

Gartmorn Dam Country Park Management Plan 2024-2029



**Clackmannanshire
Council**

www.clacks.gov.uk

Comhairle Siorrachd
Chlach Mhanann

What is a Country Park?

Country Parks are relatively small areas, readily accessible to the public, which are actively managed to provide opportunities for people to enjoy the countryside and informal open-air recreation. The range of facilities provided varies from site to site, but all Parks are supported by built facilities and by opportunities to picnic or walk and by programmes of organised events. They are also supported by a Ranger Service to promote visitor enjoyment and understanding of their natural qualities. The majority of Country Parks are owned or managed by Local Authorities with the support of Scottish Natural Heritage. Clackmannanshire Council is responsible for the management of Gartmorn Dam Country Park insofar as the council remit allows.

Gartmorn Dam is Clackmannanshire's only Country Park and is easily accessible for all Clackmannanshire's residents. It is within an hours drive for half the Scottish population.

Introduction to Management Plan

This Management Plan continues on from the Management Plan written by Clackmannanshire Ranger Service in 2002. Since the 2002 plan was written there have been quite a few changes that have had an impact on Gartmorn Dam. These changes are discussed throughout the current plan. This new Management Plan is designed to reflect the reduction of Ranger Service and other council staff. It is also designed to meet the criteria for the Green Flag Award. <http://www.greenflagaward.org.uk/>.

The plan will be reviewed annually, with rolling extensions and any changes will be added to the online version.

The Council welcomes Community Groups and Volunteers and would ask that any work or other activities that take place at Gartmorn Dam are done in consultation with the Council and comply with the current Management Plan. This is to ensure that there is a combined approach to managing the Biodiversity and Heritage of the Country Park.

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Vision

To actively manage and improve Gartmorn Dam Country Park for the benefit of people and biodiversity

Aims

Conservation

To conserve and improve the biodiversity and heritage of Gartmorn Dam Country Park.

Health

To improve the mental and physical health of those accessing Gartmorn Dam Country Park.

Landscape

To enhance the existing levels of landscape value and amenity value.

Recreation

To provide a place to enjoy formal and informal recreation for all ages and user groups. To ensure that activities that take place at Gartmorn Dam Country Park fit with the ethos of a Country Park and Local Nature Reserve.

Community Involvement

To engage with the local, wider community and user groups.

Education

To provide quality experiences for formal and informal education

Cultural

To protect and conserve all features of cultural significance and heritage value.

Sustainability

To ensure policies, management practices and operations accord with sustainable principles by meeting today's needs, without compromising the needs of future generations.

Legal

To ensure that the site management works comply with all legal obligations and that access takers do so within the Land Reform Act (Scotland) 2003.

Maintenance

To ensure that a maintenance programme is in place to reinforce the aims of the Country Park and meet visitor expectations.

Safety

To ensure the safety of visitors and staff working on the site and fulfil the council's duty of care.

Marketing

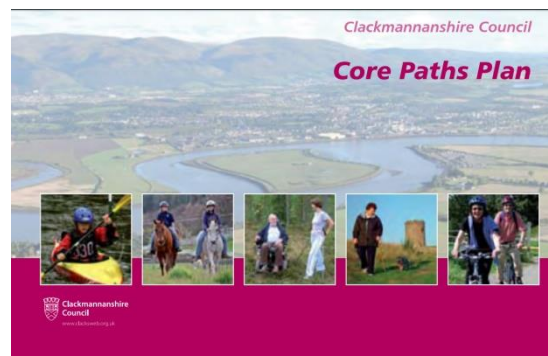
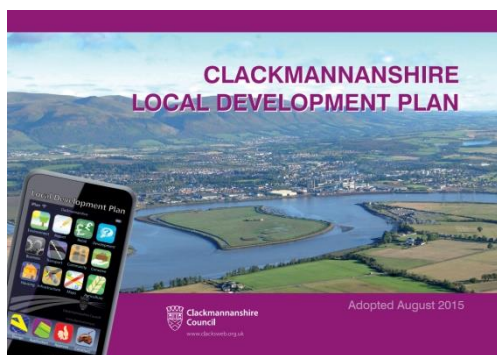
To positively promote Gartmorn Dam Country Park to local residents and potential visitors to the area.

Wider Policy Context

Council Priorities

- The area has a positive image and attracts people and businesses;
- Our communities are more cohesive and inclusive;
- People are better skilled, trained and ready for learning and employment;
- Our communities are safer;
- Vulnerable people and families are supported;
- Health is improving and health inequalities are reducing;
- The environment is protected and enhanced for all;
- The Council is efficient, effective and recognised for excellence

The Management Plan supports the following Council policies and strategies
Local Development Plan Policy SC11 Transport Networks specifies that “the Core Path network will be safeguarded, promoted and enhanced”



The plan supports the Council’s statutory Core Path Plan required under the Land Reform (Scotland) Act 2003, in particular the criteria that core paths should be capable of supporting all abilities, and that paths should be free of significant maintenance issues under the Council’s Biodiversity Action Plan pursuant to the Nature Conservation (Scotland) Act 2004, “people will be able to access and learn about their local biodiversity and will want to protect and enhance it”.

The Council’s Sustainability and Climate Change Strategy pursuant to our Public Body Duties under the Climate Change (Scotland) Act 2009 contains targets to increase active travel and reduce the environmental impact of travel.

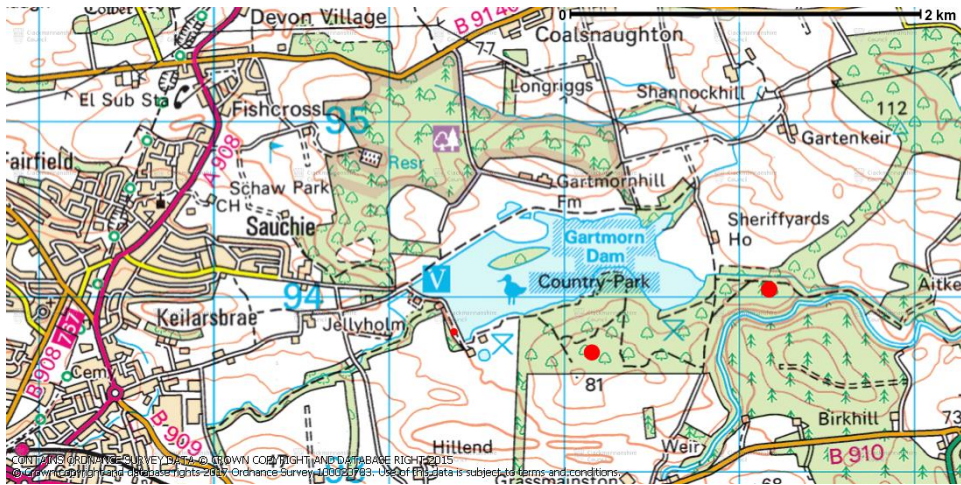
<https://www.clacks.gov.uk/environment/sustainabilityandclimate/>

The Clackmannanshire Pollinator Strategy is currently in draft form and will influence work done within Gartmorn Dam Country Park to increase pollinator opportunities.

The Forest and Woodland Strategy for Clackmannanshire will also feed into the management plan, helping to inform tree planting and connecting habitats.

<https://www.clacks.gov.uk/site/documents/sustainability/forestryandwoodlandstrategy>

Site Description



Location

Latitude 5608'N, Longitude 344'W, Grid ref: NS 920943

The total area involving management by Clackmannanshire Council is 120.21ha (including footpaths and cycleways within the Country Park boundary). Of this total, 28.12ha is outside the designated Country Park boundary and 32.07ha has been acquired since 1990.

Country Park Contacts

Clackmannanshire Council
Kilncraigs
Greenside Street
Alloa
FK10 1BA
01259 452000
rangers@clacks.gov.uk

Reservoir – Scottish Water
6 Castle Drive
Dunfermline
KY11 8GG
08456018855

Status

- **Country Park (87ha)** – designated in 1982
<https://www.clacks.gov.uk/culture/gartmorndam>
- **Site of Special Scientific Interest (68.79ha)** – notified in 1971 for importance to overwintering wildfowl.
- Re-notified in 1986 for the eutrophic loch and open water transition fen features
- In 2015 it was stated by Scottish Natural Heritage to be in unfavourable declining condition due mainly to the closure of the Lade and the change in the water condition as a result.
http://gateway.snh.gov.uk/sitelink/siteinfo.jsp?pa_code=678
- **Local Nature Reserve (43.58ha)** – designated in 1980.
- **Local Landscape Area (1175ha).**
<https://www.nature.scot/professional-advice/safeguarding-protected-areas-and-species/protected-areas/local-designations/local-landscape-areas>

Access

Facilities – managed by Clackmannanshire Council

- Car parking – 3 main car parking areas and an overflow car park
- Extensive multi use path network which radiates out from the Dam
- Various benches – seating and picnic
- BBQ area
- Sunken Garden (Old filter beds which are now an attractive garden area)

Other Facilities located within the Country Park

- Café (with toilets, only available to customers) adjacent to the Dam. It was formerly a visitor centre and fishery lodge, but was closed in 2012. In 2017 it was taken over by “Dam Good Coffee” and is currently a coffee shop.

Publications

- Management Plans (1980, 1990, 2017)
- Clackmannanshire Core Paths Plan
<http://www.clacks.gov.uk/mapping/corepaths.php>
- Gartmorn Dam Country Park Leaflet (last updated 2013)
- Ramblers Scotland Medal Routes
<http://www.ramblers.org.uk/~media/Files/Scotland%20microsite/MedalRoutes/MRoutes%20jpegs/RP%20Gartmorn%20Dam2.jpg?la=en>
- Articles in Forth Naturalist and Historian journal
- Included in the Clackmannanshire Bird Atlas
- Cowpark Wood Management Plan
- The Fieldfare Trust has created a photographic trail of Gartmorn Dam to allow potential visitors to look at the paths before they come. It can be found at http://www.phototrails.org/default.cfm?walk=Gartmorn-Reservoir&page=trail&walk_id=52
- Clackmannanshire Local Biodiversity Action Plan
- A Tale of Two Estates, Linn Mill and Lade Reports – innerforthlandscape.co.uk
- Clackmannanshire Council Pollinator Strategy

Management

Gartmorn Dam Country Park is currently managed by Clackmannanshire Council. The Council are responsible for:

- Management of Gartmorn Dam as a Country Park within council remit
- Updating / writing the Management Plan
- Co-ordinating the delivery of the Management Plan
- Giving advice to user groups
- Patrolling the paths as per the path inspection regime
- Working with the access forum to resolve and access issues within the country park
- Organising repairs and improvements
- Promoting responsible access.
- Working with Clackmannanshire council legal team to ensure compliance with relevant legislation
- Ensure the SSSI is appropriately managed in consultation with Nature Scot
- Coordinating input from community groups and other organisations
- Ensuring appropriate health and safety obligations are carried out.

Working with Other Bodies

- Much of the Country Park is a SSSI. Consequently, the Management plan should be approved by Nature Scot, who will outline consented activities. Any non consented activities must be approved by Nature Scot before they can be carried out.
- Scottish Water own much of the country Park, but lease it to Clackmannanshire Council.
- Other Landowners: Some of the country Park is in private Landownership.
- TCV (The Conservation Volunteers) and EPIC (Enabling Projects in Clackmannanshire)
 - : TCV and EPIC provide invaluable volunteer hours, working on projects in Clackmannanshire, including some within the Country Park.
- Forestry and Land Scotland: FLS are our adjacent landowner. There is a long history of joint projects, especially with their Ranger Service.
- Gartmorn Dam Country Park Development Trust: The Trust currently looks after the sunken garden and may carry out other projects within the Country park, after consultation with the Rangers. The Trust are currently looking at writing a Regeneration Plan to conserve and improve the Country Park. <https://www.facebook.com/gdcpdt/>
- Stirling University / Scotland's International Environment Centre: Stirling University / Scotland's International Environment Centre are carrying out some monitoring within the Country Park as part of a wider project called Forth Era (Environmental Resilience Array). The information collected will be invaluable to help us understand biodiversity, water quality issues and enable us to develop a better understanding of the range of wildlife within the area.
- Clackmannanshire Access Forum: The Access Forum have a county wide remit to help resolve access issues, including any that occur within the Country Park.
- Clackmannanshire Biodiversity Action Plan Group: This working group is responsible for updating and carrying out actions in the CBAP. Many of the species, habitats and actions identified occur within the Country Park.

Safety Provision

- The Rangers are First Aid trained and carry a First Aid kit as part of their day to day working.
- Rangers also carry throwing buoys when out on patrol or with groups.
- Gartmorn Dam Country Park has a risk assessment which is updated annually.
- The Core path around the Dam (CP121) is checked monthly and other core paths within the country Park are inspected at least twice a year.
- A tree safety survey of Headwall woods and Core path 121 is carried out every 3 years.
- There are life buoys situated around the dam. These are inspected and maintained by Waste Services.
- There is information in the public domain about safe and responsible access www.outdooraccess-scotland.com
- There are various safety signs around the park, and there is scope to improve this.

History

Agriculture

In the 17th century the Gartmorn area was part of both the Alloa and Clackmannan estates owned by the Erskines and the Bruces. The majority of the population lived in small farm towns and the marshy land of Gartmorn was worked under a run rig system of agriculture. Long narrow strips were ploughed into a ridge and furrow pattern. Signs of this can be seen as regular bumps on the south shore path.

Most of the surrounding area of the Country Park and two areas within its boundary have been used for grazing and for arable crops. Within the Park, the Island field and the Meadow were farmed up until 1995 and the late 1980's respectively. Clackmannanshire Council leased the Island Field in 1995 as part of a wetland creation project and it is now owned by Clackmannanshire Council.

Coal Mining

Towards the end of the 16th century, the Erskines and the Bruces began to invest in coal mining. By 1707 the Alloa Coal Field, owned by John Erskine, the 6th Earl of Mar, was frequently flooded. An engineer recommended the construction of a series of pumps driven by a large water wheel. Neither the Brothie or Sauchie burns had the water power so a lade and a weir were put in place to divert water from the Black Devon river at Forestmill. Both these structures can still be seen. More information on the lade can be found at the innerforthlandscape.co.uk – 'Craigrie and Gartmorn Lade System'.



The Dam was built to drain the mines in Sauchie but extensive mining has also taken place within the Country Park.

Clackmannan County Council (now Clackmannanshire Council) first officially acknowledged the ecological and recreational value of Gartmorn dam and the surrounding area through an agreement with Mid Scotland Water board (now Scottish Water) in 1973. Two areas of woodland – Cowpark Woods (30ha) and Headwall Wood (1ha) were purchased by the council in the early 1990s.

It was anticipated that the popularity of the area for recreation would increase and that it had great potential for outdoor learning, particularly in terms of natural, social and industrial history.

