16.7 billion in economic value added, and $28.6 billion in total economic output.”*

The total budget represents an average of about £6 million per protected area, but it is argued that this generates much more in economic value to the US economy whilst protecting invaluable natural assets.

According to the US National Parks Conservation Association this approach has not delivered the total funding required and in a recent statement they claim…

> *“Due to years of congressional under-funding, the National Park Service lacks the resources to adequately staff its parks and programs, address nearly $12 billion in repair needs, provide routine maintenance and protect the treasures of the park system. Inadequate funding in recent years has led to crumbling facilities and too few rangers and other staff to serve visitors and protect cultural and natural resources. Parks have seen a 14% increase in visitation over the last five years, yet the park system has seen a 14% percent reduction in staff during*

> *the same time period. The National Park Service needs more resources, not less, to effectively manage its growing backlog and serve the needs of its unique and iconic resources, as well as the millions of visitors who travel the world to visit these natural and historic wonders."*

In contrast **Chile** illustrates the funding issues of many of the world's national parks in less well-off nations

In 2022, Chile budgeted just $25.8 million ($0.64 per hectare) for protected areas. This stands in stark contrast to the sums that neighbouring countries have dedicated to this purpose that year. Argentina, for example, allocated nearly four times as much ($2.55 per hectare), while Peru budgeted nearly 10 times as much ($6.11 per hectare).

Even in terms of the percentage of its budget allocated to protected areas, Chile's contributions are considerably lower than those of its neighbours. Argentina dedicates 0.006% of its budget to protected areas, while Chile allocates only half as much—and 10 times less than Peru.

The under-funding of national parks is common throughout the world which undermines their contribution to both tourism and to the environment.

2. HYPOTHECATED TAXES

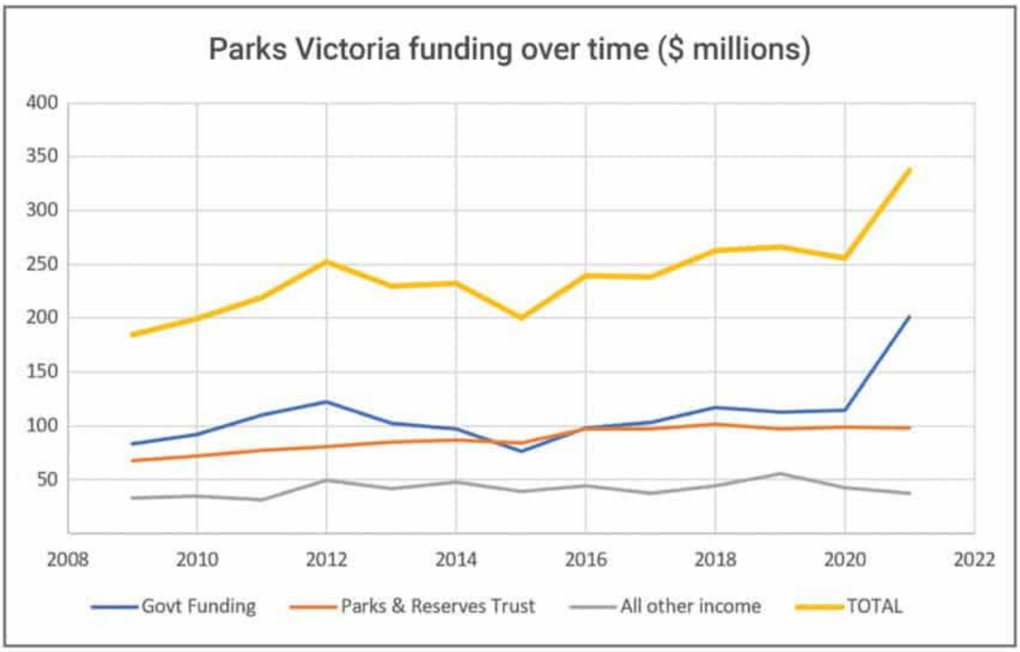
Taxes which are gathered for a specific use are termed “hypothecated”. The proposed UK health and social care levy which was due to come in to effect in April 2023 is such a tax and would have been the first in the UK. The tax, which was initially to be raised from a 1.25% increase in National Insurance contributions and was expected to raise £12bn a year. The proposed tax was withdrawn under the short-lived Truss administration.

An example of a tax that could be hypothecated is a tax on road vehicles which could be allocated directly to road maintenance, but the UK government has not done this and has been generally wary of hypothecating taxes. Could such an approach help fund national parks?

