



Location and Context

Two flooded *Lowland Basins* have formed in Tayside where softer, Upper Old Red Sandstone deposits, enclosed by hard volcanic or carboniferous rocks, have been eroded away. The first of these is occupied by Loch Leven in the extreme south of Tayside, enclosed by the Lomond and Cleish Hills to the east and south, and by the Ochils to the north and extending to the West up the flat valleys of the Queich River and Glendey Water and to the south east along the River Leven. The second of these is the Montrose Basin, a broad tidal estuary cut off from the sea by the spit of land occupied by the town of Montrose, and enclosed by harder volcanic rocks to the north and south.

Key Characteristics

- Broad basins formed where sandstones have been eroded away leaving harder enclosing rocks.
- Flat, relatively low lying landform with strong horizontal composition.
- Extensive mudflats, reinforce openness and flatness of landscape, and dynamic character reinforces by presence of large populations of birds, and reflections of sky. Open, large scale, regular, tended pattern of fields on fringes of waterbodies.
- Rich natural heritage, particularly migratory and wading birds.
- Historic sites and associations.
- Dominance of water, sky and distant shores.
- Diverse, calm, settled and (away from main roads and other discordant elements) the quiet, calm and balanced ambience.
- Views are wide and panoramic across the basins along strong visual links to adjacent landscape types.

Landscape Character Description

General

Both basins include considerable areas of arable and grazing land around the fringes of the waterbodies. This is generally of semi-open character, enclosed by hedges. Semi-natural woodland is found around the edges of the waterbodies.

Roads encircle both basins, several of them of A-road status. In addition, the M90 passes close to the western side of Loch Leven and, at Montrose an inner ring road has been constructed along the north-eastern side of the basin. These roads mean that there is often a considerable amount of traffic movement and noise in these otherwise tranquil locations.

Historically, both the Loch Leven and Montrose Basins have been a focus for settlement. In the case of Loch Leven, a number of suburban settlements have developed around the loch principally at Kinross, Milnathort and Kinnesswood (the latter is discussed in relation to the *Rugged Lowland Hills* Landscape Character Type). Some of the more recent development at Kinross is particularly prominent in the landscape as a result of the building materials that have been employed (white walls and orange pantiles reflecting the styles more commonly found in Fife to the south) and the lack of screening around the urban edge. Development at Montrose has been concentrated on the constrained spit of land occupied by the town itself. Expansion has occurred north and southwards predominantly sandwiched between the basin and the sea.

The two *Lowland Basins* have similarities, in terms of underlying geology, peripheral land use, road patterns and settlement history, which are highlighted in the key characteristics above and at the end of this character description. However, they differ in certain respects and have been described separately in the following sections.

Loch Leven Basin

Landform

Loch Leven was formed at the end of the last Ice Age as retreating ice sheets, which had scoured a hollow between the Lomond Hills, Cleish Hills and the Ochils, deposited a mass of fluvio-glacial sand and gravel, impounding a shallow loch surrounded by extensive areas of marsh and wetland. It is dominated by soils of humus iron podzols with gleys and peaty gleys derived from the surrounding hills and with alluvial soils associated with the Loch, the burns, rivers and wetlands. There is an area of valley peat at Portmoak at the foot of the Lomond Hills. The Basin is characteristically flat except for some very shallow rising ground towards the west and a series of glacial landform features, eskers, from South Kilduff east to Gellybank.

Landcover

In the first half of the 19th Century, the level of the loch was lowered by 1.5 metres in order to ensure a steady supply of water to mills along the River Leven and to increase the amount of rentable farmland. Surrounding areas of marsh were drained and improved to provide the basis of the landscape that we see today. Inland, a shallow basin extends towards the Crook of Devon, drained by a network of minor burns. Downstream, the River Leven has been canalised in a straight channel and the surrounding floodplain drained by a network of ditches. Water levels in the loch fluctuate, revealing extensive mudflats during the late

summer and early autumn. The area becomes more complex at its western end near the boundary with Clackmannanshire. There is a substantial sand and gravel pit at Craigton with a number of other much smaller scale and mainly disused quarries occurring sporadically across the western part of the Basin.

Despite the changes brought by the lowering of water levels and the drainage of the marshes, Loch Leven retains a rich ecology and is designated as an SSSI and an NNR. It is particularly important for birds, accommodating thousands of ducks, migratory geese, swans and waders. The loch's fish stocks have been exploited for over 650 years, the brown trout being particularly well known. Mammals around the loch include otters, roe deer and foxes. The area has a range of natural and planted woodland with Scots pine growing in the drier areas and birch, willow and alder in wetter areas. There are some four substantial softwood forests at Portmoak, Levenmouth, Waterbutts Plantation and Cockairney Feus. Elsewhere there are frequent shelterbelts, small, mixed, softwood and hardwood forests and groups of trees sometimes, but not always, associated with steadings.