A Management Plan was written and a Ranger Service set up to ensure the appropriate management of the site:

- for recreation and education,
- to minimise conflict between various activities,
- to protect the landscape value of the area
- as a habitat for wildlife

Significant Buildings and Man Made Structures

- Pump House (1891) sandstone building housed the engines which pumped water to the filter beds. Used as a visitor centre from 1980 – 1996. (leased and maintained by Clackmannanshire Council)



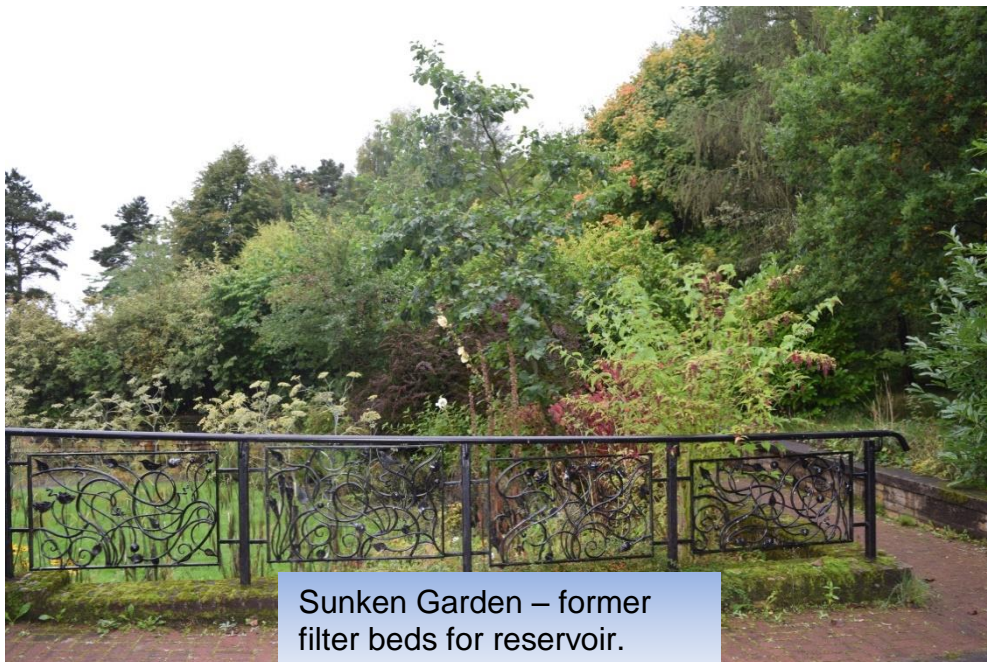
Former toilet block (left) and pump house (right).

- Valve House (owned and maintained by Scottish water)
- Sluice Tower (owned and maintained by Scottish Water)
- Visitor Centre now leased by the council to 'Dam Good Coffee' café
- Old Toilet Block (leased and managed by Clackmannanshire Council)



Former Visitor Centre, now
café - Dam Good Coffee.

- Sunken Garden – this area occupies the site of the former filter beds and is now part of an attractive garden area.



Sunken Garden – former
filter beds for reservoir.

- Run-Rig system used in past is shown by the regular bumps in the South shore paths
- Bings on the south shore are the remains of mines closed in the 1870s.

- Sherrifyards Colliery site operated between the late 1800's to 1921. On the North Shore Path there are the ruins of the colliery (see picture below for when the colliery was in action).



- The north shore path was the old mineral railway and a railway sleeper from this time marks the start of the path.
- Cowpark Wood dates from the 18th century and is a broadleaf woodland.
- Disused settling pond from old water treatment works, with three brick lined pits adjacent to it.
- Partially Ruined brick tower. Disused ventilation shaft for Jellyholme pit.
- Sherrifyards House (private ownership) and outbuildings (owned by Gartenkeir Farm).
- Gartmorn Dam House - in private ownership.
- Gartmorn Hill farm - in private ownership.
- Fenced compound area by Sunken Garden

Clackmannanshire Council is responsible for three of the buildings under the Lease with Scottish Water. The new Visitor Centre is leased to Dam Good Coffee. The maintenance of the other two (Old Toilet Block and Pump House) is the responsibility of Clackmannanshire Council (Strategy and Customer Services). The current state of the buildings should be investigated and this will determine whether any work is required to safeguard the future state of the buildings.

Conservation and Heritage

Soils

- The majority of soils around Gartmorn Dam are till soils produced from underlying (mainly sandstone) sediments.
- Others are alluvial or raised beach deposits.

Hydrology

- The water body of Gartmorn Dam covers an area of 67.6 ha and has a capacity of 1, 665, 581, 184, litres (440m gallons).
- The Dam outflows into the Brothie Burn. There is also capacity for outflow into an overflow channel at the most westerly point of the Dam.
- Originally inflow was from the lade (east end of the dam), which took water off the Black Devon. This was closed in 2002 and the dam now fills through run off and direct precipitation, as well as a small burn to the North East of the Dam.
- Gartmorn Dam is a lowland mesotrophic loch. There are concerns that it is becoming overly enriched with nutrients coming from the surrounding catchment area. This is having a detrimental effect on the biodiversity of the water body, particularly the aquatic plant life.

Climate

- The climate of the area is a transitional one, with the maritime influences of the mild and wetter West Coast of Scotland and the more continental influences of the colder and drier East.
- The Forth Valley is one of the warmer areas of Scotland. It is low lying, sheltered to the north by the Ochil Hills and benefits from the warming effect of the River Forth.

Aquatic fauna

- The condition of the aquatic fauna in Gartmorn Dam is in decline.
- In the mid 1990s, pond dipping activities with groups, using species present as pollution indicator revealed that the water quality was good.
- In 2016, similar surveys suggest a poorer range of species with a lack of clean water indicator species.
- Leech species and hog louse are common, indicating low oxygen levels.
- Other taxa such as caddisfly species and water scorpion are present, but in small numbers.
- In essence, the water body is beginning to feel and act like a pond.

Trees

- Gartmorn Dam Country Park has an impressive array of native and non native trees. Headwall Wood is dominated by established Beech trees, with some Oak, Holly and Scots pine.
- Cowpark Wood is a deciduous woodland dominated by Oak and Birch. Beech and Sycamore are also present along with Rowan, Ash and other species.
- The Forestry Commission land to the north of the Dam is dominated by coniferous trees. However, the make up of some of the woodland will change over the next few years, as some of the traditional timber plantation is being replaced by areas of more biodiverse native woodland.
- There are 2 areas of deciduous mixed community woodland to the north and south of the Dam.
- The Dam itself is surrounded by mixed deciduous trees. Also of interest is the willow carr habitat.
- Tree surveys are carried out by the Ranger Service as part of the wider council woodland inspection scheme

Birds

- Gartmorn Dam was first designated a SSSI in 1971 for its importance to overwintering wildfowl.
- The dam has now been re-designated as a SSSI for its variety of pondweeds instead as wildfowl numbers have decreased significantly.
- In 1997 the Forth Naturalist and Historian stated that Gartmorn Dam is still far and away the most populous site, holding 37 % of all still water birds in the region. The wildfowl numbers have declined over the years, but a good variety and number of birds are still present, especially over the winter months. Information comes from the WEBS counts.



Mute swans resident at Gartmorn

- Up until 2012 The Dam was a fishery and disturbance from fishing was a common problem. Since the fishery has closed, there should be a reduction in disturbance which may allow some recovery.

- For a full list of wildfowl see appendix 2 and also the Forth Naturalist and Historian journal.
- Barn owls (*Tyto Alba*) are a notable species present within the Country Park. Boxes have been put up around Clackmannanshire including 3 within the Country Park. This was part of the BOOLS (Barn Owls of Lowland Scotland) Project. The boxes are checked annually and the chicks ringed under BTO (British Trust for Ornithology) license. The box at Gartmorn Dam is particularly successful.



Barn owls at Gartmorn

- There are plans to put up Kestrel (*Falco tinnunculus*) boxes.
- Ospreys (*Pandion haliaetus*) and even White-tailed sea eagle (*Haliaeetus albicilla*) have been seen within the Country Park. CSG are working on projects to try and encourage more birds into the area
- The Country Park provides ideal habitat for many breeding summer migrants, such as Willow warbler (*Phylloscopus trochilus*) and Chiff chaff (*Phylloscopus collybita*)

Appendices 2 and 3 give some additional information about Birds in the Country Park.

Mammals

- Mink (*Mustela lutreola*) create a problem for nesting ducks and it is probable that a good percentage of chick loss is due to predation.
- Badger Setts are present in various locations throughout the country park. These tend not to be publicised
- Anecdotally, it seems as though red squirrel (*Sciurus vulgaris*) numbers are increasing within and around the Country Park. This is likely be due to the increasing pine marten (*martes martes*) population, which has a selective prey preference for grey squirrels (*Sciurus carolinensis*)

Flora

- The open water of the dam is highly productive and nutrient-rich supporting a wide variety of large submerged or floating plants. In particular, an unusually large number of pondweeds (*Potamogeton* species) occur, including one nationally scarce species, Slender-leaved pondweed (*Potamogeton filiformis*), and several that are locally uncommon.
- The transition fens consist largely of Reedswamp (*Phragmites australis*), Bulrushes (*Typha latifolia*), Reed sweet grass (*Glyceria maxima*) and Common spikerush (*Eleocharis palustris*). They support plant species which are scarce in the area such as trailing St John's wort (*Hypericum humifusum*). It is also the only known site in Clackmannanshire for the Trifid bur-marigold (*Bidens tripartite*).
- There is concern after Scottish Natural Heritage deemed Gartmorn Dam unfavourable, declining, due to change in water flow, most likely due to the closure of the lade in 2002.



Mammals

- The Country Park supports a healthy mammal population with most of the common Scottish mammals you would expect to see being present.
- Species of notable conservation value include various bat species: Common pipistrelle (*Pipistrellus pipistrellus*), Soprano pipistrelle (*Pipistrellus pygmaeus*), Noctule (*nyctalus noctula*) Daubentons (*Myotis dabentonii*) and Brown long eared bats (*Plecotus auritus*), Natterers (*Myotis nattereri*). Other mammal species include Otters (*Lutra lutra*), Red squirrels (*Scirius vulgaris*), Water shrews (*Neomys fodiens*) and more recently Pine martens (*Martes martes*).



Fish

- Gartmorn Dam was stocked in the past as a fishery with Brown trout (*Salmo trutta*) and Rainbow trout (*Oncorhynchus mykiss*). There are also Pike (*Esox lucius*) and Perch (*Perca fluviatilis*) in the dam, which occur naturally.
- Determining the different species of fish in Gartmorn Dam since the fishery closed would be a useful tool in determining the future management of the water body.

Amphibians and Reptiles

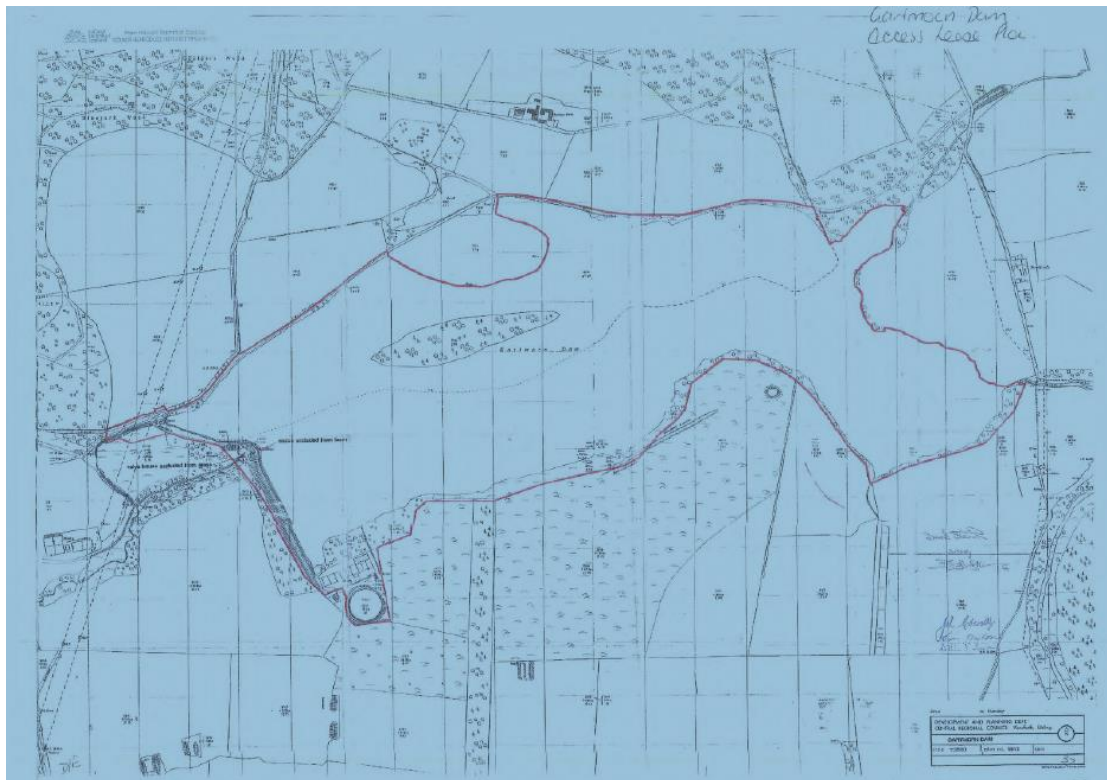
- Amphibians such as the Common frog (*Rana temporaria*) and the Common toad (*Bufo bufo*) are abundant at Gartmorn Dam especially in the Island Field area.
- Reptile survey roofing felt sheets have been laid by the Ranger Service in Cowpark Woods and Adders (*Vipera berus*) have been sighted in the area.

- There have been Smooth newts (*Lissotriton vulgaris*) in the Island field lagoons when pond dipping. There is also potential breeding ground in the pond behind Gartmorn House.

Land Tenures

This is not a legal document. Please refer to the original tenure documents before taking any decision or any action that may have legal implications. Legal Documents pertaining to ownership and leases are kept with Clackmannanshire council legal services.

Gartmorn Dam (66ha) is leased by Clackmannanshire Council from Scottish Water. The map below show the area covered by the lease. The lease is valid until 31/3/2029.



Map of land leased from Scottish Water by Clackmannanshire Council

The dwelling house and surrounding ground, approximately 933m², at the south end of the headwall is in private ownership.

The Café is owned by Clackmannanshire Council and is currently leased to Dam Good Coffee.

Local Context

Community Profile – Green Hub Survey

In March 2011, Gartmorn Dam Advisory Group, Clackmannanshire Council and Transerv commissioned a Green Hub study to provide a framework for the future management and maintenance of Gartmorn Dam Country Park. This consultation was tasked with identifying existing park users and to identify possible areas of improvement within the Country Park. The findings were then to be incorporated into the Management Plan.

