

WATERFORD - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE

Other names used for site

IGH THEME**TOWNLAND(S)****NEAREST TOWN****SIX INCH MAP NUMBER****NATIONAL GRID REFERENCE****1:50,000 O.S. SHEET NUMBER****Comeragh Mountains (OVERVIEW)****IGH7 Quaternary**

Curraheen, Knockanaffrin, Carrigeen, Graigavalla, Ross, Boolacloghagh, Coolnalingaddy, Commons, Kilclooney, Curraghduff, Lyre Mountain, Tooreen Mountain, Comeragh Mountain, Carrigbrack, Ashtown, Barracreemountain Upper, Cutteen North, Coummahon.

Kilmacthomas**Waterford 14, 6, 7****230400 110200 (centre of site)****75 1/2 inch Sheet No. 22****Outline Site Description**

The Comeragh Mountains site is a mountain plateau heavily ice-sculpted with corries.

Geological System/Age and Primary Rock Type

The mountains have been shaped and moulded during the Quaternary (Ice Age) by glacier ice abrading the mountain tops and flanks. The mountains therefore comprise ice-scoured bedrock, which itself is Devonian Old Red Sandstone.

Main Geological or Geomorphological Interest

The corries comprise deep, wide hollows which are sometimes several kilometres wide, and include discrete as well as composite corrie features. Many hold tarns (corrie lakes) and also show excellent examples of lateral and corrie-edge recessional moraines. The moraines are often strewn with very large erratic boulders, dropped from the ice and weighing several hundred tonnes in some cases.

The features have almost-vertical back walls, with the highest at Coumshingaun up to 400m in height. Coumshingaun and Coumfea-Coumalocha are flanked by fine arête ridges, which are very jagged, sometimes knife-edged, craggy rock walls, which separate two corrie features. Coum Mahon holds one of Ireland's finest waterfalls, which cascades down its backwall (Mahon Falls).

The summit of the Comeragh Mountains is blanketed by several metres depth of blanket peat, which has formed across the summit since the Ice Age. This peat has been cutover in places and displays high peat hags in some localities, particularly between Coumtay and Coumfea-Coumalocha. The Devonian sandstones and conglomerates, which make up the Comeraghs, are also well displayed and include some localised development of paleosols – Devonian soils.

The entire plateau will provide evidence, which can be read by a geologist, but the following site reports are brief focused descriptions of some of the highlights and by default these are large scale features. Other smaller sites and sections are also important, but not all the plateau can be described in full.

Site Importance

The mountains provide the best corrie landscape in the country within a relatively restricted (50 square kilometres) extent. They are already a pNHA and SAC (Site 001952, Comeragh Mountains) for biodiversity reasons and the corrie landscape itself is of national importance.

Management/promotion issues

Access to the mountains is restricted to hillwalkers and climbers, as there is no road access.

WATERFORD - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Coumshingaun		
Other names used for site	Com Seangan, Glen of the Ants, Pissmire Valley		
IGH THEME	IGH7 Quaternary		
TOWNLAND(S)	Kilclooney		
NEAREST TOWN	Kilmacthomas		
SIX INCH MAP NUMBER	Waterford 6 and 7		
NATIONAL GRID REFERENCE	232563 110900		
1:50,000 O.S. SHEET NUMBER	75	1/2 inch Sheet No.	22

Outline Site Description

Coumshingaun is a deep glacial corrie, situated along the eastern flank of the Comeragh Mountains, eight kilometres northwest of Kilmacthomas along the R676 road.

Geological System/Age and Primary Rock Type

The feature was formed during the Quaternary (Ice Age), by glacier ice scouring out a deep, armchair-shaped hollow at the edge of the mountains.

The majority of the feature therefore comprises ice-scoured bedrock, which itself is Devonian Old Red Sandstone, and is mostly conglomerate rocks composed of large pebbles and cobbles.

Main Geological or Geomorphological Interest

This corrie has an almost-vertical backwall up to 400m in height. A lake floors the feature and the corrie is bounded on the eastern side by a moraine, which has been dissected by a Holocene (post-glacial) river draining the lake. The moraine comprises well-drained, bouldery material, and the area around and east of Coumshingaun is littered with large erratic boulders up to 15m across. Many of these erratics weigh several hundred tonnes and bear testament to the power of the ice sheet which transported them.

The northern and southern sides of the corrie are both arêtes, where two corries eroding towards each other result in a narrow sharp ridge of rock remaining between them.