Settlement

Historically Loch Leven has been a focus for human settlement and land use. The earliest signs of settlement included a crannog which was destroyed during the 19th Century. Loch Leven has a number of other historic sites including Kinross House, Loch Leven Castle on Castle Island – a prominent landmark - and the Priory on St Self's Island. Several villages and hamlets grew around the fringes of the loch, their industries of weaving, paper making and fishing reliant on the supply of water. The largest of these settlements, particularly Kinross and Milnathort, having expanded over the last century, and both are strongly associated with the Basin in distant views. Both of the towns are contained in a relatively narrow area between the motorway and the Loch. Elsewhere settlements vary in size and form. Kinnesswood has also expanded over the last century, the latter pushing up the slopes of the Lomond Hills. There are small villages on the edge of the Basin and low hills e.g. Dalqueich, Cleish and Scotlandwell and small hamlets in the Basin, e.g. Gairney Bank, Carsegour, and Mawcarse. There is a regular distribution of steadings and other small building groups with some sporadic groups of houses and individual houses.

The former airfield at Balado has been redeveloped for intensive poultry units with wooden structured dwellings and a military installation with a distinctive golf-ball like structure which is visible over a wide area. There are a variety of small scale commercial uses, a gliding club at Levenmouth, the RSPB Vane Farm Visitor Centre, recreational car parks and picnic sites, camping sites, a golf club, a falconry centre, motorway service centre, and the M90 motorway itself which all contribute to a diverse land use outwith the towns. Other roads too are noticeable features in this flat landscape including the A977, A91, B9097, A911, B996, B919 and B920. Some of these roads run around the perimeter of the Basin along the boundary with the low hills. The channelled River Leven's artificially straight course is a prominent feature within the Basin and from surrounding higher land. The Loch Leven Heritage Trail encircles the loch, providing a well-used pathway for use by walkers and cyclists with panoramic views of the loch. New recreational facilities have grown up with easy access to this path, although this does not undermine the unspoilt character of the basin.

The M90 motorway is the most obvious linear feature across the Basin where it is generally a noticeable feature, effectively severing the Loch, visually, from the western part of the Basin. It is a busy landscape with many point features, including the towns of Kinross and Milnathort, the loch itself and its islands, and characteristic castles, houses and steadings. Overhead transmission lines also form locally prominent linear features where the pylons are on the hill tops. Together with the distinctive skylines and slopes of the surrounding hills, views of the Loch provide a unique sense of place.

Perception

The overall impression is of a very broad, shallow basin within which, particularly at the eastern end, water and sky, together with the enclosing hills are the dominant landscape elements. Away from the towns and the Loch, the Basin is characteristically an open, large scale, flat rather angular and often diverse landscape. It is textured, locally and seasonally colourful, generally balanced, regular, calm, tended and safe. The wildfowl on, over and flying around the Loch are an important part of the landscape experience.

Montrose Basin

Landform

The Montrose Basin is a large, rounded estuarine basin formed near the mouth of the River South Esk. Unlike Loch Leven, the basin is tidal, revealing extensive mudflats at low tide. An area of low-lying, drained farmland extends inland, while the basin is separated from the sea by the town of Montrose, located on a low peninsula spit of land less than two kilometres wide. There have been attempts to drain the basin to provide farmland in the past, the most notable effort leaving Dronner's Dyke which is revealed at low tide. Like the Loch Leven Basin, this area is shallow and open. The expanse of mudflats, water, distant shores and sky all shape the character of the surrounding landscape.

Landcover

The Montrose Basin also has a rich natural heritage. Its mudflats provide important feeding grounds for birds, supporting internationally important numbers of geese, widgeon and redshank and nationally important numbers of eider, oystercatcher, knot and mute swan. A number of salt-loving plants, including rare grasses, occur on the mudflats. The variety of saline, brackish and freshwater marshes have a great variety of plant communities. The area is also of geological importance.

Settlement

In prehistory, the edges of the basin were the focus for a dense distribution of ceremonial, funerary and settlement sites. More recently, the basin has physically constrained the growth of the town of Montrose, with the east coast railway forming the boundary between the basin and the town. Extensive, unparalleled views of the basin can be seen from the trains that pass along this stretch of railway. There has been growth of the settlement to the north and south of Montrose, including a number of caravan sites sited on the edges of the basin. Outwith the town settlement is limited to a scatter of farmsteads, generally located on slightly higher ground along the A934 and A935 to the south and north of the basin. The western end of this landscape unit is occupied by Kinnaird Park with its castle, deer park and extensive estate woodlands. A number of historic mills are sites along the non-tidal section

of the River South Esk, above the Bridge of Dun, and the House of Dun with its designed landscape and policies forms a local landmark to the north of the basin, clearly visible from the A935. There is a scatter of small and medium-sized wind turbines on adjacent landscapes which are prominent in views across the basin.

Some land has been reclaimed at the inland edge of the basin. There is also a series of raised beaches which demonstrate the series of sea level changes that occurred during the later stages of the last Ice Age and in the post-glacial period.

The area is popular with visitors, and there are low-key recreational facilities such as a visitor centre, small car parks, bird viewing hides and footpaths.

Perception

Views across the basin are open and panoramic. They vary greatly with the tidal conditions – at low tide there are great expanses of exposed mud and sand with wading birds and people digging for bait, whereas when the basin is filled with water the surface is more reflective. The Montrose church spire is a landmark feature and orientation point.



This is one of 390 Landscape Character Types identified at a scale of 1:50 000 as part of a national programme of Landscape Character Assessment republished in 2019.

The area covered by this Landscape Character Type was originally included in the Tayside LCA (Land Use Consultants), published 1999.