The Green Hub Survey found that 80% of visitors lived within 5 miles of the Country Park. Only 4% had travelled more than 16 miles. The closest community to Gartmorn Dam is Sauchie, which is listed as being within the 15 most deprived areas in Scotland.

The communities of Sauchie, Keilarsbrae, Fishcross and Coalsnaughton are all located on the boundaries of the Country Park and have access through a network of paths.

Menstrie, Alva, Tillicoultry, Clackmannan and Kincardine all have access to the Country Park via a network of paths, local roads or cycle ways.

Trip advisor has 73 reviews which have an average rating of 4.5 out of 5 for Gartmorn Dam Country Park. The main issues that people report are:

- Lack of toilets
- Overgrown paths in places
- Locked bird hide.



The Green Flag Award

The Green Flag Award Scheme recognises and rewards well managed parks and green spaces, setting the benchmark standard for the management of recreational outdoor spaces across the UK and around the world.



A successful Green Flag Award site demonstrates, through a sound management plan and a well run site that the management understand:

- **The users:** who they are, who they could be, what they want, how they are informed and involved.
- **The Site:** what is special about its history, biodiversity, landscape, social and physical setting and what it is trying to achieve.
- **The management strategy:** that what is there is safe, in line with legislation and policy, well maintained and that there are plans for the future.

The Management plan used the Green Flag Award Criteria. A decision was made to keep this structure for continuity. If time and resources allow, this would be a worthwhile award to work towards.

A Welcoming Place

1: Welcome



Gartmorn Dam Country Park is signposted from various points in the local area and a sign at the entrance is also present. All signposts need repair and maintenance.

Leaflets and interpretive panels are also available but could be improved

A Ranger Service provides a welcome, but this is limited due to a reduction of posts.

2: Good and Safe Access

There are many ways to access the park – by car, bus, foot, bike or horse.

Public transport

Public transport to the park is achieved by various buses along the A91 /908. There are accessible core paths into the park from there but it is a 2km walk to the Visitor Centre and Dam, essentially the main hub of the park

Buses will take you to Sauchie – service details can be found here: <https://www.firstbus.co.uk/>.

Car

Arriving by car involves travelling through a housing estate with speed bumps and at times lots of children on / by the road. Once in the park, the access road is a narrow, single track with passing places. Recent resurfacing in 2021 has improved the access significantly.



Car parking is limited. There is car parking adjacent to the Café, an overflow car park and a third unsurfaced car park. The two main car parks provide space for 46 vehicles, with 2 disabled parking spaces at the Café.

Non-motorised transport

Access to the park by bike / foot or horse is excellent with a number of well signposted paths. All communities adjacent to the park are well served, and communities further afield can link into this more local network (appendix 3).

Gartmorn Dam Country Park is well served by a variety of core paths which all link in to the Clackmannanshire Core Path network and a wider network of regional paths.

The most widely used core path (121) encircles the dam, and is a good length for a pleasant walk (just over 3 miles). It is a popular dog walking route. Replacement of the lade bridge (Hardy's link) and continuing the path improvements. Make this a multi use route



There is currently no mechanism for counting visitors to Gartmorn Dam, but this will be part of the monitoring work carried out by Stirling University and Forth ERA.

Core paths radiate off from here in all directions, providing a comprehensive network and linking to other networks. Most of the paths are multi use and are therefore suitable for a variety of user groups. The paths themselves are owned by a variety of landowners.

The use of multi use and other paths is made a more pleasant experience when the public use them within their access rights. The Scottish Outdoor Access Code outlines what these rights are and the public should be encouraged to adhere to them. The code also outlines the responsibilities of landowners and they too should be encouraged to adhere to the code.

3. Signage

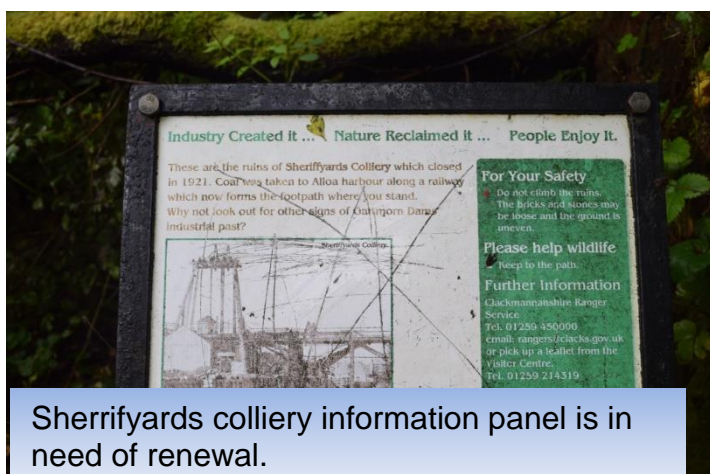
Safety signs are erected when required by the Ranger Service and by Scottish water – these include for

- Blue green algae
- Winter Water Safety
- **Dogs**
- **Safety at reservoirs (Scottish Water)**
- **Motorbikes**

More signage is needed including:

- Signs to manage access to the water.
- SOAC signs to deal with specific issue.
- Land management information signs – e.g. for areas being managed for pollinators.

Information boards are currently designed and installed by the Ranger Service and there is wider scope for it on the site. The current signs are old and need redesigned / replaced.



The interpretation signs are in need of updating. There are plans to replace the existing bird hide (at the time of writing the plan the existing structure has been removed and funding is available to erect a new hide). New interpretation will be part of this. Similarly, the signs at the colliery should be updated.

The core paths are all signposted and include distances to certain points. The signs are of a standard design and are checked during core path checks by the Ranger service



The visitor information provided at the Dam is need of a review. Part of this should include a board with a map showing the paths mentioned above as well as further SOAC information signs. Also under investigation is putting QR code stickers on the core path signs, which would link to the council core paths plan

4. Equal Access for All

Clackmannanshire Disability Awareness Group raised funds to improve the Sunken Garden. The biggest grant they received was for £87,963 for a permaculture project within the garden.

Disabled parking bays – there are disabled parking bays outside the café.



Hardy's link bridge was installed to make the path easier for wheelchair users.

Management

- Council to make an inventory of all access signs within the park, standardise them and remove any that are unnecessary.
- Create and install an interpretive panel, including more information on paths in and radiating from the country park. This should include SOAC information.
- Investigate the use of QR codes on core path signs. These would link with the council core path map.
- Review and update interpretation panels.
- Create information signs to inform the public about recreational management of the water body, including access points, groups and powerboats.
- Design and install a variety of signs (some temporary and some permanent) to inform the public about land management objectives, including management of areas for pollinators, woodland management etc.
- Ensure all signage is kept up to date.

- Council to continue to check core path 121 monthly.
- Council to continue to check all other core paths annually as a minimum. This should be increased if staffing allows.
- Forest and Land Scotland to continue with path check regime on their land.
- Council to liaise with landowners / Land Services over path repairs.
- Council to maintain relationships with landowners and liaise with them over any access / maintenance issues.
- Use of SOAC signs/ publicity to deal with any specific access issues where appropriate.
- Council to ensure that paths are DDA compliant, as far as reasonably possible) while out on patrol.
- Clackmannanshire Council to replace the current bird hide with one that is open. Screening should continue from the bird hide to provide protection for the wildlife.
- Council to investigate upgrading of Core path 121 to ensure it is fully accessible for all user groups.
- Stirling University to install people counters and collect recreational usage information.

Healthy, Safe and Secure

1. Appropriate Provision of Quality Facilities and Activities

Up until 2017 Gartmorn Dam hosted a programme of very successful events as part of the annual Ranger Events programme. Numbers have built up over the years and people are now actively seeking out things to do outdoors.

The events programme was there to engage the general public, promote the Dam, promote the Scottish Outdoor Access Code and hopefully inspire people / families to explore the outdoors.

Due to a reduction in the Ranger team and changing priorities, the annual programme of ranger events cannot be guaranteed every year. In 2021 and 2022 Nature Scot funded several seasonal posts, whose objectives were to promote SOAC. One of the ways this has been achieved was to run an events programme where the events were either managing sites to improve access or to promote SOAC.

There is an expectation that there should be events on offer in a Country park, usually via Ranger Services and the Ranger Service feels that events are important for the promotion of the outdoors and all its benefits (health and wellbeing).

Outdoor Learning

Gartmorn Dam has a huge potential for supporting outdoor learning. The variety of habitats, landscape and wildlife means it is an ideal venue for exploring many areas of the curriculum as well as various topics.

Other Bodies

Various other bodies are involved in providing activities / running events at Gartmorn Dam. These include:

- Education Community Learning and Development
- Gartmorn Dam Country Park Development Trust (GDPCDT)
- Forest and Land Scotland
- Cani Cross
- Wee County Harriers
- Paths for all
- The Conservation Volunteers (TCV)
- Enabling Projects in Clackmannanshire (EPIC)
- Clackmannanshire Field Studies Society
- Sponsored walks – various
- Scottish Endurance Riders
- Stirling University – Young Pathfinders Group

Development of outdoor learning and activity programmes at Gartmorn Dam

The compound near the cottage is currently used by CLD. This has the potential to be developed further and become a community hub.

Activities could include opportunities to gain accreditation in various outdoor activities.

The Education Service are currently working in partnership at local and national level to develop flexible outdoor learning spaces in order to provide alternative learning pathways for children and young people displaying a wide range of complex barriers to education, including those who are excluded or at risk of exclusion and those with social, emotional and mental health needs or special educational needs.

Programmes will be developed and designed to meet the needs of learners who need alternatives to a traditional education setting. Learners are supported in small group work settings and are provided with a variety of options that can lead to wider achievement. Survey results demonstrated that 41% of 1300 young people surveyed would like to see outdoor activities developed.

Outdoor Learning and the Scottish Outdoor Access Code (SOAC)

Any activities within the Country Park must fit with the ethos of the Country Park and Local Nature Reserve. They must also operate within the Land Reform Act (2003) and adhere to the Scottish Outdoor Access Code. Any activities that are out with the Act and code should seek permission from the Council and relevant land owners.

Any large scale or long term activities should be done in consultation with the Council. Environmental impacts (long and short term) should also be considered at this point.

Any activities that require access to the water body need to obtain consent from nature scot. Such activities are considered potentially damaging operations.

The Forth OWLS (Outdoor Woodland Learning Scotland) is a local group and is part of the national OWLS network. The group exists to promote outdoor learning in Woodland areas.

6: Safe Equipment and Facilities

Antisocial behaviour

General vandalism of property, vandalism of benches and the bird hide in particular tends to increase during the school holidays. The Clackmannanshire Countryside Rangers used to work with local schools and this appeared to have a positive effect. Currently the Rangers are limited in what they can commit to with school groups.

The council CLD team have filled this gap to a certain extent and have the advantage of working with hard to reach young people, The team are currently being restructured so it is unclear if this will continue.

Bringing more community involvement to Gartmorn Dam need to be a focus and this should again make a difference, Community groups should be invited to outline their thoughts about involvement in the Dam and what they would like to see happen. As the management plan is a working document and in response to changes projects can be added at any time during the 5 year term.

7: Personal Security

Vehicles

In the past there have been car break ins. Rangers talked to police to ask for an increased presence and for a while police patrols increased and crime dropped.

Hedges have been cut back to create a better sight line for cars to be seen from the Café. Signs warning car owners to keep their valuables out of site have also been erected by the Council.

Drones

The rules for flying small recreational drones are set out in the Air Navigation Order 2009 (ANO) and should be followed at Gartmorn Dam Country Park.

Life buoys

These are checked by Waste Services and are replaced when required. At times they have been subject to vandalism and theft.



8: Control of Dogs

The Country Park is an ideal length for a decent dog walk. It is used by both individual and commercial dog walkers.

Most dogs are walked responsibly and cause no issues. There is, however, a small minority of less responsible owners, who cause the following issues

- Dog fouling
- Dogs chasing wildfowl
- Dogs not under control

The issue of disturbance by dogs around the waters edge reduces suitable nesting and resting areas for birds (most notably wildfowl). This is addressed in Section 22, as it is a biodiversity issue.

Guidance for dog owners is clearly articulated in the SOAC document as well as associated leaflets, posters and advertising campaigns. <http://www.snh.gov.uk/docs/C233791.pdf>. There are currently signs at Gartmorn Dam to try and encourage responsible dog walking.

There are a number of commercial dog walkers who use the paths in the country park. Engaging with this group should be a priority and working with them to produce guidance on doing this responsibly at Gartmorn Dam is worth looking into.



Management

- Ranger service to plan and run events programmes where possible, when staffing allows. Joint events with FLS have worked well in the past and should be considered when planning events.
- Liaise with third parties running events and ensure that these comply with Health and Safety and that clashes are avoided.
- Rangers to continue to forge links with local schools as well as schools in the wider area.
- Maintain relationships with Forth Valley Outdoor and Woodland Learning Scotland Group. Having a Ranger in the group should be considered.
- Continue with existing dog bins.
- Maintain advisory signage at the boat launch and café, encouraging owners to put dogs on leads around wildfowl.
- Rangers to liaise informally with the public when on site.
- Consider running dog events in the Country Park to raise awareness and encourage responsible behaviour. Consider involving local commercial dog walkers in this as a way to forge links.
- Liaise with Environmental Health if specific issues arise.
- Liaise with café over making SOAC dog leaflets available in the Café.
- Signage to be erected by Council when conflict increases with birds. These should ask owners to put their dogs on leads or under close control in specific areas, for example when birds are nesting.
- Update the information on Clacks web about Gartmorn Dam to include drones.

Well Maintained and Clean

9: Litter and Waste Management

Waste from Gartmorn Dam is collected by Waste Services and is disposed of at the Council recycling area at Forthbank.

10: Horticultural Maintenance

This is undertaken by the council around the main paths and car park area. In the past, the Rangers have run workdays to improve other areas of the Country Park.

The Gartmorn Dam Country Park Development Trust has been involved in the maintenance and development of the sunken garden over a number of years. It would be useful for them to produce a 5 year plan for the garden, to tie in with the 5 year management plan. This should tie in with wider council objectives, including the Clackmannanshire Pollinator strategy and be approved by the rangers, before work commences. The group are currently seeking a formal agreement from Clackmannanshire council over the use and development of the area

11: Arboriculture Maintenance

Gartmorn Dam has many areas of woodland as well as smaller stands of trees. The trees should be regularly surveyed to ensure the Clackmannanshire council fulfils its duty of care as a landowner / land manager. Areas of Woodland surrounding Gartmorn Dam are managed by the appropriate land owners with input from the Council where required.

