



Scotland's
National Nature
Reserves

The Story of Glasdrum Wood National Nature Reserve

(2nd Edition)



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Scottish Natural Heritage
Dualchas Nàdair na h-Alba

All of nature for all of Scotland
Nàdar air fad airson Alba air fad



The Story of Glasdrum Wood National Nature Reserve

Foreword

Glasdrum Wood National Nature Reserve clings to the lower slopes of Beinn Churalain, a mountain rising up from Loch Creran, 27 kilometres (km) north of Oban on the west coast of Scotland. The wood is a remnant of the ancient woodland that once clothed many of the Argyll hillsides, with native oak and ash and some birch and alder. The lichen and bryophyte flora in the wood is exceptionally rich, thriving in the mild, humid climate of the west coast. The Reserve is one of Scotland's best sites for butterflies, particularly noted for the population of chequered skipper and pearl bordered fritillary living in the open clearings of the wood.

Glasdrum is one of more than forty-five National Nature Reserves (NNRs) in Scotland. Scotland's NNRS are special places for nature, where some of the best examples of Scotland's wildlife are managed. Every NNR is carefully managed for both nature and people, giving visitors the opportunity to experience and enjoy our rich natural heritage. Glasdrum is a wood for specialists and amateurs alike testing out their butterfly and lichen identification skills.

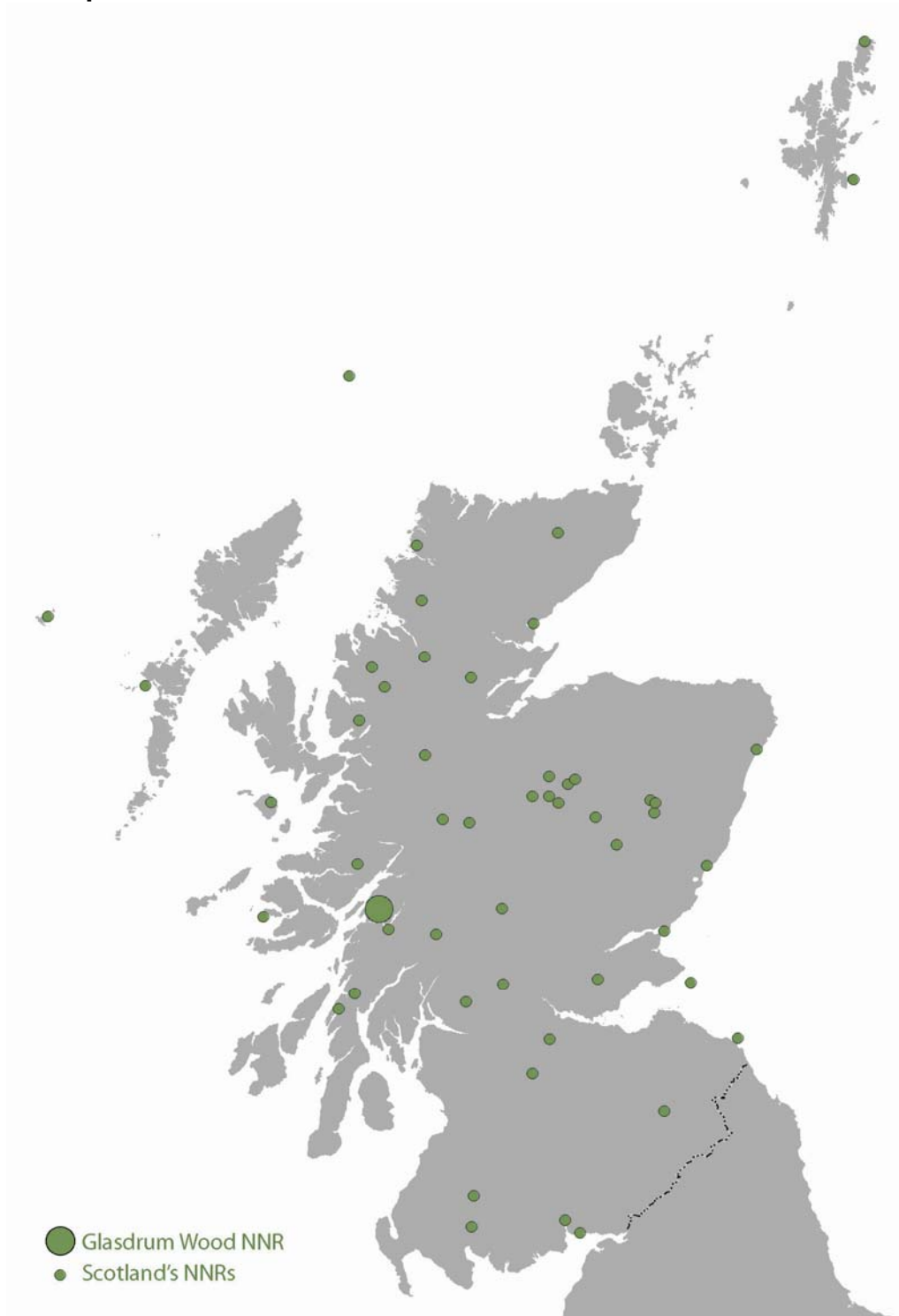
This Reserve Story contains background information about the Reserve, describing its wildlife interest, land use history and management since it became a Reserve. Future management of the Reserve is outlined in the Glasdrum Wood NNR Management Plan 2013-2023.