Australia has a very large number of national parks, although only six are managed by Parks Australia (federal government). The vast majority of the total of 650 national parks are owned, managed and largely funded by the different states. **The State of Victoria,** for example, has a population of 6.6 million with its capital city of Melbourne having over 4 million residents. Victoria has a land area of 227,500 sq kms (about 3 times the size of Scotland). The state has some 45 national parks covering 18% of the state.

Parks Victoria’s total funding in 2020-2021 was A$337 million, significantly up from A$256 million in 2019-2020 (up $81 million), a 32 per cent increase overall. This was largely from government grants, which according to the Parks Victoria Annual Report were:

“…$35.4 million higher than budgeted. This additional income primarily relates to funding received in 2020–21 to deliver programs over the next few years to assist Victoria to recover and revitalise its tourism economy from the combined effects of bushfires and the COVID pandemic.”



As can be seen from the above graph Government (State) funding accounts for about 50% - 60% of the total budget of Victoria's parks. Significant contributions also come from the Melbourne Parks and Reserves Trust and from other sources.

The Parks and Reserves Trust is funded by a parks charge included since 1958 on the water, sewerage and drainage bills of residential and commercial properties in the Melbourne Metropolitan Region. The Department of Environment, Land, Water and Planning (DELWP) distributes it to Parks Victoria and other entities such as Melbourne's zoos, the Royal Botanic Gardens and the Shrine of Remembrance for the management and maintenance of metropolitan parks, gardens, trails and waterways.

This hypothecated tax funding is tied largely to the management of parks in and around metropolitan Melbourne. Whilst it is a significant amount, roughly 30 per cent of Parks Victoria's total funding, it can only be spent on a small proportion of the park estate (less than 1 per cent of land area). An issue is also that the levy is only collected on some Melbourne residents, those within the old Melbourne Metropolitan Board of Works (MMBW) boundaries, which has been abolished for 30 years, and the city has now well outgrown.

It has been suggested over the years that this hypothecated tax could be applied to the whole state of Victoria and be used for all of the parks.

3. ENDOWMENT FUNDS AND LEGACIES

Endowments and Legacies exist to support a number of National Parks throughout the world. An example is the **Golden Gate National Park in the USA.** Three endowments for that park are:

The James R. Harvey Presidio Restoration Fund. The endowment fund was created in honour of the late Jim Harvey, a community leader, former trustee of the Parks Conservancy, and champion of America's national parks.. The fund exceeds $3.3 million and supports preservation of the Presidio's (a specific part of the park) natural beauty, forest, and open space.

The Bernard Osher Endowment for Environmental Education at Crissy Field. The Bernard Osher Foundation established this endowment fund, now in excess of $2.7 million, to create a permanent base of support for the Crissy Field Centre and provide funding for a number of program areas: Community Connections, Learning Environments, Stewardship & Community Service, and Young Leaders.

The Anne Kincaid Endowment Fund. Initially created by the Wallace and Andrea DeSha Family to honour their friend Anne Kincaid, this endowment fund of over $135,000 helps protect wildlife habitat, restore trails, conserve natural resources, and support the native plant nurseries.

In **Uganda** a significant endowment fund has been established by the Mgahinga and Bwindi Impenetrable Forest Conservation Trust (MBIFCT). The overall aim of the MBIFCT is, in co-operation with other like-minded organisations, to promote the conservation and protection of the biodiversity in the two National Parks. The two national parks are home to the largest population of mountain gorillas in the world - estimated at about 300 in Bwindi alone. The habitat was being threatened by human activities and therefore endangering the gorilla population.

MBIFCT has been funded by the Global Environment Facility through the World Bank. The GEF grant of $US 4million to MBIFCT was in the form of an endowment fund, placed with a finance company in London. The income derived from this endowment provides grants for community, research and park management projects in perpetuity.

In the UK a new initiative was launched in 2019 to establish a single endowment fund for all 15 of the National Parks. The UK National Parks Foundation priorities are to support:

- Work that improves protects or enhances the National Parks.
- Programmes that connect people and communities with the Parks.
- Activities that promote the enjoyment and understanding of the National Parks.

It has had a slow start and under £10,000 was raised by 2022 but there are signs that this will grow. The Estée Lauder Companies UK & Ireland (ELC) for example has pledged £500,000 over 5 years – the first major donation to the initiative.

4. ENTRANCE CHARGES

Many national parks generate significant income from entrance charges. In some cases this is the main income source for the park. These are generally national parks in government ownership and with little or no resident population or private land. In Scotland our national parks are not able to take this approach, although it would theoretically be possible to charge for entry to a specific part of a national park if this were under the direct management of a national park authority.