A survey of woodland owned and managed by Clackmannanshire council was carried out in CSGN in 2017 (see appendix 1). As a result of this, the Ranger Service has drawn up local guidance on and a regime of tree survey inspections of council owned woodlands. Gartmorn Dam is included in this. Tree surveys of core path 121, Headwall Wood and Cowpark Wood were carried out in 2023. These should be repeated by 2026, at the latest. Trees with defects are reported during monthly core path inspections, but are less of a focus and so do not receive such detailed inspection and only obvious defects are likely to be picked up.

Storms and the subsequent damage are time consuming and can be challenging to deal with. The possibility that these kinds of events are becoming more frequent due to climate change needs to be considered and taken into consideration as much as possible for the future management of Gartmorn Dam.

12: Building and Infrastructure Maintenance

The Valve House and Sluice Tower are owned and maintained by Scottish Water. The Pump House and old Toilet Block are leased by and maintained by Clackmannanshire Council. New roofs were put on the buildings owned by Scottish Water in 2017. The old Visitor Centre is leased by Clackmannanshire Council to Dam Good Coffee.

The infrastructure in the Country Park is maintained by Clackmannanshire Council and Scottish Water.

There is potential to look at how the buildings could be repurposed for use by the rangers / local groups etc. The work of the Stirling Community enterprise on the boiler house at Kildean, in Stirling may provide a useful model for how we achieve this.

13: Equipment Maintenance.

The life buoys are checked and maintained by Waste Services.

Hardy's link Bridge at the far side of Gartmorn Dam was widened for wheelchair access.<https://www.buildscotland.co.uk/construction-news/168529/building-work-starts-at-gartmorn-dam>.

Management

- Council to continue to work with volunteers / groups to improve the horticultural diversity of the Country Park
- GDCPDT to continue their work at the sunken garden and to do this within the framework of a 5 year plan.
- Rangers to carry out / arrange full, regular tree safety surveys along path boundaries, within a wider tree survey / inspection routine.
- Windblown trees within fall length of pathways to be felled.
- Any dangerous hang-ups or other defects to be dealt with by the Rangers or Land Services.

Environmental Management

14: Managing Environmental Impact

Users are encouraged to use active, non-motorised transport to access the Country Park.

There is potential for bike hire in the future.

15: Waste Minimisation

Waste is recycled as much as possible. Contents of the bins are separated where achievable at Forthbank Recycling Centre.

During litter picks, volunteers are encouraged to separate waste into recyclable and non-recyclable bags.

16: Chemical Use

Our aim is to spray as little as possible and with the least toxic, non-residual chemicals available.

18: Climate Change

Clackmannanshire Council's Sustainability and Climate Change strategy can be found at www.clacksweb.co.uk/document/2858.pdf

Management

- Liaise with other interested parties over the possibility of bike hire.
- Council to continue to support litter picks at Gartmorn Dam and to encourage volunteers to separate the waste collected.

Biodiversity, Landscape and Heritage

19: Management of Natural Features, Wild Fauna and Flora

20: Conservation of Landscape Features

21: Conservation of Buildings and Structures

Since it is most sensible to manage Biodiversity, Landscape and Heritage by compartments, these three headings are combined.

Pollinator Strategy

A pollinator Strategy was written in 2023, by the Ranger Service. This forward thinking and achievable strategy will be delivered throughout Clackmannanshire and will be part of a national approach.

Clackmannanshire Council is committed to increasing the numbers of pollinators within Clackmannanshire. It will ensure that pollinators' needs are considered and protected in the delivery of its duties and work.

The Council's Interim Climate Change Strategy sets out a framework for achieving net zero greenhouse gas emissions by 2040 at the latest for the Council's own operations and by 2045 at the latest for the Clackmannanshire area.

This includes regular interim emission reduction targets leading up to net zero by 2040 and a Climate Emergency Action with specific actions to reduce emissions.

Pollinators constitute a core part of achieving net zero such as through the emissions absorption potential of nature and biodiversity's role in climate resilience.

Clackmannanshire Council will seek to protect and enhance the amount and quality of pollinator habitat present in Clackmannanshire. Habitats such as open spaces and road verges will be managed to increase benefits for pollinators. Planting schemes will incorporate plants that benefit pollinators where possible and planning will also include areas that have pollinator potential.

There are lots of opportunities to deliver the strategy within the country park. Some of these are embedded within the management plan, but more opportunities may be identified.

Some of the areas outlined in the next section could be managed for pollinators. The strategy would be:

- An annual September cut
- Removal of the cuttings
- Pollinator signs to inform / educate the public
- Information on social media about their management
- Possible enhancement with plug plants
- Baseline and possible bi annual surveys to monitor the effectiveness of the management
- Involvement of local groups (TCV, EPIC, local volunteers, GDCPDT, Young Pathfinders Group)

Headwall Area

The Headwall area runs from the entrance area to the Sunken Garden area. It includes all car parks, the barbeque site on the north shore, Café (old Visitor Centre) and the Headwall. This area is subject to the greatest number of visitors. It includes two areas of nature conservation interest. A woodland of Birch, Oak, Lime, Beech and Hawthorn runs from south of the car park 'behind' the Café and links to the Brothie Burn woods and compartment 2. The old holding pond near the Sunken Garden is important as a spawning site for newts and toads. A number of brick-built pits can be found next to the pond, providing hibernation sites.



Management

- Grass cutting – Ranger to liaise with Land services to see if the cutting regime can be altered to make it more pollinator friendly
- Dam headwall to be maintained by Scottish Water as necessary
- Benches and bins to be maintained by Council

Headwall Wood

This woodland runs parallel to the headwall of the dam. It consists mainly of Scots pine (*Pinus sylvestris*) and Beech (*Fagus sylvatica*) with an understory of Holly (*Ilex aquifolium*) and Beech saplings. Other tree species include Oak (*Quercus* species) Rowan (*Sorbus aucuparia*), Sycamore (*Acer pseudo-platanus*), Holly and Birch (*Betula pendula*). There is an 'edible' hedge of native trees on the boundary of the woodland. There are bat boxes in the woods which are surveyed annually by the Rangers.

Because of the fact that it is a mature woodland with very little understorey (some ferns (*Polypodiopsida* species) and brambles (*Rubus fruticosus*) it is ideal for use with groups, as any damage is minimal.

There are a number of bat species roosting in Headwall Woods. Known species include Brown long-eared bats (*Plecotus auritus*), Common pipistrelle (*Pipistrellus pipistrellus*) and Soprano pipistrelle (*Pipistrellus pygmaeus*) and Natterers (*Myotis Natterii*). There are a number of bat boxes in the woods and these are surveyed every year (since 2008) by the Rangers. The original wooden boxes have been replaced with Schweglers woodcrete boxes. There is evidence to suggest that bats are more likely to roost in woodcrete boxes as they are less draughty and hold a more stable temperature.



Management

- Investigate improvements to the woodland for use by groups.
- Carry out tree safety surveys as per tree inspection regime.
- Carry out some limited thinning to increase the age and species diversity of the site.
- Investigate alternative roost provision.
- Annual bat box survey.

The Sunken Garden

The Sunken Garden was the old filter-beds for Gartmorn Dam when it was a reservoir. The filter-bed was later transformed into an area where people could come and sit. It is wheelchair accessible and is well used by those wanting a shorter walk and a seat at the end. It was planted with a variety of plants, including sensory plants, to make it a more pleasant place to visit. Planting included an area with herbs and flowering plants. It has a bug hotel that was built by a local disability group and other wildlife friendly features. There was a draft drawn up with a permaculture design for the garden in 2002.



Management

- A 5 year annual work plan should be written by GDCPDT to inform the work carried out in the sunken garden and should be agreed by the Rangers. Any work planned for the Sunken garden should aim to include actions from the pollinator strategy as well and from the CBAP. The Regeneration Plan written by the Trust is likely to incorporate the Sunken Gardens. Negotiations for a lease between the Trust and the council to allow management of the Sunken Gardens is currently underway.
- Maintain area to allow access in for all

The South Shore

This runs from the western edge of the south shore footpath along to the lade bridge. It includes the waters edge, the narrow strip of trees that runs along the bank and the surfaced path. Small wooded areas include Oak, Birch, Hawthorn (*Crataegus monogyna*) and Sycamore. Among other woodland species present there are Amphibious bistort (*Persicaria amphibia*), Burr marigold (*Bidens ripartite*) and Dog violet (*Viola riviniana*)



Bing on south shore – steps needing repair (left) and steps that have had repair by Paths for All and Education Community Learning and Development project (right).

Management

- Cut back trees to improve the view from the bing.
- Install new bench on the bing.

The Meadow

The grassland contains Tufted-hair grass (*Deschampsia cespitosa*), Cocks foot (*Dactylis glomerata*) and Yorkshire fog (*Holcus lanatus*). Rosebay willowherb (*Chamerion angustifolium*) and Creeping thistle (*Cirsium arvensae*) are abundant, with Meadowsweet (*Filipendula ulmaria*), Greater birds-foot trefoil (*Lotus pendunculatus*) and Meadow vetchling (*Lathyrus pratensis*) present in the sward. The coal bing at the southern edge of the area supports mainly Gorse (*Ulex europaeus*).

The species present suggest the meadow is becoming rank. Therefore a cutting regime is required to lower soil nutrients and allow some of the finer meadow grasses and flowers to flourish. This will greatly increase its biodiversity value and also tie in with the pollinator strategy.



Management

- Baseline transect survey to get an up to date plant list.
- An annual September cut.
- Removal of the cuttings.
- Pollinator signs to inform / educate the public.
- Information on social media about their management.
- Possible enhancement with plug plants.
- Baseline and possible bi annual surveys to monitor the effectiveness of the management.
- Involvement of local groups (TCV, EPIC, local volunteers, GDCPDT, Young Pathfinders Group).

The East Shore

This runs from the lade bridge to the field drain in the north-eastern corner of the reservoir. The vegetation along the bank consists mainly of Reed Sweet grass (*Glyceria maxima*) and Amphibious bistort (*pescaria amphibia*) with Alder (*Alnus glutinosa*) and Goat willow (*Salix caprea*) carr.



Management

- Sensitively thin out areas of carr habitat.
- Maintain some of this area as per the pollinator strategy (see the meadow above).

Sherrifyards Woodland

This was the site of Sherrifyards Colliery, which closed in 1921. It is within the S.S.S.I. designation. Birch (*Betula pendula*) and Oak (*Quercus species*) are dominant with a Hawthorn, Elder and Goat willow (*Salix caprea*) under-story. Lesser celandine (*Ficaria verna*), Dog violet (*Viola riviniana*) and Enchanters nightshade (*Circaea lutentiana*) are found in the field layer.

Various bits of the built structure of Sherrifyards Colliery remain. However most of the built heritage is very overgrown. There is a small interpretation panel which is small, outdated and gives only scant information.

Managing the trees growing out of the structures is key to preventing further deterioration. It would be worth carrying out some fixed point photography, initially to provide a baseline and then as a method of monitoring. It would also be worth mapping the existing structures so we know what if there.

Managing trees in this context needs some specialist advice and input and also the agreement of the landowner, as this area is in private ownership. This may well also be of interest to the Clackmannanshire Field studies group, who have a good body of knowledge and expertise in the history of the area.

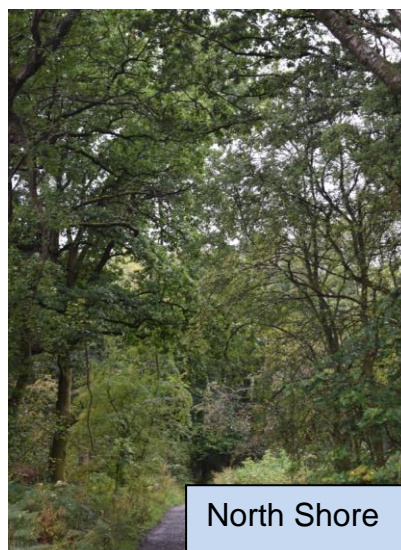


Management

- Liaise with the Landowner, Stirling Council Archaeologist and Clackmannanshire Field Studies Group to look at how the structures can be protected / maintained.
- Either map the built structures or locate a map.
- Photograph the structure before further deterioration occurs and develop a regime for monitoring.
- Produce a new interpretive board.

The North Shore

The habitat along this old mineral railway is similar to the south comprising marginal plants, a narrow woody strip with hawthorn (*Crataegus monogyna*), dog rose (*Rosa canina*) and goat willow (*Salix caprea*) and the surfaced path. Sycamore (*Acer pseudoplatanus*) is common along the banks of the western half.



Management

- Reduce the number of sycamore (*Acer pseudoplatanus*) by felling

The Local Nature Reserve

This includes three areas of land within the LNR boundary. These are the 'Pike ponds', the island field and the island itself. Bird watching screens are installed here. The pike ponds are surrounded by reed beds and have a Willow scrub edge. A strip of trees and shrubs including Oak (*Quercus* species), Birch (*Betula pendula*), Hawthorn (*Crataegus monogyna*), Elder (*Sambucus nigra*) and Dog-rose (*Rosa canina*) forms the south and west edges. This area is used by woodland species and Mallard ducks (*Anas platyrhynchos*) for nesting. Coot (*Fulica atra*), Moorhen (*Gallinula chloropus*) and Mute swan (*Cygnus olor*) nest in the reedbeds. The Island field has two grassland communities, a fine sward with Vetches (*Vicia* species), Dock (*Rumex* species) and Creeping thistle (*Cirsium arvense*). Due to a lack of management the grassland areas are beginning to turn rank. The lagoons support a diverse invertebrate and plant community. Reed sweet grass (*Glyceria maxima*), Reed canary grass (*Phalaris arundinacea*), Meadowsweet (*Filipendula ulmaria*) and Greater birds foot trefoil (*Lotus pendunculatus*) grow along the banks of the field. There are a number of mature trees on the island including Oak (*Quercus* species), Beech (*Fagus sylvatica*), Sycamore (*Acer pseudoplatanus*), Scots pine (*Pinus sylvestris*), Alder (*Alnus glutinosa*) and Willow (*Salix* species). Little grows in the deep leaf litter on the island floor beneath the closed canopy with the exception of a few ferns. An artificial Sand martin (*Riparia riparia*) bank was built with the help of volunteers on the island field and an Otter (*Lutra lutra*) holt was constructed with help from Scottish Autism volunteers and volunteer rangers.



Island Field meadow



Sand martin bank – built with the help of volunteers



Management

- Baseline transect survey to get an up to date plant list.
- An annual September cut.
- Removal of the cuttings.
- Pollinator signs to inform / educate the public.
- Information on social media about their management.
- Baseline and possible bi annual surveys to monitor the effectiveness of the management.
- Involvement of local groups (TCV, EPIC, local volunteers, GDCPDT, Young Pathfinders Group).
- Removal of invasive Reed canary grass.
- Regularly cut back Birch trees in front of the Sand martin bank to encourage use by Sand martins.

22: Biological Recording

Although there are good historical records of surveys / bird lists etc., there is very little recent information about the flora and fauna of Gartmorn Dam Country Park.