Site Importance

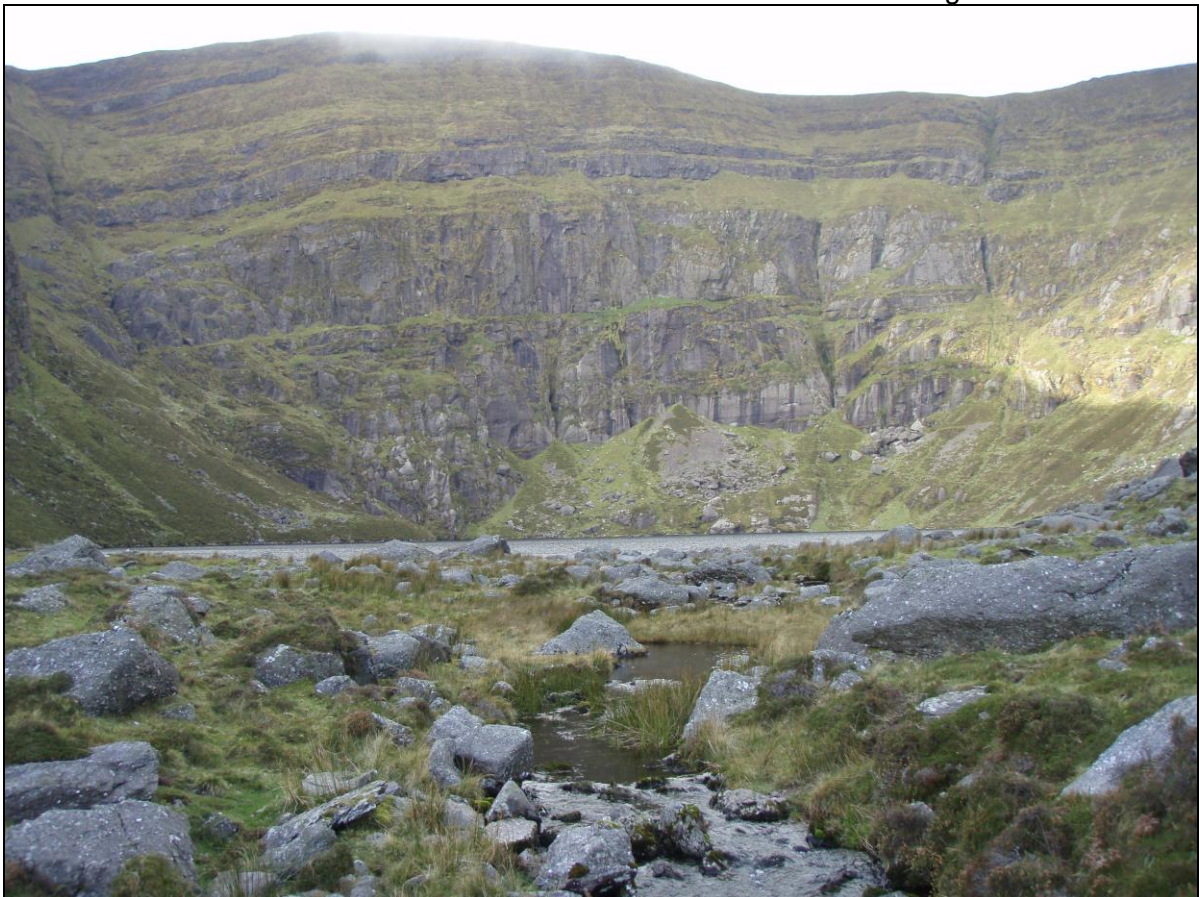
This is probably Ireland's finest example of a corrie. This corrie is part of a complex of Quaternary geology of national importance.

Management/promotion issues

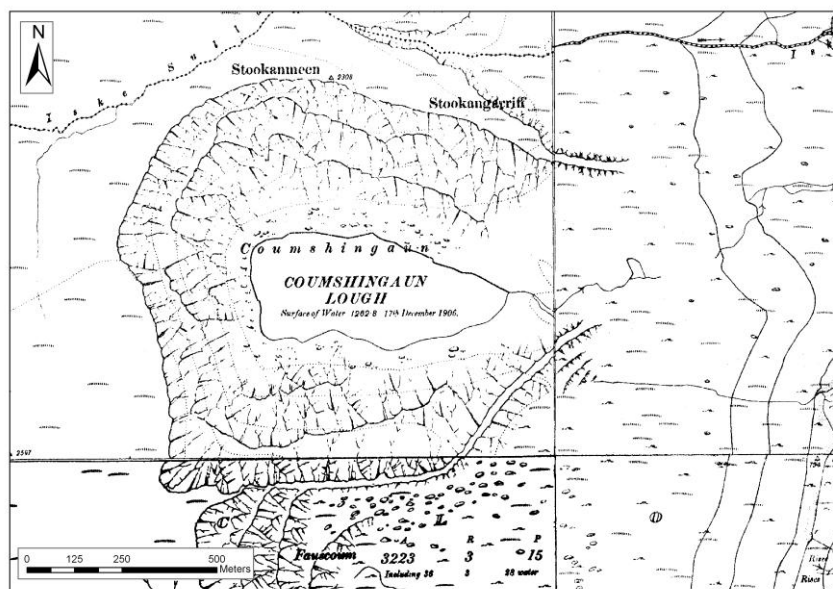
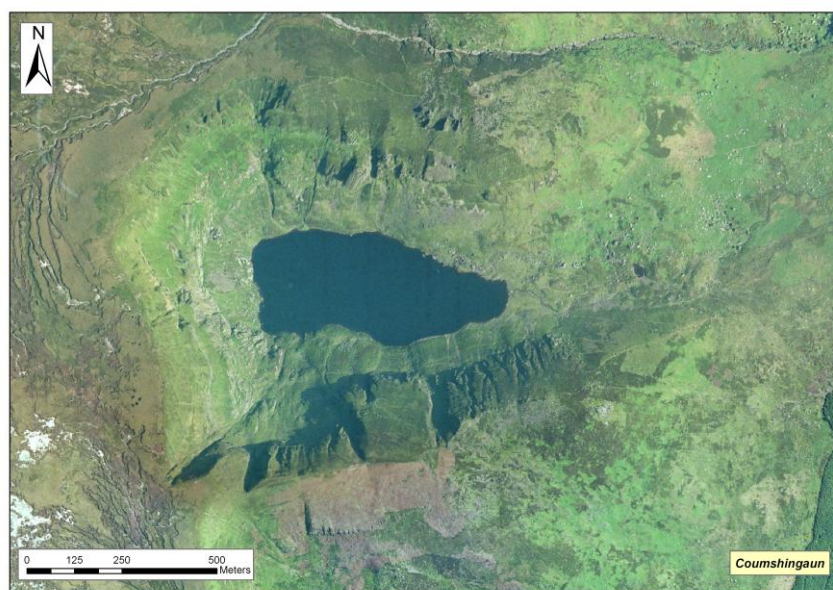
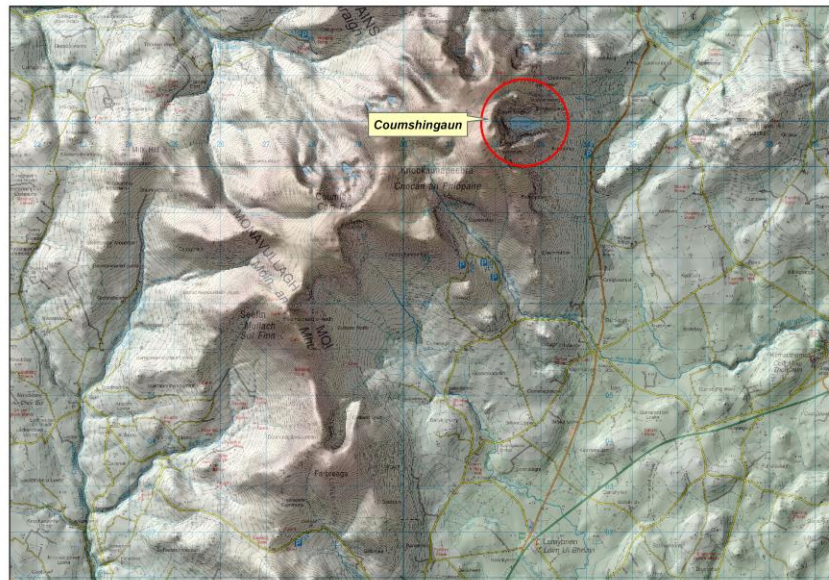
The corrie has a rough pathway up to it, and little promotional signage in the general area. Though the feature is potentially under-promoted, the absence of a cut/built path and signs in fact helps to protect the locality as a pristine portion of montane terrain. The site is already part of the Comeraghs Mountains Special Area of Conservation and pNHA (SAC – 001952).