Van Zyl, Kinghorn and Emerton (2019) have carried out a global benchmarking study of entrance charges at national parks. Their research was focused on the affordability of charges in different countries but it has assembled together a good summary of charging levels internationally. This shows that in many developing countries the entrance charges are aimed at maximising the income that can be generated from international tourists whilst being unaffordable to many of their resident populations. The global average adult entrance charge was $11.21 with Tanzania's $43.72 being the highest and Armenia's $1.04 being the cheapest.

Walpole et al. (2001) reviewed the available studies and found that it was only in a few exceptional circumstances that protected area systems were able to generate sufficient of their own revenue to cover management costs entirely. Reviews such as that of Bovarnick et al. (2010) demonstrate that self-generated revenue usually forms a relatively small part of overall funding for protected area systems. Furthermore, it is a commonly held view that a vision of 'full' financial self-sufficiency is not only unachievable, but is broadly accepted as being also unsuited to protected areas that are essentially public goods being managed in the broader social, economic and conservation interest. There is, however, a general consensus that protected area revenue needs to be increased, diversified and expanded in order to generate the funding that is required for effective biodiversity conservation.

In 2010 some £200 million was generated by entrance charges to **the US National Parks,** making a significant but not overwhelming contribution to the running costs.

In most Latin American countries, more than half of the budget for protected area management comes from the government, with the rest coming from entrance fees and spending on tourist activities. But in **Chile**, 61.2% of the budget allocated to protected areas from 2020 to 2022 came from entrance fees. Although entrance fees are the primary source of protected areas' revenue, they aren't enough to fully cover funding needs.

Entrance charging is very difficult to apply in the UK National Parks due to the large resident population living in the parks and the many public roads that pass through them. Income generation in the UK National Parks has largely been restricted to car park charges and visitor centre income.

5. TOURISM TAXES

The idea of raising taxes from visitors to different areas has been applied for a number of years throughout the world both in rural and urban situations. Whilst it is often opposed by the tourist industry it has been shown to be an effective way of raising income for the management of visitors and for the provision of visitor infrastructure.

The Scottish Government’s consultation on the Principles of a Local Discretionary Transient Visitor Levy or Tourist Tax ran from 9 September to 2 December 2019. The consultation paper is available from the Scottish Government’s website at: https://consult.gov.scot/local-government-and-communities/visitor-levy/. This considered the principles of tourism taxes in Scotland but made no specific reference to national parks.

Some international examples from National Parks with a tourism levy are:

A. The Malaysian Government introduced a tourism tax legislation for Sarawak national parks in 2017 and that came in to effect in 2019. A tax of 10 RM per room per night was imposed on all tourism accommodation in the national parks and this was in addition to any entrance charges.

B. The Balearic Islands, Ibiza and Majorca, are situated just east of mainland Spain’s Mediterranean coast. Known for their azure waters, best-in-show nightlife and stunning cliffside villages, these Balearic Islands are one of the most visited summer destinations, drawing in hordes of European travellers each year. They have a number of national parks and protected areas. To increase the islands’ focus toward preserving biodiversity and cultural heritage, the Committee for Sustainable Tourism was created to select and fund projects using the profit generated by the tourist tax in 2016. The taxes today are of 1-4 euro (approx. £80p to £3.50) per day depending on the type of accommodation and duration of stay.

C. The Kamikochi National Park in Japan has an accommodation tax.

D. Sri Lanka has had a tourism levy since 2003. A levy of one percent on the annual turnover of most tourism businesses (the Tourism Development Levy) has been applied to all accommodation, travel agents and shops. But it is applied to the development and marketing of the tourist industry rather than the management of the natural resources.

In April 2023 Manchester Accommodation Business Improvement District introduced a £1 a night tourism tax for visitors staying in hotels or short term lets in the city centre, which is projected to raise around £3 million per year. This makes it the first city in the UK to implement an explicit 'tax' on overnight stays. Such an approach could in theory be applied to a national park area in Scotland.

6. PARK AUTHORITY PROVIDING TOURISM SERVICES

Where national parks are state owned/managed it is possible for tourism services such as accommodation provision and guiding services to be provided directly by the park authority and appropriate charges to be made. South Africa is such an example.

South Africa has 21 national parks covering about 3% of its area. Most of the park lands are in government ownership but there is some private land within national park boundaries. Kruger National Park is the most famous and has an exceptional diversity of game. It is home to more different species of wildlife than any other natural sanctuary in Africa.