There is a WEBS count done by a local volunteer. Unfortunately there is a charge for accessing this data. Some information can be found in the Forth Naturalist and Historian journals (Forth Area Bird Report amongst other articles).

Sound management of any site requires a good understanding of what it is we are actually trying to manage. With this in mind, there needs to be a concentrated effort to update our biological records.

Bats: an annual bat survey is done to check occupancy of the bat boxes in Headwall Woods and Cowpark Woods. Some bat species do not use boxes and this only gives us a small snapshot. The Bat Conservation Trust compile data from surveys nationally. These surveys could be done at Gartmorn Dam – a waterways survey and a Field survey.

Stirling University will be installing sensors (camera traps) and bio acoustic sensors to increase the local knowledge of the wildlife present in the park. The data collected will be shared on an open-source dashboard enabling citizen interactions as well as increased knowledge for professional researchers. The project has been preliminarily scoped for 5 years with each phase expanding on the learnings and opportunities for growing out the project. Forth ERA's ambition is to leave a legacy of data and infrastructure that can be taken on by the local community and the organisations that have committed over the term of the project.

23: Disturbance of Wildfowl

One of the initial qualifying interests of the site was its wintering wildfowl population. While this is no longer a qualifying interest it is still one of our wider conservation interests to try and maintain and enhance the current interest of the site for such bird populations. In addition, Gartmorn Dam is also home to many breeding birds, including wildfowl.

During the winter, many of the birds from the Forth SPA are thought to use Gartmorn Dam during periods of poor weather, when they tend to seek inland shelter. As these birds are considered to be SPA birds, it is vitally important that their interests are looked after.

One of the issues the birds have is disturbance, from the sheer volume of people and dogs using the site. Under the management plan (currently being updated) we are looking at ways to minimise disturbance (Screening, dead hedging zoning etc.). Disturbance is both from the land and the water.

Gartmorn Dam – Waterbody

The waterbody of Gartmorn Dam has been subject to significant change over the years. In the past, when the lade was running, it provided a steady stream of freshwater into the waterbody. Since the lade was closed, the main inflow into the dam has been direct precipitation and run off from the fields and through various pipes. The lack of a large volume of freshwater coming through the waterbody and the resulting increased proportion of the inflow of water as runoff has meant an increase in the nutrient content of the water body (eutrophication).

This creates a number of problems, including algal blooms and a detrimental effect on the botanical interest of the site (open water and transition fen)

The project being carried out by Stirling University / Scotland's International Environment Centre should help us further understand the issues. One of the remote sensors being deployed will collect data on water quality, nutrient status and also water levels. This is real time data and will allow us not only to understand the bigger picture, but also how it changes over time and in different conditions. There will also be a sensor collecting information on meteorology and plant growth, which may tie in with this. Turbidity is an ongoing issue at the dam, so being able to link meteorological data with information about nutrient levels could help us further understand this problem.

As well as gaining a better understanding of how the water body is changing / behaving, we need to consider how the situation could be remedied. Re-opening of the lade has been an ongoing discussion, but the stumbling block has always been the cost (more ongoing maintenance than project cost) and the logistics of ongoing maintenance.

The involvement of Stirling University / Scotland's International Environment Centre and the data they are collecting provides a new incentive to reopen these investigations. These investigations need to be fully joined up and include discussions with Nature Scot and SEPA. Involvement from local groups would be welcomed, but this should be coordinated by Clackmannanshire council.

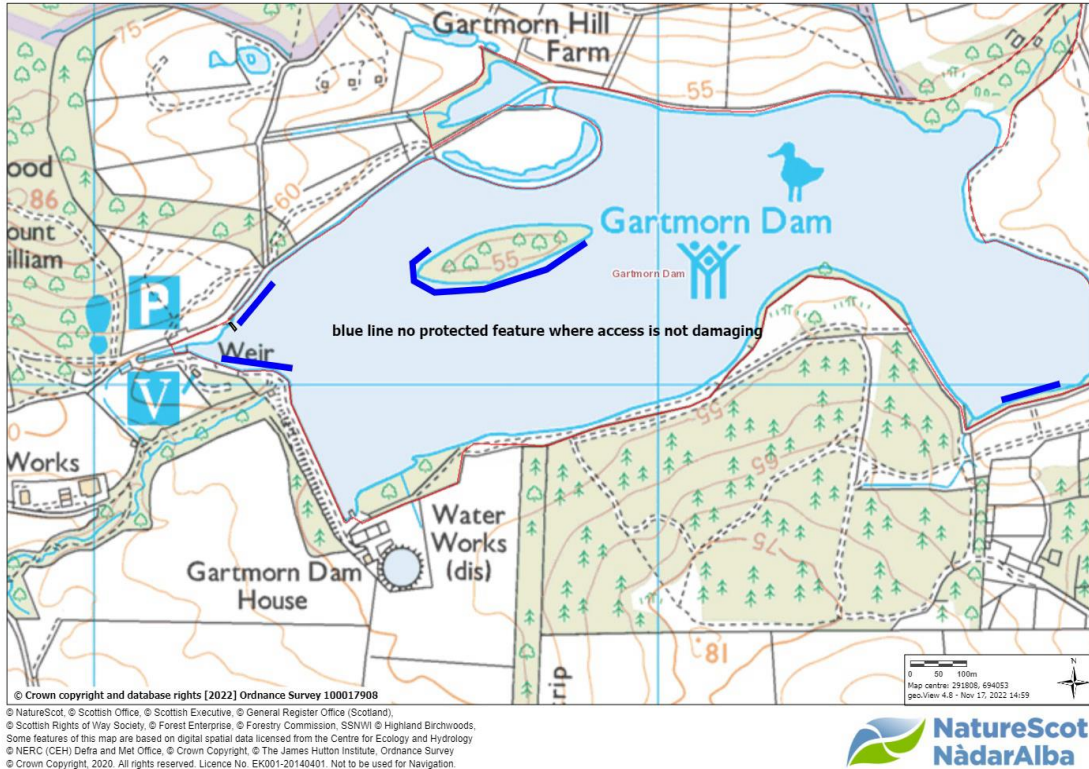
Tied in to both the water quality / nutrient levels and water levels is the aquatic flora interest of the SSSI (open water and transition fen). Continued monitoring will be carried out by Nature Scot as part of their site condition monitoring.

The open water / transition fen vegetation which is part of the SSSI designation occurs throughout the Waterbody. As far as recreational access to the waterbody goes, there are very few areas where this will not cause damage.

Access to the waterbody is not a consented activity where it damages the botanical interest of the dam. Because of access rights determined by SOAC, it would be almost impossible to have no recreational use of the waterbody. As there is no one up at the Dam full time and people can access the water after hours, we have to assume that there will always be some low level use of the waterbody.

The map shows the only places at the Dam where people / non motorised craft can enter the water without damage. Accepting that there is going to be some low level access to the water, signage should be drawn up to inform people of where they can access the water and also to explain the issues surrounding access.

geo.View map



It should also state that no access is permitted for powerboats / motorised craft and that anyone contravening this will be reported to the police.

The boat launch is situated at one of the best locations for some of the plants which are of interest to the SSSI designation. The boat launch is no longer needed and is counter to the conservation interest of the waterbody. It is also no longer maintained. It also draws people to this part of the shore line and is a magnet for antisocial behaviour. It should be removed. However, this is likely to be an unpopular move and so will need to be done sensitively.

This area of the shore line should be allowed to recover, and so some sort of barrier may need to be installed (along with information for the public). Consultation with Nature scot will be required to determine the best way to achieve this.

Management

- Installation of dead hedging and duck nesting platforms, to increase the area of undisturbed nesting / resting habitat for birds.
- Investigate whether any work on the island would be beneficial for nesting birds
- Use of signs to inform water sports users about responsible access and appropriate spots for launching
- Consider using buoys to limit access for water sports to try and minimise damage.
- Remove the boat launch
- Investigate using barriers / signage to allow the vegetation at the boat launch to recover.
- Installation of remote sensor(s) to monitor water quality, nutrient levels and water levels by Stirling University / Scotland's International Environment Centre.
- Coordinated approach (lead by Clackmannanshire Council) to look at the possibility of reopening the lade.

Community Involvement

24: Community Involvement in Management and Development

Patterns of use survey

In March 2011 the Green Hub Survey was carried out to help inform future maintenance and management of Gartmorn Dam. The key findings in the survey were.

- The majority of people questioned were in full time employment or retired
- The largest proportion of visitors were white Scottish (85%)
- The majority of visitors were from local communities, with over 80% of people travelling from within a 5 mile radius.
- Only 4% travelled over 16 miles
- The vast majority of people drive (56%) or walk (27%)

Groups / Organisations using the Country Park

- Stirling university / Scotland's International Environment Centre.
- TCV (Trust for Conservation Volunteers)
- EPIC (Enabling Projects in Clackmannanshire)
- Gartmorn Dam Country Park Development Trust (GDCPDT).
- Local Outdoor groups – Ramblers, sports groups, DAG .
- Community Police.
- Clackmannanshire OWLS (Outdoor and Woodland Learning Scotland)
- Field Studies Society.
- Scottish Autism.
- Young Pathfinders Group Education Community Learning and Development.
- Local Volunteers.

25: Appropriate Provision for the Community

Community groups, individuals and schools are all encouraged to use the country park independently and there is a good range of outdoor learning equipment and training available through the Clackmannanshire Outdoor and Woodland Learning Scotland group.

Volunteers carry out a wide range of tasks at Gartmorn Dam and there is huge potential to involve them further in the management of the site.

A full events programme has been offered in the past and is again an excellent way of bringing the local community into the Country Park.

Management

- OWLS group to further publicise their resources and training to the local community and local schools.
- Council to develop a leaflet / app for schools.
- Continue to work with local volunteers.
- Continue to work with TCV and EPIC.
- Rangers to look at running an annual events programme.
- Council to continue links with the Ramblers Group and to encourage them to make full use of the path network in and around the Country Park.
- Rangers to work with Education Service .
- Discussion with local groups about the development of the compound.

Management and Communication

26: Marketing and Promotion

There are already various interpretation panels and leaflets, but most are outdated and need to be redone. It is also worth investigating developing an app.

25: Appropriate Information Channels

The Ranger Service has historically worked with the Communications Department to promote Gartmorn Dam. Currently this is done via

- Facebook
- Twitter
- Clacksweb
- Press
- Posters
- Leaflets

Other avenues for marketing include

- GDCPDT Facebook page
- GDCPDT website
- Dam Good Coffee Facebook page

QR Codes

QR codes are a good, cost effective way of delivering information. Using QR codes at Gartmorn Dam as a way of linking to relevant website / clacks web etc. should be investigated.

26: Appropriate Educational and Interpretive Information

There is very little online or written information available for educational visits to Gartmorn Dam. Most of the Ranger Service educational input is face to face. This could be supplemented by an educational guide / children's leaflet / app.

Management

- Rangers to develop new interpretation panels.
- Rangers to update the Gartmorn Dam leaflet.
- Rangers to develop an educational guide / children's guide / app.
- Rangers to investigate using QR codes.
- Rangers to continue posting through council social media channels.

How will we know when we get there?

Monitoring & Review

Council officers will continue to visit Gartmorn Dam regularly and progress will be monitored against the Management Plan. Work with Gartmorn Dam Country Park Development Trust and other stakeholders will continue to identify strengths and weaknesses of the park to improve it for all users. Regular meetings with Gartmorn Dam Country Park Development Trust members will allow joint working between officers and groups. This should allow members to communicate with the Council any thoughts that they have on the way that the park is managed. It should also allow for officers to communicate information about any planned developments at Gartmorn Dam.

Ideally a user survey will be carried out and this should help to guide the plans for the park. It should allow officers to see where users are happy with current changes in the park and where future plans should be made.

The park's Management Plan will be reviewed once a year. This will allow the officers to focus on actions and developments for the year ahead. Regular review meetings will also take place when necessary. Review meetings will be held following feedback from each Green Flag application to discuss any suggestions and recommendations raised by the judges.

There is now a five year work programme. This outlines all the tasks, who is responsible, when they will be carried out and how progress will be shown and monitored.

Useful references

Clackmannanshire Local Biodiversity Action Plan -
<http://www.clacks.gov.uk/document/4519.pdf>

Green Hub Development study – request an electronic copy from the Ranger Service at rangers@clacks.gov.uk

Gartmorn Dam Country Park Development Trust - contact the trust at
<http://gartmordam.btck.co.uk/>

Clackmannanshire Birds Atlas – <https://www.bto.org/volunteer-surveys/birdatlas>

Forth Naturalist and Historian Articles - <http://www.fnh.stir.ac.uk/>

Clackmannanshire Field Studies Society - www.cfss.org.uk

5 Year Work Plan

Category	Task	Who is responsible	2024	2025	2026	2027	2028	Assessing progress
A Welcoming Place	Improve signage for Overspill car park	Council	Design, order and put up signs	Monitor signage and replace as necessary.				
	Investigate repainting car park lines	Council	Paint new car park lines if required.					
	Ensure all access signage is up to date.	Council	Regular patrols by Rangers to monitor signage.					
	Gartmorn Dam path check	Council	Core Path 121 (path around Gartmorn Dam) to be checked monthly					
	Core path checks	Council / FLS	All Core Paths to be checked annually. Forestry and Land Scotland to check their paths as per their inspection regime.					
	Path repairs	Council / TCV / EPIC/GDCPDT	Liaise with landowners / FLS / GDCPDT / TCV /EPICand other interested parties (possibly employment training) to arrange repairs.					
	Scottish Outdoor Access (SOAC)Information	Council	Ensure SOAC leaflets are available in the café. Use of SOAC posters to deal with any access issues.					
	Landowner relations	Council	Maintain relationships with landowners and liaise over any access issues. Use landowner group to communicate issues arising.					
	Map provision	Council	Investigate better provision of the maps for public. Look at QR code provision.					
	Disabled access	Council	Regular patrols by Rangers to ensure paths are maintained for disabled users. Liaise with third parties / council groups over improvements/ use by disabled users.					
	Safety signage	Council	Keep safety signage updated.					
	Interpretive panel	Council	Make an inventory of all signs within the park. Standardise all signs.					
	Replace Bird Hide	Council	Remove and replace bird hide.				New bird hide	