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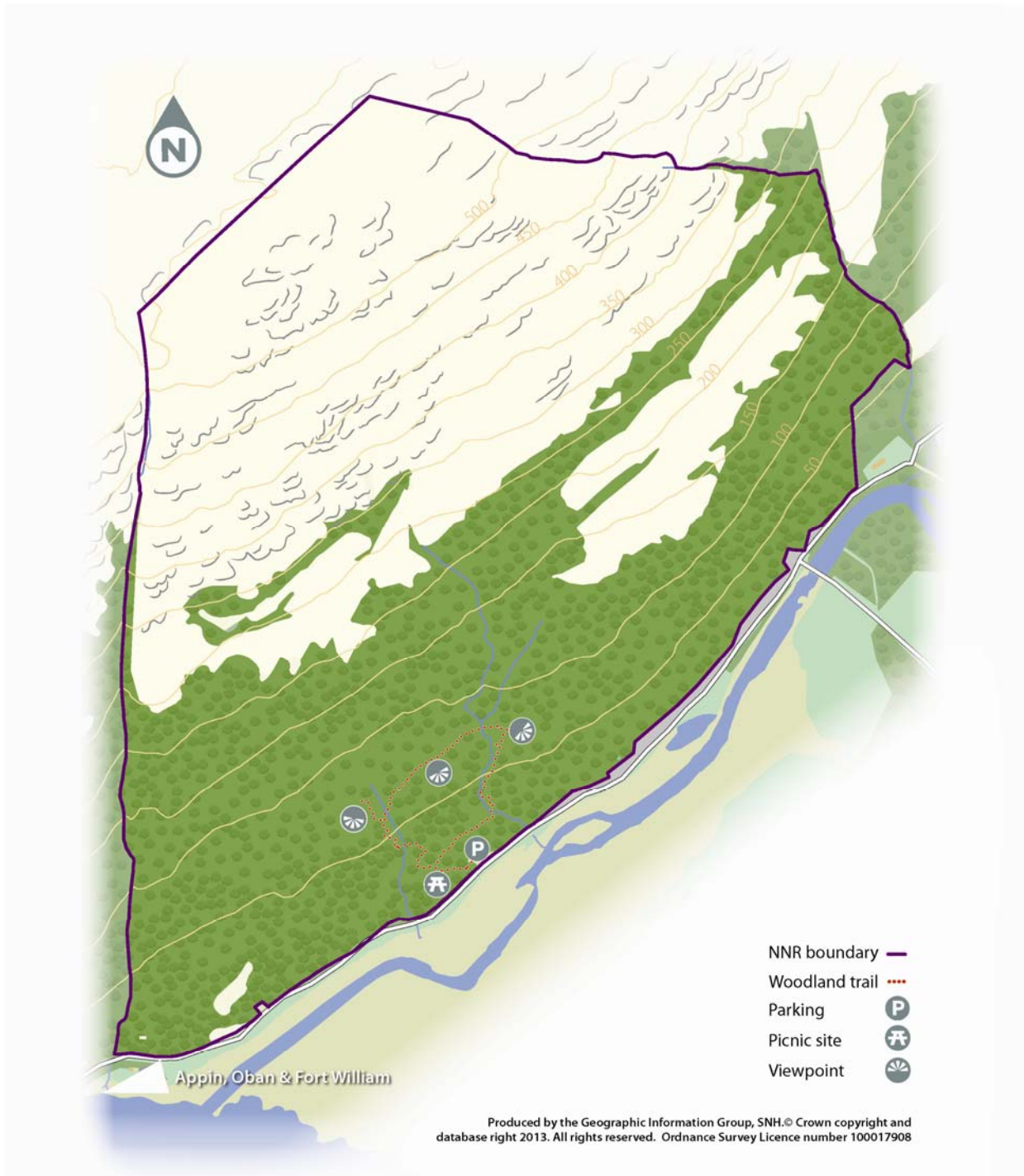
Maps of Glasdrum Wood NNR

Location map



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Reserve map

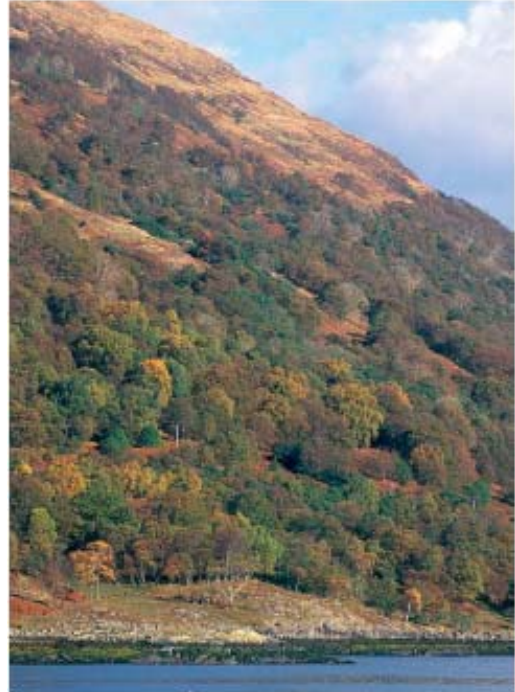


1 Introduction

Glasdrum Wood NNR is on the west coast of Scotland, some 27 km north of Oban in Argyll. The woodland occupies the southeast facing, lower slopes of Beinn Churalain, where it stretches 2km along the north shore of Loch Creran, covering an area of 169 hectares (ha).

The Reserve starts just above the road alongside the shore of the sea loch and rises up to 500 metres (m) on the slopes of Beinn Churalain. The northeast and southwest boundaries of the Reserve are defined by burns flowing down to Loch Creran through gorges rich in ferns and mosses.

The rock types on the Reserve are mainly black slates and phyllites – grey green rocks often intensely folded and crumpled with minerals of mica and quartz. The lower slopes have outcrops of calcareous rocks; limestone extends into the Reserve at St Mary's and higher up the slope intrusions of igneous rocks occur. The underlying mosaic of rock types determines the diverse vegetation on the Reserve.