The parks are managed by SANParks, a central government agency. The National Environmental Management Protected Areas Act mandates SANParks to create destinations for nature-based tourism in a manner that is not harmful to the environment. As SANParks is primarily a self-funding entity generating approximately 80% of its operating budget from its ecotourism business; fulfilment of its conservation mandate is heavily reliant on a thriving and sustainable tourism operations. The recent Covid19 pandemic has had a serious impact on this financial model, but it is hoped that visitor numbers will return to pre-pandemic levels in future.

The most recent SANParks annual report shows that about $165 million of its $230 million total annual income (£150 million)—about 72 percent—was attributable to tourism, including entrance fees, accommodation profits, and concession fees.

Income **19/20 year**	**Rand '000**	
Tourism, retail, concessions and other	2,271,303	(71.7%)
Sales - fauna and flora	16,942	(0.5%)
Other operating income	46,862	(1.5%)
Interest income	72,974	(2.3%)
Government grants	713,208	(22.5%)
Donations	46,813	(1.5%)
Total Revenue	**3,168,102**	

New Zealand has 13 National Parks covering 11% of its land area. The country has a population of 5.1 million, similar to that of Scotland, with 1.7 million in the capital Auckland in the north and 380,000 in Christchurch, the capital of South Island. The national parks are particularly large and numerous in the spectacular South Island.

Despite generating significant income from charges for services and other commercial activities this only accounted for 11% of the total parks budget in 2019/20 as the figures below illustrate.

Income Year 19/20	$000
Government	**459,314 (89%)**
Other Revenue:	
Recreational and tourism charges	17,822
Donations and sponsorships	21,969
Administration cost recoveries	7,744
Leases and rents	779
Retail sales	3,048
Permissions cost recoveries	6,844
Resource sales	146
Total other revenue	**58,352 (11%)**

Victoria Parks in Australia illustrates how a range of services provided directly by a park authority can generate significant income. In 2020/21 some AU$37 million was generated from sources other than state government grant.

	AU$m
Accommodation / camping fees*	7,131
Funding sponsored by external parties	876
Rent, leases and licences **	5,060
External sales ***	2,744
Berthing / mooring fees	563
Cave tour fees	460
Fire suppression costs, recovered from DELWP ****	9,207
Fair value of assets received free of charge 55 Insurance claims	4,272
Fine and regulatory fees *****	1,976
Other miscellaneous income	4,842
Total other income	**37,186 m**

* **Accommodation / camping fees revenue** is generated from various parks across the state for both roofed accommodation and camping, the major one being Wilson Promontory National Park.
** **Rent, leases and licence revenue** represents income that arise from leasing of properties and licences issued to conduct various activities within the areas managed by Parks Victoria. Parks Victoria hold properties to meet service delivery objectives, rather than to earn rent or for capital appreciation.
*** **External sales** are mainly income generated from the commercial operations of stores located at various parks, and recognised as revenue at the point of sale.
**** **Fire suppression costs recovered** from DELWP is the income for the reimbursement of labour costs incurred relating to fire-fighting activities and recognised as revenue when invoiced or earned whichever occurs earlier.
***** **Fines and regulatory fees** are recognised when an invoice is issued, which establishes the entitlement to payment.

Reference: Parks Victoria - Annual Report 2020-21

7. PLANNING APPLICATION CHARGES

Where a national park is the controller of development within its' area it is possible for the charges generated through planning applications to theoretically be used for park management.

In a national park with significant development pressures, such as the Lake District in England, the park authority can get a significant income from its planning activities, but the costs of providing the planning service outweighs the income generated so no additional funding is made for park management or maintenance.

Under S106 of the Town and Country Planning Act 1990, as amended, contributions can be sought from developers towards the costs of providing community and social infrastructure, the need for which has arisen as a result of a new development. This funding is commonly known as 'Section 106'.

In the South Downs National Park for instance the acquisition of an old library to be used at a community facility and town council offices, improvements to paths and the purchase of new play equipment were among 35 projects in the awarded a total of over £255,000 through S106 contributions in 2018.

In Scotland these development-linked payments are unlikely to generate significant reliable income for a park authority as the park areas will generally have low populations without regularly recurring development pressures.

8. MEMBERSHIP SCHEMES

The National Trust and the National Trust for Scotland are supported by well-promoted membership schemes which generate a significant proportion of their income. This is possible because entrance charges can be applied to their properties and a member can obtain free access – a significant benefit.