									in place.
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Category	Task	Who is responsible	2024	2025	2026	2027	2028	Assessing progress
Health, Safe and Secure	Control of dogs	Council	<p>Rangers to liaise with the public informally when on site.</p> <p>Liaise with Environmental Health if specific issues arise.</p> <p>Increase advisory signage encouraging owners to put dogs on leads around wildfowl.</p> <p>Continue with existing dog bins.</p> <p>Ensure SOAC leaflets about dogs are available in the visitor centre.</p>					Number of incidents involving dogs to decrease.
	Events	Council / Partners (could include FLS, GDCPDT, Dam Good Coffee, TCV, EPIC and others)	<p>Plan an annual programme of events designed to appeal to all ages / families etc. This could be done in conjunction with partners.</p> <p>Investigate third parties running events and ensure that these comply with Health and Safety and that clashes between events are avoided.</p> <p>Continue joint working on events with Forestry and Land Scotland Rangers.</p> <p>Liaise with café over events.</p>					
	Outdoor Learning	Council	<p>Rangers to continue to forge links with local schools as well as schools in the local area.</p> <p>Rangers to work with OWLS group to provide outdoor training for teachers.</p>					Increase in number of schools using Country Park
	Possible playpark	Café / Council	<p>Liaise with café owners and Clacks Council over the possibility of a playpark.</p>					Playpark either present

	installation.			or not.
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Category	Task	Who is responsible	2024	2025	2026	2027	2028	Assessing progress
Well maintained and clean	Sunken Garden improvements	Council / GDCPDT/ TCV/ EPIC	GDCPDT volunteers to carry out regular maintenance and development tasks in the sunken garden. Any development plans should be discussed with the council.					
	Tree safety	Council / land owners	Council to carry out / arrange full , regular tree safety surveys along path boundaries. Windblown / dangerous trees within fall length of pathways to be felled.					Ongoing
Environmental Management	Litter collection	Council	Council to empty litter bins regularly. Any litter picking events with volunteers should liaise with council to arrange collection of litter.					Ongoing
	Bike hire	Council	Liaise with the café over the possibility of bike hire.					Ongoing
Biodiversity, Landscape and Heritage	Reinstate Gartmorn Dam Lade	Scottish Water /Council / GDCPDT	Liaise with Scottish Water, Nature Scot and SEPA to investigate whether reopening of the lade would be feasible and beneficial. Following on from these discussions, carry the project forward if the funding is available, taking into account impact on the Black Devon River and the Brothie burn as a result. Funding might be most easily accessed by GDCPDT.					Ongoing
	Headwall area and Headwall Woods	Council	Grass cut by land services when required.					Ongoing
		Scottish Water	Maintenance of headwall and overflow into Brothie Burn.					Ongoing
		Council	Benches and bins maintained as necessary by land services and other parties.					Ongoing
		Council	Annual bat surveys					Ongoing
	South Shore	Council	Cut back trees to improve the viewpoint.					Improved view
South Shore Bing	Council	Install a new bench on the bing.						

Category	Task	Who is responsible	2024	2025	2026	2027	2028	Assessing progress
Biodiversity	The Island Field	Council / TCV/ EPIC	Baseline transect survey to get an up to date plant list. Survey repeated at least every two years. Annual cut and rake.					Species list should reflect an increase in finer grasses and meadow flowers.
		Council / TCV/ EPIC	Annual removal of Reed Canary Grass (invasive species)					Decrease in Reed Canary Grass coverage, eventual eradication.
	Sand Martin bank	Council / TCV/ EPIC	Cut back birch trees from front of the sand martin bank to clear flight lines.					Clearer entrance for sand martins to use.
	The East Shore	Council / Volunteers	Thinning out Carr habitat.					Increase in marginal wetland plants.
	Mitigating bird disturbance at the waters edge.	Council/ TCV / EPIC / volunteers	Install duck nesting platforms. Investigate whether any thinning / planting on the island would benefit birds. Consider whether some of the thinned out carr could be placed to help create					Increase in bird species numbers and diversity.

			nesting opportunities. Install areas of dead hedge around Gartmorn Dam .	
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Category	Task	Who is responsible	2024	2025	2026	2027	2028	Assessing progress
Community Involvement	Sherrifyards Woodland / remains of colliery	Council / GDCPDT	Map and photograph the structures. Look at whether they should be allowed to return to nature or be preserved. Cut back / control vegetation. Fell any trees and spray any stumps that are destroying the structures if agreed that preservation is the action to take.					Record of built structures. Structure would be more visible and stable.
	Outdoor learning training	Council / OWLS	OWLS group to publicise resources and training to local schools / community groups.					More local groups using the site.
	Outdoor learning-schools	Council	Rangers to develop a leaflet / app for schools					More school groups using the site.
	Volunteer Programme	Council / TCV/ EPIC / GDCPDT/ FLS	Run annual volunteer programme. Liaise with FLS and TCV. Work with Scottish Autism volunteers and any other interested groups.					Increase volunteer numbers. Records kept of volunteer hours and tasks completed.

Appendices

Appendix 1: Gartmorn Dam Country Park – Management Rules

Management Rules Regulating the use of Countryside Areas

Clackmannanshire Council (hereinafter referred to as “the Council”) by virtue of the powers conferred on them by Section 112 of the Civic Government (Scotland) Act 1982 DO HEREBY make the following Management Rules to regulate the use of and conduct of persons while on or in certain areas of land in Clackmannanshire (hereinafter called “Countryside Areas”) which are owned, occupied or managed by the Council or are otherwise under their control and to which the public have access.

Interpretation

In the construction of these management rules unless the context otherwise requires:

“Countryside Areas” mean the following areas of land known as:

- (a) Gartmorn Dam Country Park, Sauchie
- (b) Cowpark Wood, Gartmorn Dam, Sauchie

Shown shaded red on the plan annexed and executed as relative hereto.

“Council” refers to Clackmannanshire Council incorporated under the Local Government etc. (Scotland) Act 1994.

“Authorised Council Officer” means any employee of the Council nominated by the Council to carry out the duties of Authorised Officer.

“Authorised Organisation” means Clackmannanshire Leisure or any other organisation authorised by the Council.

“Landowner” means any owner of land in or adjoining countryside areas.

“Scottish Water” means the owner of Gartmorn Dam

“Vehicle” means a vehicle including a motor cycle or quad bike but excluding a cycle or an invalid carriage.

“Notice” means a Notice issued by or with the authority of the Council and erected or posted on, at or near the place to which it refers.

1. No person within Countryside Areas shall wilfully damage or deface any structure, sign, notice or any natural feature.

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(i) No person shall within Countryside Areas light any fire unless in the use of a portable stove, BBQ or other appropriate apparatus provided for that purpose.

(ii) Notwithstanding the foregoing no person shall within Countryside Areas throw or let fall any ignited match or any firework or other substance or thing likely to cause fire.

3. No person shall drop, throw down or place any object likely to deface Countryside Areas, or deposit any garden waste material within Countryside Areas.

4. No person while using Countryside Areas, shall, with or without any animal under their control, do so in a manner likely to cause damage or injury to any property or person or nuisance or annoyance to any person or interfere with the peaceful enjoyment of the Countryside Areas.

5. No person shall, while using Countryside Areas, with or without any animal under their control, wilfully or negligently uproot, pick or destroy or damage any plant or tree; disturb, injure kill or remove any animal or habitat, bird nest or egg.

6. No person shall unless with the prior written consent whether by permit or written consent of the Council or any other Authorised Organisation, Landowner or Scottish Water with rights of ownership or management, bring into, use or have in or upon the Countryside Areas any gun rifle or other firearm, knife, snare, engine or instrument or apparatus which may be used to take or kill wildlife or which may be used in such a way as to interfere with the peaceful enjoyment of the Countryside Areas.

7. Vehicles entering Countryside Areas [with the exception of Scottish Water, Landowners, Authorised Organisations or statutory undertakers in the course of their daily business] will do so only on surfaced access roads provided for that purpose and obey any restriction on their use whether by signage or road markings or on the direction of an Authorised Council Officer.

8. No person shall offer for sale any food or anything from within the Countryside Areas without the written permission of the Council.

9. No person shall carry out any of the following acts within the Countryside Areas unless with the prior written consent or appropriate signage of the Council or Scottish Water.

(i) Use any mechanically powered vessel on any water area.

(ii) Wilfully or negligently foul or pollute any water;

(iii) No person shall moor a vessel of any type on any water area overnight or for the purpose of storage.

10. No person shall build any building nor site any caravan or camper van for the purposes of staying overnight without the prior consent or appropriate signage of the Council.

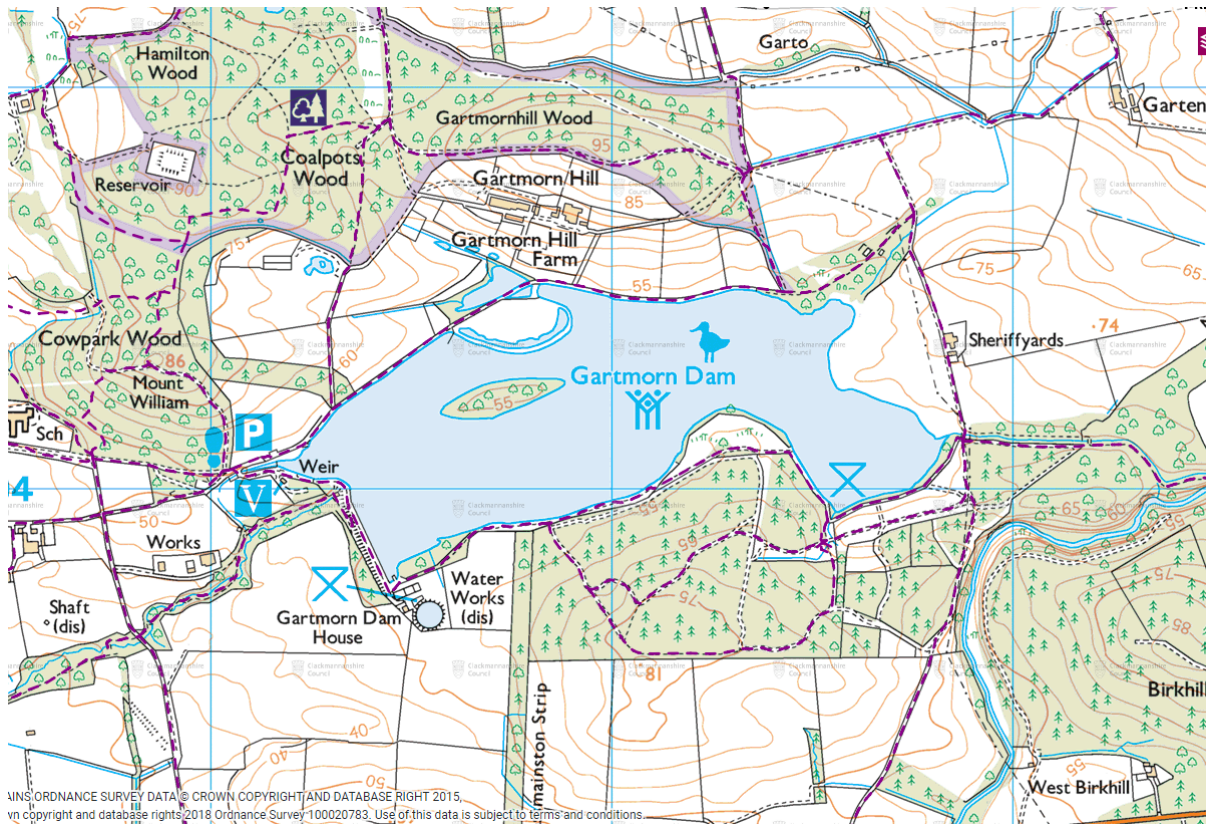
11. No person shall consume alcoholic drink in the Countryside Areas or in any building erected thereon except in areas designated from time to time by the Council for that purpose.

12. No person shall disobey a Notice whether it be a Notice referred to in these management rules or otherwise.

13. No person shall fail to neither comply with any proper instruction given by an Authorised Council Officer nor obstruct him/her in the execution of his /her duties.

14. Any act necessary to the proper execution of his duty in the Countryside Areas by a Council Officer or by any person employed by the Council or of an agent of or Contractor with the Council or any person employed by such Contractor or

Appendix 2: Core Paths – Gartmorn Dam and surrounding area



Appendix 3: Historical Bird Count Data

There is no up to date bird count data available for the Dam. Although WEBS counts are being done, BTO hold this data. There is charge to access it.

Maximum Counts 1990 – 2000

	90/91	91/92	92/93	93/94	94/95	95/96	96/97
97/98	98/99	99/00					
Mallard	890Dec. 264Oct.	840Dec. 173Oct.	620Sept.	680Dec.	495Jan.	386Oct.	430Jan.
Teal	208Oct. 48Feb.	112Nov. 17Feb.	33Sept.	220Jan.	39Jan.	205Dec.	210Jan.
Wigeon	960Feb. 548Feb.	1350Dec. 50Jan.	386Oct.	1260Jan.	557Jan.	1150Dec.	844Jan.
Tufted Duck	212Oct. 260Mar.	244Dec. 105 Oct. 263Oct.	257Sept.	137Sept.	88Oct.	184Nov.	174Oct.
Pochard	26 Nov. 42Dec.	112Sept. 13Nov. 43Oct.	102 Oct.	78Nov.	64Oct.	79Oct.	38Oct.
Goldeneye	56Feb. 62Feb.	48Feb. 37Jan. 42Feb.	48Mar.	48Feb.	52Jan.	132Mar.	62Jan.