The view into the corrie from the arête on the southern side of Coumshingaun.



The view into the corrie backwall from the floor of the basin.



WATERFORD - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Coumfea - Coumalocha
Other names used for site	Deer Valley (Coumfea)
IGH THEME	IGH7 Quaternary
TOWNLAND(S)	Curraghduff, Lyre Mountain, Comeragh Mountain
NEAREST TOWN	Ballymacarbry
SIX INCH MAP NUMBER	Waterford 6 (and 14)
NATIONAL GRID REFERENCE	228810 109980
1:50,000 O.S. SHEET NUMBER	75 1/2 inch Sheet No. 22

Outline Site Description

Coumfea and Coumalocha are two deep glacial corries, which together make up one large bowl-shaped hollow along the western flank of the Comeragh Mountains, ten kilometres east of Ballymacarbry. The features are one of three sets of corries at the head of the Nire Valley.

Geological System/Age and Primary Rock Type

The features were formed during the Quaternary (Ice Age), by glacier ice scouring out two side-by-side, deep, armchair-shaped hollows at the edge of the mountains.

The majority of the features therefore comprise ice-scoured bedrock, which itself is Devonian Old Red Sandstone. The rock itself is mostly conglomerate.

Main Geological or Geomorphological Interest

The corries comprise a wide, deep hollow, which is up to 1.5 km wide, and which contains two individual corries separated by an arête. The features have an almost-vertical backwall up to 210m in height, and the smaller, western corrie is floored by Lough Coumfea which is at a higher elevation than the floor of the eastern corrie at Coumalocha. Coumalocha is a wider, larger feature and is floored by three individual lakes (only two of which are shown on the first edition O.S. Discovery Series Map).

Both corries are bounded by particularly hummocky moraine features at their northern edges. The moraine comprises well-drained, bouldery material.

Site Importance

This is an excellent example of a composite corrie and an important County Geological Site, and this site is part of a complex of Quaternary geology of national importance. It is a particularly areally-extensive feature and its composite nature adds to its significance.

Management/promotion issues

Access to the corrie is restricted to hillwalkers and climbers, as there is no road access. Again though the feature is potentially under-promoted, the absence of a cut/built path and signs in fact helps to protect the locality as a pristine portion of montane terrain. The site is already part of the Comeraghs Mountains Special Area of Conservation and pNHA (SAC – 001952).