National Park friends groups have members in the UK and through the activities of the friends some minor financial contributions can be made to the Park Authority budgets, but these are very limited. The Friends of Loch Lomond have made a number of useful contributions to projects in the Loch Lomond and the Trossachs National Park in recent years but these have been achieved primarily through being successful with grant applications and sponsorship rather than with money generated directly from memberships.

The US National Parks have an annual membership scheme which permits free entry for a year to all the parks and this is well established.

The Lake District National Park sells an annual parking permit for £450 to allow free parking in any of its car parks but this is not strictly a membership scheme and appeals only to very regular users of the park who possibly are local residents.

9. SPONSORSHIP

The National Park Foundation (NPF) in the USA relies on corporate partners to enhance and expand the efforts of the National Park Service (NPS) to preserve important history and landscapes, improve the visitor experience, pursue new programs, and engage younger generations. The Foundation has for over a hundred years been able to grow and thrive with the commitment and generosity of the business community in the USA. In 2021 it contributed some $89.4 million to the parks. It is recognised as the official non-profit partner of the US National Parks Service.

Corporate giving is far more established in the USA than possibly any other country and a similar level of support in Scotland is difficult to imagine. National Parks Partnerships (National Parks Foundation) is a relatively recent initiative to engage the corporate sector in the family of UK national parks. See their web site for details:
www.nationalparks.uk/national-parks-partnerships/

A scheme to sponsor a ranger was launched some years ago – see: *www.adopt-a-ranger.org/sponsorships.htm* where individuals or companies can donate various sums to support ranger services in national parks around the world. It is not clear how successful this programme is. This has stimulated a number of similar initiatives such as those of the David Shepherd Wildlife Foundation (UK based) and the Global Conservation Force (California based).
Attracting business sponsorship for individual projects such as new paths, interpretation boards or education services has been shown to be possible, but getting long-term core support for a national park service from the private sector is a different matter.

10. VOLUNTARY SUPPORT

Many national parks are only viable through the efforts of volunteers who give time and money to support the management of the park.

In the **USA Cooperating Associations** are vital for the provision of services in many of the national parks. Cooperating Associations developed early in National Park Service history in response to visitor needs for inexpensive guide leaflets, pictures, maps and other interpretive literature not otherwise available through the use of Federal funds. Interested persons in nearby communities and educational institutions joined with park naturalists and historians to form library, museum, and historical societies to produce and provide such information to the public. In some instances, long-established organisations became NPS cooperating associations to further their interests in park preservation. The first such organisation was the Yosemite Museum Association, founded in 1920 to develop a museum and visitor contact station in Yosemite Valley. In 1931, cooperating associations were established in Zion and Rocky Mountain National Parks, and in 1933 in Yellowstone. By 1943, when Southwest Parks & Monuments Association was organized, there were more than a dozen such groups publishing and selling interpretive literature in visitor centres. In 1948 Eastern National Park & Monument Association was established, providing a supportive umbrella for a number of small parks and historic sites along the eastern coast.

Today, there are 56 associations providing services at 230 areas of the National Park System. Each cooperating association is a legal entity incorporated within the state in which it operates, and enjoys a non-profit and tax-exempt status under Internal Revenue Service codes. This means that it is governed by state corporate laws and regulations and by certain IRS rulings. Cooperating associations are non-Federal organisations. They conduct their business in the parks, however, under authorization by the Federal government. Each organisation is managed by a board of directors composed of community leaders who give generously of their time, and by a membership of interested persons sometimes from some distance away.

In recognising the need for advancing "educational and scientific" activities in the parks, the Congress authorised the Secretary of the Interior to permit "cooperation with . . . non-profit scientific and historical societies engaged in educational work in the various parks and monuments ... " In so doing the National Park Service has established guidelines to insure a standard of quality for association management and activities. In short, the primary function of cooperating associations is to support the interpretive and related visitor-service activities of the National Park Service. It is done with the sanction of the Federal government and the support of the National Park Service. Cooperating associations operate small bookshops and sales counters in park visitor facilities for the purpose of making available literature and other items that assist the visiting public to better understand the parks and their related values. Monies from these sales are used to sponsor numerous activities that support interpretation activities and facilities.

The fundamental lesson from the States is that their “Friends Groups” or Cooperating Associations have a directly supportive role to their national parks. It is not uncommon for a retired senior member of park staff to take up the role of Chairman of the Association. The relationship between the Friends Groups of the UK National parks is less direct and sometimes our friends groups are directly critical of the park authority.