	90/91	91/92	92/93	93/94	94/95	95/96	96/97	97/98
98/99	99/00							
G. C. grebe	9 Nov 15 Nov	5 Oct 4 Sept 9 Nov	4 Mar	11 Nov	14 Oct	6 Nov		
Little grebe	20 Oct 3 Feb	12 Oct 7 Sept 2 Nov.	17 Sept	17 Sept	15 Sept	24 Sept		

Mute swan	19 Oct	22 Oct	21 Sept	35 Oct	27 Nov	61 Oct
	51 Oct	122 Nov	16 Sept	18 Oct		
Whooper swan	16 Feb	17 Oct		58 Feb	6 Jan	12 Dec
	2 Nov	11 Nov	40 Oct			
Pinkfoot goose	400 Nov	270 Sept	1 Mar	1 Feb		
Greylag goose	1600 Nov	487 Oct	112 Mar	320 Mar	190 Jan	200 Feb
	400 Mar	90 Nov	10 Jan			
Cormorant	4 Oct	7 Nov		9 Oct	36 Oct	8 Oct
	6 Dec	11 Jan	5 Nov	3 Nov		
Coot	680 Dec	800 Jan	659 Oct	480 Nov	300 Nov	547 Nov
	810 Dec	482 Dec	160 Nov	361 Nov		
Grey Heron				6 Jan	8 Feb	9 Mar
	7 Oct	1 Oct	3 Feb			9 Oct

Appendix 4: Bird species Present at Gartmorn Dam Country Park

Notable Species	Symbol
Schedule 1 birds	*1
Schedule 2 birds	*2
UKBAP target species	*K
LBAP target species	*L

UKBAP-priority (short and medium listed) **P**

UKBAP – species of conservation concern (long listed) **CC**

Blanks indicate not listed under UKBAP

Family +

Species **Past records (1990 plan)** **New records (1990-2000)**

Accentors - Prunellidae

CC Dunnock Prunella modularis	No records	Resident. Probably breeding
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Barn owls - Tytonidae

CC Barn owl	No records	Single bird in Community
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Tyto alba		woodland Oct / Nov 1996 Possible sightings in eastern area and also near Centre in 2000
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Buntings - Emberizidae

P Reed bunting Emberiza schoeniclus	Resident. Breeding	R. Seen often at South East bing in summer
CC Yellowhammer Emberiza citrinella	Resident. Breeding	R. Sings east and south shore. 200 in winters 94 and 96 c'park / com.w'land

Cormorants - Phalacrocoracidae

CC Cormorant Phalacrocorax carbo	Regular winter visitor Max. 38 12/01/90	Winter visitor Max. 9 in Feb. 2000
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Crows - Corvidae

Carrion crow Corvus corone	Resident. Breeding	Resident. Breeds
Jackdaw Corvus monedula	No records	Year round visitor
Jay Garrulus glandarius	Resident. Breeding	Resident. 4 in Feb. '95. Breeds
Magpie Pica pica	Resident . Breeding	Resident. Breeds
Rook Corvus frugilegus	Resident. Breeding 177 pairs 1990	Breeding in island rookery no recent counts

Cuckoos - Cuculidae

Cuckoo Cuculus canorus	No records	Summer visitor, 2 birds in May '00 at lade + Cowpark
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Family +

Species Past records (1990 plan) New records (1990-2000)

Dippers - Cinclidae

CC Dipper Cinclus cinclus	Occasional visitor	Seen along lade. Probably breeds.
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Divers - Gaviidae

CC Diver Black-throated Gavia arctica	No records	Pair present throughout March 1994m
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Ducks, geese and swans - Anatidae

CC Duck Long-tailed Clangula hyemalis	Infrequent winter visitor 1 in 1983	Female in Nov. 1999 *
Duck Ruddy Oxyura jamaicensis	Infrequent winter visitor 1987	Winter visitor. 3 in May 1995, 2 in 1999, 3 in 2000
CC Duck Tufted	Resident /winter max.500	Winter max. 278 Oct 1999

Aythya fuligula	Occasionally breeds	1 pair raised 4 young 1995
CC Gadwall Anas strepera	Winter visitor (single bird) 1983	Small numbers most winters. 6 Oct. 1997
CC Garganey Anas querquedula	Occasional winter visitor	No recent records *
CC Goldeneye Bucephala clangula	Winter resident Max.64 1980	Winter resident 132 March 1996 *2
CC Goosander Mergus merganser	Infrequent winter visitor	Winter visitor 4 Dec.'99, 5 Feb.'00
CC Goose barnacle Branta leucopsis	No records	Rare winter visitor. 2 in November 1997
Goose canada Branta canadensis	Infrequent visitor. Max 12	Infrequent visitor.11 in Sept 1995. 12 in Sept. 1998
CC Goose Greylag Anser anser	Winter visitor Max. 2000 1990	Winter visitor.Max 1600'90 Max. 400 in last 5 years
CC Goose Pink-footed Anser brachyrhynchus	No records	Winter visitor Max. 400 '90 Max. 18 in last 5 years
CC Goose White-fronted Anser albifrons	No records	Single in October 1991
CC Mallard Anas platyrhynchos	Resident and Breeding Winter max. 1500	Resident/breeds Max.890 '90. 430 in last 5 years '97
CC Merganser Red- breasted Mergus serrator	Infrequent winter visitor	No records
CC Pintail Anas acuta	Infrequent winter visitor Usually single birds 1984	Infrequent w. v. 2Nov.'91 3 Oct.'95, 1Jan '98 *2
CC Pochard Aythya ferina	Winter resident Max. 176 in 1986	Winter resident Max. 112 September 1991
Pochard Red-crested Netta rufina	Infrequent winter visitor March 1987	No records
CC Scaup Aythya marita	Infrequent winter visitor Max. 2 September 1984	

**Family +
Species**

Past records (1990 plan) New records (1990-2000)

Ducks, geese and swans – Anatidae (continued from previous page)

CC Shelduck <i>Tadorna tadorna</i>	Occasional visitor in small numbers	Winter visitor 3 in Mar.1997. 2 Mar.1998
Shoveler <i>Anas clypeata</i>	Occasional visitor Max. 10 Dec.1983 / Pair May 1990	Visitor in small no.s max 4. Pair bred in 1997. lagoons
CC Smew <i>Mergus albellus</i>	Infrequent visitor Jan 1987	Female present Dec. 1995
Swan Black <i>Cygnus atratus</i>	No records	Pair present October 1997 till Feb.1998 . (Escapes)
CC Swan Mute <i>Cygnus olor</i>	Resident breeding. Big groups winter. 63 Nov.'82	Breeding / 4 pairs 2000. Winter max.122 Nov. 1997
CC Swan Whooper <i>Cygnus cygnus</i>	Winter visitor Max. 62 in October 1989	Winter visitor Max. 62 in 1993 / 40 in 1998 *
CC Teal <i>Anas crecca</i>	Winter resident Max.700 1989	Winter visitor Max 210 Jan. '97.
CC Wigeon <i>Anas penelope</i>	Winter resident Max. 1200 October 1989	Winter visitor Max.1350 Dec. '91 / 548 Feb.'98
Wigeon American <i>Anas americana</i>	No records	Single bird in Oct. 1992 and in Jan. 1994. Vagrant

Falcons - Falconidae

CC Kestrel <i>Falcon tinnunculus</i>	Resident. Breeding	Resident . Bred in Grass- mainston strip 1995. 1997
CC Merlin <i>Falcon columbarius</i>	Recorded in winter	No records Although sighted in District *
CC Peregrine <i>Falco peregrinus</i>	No records	Recorded during winter * counts

Finches - Fringillidae

CC Brambling <i>Fringilla montifringilla</i>	Passage migrant	14 Jan 1995 Occasional winter visitor *
P Bullfinch <i>Pyrrhula pyrrhula</i>	Resident. Breeding	Resident . Probably breeding
Chaffinch <i>Fringilla coelebs</i>	Resident .Breeding	Resident .Breeding
CC Goldfinch <i>Carduelis carduelis</i>	Resident . Breeding	Frequent visitor
CC Greenfinch <i>Carduelis chloris</i>	Resident. Breeding	Resident. Breeding
P Linnet <i>Acanthis cannabina</i>	Resident. Breeding	Resident . Winter flock of 85 Jan. 1995
Redpoll <i>Acanthis flammea</i>	Resident. Breeding	No records
CC Siskin <i>Carduelis spinus</i>	Occasional winter visitor	40 in Dec.1996 Many parties Sept. 1997

**Family +
Species**

Past records (1990 plan)

New records (1990-2000)

Grebes - Podicipitidae

CC Black-necked grebe Podiceps nigricollis	Infrequent visitor Last record 8/3/87	Rare visitor * 2 birds in Feb. 1992
Great crested grebe Podiceps cristatus	Numbers vary between 5-10 birds throughout year	Bred in 1998 reared two young.
Little grebe Tachybaptus ruficollis	Resident throughout year 2-3 breeding pairs	Max. 24 September 1995 10 pairs / 14 young 1993. No breeding 1999/2000
CC Slavonian grebe Podiceps auritus	Infrequent visitor	1 bird in December 1999 *

Gulls, terns - Laridae

Black-headed gull Larus ridibundus	Present all year round. Large winter flocks	Max. 468 Jan 2000
Common gull Larus canus	Winter visitor. Non - breeding summer visitor	Visitor. More birds in winter Max. 121 Nov. 1999
Great Black-backed gull Larus marinus	Occasional visitor especially in winter	Occasional visitor
CC Herring gull Larus argentatus	Common winter visitor	Visitor. Small numbers. 1 Dec. 1999
CC Lesser Black-backed gull Larus fuscus	Winter visitor and on passage	Visitor. Small numbers. 2 Feb. 1999
CC Black tern Chlidonias niger	No records	Sighted 7/5/00 *

Hérons - Ardeidae

Grey heron Ardea cinerea	Seen throughout year Single birds	Resident. Max 9 Mar 95' 4/5 pairs in G' hill woods
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Kingfishers - Alcedinidae

CC Kingfisher Alcedo atthis	No records	Sighted Sept and Oct * 1999, Oct 2000, Jan 2001
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Larks - Alaudidae

P Skylark Alauda arvensis	No records (but known to have been common)	Thought to be less frequent in 1999 and 2000
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Owls - Strigidae

CC Long-eared owl Asio otus	No records	Bred Grassmainston strip 1998
CC Tawny owl Strix aluco	No records	Resident. Bred S'yards '96 and Cowpark 1997

Oystercatcher - Haematopodidae

Oystercatcher	Resident. Breeding in	Visitor. Higher numbers in
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Haemotopus ostralegus	surrounding area	Winter . 46 March 1998
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Family +

Species **Past records (1990 plan)** **New records (1990-2000)**

Pheasants, partridges and quails - Phasianidae

Pheasant Phasianus colchicus	Resident. Breeding in surrounding area	Resident
P Grey partridge Perdix perdix	Resident. Breeding in surrounding area	Resident

Pigeons - Columbidae

Wood pigeon Columba palumbus	No records	Resident. Breeding
Stock dove Columba oenas	No records	Resident

Plovers - Charadriidae

CC Ringed plover Charadrius hiaticula	Resident . Breeding	No records
CC Lapwing Vanellus vanellus	Resident. Breeding	Visitor / 37 August 2000 No recent breeding

Rails - Rallidae

Coot Fulica atra	Resident. Breeding. Large winter flocks. Max 800 '89	Resident. Breeding. Max.810 December 1996
Moorhen Gallinula chloropus	Resident. Breeding	Resident. Breeding
CC Water rail Rallus aquaticus	No records	Pair resident in North shore reserve.

Sandpipers - Scolopacidae

CC Curlew Numenius arquata	Resident. Breeding in surrounding area.	Summer visitor
CC Godwit (black-tailed) Limosa limosa	Occasional passage migrant	No records
CC Greenshank Tringa nebularia	Passage migrant	No records
CC Redshank Tringa totanus	Passage migrant	No records
Sandpiper (common) Tringa hypoleucos	Passage migrant	Passage migrant
CC Snipe Gallinago gallinago	Resident. Breeding	Resident . Seen in lagoons. Max. 28 Feb. '00
CC Woodcock Scolopax rusticola	Resident. Breeding	Resident Pair bred Cowpark 1995

**Family +
Species**

Past records (1990 plan)

New records (1990-2000)

Sparrows - Estrildidae

House sparrow Passer domesticus	Resident. Breeding	Resident 30 in December 1996
P Tree sparrow Passer montanus	Resident. Breeding	Resident. 26 in October 1996

Starlings - Sturnidae

Starling Sturnus vulgaris	Resident. Breeding	Resident.
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Swallows, martins - Hirundinidae

CC House martin Delichon urbica	No records	Summer visitor.
CC Sand martin Riparia riparia	No records	Summer visitor in large numbers
CC Swallow Hirundo rustica	No records	Summer visitor.

Swifts - Apodidae

Swift Apus apus	No records (known to have been regular summer visitors)	Regular summer visitors in small numbers. Arrive in early May
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**Family +
Species**

Past records (1990 plan)

New records (1990-2000)

Thrushes, warblers and flycatchers - Muscicapidae

Blackbird Turdus merula	Resident. Breeding	Resident. Breeding
CC Blackcap Sylvia atricapilla	No records	Summer visitor. Breeding 1993
CC Chiffchaff Phyoscopus collybita	Summer visitor. Breeds	Summer visitor. Breeding 1993
CC Fieldfare Turdus pilaris	Winter visitor	Winter visitor 200 March 1998 *
P Flycatcher (spotted) Muscicapa striata	Resident . Breeding	Bred near brothie burn in early 1990's
CC Goldcrest Regulus regulus	Resident. Breeding	Resident
CC Redstart Phoenicurus phoenicurus	No records	1 in July 1995
CC Redwing Turdus iliacus	Winter visitor	Winter visitor 200 march 1998 *
Robin Erithacus rubecula	Resident. Breeding	Resident. Breeding
P Thrush (song) Turdus philomelos	Resident. Breeding	Resident.
CC Warbler (garden) Sylvia borin	No records	Summer visitor. Breeding 1993
CC Warbler (reed) Acrocephalus scirpaceus	No records	Summer visitor. Breeding 1993
CC Warbler (sedge) Acrocephalus schoenobaenus	No records	Summer visitor. Breeding 1993
CC Warbler (Willow) Phylloscopus trochilus	Summer visitor. Breeding	Summer visitor. Breeding 1993
CC Warbler (wood) Phylloscopus sibilatrix	No records	Summer visitor. Breeding 1993
CC Whitethroat Sylvia communis	No records	Summer visitor. Breeding 1993

Tits - Paridae

CC Blue tit Parus caeruleus	Resident. Breeding	Resident. Breeding
CC Coal tit Parus ater	Resident. Breeding	Resident. Breeding
CC Great tit Parus major	Resident. Breeding	Resident. Breeding
Long-tailed tit Aegithalos caudatus	Resident. Breeding	Resident. 3 pairs bred N. shore '96. Max. flock 86 '95

**Family +
Species**

Past records (1990 plan)

New records (1990-2000)

Treecreepers - Certhiidae

CC Treecreeper Certhia familiaris	Resident. Breeding	Regularly sighted especially in Cowpark
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Vultures, hawks and eagles – Accipitridae

CC Buzzard Buteo buteo	No records	Resident. Breeding G'hill 2 young in 1997 & Birkhill?
CC Osprey Pandion haliaetus	No records	On passage. Seen Sept * '93, Aug'95, June'96 & '97
CC Sparrowhawk Accipiter nisus	Resident. Breeding	Resident. Seen along North Shore path.

Wagtails, pipits - Motacillidae

CC Meadow pipit Anthus pratensis	No records	Resident
CC Pied wagtail Motacilla alba	No records	Resident. Breeding

Woodpeckers - Picidae

CC Great spotted woodpecker Dendrocopus major	No records	Resident. Breeding 2 pairs Cowpark 1997
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Wrens - Troglodytidae

Wren Troglodytes troglodytes	Resident. Breeding	Resident.
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Gartmorn Dam SSSI – DRAFT- Management Plan for SSSI requirements – 2019 – 2024

Background

Gartmorn Dam SSSI is owned by Scottish Water and is managed by Clackmannanshire Council as a Local Nature Reserve. Clackmannanshire Council have a lease to continue to manage the site until 2029. The reservoir is considered a high risk site by Scottish Water, which means that there is the potential for high flood risk. Because of this the site can only be sold to a public body. The reserve is managed by the rangers and volunteers, as well as other council staff.