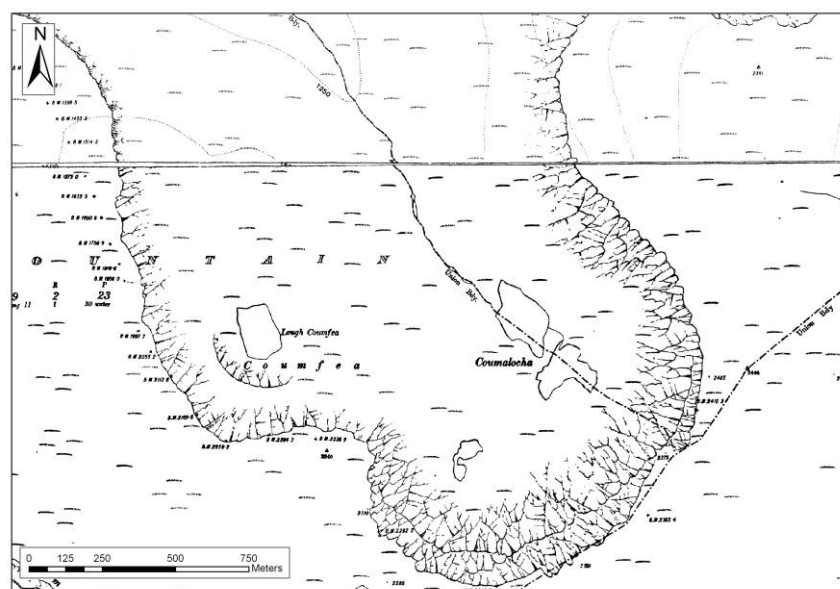
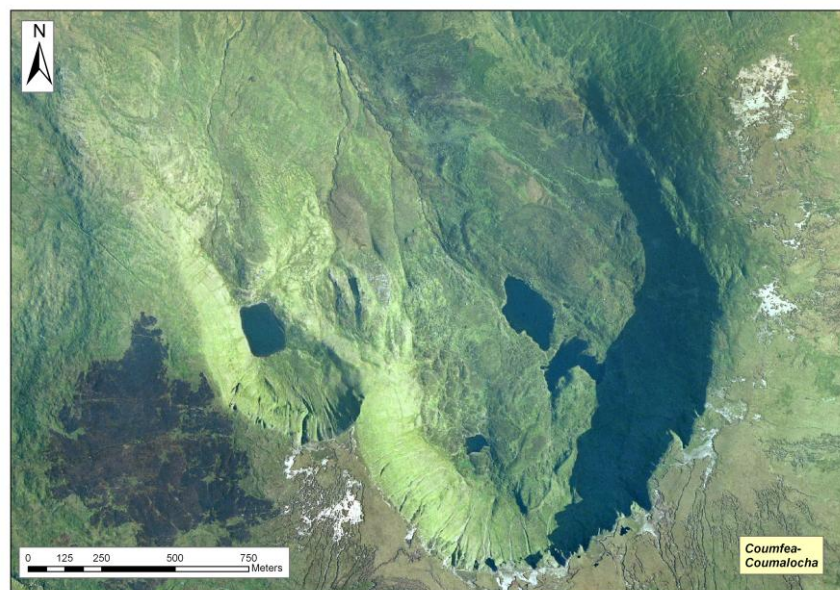
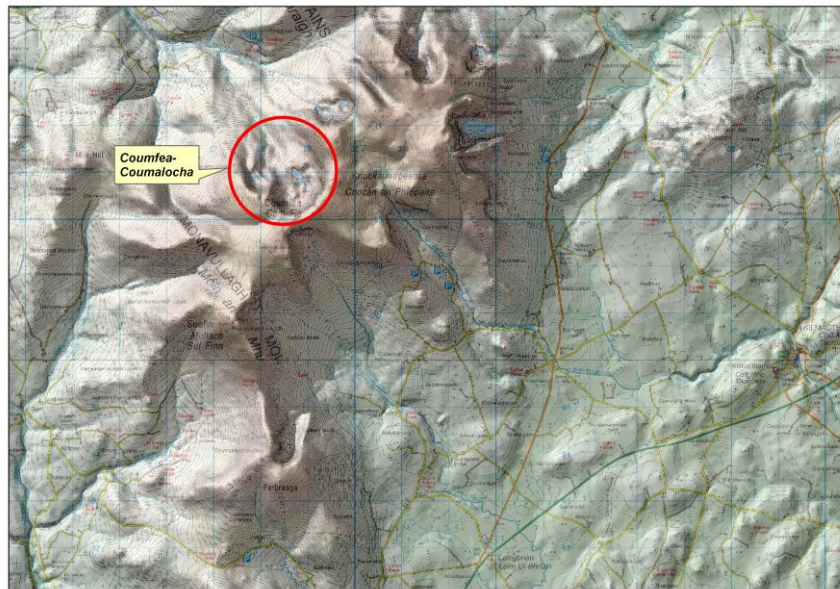
The western backwall of Coumalocha.



View north across Coumalocha, with two of the three lakes.



The eastern backwall of Coumalocha.



WATERFORD - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Crotty's Lough Corrie		
Other names used for site	Lough Coum Gabhartha		
IGH THEME	IGH7 Quaternary		
TOWNLAND(S)	Ross, Coolnalingady		
NEAREST TOWN	Kilmacthomas		
SIX INCH MAP NUMBER	Waterford 6 and 7		
NATIONAL GRID REFERENCE	232670 112600		
1:50,000 O.S. SHEET NUMBER	75	1/2 inch Sheet No.	22

Outline Site Description

Crotty's Lough Corrie is a deep glacial corrie situated along the northeastern flank of the Comeragh Mountains.

Geological System/Age and Primary Rock Type

The feature was formed during the Quaternary (Ice Age) by glacier ice scouring out a deep, armchair-shaped hollow at the edge of the mountains. The majority of the feature therefore comprises ice-scoured bedrock, which is of Devonian age, informally called the Old Red Sandstone. The rock itself is mostly conglomerate.

Main Geological or Geomorphological Interest

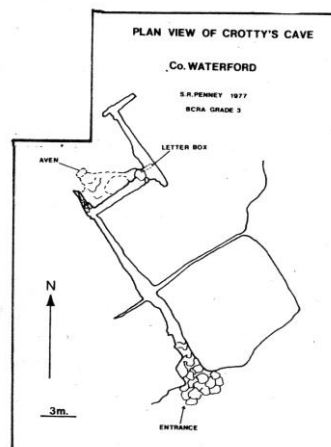
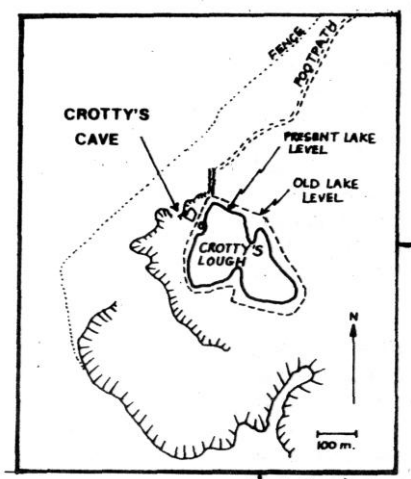
This corrie has an almost-vertical backwall up to 250m in height. Crotty's lake floors the feature and the corrie is bounded on the northeastern side by a high moraine feature, which itself is up to 30m high. The moraine comprises well-drained, bouldery material, and the area around and northeast of Crotty's Lough Corrie is littered with large erratic boulders. The backwall of the corrie is formed in well bedded sandstone, which has beds up to 2m thick, and which has been eroded and fractured to form some unusual, blocky, rock formations. The most impressive of these is Crotty's Rock itself. They also include Crotty's Cave, which is a fissure cave, not a karstic cave.

Site Importance

This is a fine example of a corrie and as the feature is particularly narrow (only 400m across) the steepness and height of the backwall is marked. This corrie is part of a complex of Quaternary geology of national importance.