Glasdrum Wood overlooking Loch Creran

The Gulf Stream is responsible for Glasdrum's mild, moist and relatively warm oceanic climate. Southwesterly winds bring rain to Glen Creran during most seasons, generally heaviest in late summer, autumn and winter months. Easterly winds often bring drier spells in the early spring. Frosts are not usually severe and snow rarely lies for more than a few days below 350m. Storms out of the southwest frequently sweep across the face of the hill as the wind is funneled into Glen Creran. The average annual rainfall between 1972 and 1985 was 1550 millimeters (mm).

The comparatively mild climate and moist conditions inside the wood provide ideal conditions for the great variety of lichens, mosses, liverworts and ferns. The shelter provided by the trees produces 'suntrap' conditions in the glades, which become very warm on the steep southeast facing slopes. This favours a variety of insects, with butterflies being the most conspicuous.

The Reserve lies just off the busy Oban-Fort William road (the A828). It became a much quieter place in 2000 when the trunk road was re-routed over Creagan Bridge bypassing the NNR. The Reserve is open all year round. There is a car park at the entrance towards the northeast end of Loch Creran, where there is an all abilities picnic area with views across the Loch to the south. A 1km circular route climbs up through the woodland. Benches are provided at intervals around the trail for stops to admire the view and enjoy the Reserve.

Scottish Natural Heritage owns Glasdrum Wood NNR. SNH's predecessor, the Nature Conservancy Council (NCC), recognised the value of the ash/hazel woodland, and leased a 17ha strip alongside the road from the Forestry Commission (FC) in 1962. This was

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declared a National Nature Reserve in 1967. Further survey subsequently revealed the richness of the woodland, and in 1976 NCC purchased both the leased area and adjoining land (152ha). The extension was declared a National Nature Reserve in 1977.

The natural heritage interests of Glasdrum Wood are of UK and European importance. The larger Glen Crenan Woods are designated a Special Area of Conservation (SAC) and are of European importance for the mixed and western acidic oakwood as well as its population of otter. The recognition of Glasdrum as a European site of international importance means that it is part of a Europe wide network of areas referred to as 'Natura' sites which reinforces the message that it can be considered one of the best sites in Europe.

At a national level, the Reserve forms part of the Glen Crenan Wood Site of Special Scientific Interest (SSSI). In addition to the oak woodland the Reserve is nationally important for its lichen and bryophyte assemblages and it's populations of chequered skipper and pearl-bordered fritillary butterflies.

Table 1: Protected areas and features of Glasdrum Woods NNR

Protected Area	Glen Crenan Wood SAC	Glen Crenan Wood SSSI
	European	UK
Habitat		
Tilio-Acerion (lime-sycamore*) forests of slopes, screes and ravines**	✓	
Western acidic oak woodland	✓	✓
Species		
Otter	✓	
Bryophyte assemblage		✓
Lichen assemblage		✓
Chequered skipper		✓
Pearl-bordered fritillary		✓

* Lime is replaced by wych elm in northern European sites.

** This is a priority habitat under the Habitats Directive.

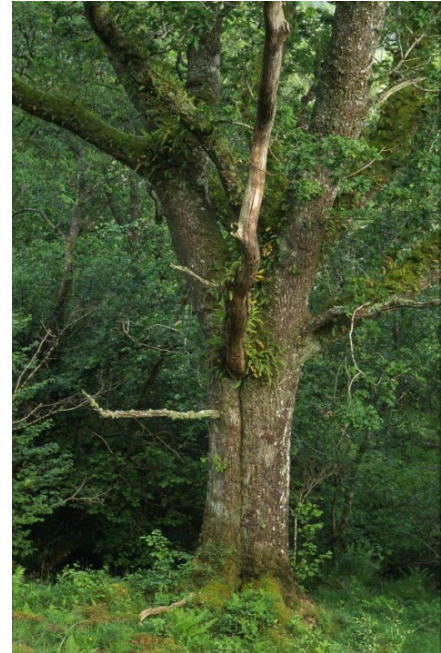
2 The Natural Heritage of Glasdrum Wood NNR

Glasdrum means “grey ridge” in the local dialect of Gaelic, and the inspiration for this could have come from the grey of the ash trees which thrive in the heart of the wood. Glasdrum Wood is one of the richer areas of native deciduous woodland in Scotland in terms of abundance and diversity of flora and fauna. Below 300m the Reserve is predominantly woodland, whereas from 300m to the upper boundary of the Reserve, at 500m, there is mire and heath.

The Woodland

Old sessile oakwoods are very fragmented in Britain, although they are widespread and locally extensive, particularly in western Scotland and west Wales. Some of these woods, like Glasdrum, have rich Atlantic bryophyte communities with numerous rare species. In Europe woods of this type are virtually confined to the UK and Ireland, so the UK has a special responsibility for conserving this habitat type.

In the north and west of Britain *Tilio-Acerion* ravine woods are often dominated by ash and wych elm. Glasdrum is a typical example of this type of woodland, which is usually found as a series of scattered patches grading into other types of woodland or as narrow strips alongside streams. They tend to occur on calcareous soils associated with steep rocky slopes and ravines, where inaccessibility has reduced human impact. The centre of distribution for this type of woodland is in continental Europe, but it is widespread from Scandinavia through to the Pyrenees and into Italy. It is not an extensive type of woodland in the UK, although fragmentary stands are widespread.