Historically the site was part of the water management system for draining mines, then the loch was used for drinking water and most of the water was supplied through a lade running from the Black Devon at Forest Mill. The lade has been shut since 2002 and the loch relies on recharge from the surrounding fields which are mostly in agricultural or arable use. This water brings with it nutrients into the loch, and without the lade's water input, the water flow through is greatly reduced. The change in water quality and increase in nutrient inflow has changed the chemistry and biology of the loch and this has affected the notified features. The loch was originally notified as a moderate nutrient mesotrophic loch and was changed to a high nutrient eutrophic loch based on the findings from SNH's site condition monitoring. The bird assemblage was removed as a notified feature in 2008.

Gartmorn Dam SSSI is notified for the following features and their condition and pressures affecting them are as follows:

Open water transition fen	2015	Unfavourable declining	Drainage ditches, other agricultural operations, ploughing, spreading, water management
Eutrophic loch	2004	Favourable maintained	Water management

Since 2013 Scottish Water has repaired the damn and repaired the wall and bund on the south end of the loch. Unfortunately the works required the lowering of the water level in the loch. Because the damn was left open for much longer than the 6 months agree, the water level stayed low for about 3 years. This has damaged the notified features and changed the usage by birds. In the future SNH will advise the use of coffer dams around the work area so that the loch level will not be lowered.

The council used the loch as fisheries until 2012, stocking it with brown or rainbow trout. The fisheries were closed because of an infestation of fish lice. Fish stocking originally was from March to October, but in the 1990s it took place year round. This coincided with a substantial drop in bird species types and numbers recorded as using the site. Since then the Webs Counts have remained lower than they were when the bird assemblage was a notified feature. Since fish stocking would increase the nutrient input in the loch, this activity is unlikely to be consented to by SNH. The Gartmorn Dam Development Trust are keen to get the lade reopened and to start stocking and fishing the loch. SNH and Clackmannanshire Council will continue to liaise with them on future site management.

Vision and proposed management

The following management will be carried out by the rangers and volunteers. When the management plan is agreed by both parties then there will be no further consent required to progress the following:

1. Path maintenance – clear drains and ditches, repair steps as required, resurface paths
2. Path clearance of scrub as required
3. Use of the site for educational purposes – including pond dipping, canoe clubs and sample of plants and invertebrates
4. Use of vehicles on the SSSI – including ATV, van for contractors, on the dam head wall and at the cottage
5. Use of herbicide for path clearance only
6. Building a brash fence at the water's edge for screening to reduce bird disturbance
7. Thinning of the wood for health and safety – conduct bat and breeding bird surveys and only conduct outside of the bird breeding season
8. Thinning out of carr habitat
9. Fell sycamores that are smaller than pole stage to leave room for other tree species
10. Install barn owl, bat, bird and kestrel boxes

Any further management required can be consented by SNH through submitting a request for consent. Any activities that are on the list of Operations Requiring Consent must be considered for by SNH, see Annex 3.

Annex 1: CITATION

GARTMORN DAM

SITE OF SPECIAL SCIENTIFIC INTEREST

Clackmannanshire

Site code: 678

NATIONAL GRID REFERENCE: NS 920943

OS 1:50,000 SHEET NO: Landranger Series 58

1:25,000 SHEET NO: Explorer Series 366

AREA 66.26ha

NOTIFIED NATURAL FEATURES

Biological: Freshwater habitats: Eutrophic loch

Fens: Open water transition fen

DESCRIPTION:

Gartmorn Dam is sited in the lowland area of central Clackmannanshire, 2.5 km north-west of Alloa and 2km north of Clackmannan. The site is the largest area of open water in the district and represents a typical eutrophic lowland loch, with

characteristic submerged plants, surrounded by open water transition fen of marginal vegetation and reed swamp.

The open water is highly productive and nutrient-rich supporting a wide variety of large submerged or floating plants. In particular, an unusually large number of pondweeds *Potamogeton* spp. occur, including one nationally scarce species, slender-leaved pondweed *Potamogeton filiformis*, and several that are locally uncommon. The transition fens consist largely of reedswamp *Phragmites australis*, bulrushes *Typha latifolia*, reed sweet grass *Glyceria maxima* and common spike-rush *Eleocharis palustris*. They support plant species which are scarce in the area such as trailing St John's-wort *Hypericum humifusum*; it is also the only known site in Clackmannanshire for the trifid bur-marigold *Bidens tripartita*.

Whilst the site is not notified for birds as a natural feature, the proximity of Gartmorn Dam to the internationally important bird populations of the Forth estuary also means that it is of regional importance as a wintering area for geese, swans and duck in times of inclement weather; and for migrant waders in autumn.

NOTIFICATION HISTORY

First notified under the National Parks and Access to the Countryside Act 1949: 1971

Re-notified under the Wildlife and Countryside Act 1981: 14 October 1986

Notification reviewed under the Nature Conservation (Scotland) Act 2004:

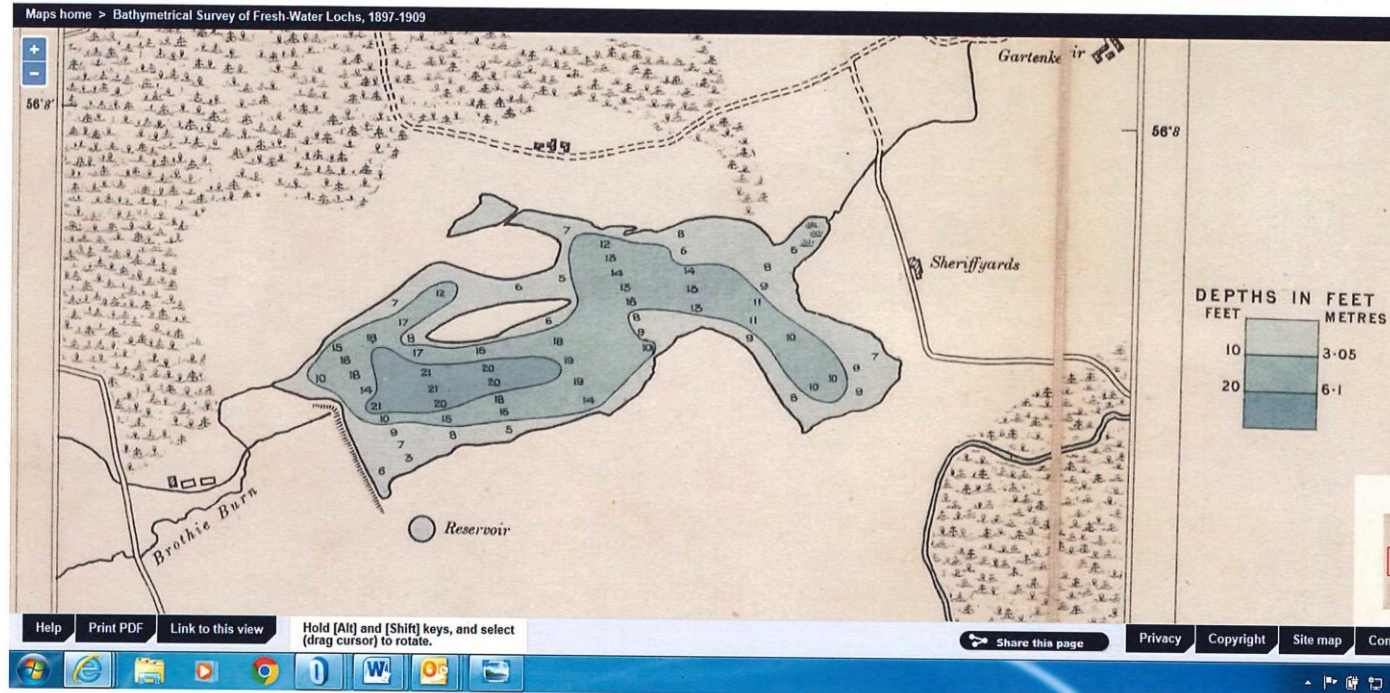
11 March 2011

REMARKS:

Measured area of site corrected (from 70.7 ha).

Annex 2: Map of water depth in Gartmorn Reservoir from 1908


Gartmorn Dam – map of water depth 1908



Gartmorn Dam SSSI location map



Gartmorn Dam
 Site of Special Scientific Interest
 Site Code: 678

 Site boundary

Produced by: Geographic Information Group, SNH, 2010
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This is an updated representation of the notified site
 boundary. Any apparent small differences are due to
 changes to the OS backdrop.



Scale 1:10,000



**GARTMORN DAM
SITE OF SPECIAL SCIENTIFIC INTEREST**

OPERATIONS REQUIRING CONSENT FROM SCOTTISH NATURAL HERITAGE

If you propose to carry out, or permit to be carried out, any of the operations listed below, you must first obtain consent from SNH unless a local authority has granted you planning permission (under Part III of the Town and Country Planning (Scotland) Act 1997) or a designated regulatory authority has given you written permission (under s.15 of the Nature Conservation (Scotland) Act 2004). If you have such a permission you may proceed without obtaining consent from SNH for the same operation.

<i>Standard Ref. No.</i>	<i>Type of Operation</i>
2	The introduction of grazing.
3	The introduction of stock feeding.
4	The introduction of mowing or other methods of cutting vegetation.
5	Application of manure, fertilisers and lime.
6	Application of herbicides (weed killers).
7	Dumping, spreading or discharge of any materials.
8	Burning of vegetation.
9	The release into the site of any wild, feral or domestic mammal, bird or fish, plant or seed.
11	The destruction, displacement, removal or cutting of any plant or plant remains, including tree, shrub, herb, dead or decaying wood, moss, lichen, fungus, leaf-mould, turf.
12	The introduction of tree and/or woodland management (including planting, selective felling, thinning, coppicing, modification of the stand or underwood, changes in species composition).
13a	Drainage (including the use of mole, tile, tunnel or other artificial drains).
13b	Modification of the structure of water courses (e.g. streams, springs, ditches, drains), including their banks and beds, as by re-alignment, regrading and dredging.
13c	Management of aquatic and bank vegetation.

*Standard
Ref. No.*

Type of Operation

- 14 The changing of water levels and tables and water utilisation (including irrigation, storage and abstraction from existing water bodies and through boreholes).
- 15 Infilling of ditches, drains, ponds, pools, marshes or pits.
- 16a Freshwater fishery production and/or management. The introduction of and changes in freshwater fishery production and/or management including sporting fishing and angling and the use of traps or fish cages.
- 20 Extraction of minerals, including sand and gravel, topsoil, subsoil, and spoil.
- 21 Construction, removal or destruction of tracks, walls, fences, hardstands, banks, ditches or other earthworks, or the laying, maintenance or removal of pipelines and cables, above or below ground.
- 22 Storage of materials.
- 23 Erection of permanent or temporary structures, or the undertaking of engineering works, including drilling.
- 26 Use of vehicles or craft likely to damage botanical interest.
- 27 Recreational activities likely to damage botanical interest.

**APPLICATION FOR CONSENT UNDER SECTION 16(2) OF THE NATURE CONSERVATION (SCOTLAND) ACT 2004
TO CARRY OUT OPERATIONS LISTED BY SCOTTISH NATURAL HERITAGE (OR ITS PREDECESSORS, NCC, NCCS) AS
LIKELY TO DAMAGE THE NATURAL FEATURE(S) OF A SITE OF SPECIAL SCIENTIFIC INTEREST**

1. Name of Site:
2. Name, address and telephone number of person applying for consent:
3. Details of proposals:

Standard number of operation (as used in the notification)	Specified operation	Details of the proposed activity and who will carry it out. (see footnote 1)	Start and end dates	Land on which operation it is to be carried out (see footnote 2)

I propose to carry out the above operation and hereby apply for consent from Scottish Natural Heritage

SNH is collecting this information solely to determine your application for consent. Some operations require permission from a local planning or regulatory authority (as listed in the SSSI booklet) rather than consent from SNH. Please tick the box if you agree that we may pass on your application to the relevant authority in such a situation. If you have any queries about this please contact your local SNH office.

Tick

Please return this form to **Henry Lima, Scottish Natural Heritage, Strathallan House
Castle Business Park, Stirling, FK9 4TZ**

Signed
Date

(For your consent to be valid, this form must also be signed on behalf of SNH)

Please turn over the page

FOOTNOTES: (1) Please specify whether the operation is one which you propose to carry out yourself, or for which you propose to engage a contractor, or is to be carried out by a third party with your permission.

CONSENT BY SCOTTISH NATURAL HERITAGE UNDER SECTION 16(3) OF THE NATURE CONSERVATION (SCOTLAND) ACT 2004

Scottish Natural Heritage hereby consents that as an owner/occupier of the site named, you may carry out, cause or permit to be carried out, the operations(s) specified above in the manner prescribed.

You are required however to give additional written notice if you propose to amend operations, or carry out an additional operation to which we have not consented or where the period identified in the proposal for the operation to take place has expired.

The issue of this consent does not absolve you from any contractual or legislative responsibility you may have to obtain the permission of any other party prior to carrying out the proposed operation.

Signed for Scottish Natural Heritage

Date:

Appendix 5: Local groups – information / ideas

Stirling University / Scotlands International Environment Centre

Through Scotland's International Environment Centre, the University of Stirling (UoS) are assembling a growing stakeholder group to coalesce around the monitoring of local environmental data . The group comprises of environmental organisations and community group representatives, each with a shared ambition for creating a regeneration catalyst for Gartmorn Dam that engages the community around the site and further afield within education and the local economy.

Through continued cross sectorial engagement it will communicate the importance of nature and environment-based research through the Scotland's International Environment Centre's flagship programme, Forth-ERA (Environment Resilience Array). In addition to the needs of establishing the academic lead sensor array network for Forth-ERA, the theme of biodiversity will be built around citizen science. The initial members of the stakeholder group convened in June 2023 to learn about the project and participated in a subsequent consultation on biodiversity monitoring sensors.

Over the first year of the project, scientific leads at Scotland's International Environment Centre will be co-ordinating the deployment of a range of biodiversity sensors covering;

- *water levels,*
- *water quality*
- *water nutrient values*
- *meteorology*
- *plant growth*
- *species monitoring through camera traps and bioacoustics.*
- *Recreational interactions*

Thereafter the data collected will be shared on an open-source dashboard enabling citizen interactions as well as increased knowledge for professional researchers. The project has been preliminarily scoped for 5 years with each phase expanding on the learnings and opportunities for growing out the project. The UoS's ambition is to leave a legacy of data and infrastructure that can be taken on by the local community and the organisations that have committed over the term of the project

Contact:

David Newitt (he/him)
Business Engagement and Innovation Officer
Scotland's International Environment Centre (SIEC)
University of Stirling
Stirling
FK9 4LA

Tel: 07443293504

Email: david.newitt@stir.ac.uk

Web: www.stir.ac.uk/