Management/promotion issues

The corrie has a rough pathway up to it, and no promotional signage in the general area. Though the feature is potentially under-promoted, the absence of a cut/built path and signs in fact helps to protect the locality as a pristine portion of montane terrain. The site is already part of the Comeraghs Mountains Special Area of Conservation and pNHA (SAC – 001952).





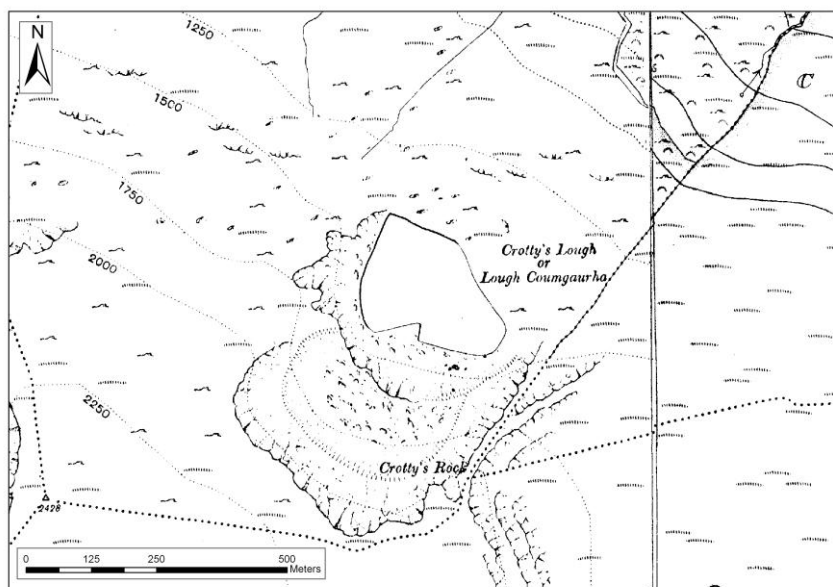
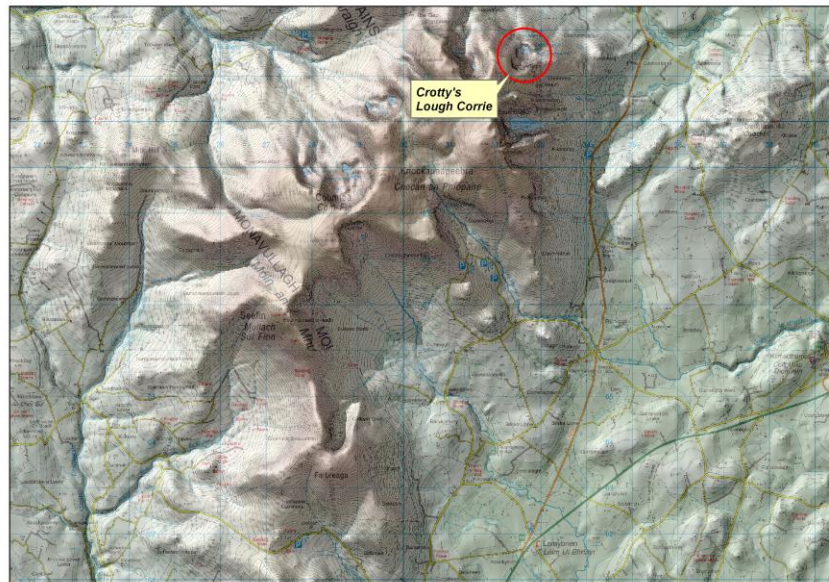
Crotty's Lough, bounded by a high moraine ridge at its northern side.



The steep northwestern backwall of Crotty's Lough corrie.



Some of notable rock buttresses in the backwall of Crotty's Lough corrie.



WATERFORD - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Coumtay
Other names used for site	
IGH THEME	IGH7 Quaternary
TOWNLAND(S)	Comeragh Mountain
NEAREST TOWN	Lemybrien
SIX INCH MAP NUMBER	Waterford 14
NATIONAL GRID REFERENCE	229178 108560
1:50,000 O.S. SHEET NUMBER	75 1/2 inch Sheet No. 22

Outline Site Description

Coumtay is a deep glacial corrie, situated along the southern flank of the Comeragh Mountains, seven kilometres northwest of Lemybrien.

Geological System/Age and Primary Rock Type

The feature was formed during the Quaternary (Ice Age), by glacier ice scouring out a deep, armchair-shaped hollow at the edge of the mountains.

The majority of the feature therefore comprises ice-scoured bedrock, which itself is Devonian Old Red Sandstone age. The rock itself is mostly conglomerate.

Main Geological or Geomorphological Interest

This corrie comprises a wide, deep hollow, which is up to 600m wide, with a particularly steep, rocky, western backwall. The corrie itself is up to 180m in height and a number of small lakes lie at the base of the feature, nestled within fine hummocky moraines.

The moraines are accumulations of boulders and bouldery debris, which built up at the edge of the glacier which occupied the corrie at the end of the last Ice Age.

Site Importance

This is a nice example of a wide, deep corrie, which is a particularly areally-extensive feature. The fact that the feature backs on the Coumfea means the corrie experience is heightened from walking the separating ridge between them. This is part of a complex of Quaternary geology of national importance.