Mature oak

At Glasdrum the woodland shows an interesting gradation from sea level up to 300m. On the lower slopes, the calcareous soils support ash/wych elm/hazel woodland with species-rich tall-herb communities. The middle slopes have more acidic soils supporting oak woodland with holly, grading into open birch woodland on the upper slopes. Alder grows in the wet flushed areas. Some of the woodland still retains a structure created by earlier wood-pasture management with mature trees, particularly ash, scattered within glades. These ash trees support a rich lichen (*Lobarian*) community. The open glades and clearings are ideal for butterflies, offering both sheltered conditions and essential food plants. In contrast, the shade in the denser parts of the wood, combined with the calcareous nature of the soil and the existence of numerous springs, rills and fast flowing streams, provide ideal conditions for the exceptionally rich assemblages of oceanic bryophytes and ferns.

Mosses and lichens

Glen Creran Woods is outstanding, on a national and international scale, for its exceptionally rich oceanic lichen assemblage which includes 4 globally vulnerable species,

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19 globally near-threatened species, 10 nationally rare species and 66 nationally scarce species.



Norwegian specklebelly

Lichens are very sensitive to pollution. A study of the effects of acidification on lichens by the Natural History Museum between 1986-90 indicated that Glasdrum Wood was one of only 5 of the 23 sites studied throughout western Britain, which showed a healthy community of *Lobarian* lichens. Norwegian specklebelly (*Pseudocyphellaria norvegica*), is a nationally scarce leafy lobed lichen that only grows on tree trunks and rocks in humid, sheltered oceanic areas. It has a

localised distribution in Scotland and is known from only one site in Wales and none in England. It needs clean air and high humidity to thrive. It is a priority UK Biodiversity Action Plan (BAP) species.

The combination of oceanic climate and humid woodland environment provide ideal conditions for mosses and liverworts. Averis (2006) found a total of 219 species in Glen Creran Woods, including 10 nationally scarce species and 35 western oceanic species.

The woodland flora has a rich variety of herbs, particularly on the lime-rich soils. Over a hundred species of woodland vascular (higher) plants have been recorded.

Butterflies and moths

The Reserve has an outstanding assemblage of invertebrates with a comprehensive range of butterflies, moths, beetles, flies, bees and wasps, bugs and spiders, many of which are nationally scarce. The Reserve is one of Scotland's best butterfly sites, with 21 of the 34 species recorded in Scotland. It has one of the largest chequered skipper populations in Britain. Now extinct in England, the chequered skipper has a very restricted distribution in north Argyll and Lochaber centered on Fort William. It is a nationally scarce species and accorded priority status in the UK BAP.



Chequered skipper

Another nationally scarce butterfly is the pearl-bordered fritillary; at Glasdrum this has a similar distribution to the chequered skipper and numbers are stable. It too is a priority UK BAP species and one of the fastest declining species of butterfly elsewhere in the UK.

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A thriving population of mountain ringlet, another nationally scarce species and UK BAP priority species, is found on the open moorland above the woodland.

Over 200 species of moths have been found on the Reserve, including barred tooth-striped, a UK BAP priority species, and many more are still likely to be discovered. This is a very rare species in Scotland and one whose ecology is poorly known. A national survey in 2004 found only two other colonies. Another nationally scarce moth, the narrow-bordered bee hawk-moth has been seen at Glasdrum on only three occasions, in June 1990, June 2005 and May 2010.

Other fauna

The bird list for Glasdrum Wood is not complete, being based on casual records. The wood has a typical mixed woodland breeding bird community, with summer visitors joining the resident species. The song thrush and spotted flycatcher are both UK BAP priority species. The pied flycatcher was recorded in 2000. There are no resident rare birds although golden eagles are occasionally seen soaring above the woods.

Otters, a species of European importance, are known to use the foreshore, riparian zone and the many burns that flow through Glen Creran Woods. There are no records of holts on the Reserve. Other mammals found at Glasdrum include pine marten, red squirrel and pipistrelle bat. Red and roe deer are observed regularly and are a key component of the woodland ecosystem. Red deer wallows, found between 80 and 100m in altitude on the Reserve, provide the only areas of standing water on the Reserve. These not only support strong breeding colonies of common frog, common toad and palmate newt, but also contain populations of water beetles. The water beetle, *Agabus malanarius*, found to be common in a shaded red deer wallow, was discovered here in 1978 – a new record for the Scottish mainland.

Summary

Glasdrum Wood National Nature Reserve is a rich broad-leaved woodland with a mild climate. The wood is an ideal habitat for the many lichens, mosses and liverworts which thrive in moist shady conditions of the Atlantic coast. The warm sunny glades are important for a broad range of invertebrates, especially butterflies such as the chequered skipper and pearl-bordered fritillary.

3 Management of Glasdrum Wood before it became a NNR

The wildlife found in Glasdrum Wood today, reflects the past and present management of the wood. People have been directly involved with the management of Glasdrum from the 17th century and probably much earlier. The charcoal platforms, the limekiln, sheepfolds and shielings in the wood date back to the 18th and 19th centuries.

The wood was once part of Glasdrum farm. Glasdrum has a long history of pastoral farming dating from the 17th century and perhaps much earlier. The pasture and shelter provided by the woodland made it particularly attractive for wintering stock. Initially traditional Highland 'black' cattle would have grazed here, along with some goats and sheep. In the latter part of the 18th century, when sheep farming became increasingly important, large numbers of sheep grazed Glen Creran. By 1833, 600 sheep were grazing on Glasdrum and it is probable that the sheepfold and shieling were built around this period. Sheep grazed more intensively after the coppicing ceased in the wood and was particularly heavy during the Second World War and throughout the 1950's and 60's.