It may be possible in the Scottish National Parks to devolve some services – particularly those of interpretation and education to a well organised and funded friends group, thus making a significant financial contribution to the park operations through the fundraising activities of the group.

11. DIRECT SALE OF NATURAL PRODUCTS

Where a national park manages significant natural resources such as forests, rivers and game it is theoretically possible for it to gain income from the sale of these resources on the general market.

The UK national parks contain significant areas of commercial forest (some managed by the Forestry Commission), water resources in the form of natural river catchments and reservoirs, fish stocks in unpolluted rivers of value for fishing, game birds and mammals (red deer in particular in Scotland). Where these resources are in public ownership it could in theory be possible to gain an income from the management of these resources for a national park authority.

There are examples internationally of commercial operations or concessions to private companies being developed by national park authorities but this is when the land is government owned. It is difficult to see how national parks in Scotland could obtain an income from these sources.

12. FUNDING ECOSYSTEM SERVICES

Payments for environmental services (also known as payments for ecosystem services or PES), are normally payments to farmers or landowners who have agreed to take certain actions to manage their land to provide an ecological service. As the payments provide incentives to land owners and managers, PES is a market-based mechanism, similar to subsidies and taxes, to encourage the conservation of natural resources.

In theory this approach could be applied to national parks with payments being made to the park authority for protecting the environment, but in Scotland the majority of the land in our national parks is in private ownership and therefore the payments would more logically be made to the landowner rather than to the national park authority. Grants to landowners to carry out ecologically sound management are an example of payments for ecosystem services which presently apply.

Costa Rica's PES program, *Pagos por servicios ambientales* (PSA) was established in 1997, and was the first PES program to be implemented on a national scale. It developed from Forestry Law 7575 of 1996 which prioritised environmental services over other forest activities such as timber production, and which established the national fund for forest financing (*Fondo Nacional de Financiamento Forestal),* FONAFIFO.

One of the main reasons for establishing the PSA program was to reframe conservation subsidies as payments for services:

- mitigation of greenhouse gas emissions
- hydrological services,
- biodiversity protection, and
- provision of scenic beauty.

During the early years of the PSA program from 2001 to 2006, it was funded by a World Bank loan and a grant from the Global Environment Facility (GEF) under the project name "Ecomarkets." From 2007 to 2014, the World Bank renewed its support for the program through a new project called "Mainstreaming Market-Based Instruments for Environmental Management." This support also generated FONAFIFO's Sustainable Biodiversity Fund (FBS), designed to target PES programs at owners of small pieces of land, indigenous communities, and communities with low development rates.

Financing of PSA activities was initially accomplished in part through a fuel tax established by Forestry Law 7575. The tax was used to flexibly target ecologically important areas. In 2006 a water tariff was introduced to provide additional funding. The water tariff has a relatively narrow application when compared to a fuel tax. Under the water tariff, holders of water concessions pay fees, a portion of which is transferred for use in the PSA exclusively within the watershed in which the revenues were generated. This removes the potential for revenues to be distributed as needed and has been criticised for concentrating funding in select areas, despite their relatively low ecological importance.

FONAFIFO acts as a semi-autonomous intermediary organisation between service buyers and service sellers. As of 2004, FONAFIFO had contracted 11 different companies in agri-business, hydropower, municipal water supply, and tourism to pay for the water services they receive. Since then, FONAFIFO has reached agreements with several more companies.

By the end of 2005, 95% of land enrolled in Costa Rica's PSA was under forest conservation contracts, covering 10% of the country. It is estimated that forest cover area increased from 2.1 million hectares in 1986 to 2.45 million hectares (48% of the country's total land area) in 2005. It is also estimated that the PSA prevented 11 million tons of carbon emissions between 1999 and 2005. Despite these successes, the PSA has been criticised for critical shortcomings. As it stands, the PSA payment system employs a flat rate cash payment to all participating landowners. This has resulted in large swaths of ecologically high value areas being left un-enrolled in the program due to associated higher opportunity costs for land-use change not being adequately compensated for by the flat rate payment scheme.

DEFRA in England published a report in 2013 entitled Payments for Ecosystem Services- A best practice guide. This lists a number of case studies in both the UK and internationally but it is not clear whether any schemes have been established in any sustainable way.

NatureScot has described what natural capital is and how it could in theory be applied to its land (National Nature Reserves) but again it is not clear that any finance has been generated from this theoretical assessment. See Ecosystem Services- Nature’s Benefits of the NatureScot web site.