Management/promotion issues

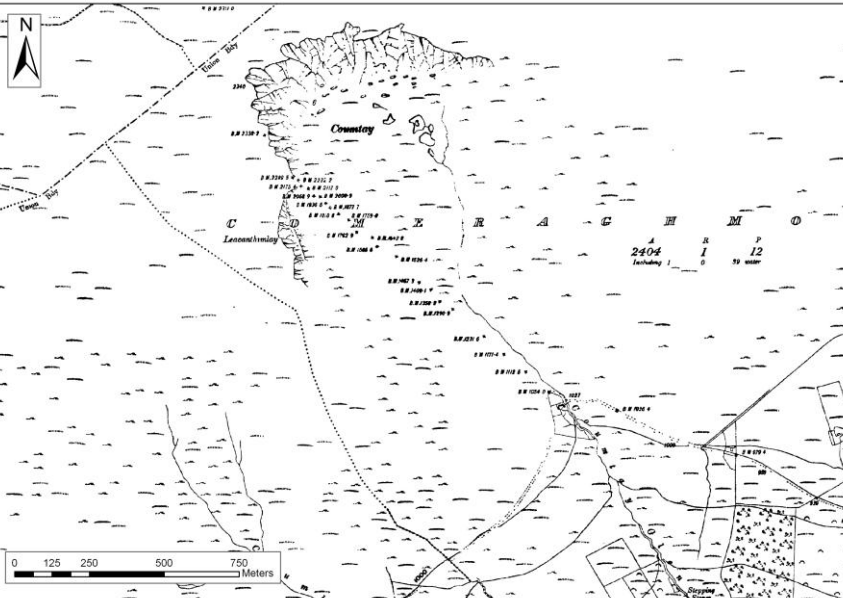
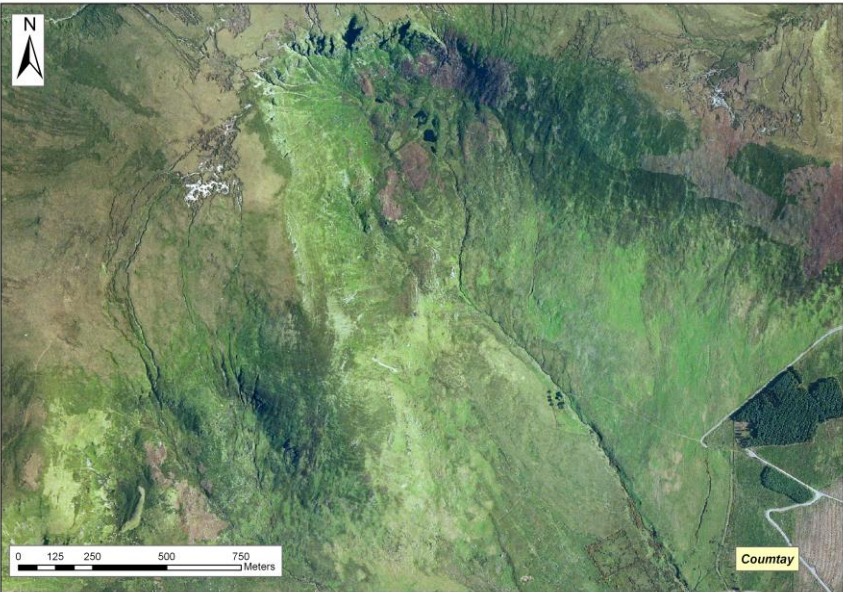
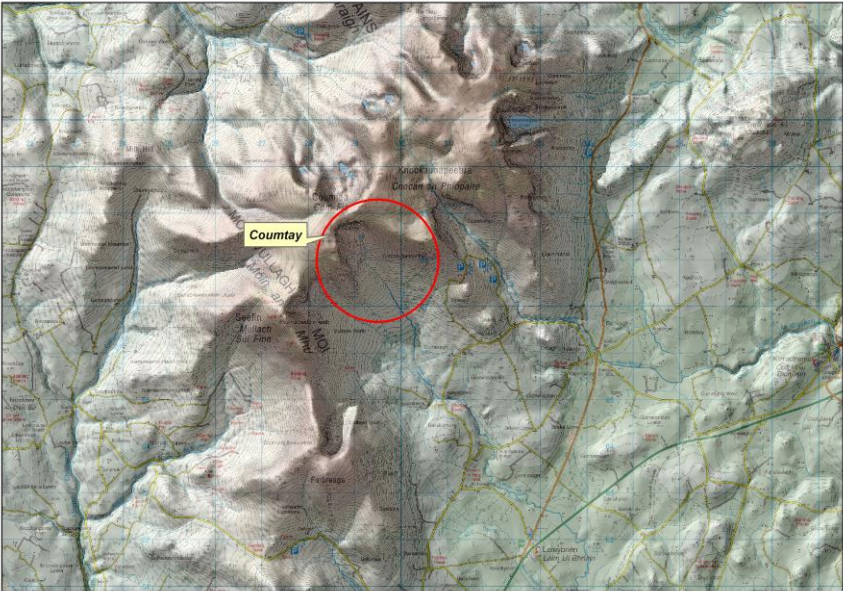
Access to the corrie is restricted to hillwalkers and climbers, as there is no road access. Again though the feature is potentially under-promoted, the absence of a cut/built path and signs in fact helps to protect the locality as a pristine portion of montane terrain. The site is already part of the Comeraghs Mountains Special Area of Conservation and pNHA (SAC – 001952).



Coumtya viewed from the east side.



The backwall at the northern end of Coumtya.



WATERFORD - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Mahon Falls
Other names used for site	Coum Mahon
IGH THEME	IGH7 Quaternary, IGH 14 Fluvial and lacustrine geomorphology
TOWNLAND(S)	Kilclooney, Coummahon, Comeragh Mountain
NEAREST TOWN	Kilmacthomas
SIX INCH MAP NUMBER	Waterford 6 and 14
NATIONAL GRID REFERENCE	230869 109230
1:50,000 O.S. SHEET NUMBER	75 1/2 inch Sheet No. 22

Outline Site Description

Mahon Falls are a series of cascading waterfalls, which flow down the backwall of a glacial corrie, situated along the southern flank of the Comeragh Mountains.

Geological System/Age and Primary Rock Type

The corrie feature was formed during the Quaternary (Ice Age), by glacier ice scouring out a deep, armchair-shaped hollow at the edge of the mountains.