Glasdrum Wood appears to have been managed under the coppice with standards system. This type of management retained scattered mature oak and ash trees and produced plenty of space for oak and other underwood to grow and be cut, or 'coppiced' at 10-15 year intervals, for making stakes, planks etc.. Woods were managed under this system from the 17th century for over 200 years, producing such items as oak and ash wheel spokes, building and boat timbers, sledge sticks, oar poles, hand barrows, scythe and spade shafts, wattling and hoops for cooperage. The value of oak bark for the tanning industry was probably higher than other products and the system of sustained yield favoured oak, often at the expense of other species. Most of the woodlands in the district were regularly cut at intervals of 19 to 25 years to produce timber, bark and charcoal.

Birch, alder, willow and hazel were collectively known as "black woods" or barren timbers. Black woods were often not considered worth protecting, particularly as winter keep for cattle was at a premium. In 1789 the 'black woods' of Glasdrum were sold to the Lorn Furnace Company for cutting, clearing and conversion to charcoal in one year. Platforms used by charcoal burners are found in the Reserve, one is visible close to the trail. Standards of oak, ash and elm were retained within the felled areas, and were usually protected from grazing livestock by fencing for 6-8 years following a cut.

Little is known about the subsequent history, but the woods probably remained without a permanent enclosure until the late 1950's and early 1960's when the Forestry Commission (FC) acquired the Loch Creran woods. Early in the 1960's the FC enclosed a 5.5 ha block in Glasdrum Wood with a deer fence, cleared the deciduous woodland and planted conifers. In 1972 the FC enclosed more of the woodland with a stock fence in preparation for conifer planting. Fortunately, the Nature Conservancy Council (NCC) was able to buy the wood before any conifer planting happened, saving this ancient native woodland.

Deer, both roe and red, have been present in the Glen Creran woods for at least 200 years. Over the period of the last management plan (6 years) numbers appear to have increased. Deer are actively controlled on the Forestry Commission Scotland (FCS) land to the east of the Reserve. However, there has been a relaxation in deer control on the Creagan Estate to the west since the expiry of the Woodland Grant Scheme to encourage

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natural regeneration. As a result there is currently evidence of an increase in the deer population on the Reserve.

Summary

Historically the wood was managed for charcoal production and as wood pasture. These uses and increasing deer numbers have influenced the structure and composition of the wood, giving rise to an open structure of the wood which is good for invertebrates, especially butterflies.

4 Management of Glasdrum Wood NNR

For more than 25 years Glasdrum Wood NNR Reserve was managed solely for nature conservation. In the early years the aim was to maintain and enhance the woodland. However, with the discovery of the chequered skipper in 1974, management for butterflies became an important priority. In 2003 the Reserve was opened to visitors with the construction of a car park, picnic site and woodland trail.

The history of Glasdrum Wood NNR is recorded in many files and in reports kept in the SNH office in Lochgilphead. A few of the highlights are:

1962	NCC lease woodland along the lower slope from FC (17ha)
1967	Declaration of the National Nature Reserve (17ha)
1976	NCC purchase 169 ha of land from FC
1977	Glasdrum Wood National Nature Reserve extended (169ha)
1983	Completion of the western march stock fence prevented sheep entering the reserve from Creagan Farm.
1986	Appointment of a warden to cover Glasdrum Wood, Glen Nant and Ben Lui NNRs, a post occupied by Andrew Campbell until 1992.
1987	Completion of northern and eastern march stock fence stopped all stock entering the Reserve from the north.
1988	Production of first management plan.
1991	Clearance of the 5.5 ha block of conifers.
1992	Part of area enclosed by deer fence.
2000	Creagan Bridge opened, allowing the busy main A828 to by-pass the reserve and leaving Glasdrum a much more peaceful place with safer access opportunities.
2001	Glen Creran Woods (including Glasdrum Wood NNR) submitted to the EU for consideration as a Special Area of Conservation in the Natura 2000 network.
2003	Major access improvements including new car park, picnic area and woodland trail – formally opened by Peter Wormell in May 2003.
2005	Completion of second management plan.
2006	Instrumental research projects increased our knowledge and understanding of management requirements for lichens (Acton, 2006) and chequered skippers (Ravenscroft, 2006).
2009	Research project on chequered skipper and pearl-bordered fritillary increased knowledge on distribution and habitat requirements (Masterman, 2009).
2010	Chequered skipper population reached a record level.

Management of Nature

Management plans for the Reserve were completed in 1988 and 2005. Objectives included maintaining woodland communities while maintaining open areas in the wood for butterflies and biodiversity as well as encouraging research, survey and monitoring to better inform management, particularly for lichens and butterflies.

Management has been a combination of allowing the woodland to develop naturally with areas of scrub, mature trees, 'veteran' trees and dead wood, as well as active management of woodland clearings for butterflies.

Woodland

It was decided in the early years of the Reserve to exclude grazing domestic livestock from the wood to encourage natural regeneration. FC had erected a stock fence around much of the wood in 1972 when it was due to be planted with conifers. The stock-proof fence along the western boundary was completed in 1983, and the northern and eastern boundary fences were completed in 1987. Sheep (except strays) have not grazed the wood since, so there has been no grazing for more than 25 years.

There is no deer fencing and the resident population of roe and red deer move freely through the woodland including neighbouring estates, Creagan to the west and FCS properties to the east. There has been no deer control on the Reserve during its entire history as woodland regeneration has been viewed as successful without the need for deer control, often filling up small glades on the lower slopes.

When the wood was acquired, there was a 5.5 ha block of non-native conifers, planted by FC in the 1960s. This conifer block was felled in 1991 and left to regenerate naturally. By 2003 broadleaved woodland was well established, so the surrounding deer fence was taken down.