The majority of the corrie feature therefore comprises ice-scoured bedrock, which itself is Devonian Old Red Sandstone. The Mahon River, which rises from a series of seeps in blanket peat in the high plateau of the Comeraghs, flows down the backwall of the corrie creating a series of stepped waterfalls, or cascades, over each of the thicker conglomerate or sandstone beds.

Main Geological or Geomorphological Interest

This corrie has a very steep backwall up to 300m in height and the Mahon River has gullied the backwall, creating a shallow gorge along part of the stretch of waterfalls. Owing to this, the falls have a stepped appearance.

The base of the corrie hosts no lakes, but the Mahon River flows through the centre of this along a meandering path, which is initially surrounded by hummocks and boulder moraines, but further down-valley becomes a flatter, less stony, till plain. The moraines comprise well-drained material, which is strewn with erratic boulders, many of which are several metres across.

The eastern side of the corrie has some well-expressed scree slopes.

As corries usually only take flows of water from a relatively restricted up-gradient catchment, the waterfalls are unusual in that a sizeable stream happens to flow across the backwall. Owing to this, the falls can become a torrent in wet weather as the river swells.

Site Importance

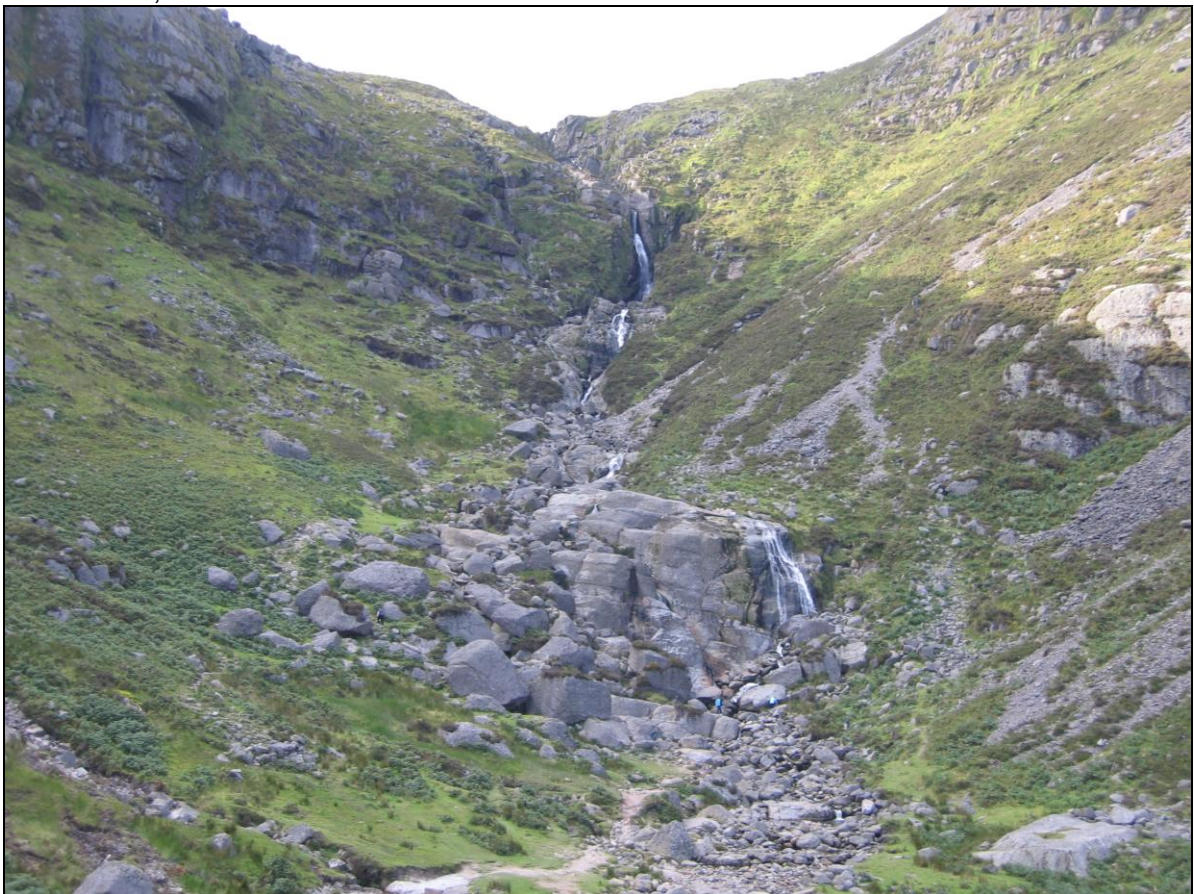
The site is of national importance and is arguably Ireland's finest waterfall. This site is part of a complex of Quaternary geology of national importance, and is of national importance in the fluvial and lacustrine geomorphology theme also.