Glasdrum with open glades and regenerated woodland block visible

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Other non-native species, like rhododendron and Japanese knotweed colonise the wood from the surrounding land. These invasive species have been sprayed with herbicide from time to time to prevent them spreading in the wood.

Management for lichens has involved retaining the veteran ash trees that support the best lichen (*Lobarian*) communities, and protecting young ash saplings with tree guards. In recent years scrub has been cleared around veteran trees and in woodland clearings to allow more light to penetrate for light demanding lichen species.

There has been no active management for bryophytes, but when carrying out other management projects, great care has been taken to avoid disturbing the damp shady conditions they favour.

The wood is monitored in various ways to check whether the management is effective and achieving the desired results. Monitoring has shown the woodland has expanded, because grazing animals have been excluded and non-native trees removed. Comparison of aerial photographs taken in 1975 and 1992 show an increase in the canopy cover within the existing woodland areas. In 2000 and 2008 the wood was assessed as being in favourable condition.

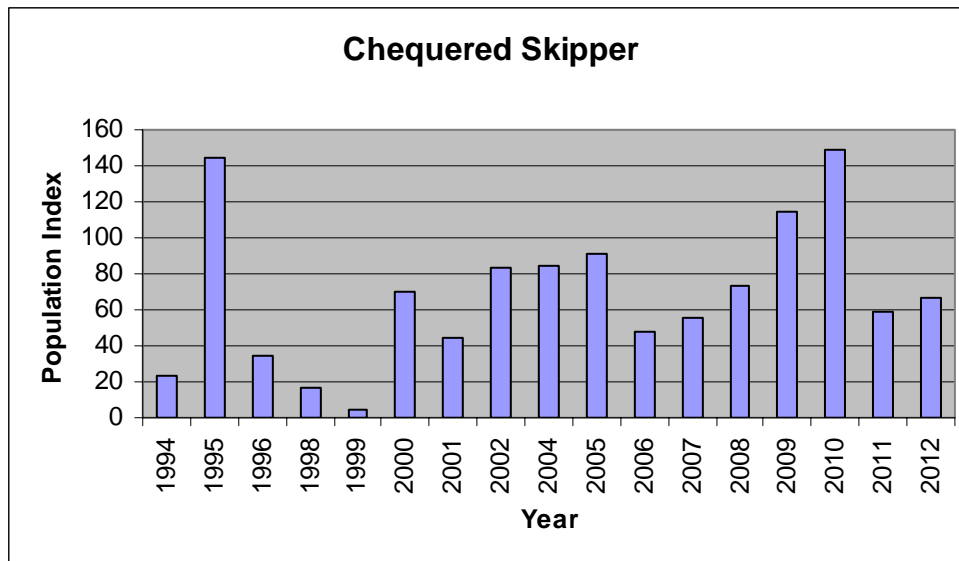
Butterflies

The largest populations and greatest diversity of butterflies are found under the power line and in the sheltered glades and clearings with marshy grassland and bracken. It is likely that the historical management for coppice and wood pasture created the open clearings in the wood that suit the butterflies. As recently as the 1960's, the Glasdrum woodlands had a much more open structure with large mature oak and ash trees and scattered glades. However, no livestock have grazed the woods since 1987, and deer browsing is at a low level, so active management is needed to prevent the openings and glades scrubbing over.



Clearing the wayleave for chequered skipper

Chequered skippers are widely distributed, the core areas being the electricity wayleave and larger open areas of marshy grassland on the higher slopes at 250-350m. Smaller numbers use a series of woodland glades with damp purple moor grass that connect the two core populations. Caterpillars of chequered skipper feed on purple moor grass, while adults require sunny glades with abundant nectar sources, particularly bugle, marsh thistle and bluebell. The electricity company has periodically cleared scrub from under the power lines for safety reasons. About 10 years ago, encroachment of scrub was causing the width of the wayleave to decrease from 30m to 10m. So we undertook to restore to its former width, thus increasing the area available to breeding and nectaring butterflies.



The pearl-bordered fritillary distribution is mostly restricted to the higher altitudes of 150-350m where more open hillside prevails with fewer along wayleave and woodland glades on the lower slopes. Nectaring areas are similar to the chequered skipper, open sunny situations with abundant spring flowers like bugle. Breeding areas are different though;

the pearl-bordered fritillary lays its eggs on or near violets (the caterpillar food plant) growing in open drier situations where at least 60% of direct sunlight reaches the plants. A moderate cover of bracken can encourage plants such as violets, typical of the woodland ground flora. The larvae also select areas of dead bracken because these provide a very warm microclimate in the spring when larvae are developing.



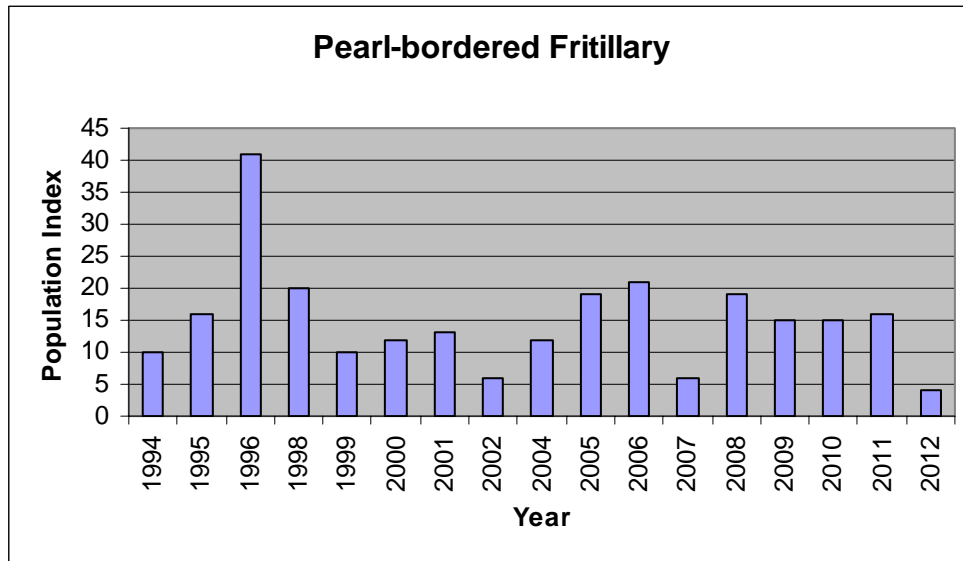
Pearl-bordered fritillary

In the past, bracken stands were kept in check by burning, grazing and collection for animal bedding. These traditional practices have ceased leading to the spread and total domination of bracken in parts of Glasdrum. Once neglected, bracken stands soon become unsuitable for fritillaries (small pearl-bordered and dark green fritillaries are also found at Glasdrum, their caterpillars feed on violets too), as violets and other herbs are eliminated by the dense shade and especially litter build up. A piece of equipment called 'Bracken Bruiser' which is towed behind an Argocat has been used successfully to control bracken in a few accessible glades.

As there is no longer any grazing, clearings and glades have been kept open by cutting scrub and bruising bracken. While deer populations remain low, active management of the

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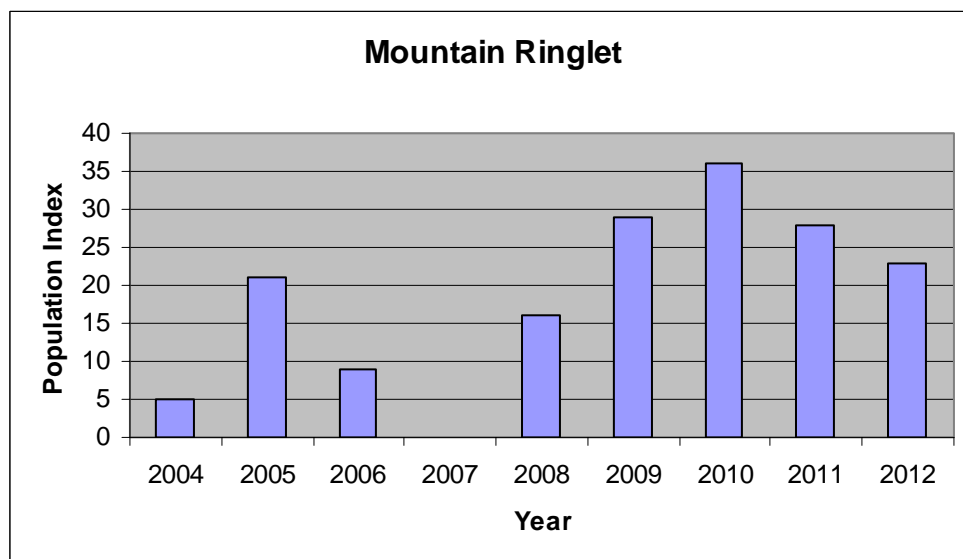
open areas will have to continue, otherwise they will scrub over and the bracken will become too dense for the butterflies.



A small population of another nationally scarce species of butterfly, the mountain ringlet, survives in the upland communities above the woodland. There is no management for this species, and is uncertain how it has responded to the cessation of sheep grazing.

A butterfly monitoring transect was established in 1992, contributing records to the UK Butterfly Monitoring Scheme. The highest numbers of butterflies have been recorded from the open areas and under the power lines. The monitoring data suggests that the populations of chequered skipper and pearl-bordered fritillary have remained stable in recent years, though numbers often reflect weather conditions during the flight period with high numbers of skippers in 2010 and low numbers in 2011.

A second transect was established on the heathland above the tree line to monitor the mountain ringlet butterfly and the data suggests that the population is increasing.



Research and Demonstration

The Reserve has been well used for research work on chequered skippers, mainly by students from Aberdeen University supervised by Dr Mark Young. Their projects, particularly research conducted by Neil Ravenscroft, greatly increased our knowledge and understanding of the conservation of the chequered skipper and contributed to the development of a Species Action Plan.

The Reserve has been used to demonstrate specialised management to groups of local land managers and members and staff from Butterfly Conservation Scotland, and there is scope to develop this further on the Reserve and on neighbouring properties, where cattle grazing will be re-introduced as a management tool for butterflies at Creagan.

More recently, research projects at Glasdrum Wood in 2006 and 2009 have greatly increased our knowledge and understanding of the status, distribution and management requirements of chequered skippers (Ravenscroft, 2006), pearl-bordered fritillaries (Masterman, 2009) and lichen communities (Acton, 2006).

Management for People

For the first 40 years Glasdrum Wood NNR had a low public profile, it was a quiet place reserved for nature, managed in special ways and used for research. Steep terrain and difficult access off the previously busy Oban – Fort William trunk road, meant it was inappropriate to develop the Reserve for visitors. Things changed at the beginning of the 21st century, with the realignment of the trunk road and a desire for NNRs to ‘raise national awareness’ of Scotland’s rich and diverse natural heritage.



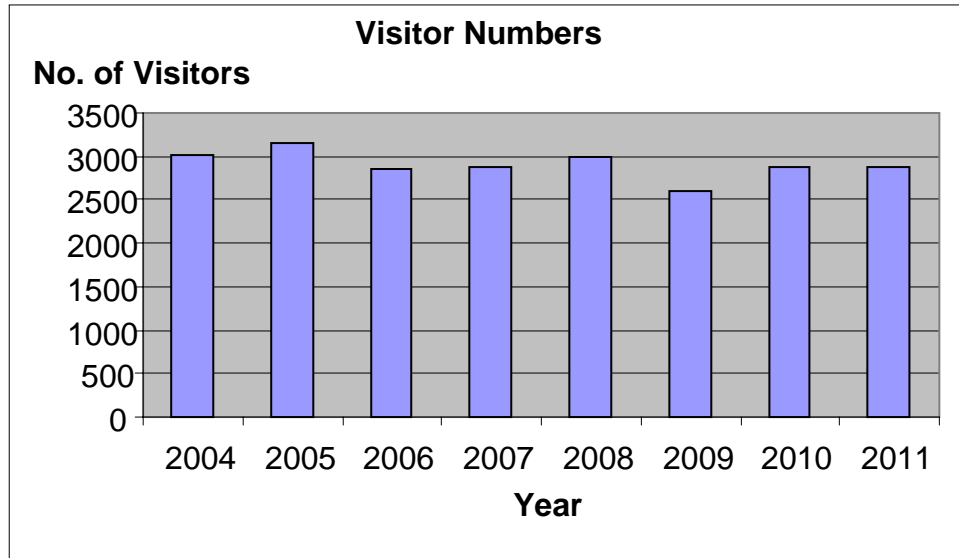
Viewpoint over Loch Creran

The hard standing area, used for extracting conifers in 1991, was turned into a small car park and picnic area in 2003. This became the focus for visitor reception and interpretation, being ideally situated by the roadside just above the foreshore with excellent views over the loch and Glen Creran. A 1km circular woodland trail was also completed. This steep trail, climbing to just under 100m, is well surfaced with steps, bridges and benches along the route. A new leaflet has recently been produced linking key interpretation points around the trail and explaining Glasdrum’s social and natural history to visitors.

Before the car park and trail were installed, the only visitors to the Reserve were researchers and land managers with particular interests in woodlands, lichens, bryophytes or butterflies. The provision of visitor facilities mean that people living in or visiting this part of Argyll can now experience the wonderful woodland at Glasdrum and enjoy fantastic views over Glen Creran.

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Since 2004, the Reserve has been attracting approximately 2800 visitors per year.



Property Management

Scottish Natural Heritage (SNH) owns Glasdrum Wood NNR and endeavours to follow best management practice. The agricultural and sporting tenancies that influenced the management of the Reserve in the early years have now expired, allowing the Reserve to be managed for nature and people's enjoyment.

There are no buildings on the Reserve and only the remnants of a disused limekiln and a ruined sheep fank providing evidence of its past human history. SNH shares responsibility for the maintenance of boundary fences. The infrastructure includes the small car park, picnic area and circular trail. Despite the high rainfall and nature of the steep terrain, the trails require relatively low maintenance.

Scottish and Southern Energy (SSE) have a wayleave running almost the full length of the NNR, entitling them to maintain an 11 kV electric power line with towers, poles and stays. SSE has the right to remove any vegetation encroaching upon the line of the wayleave at their own cost.

The staffing of this Reserve has varied over the years. The Reserve Manager of Glasdrum has usually had responsibility for other NNRs too, so has not been full time on the NNR. The current Reserve Manager looks after two other Reserves in Argyll. The equipment and vehicles used at Glasdrum are shared between the Reserves in Argyll.



Reserve sign

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As a responsible land manager, SNH has carried out a number of routine projects such as updating the Fire Plan, and carrying out risk assessments for all activities on the Reserve.

Summary

Glasdrum Wood NNR has a rich natural heritage. Management of the Reserve has maintained this interest since it was first identified more than 40 years ago. The extent of the woodland has increased and the condition of the woodland has improved over the years. There is no longer any grazing or coppicing to retain the open woodland structure, so the scrub and bracken have been cut to keep the glades open and suitable for butterflies. The chequered skipper and pearl-bordered fritillary still thrive in the wood, indicating such management has been successful.

5 Document properties

References

Acton, A. 2006. Glen Creran Woods SSSI/SAC: Lichen Survey. SNH report.

Averis, A.B.G. 2006. Bryophyte Survey of Glen Creran SSSI. SNH report.

Ravenscroft, N. 2006. Management for invertebrates in North Argyll and Lochaber: the effects of cyclical clearance of wayleaves on butterflies. SNH report.

Masterman, A. 2009. Survey of Chequered Skipper and Pearl-bordered Fritillary at Glasdrum & Creagan and assessments of nectaring plant abundance and woodland regeneration. SNH report.

Wolseley, P.A. and James, P.W. 1990. The effects of acidification on lichens 1986-90. The Natural History Museum, London.

Photography

Photography by Lorne Gill/SNH and John Halliday.

Acknowledgements

The first edition (2006) of the Story of Glasdrum Wood National Nature Reserve was written by John Halliday (Reserve Manager) and approved by Angus Laing (Area Manager – Argyll & Stirling).

We would like to thank the following SNH staff for their contribution to the production of the Story: Alan McDonnell and Susan Luurtsema.

This second edition of the Story of Glasdrum Wood National Nature Reserve (2013) has been edited by John Halliday (Reserve Manager) and approved by Alan McDonnell (Operations Officer – Forth).

Links

For information about Scotland's National Nature Reserves and further information about Glasdrum Wood NNR please go to www.snh.org.uk/nnr-scotland

For information on the protected areas associated with Glasdrum Wood NNR please go to www.snh.org.uk/snhi/

Other useful links:

Scottish Natural Heritage www.snh.org.uk

Butterfly Conservation Trust www.butterfly-conservation.org.uk

Joint Nature Conservation Committee www.jncc.gov.uk

The Story of Glasdrum Wood National Nature Reserve