Management/promotion issues

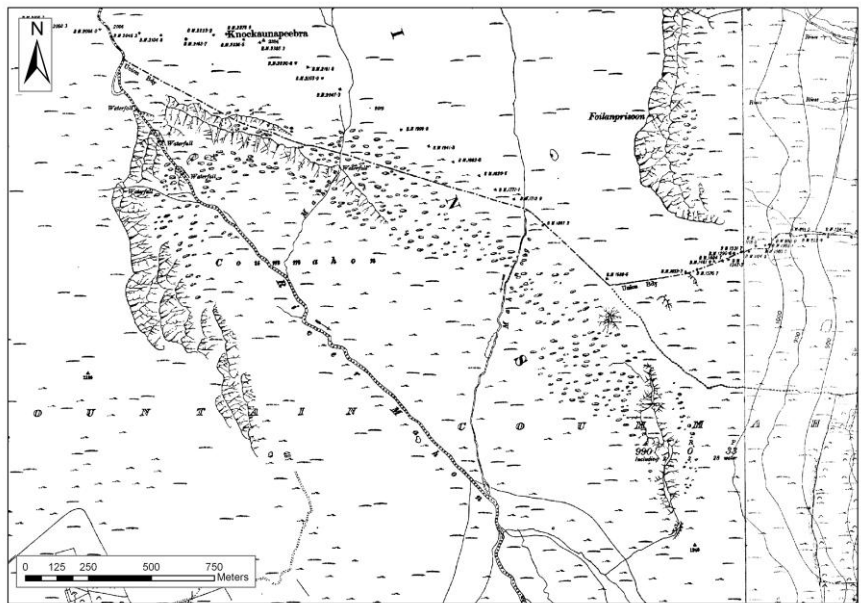
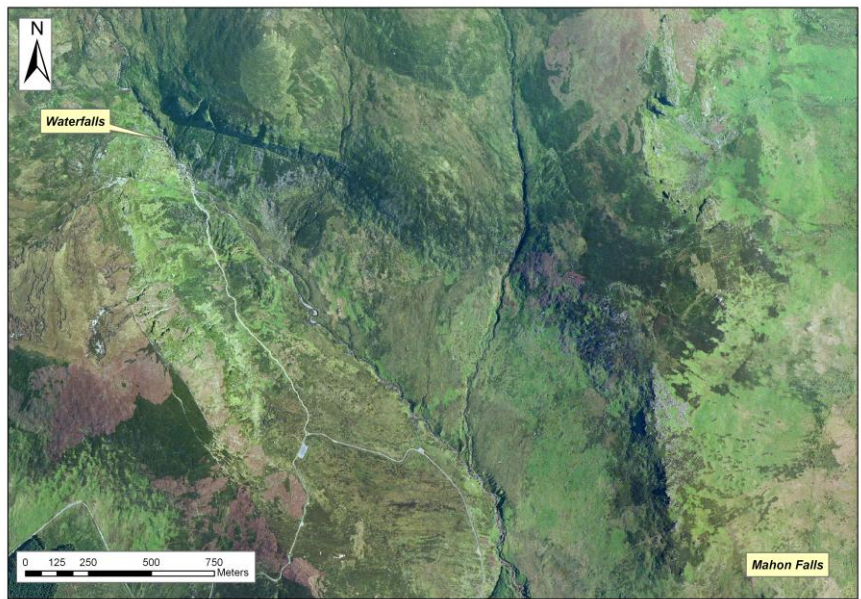
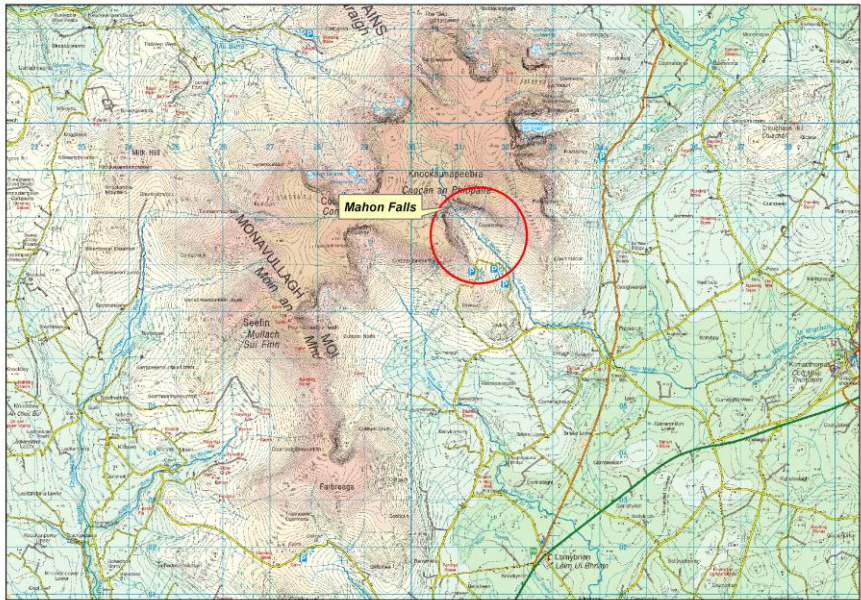
The corrie has a built pathway up to it and a well developed network of promotional signage in the general region surrounding. A discreet signboard at the falls themselves might prove a worthwhile addition. The site is already part of the Comeraghs Mountains Special Area of Conservation and pNHA (SAC – 001952).



Mahon falls, viewed from the south.



Mahon falls, viewed from the access path for visitors.



WATERFORD - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Coumiarthar
Other names used for site	Coum Iarthar, Boola Lakes
IGH THEME	IGH7 Quaternary
TOWNLAND(S)	Boolacloghagh
NEAREST TOWN	Rathgormack
SIX INCH MAP NUMBER	Waterford 6
NATIONAL GRID REFERENCE	231590 112190
1:50,000 O.S. SHEET NUMBER	75 1/2 inch Sheet No. 22

Outline Site Description

Coumiarthar is a deep glacial corrie, situated along the northern flank of the Comeragh Mountains.

Geological System/Age and Primary Rock Type

The feature was formed during the Quaternary (Ice Age), by glacier ice scouring out a deep, armchair-shaped hollow at the edge of the mountains.

The majority of the feature therefore comprises ice-scoured bedrock, which itself is Devonian Old Red Sandstone, and is composed of conglomerates of pebbles and cobbles.

Main Geological or Geomorphological Interest

This corrie has an almost-vertical backwall up to 200m in height. Three pater noster lakes floor the feature, so called because they form a series of linear lakes connected by a single stream, similar to the form and outline of rosary beads (hence 'Pater Noster', which means 'Our Father' in Latin).

The corrie is bounded by both lateral moraines, which form a pile of debris around the back and sides of the feature (lateral to the ice which floored the valley), and end moraines, which stretch across the entrance to the valley and partially bound the lake features. The moraines comprise well-drained, bouldery material, and the area around Coumiarthair is littered with large erratic boulders.

As the beds of rock at the sides and back of the corrie are relatively steeply-dipping, the ice has scoured out blocks of these leaving some spectacular rock crags (cliffs) along the valley sides.

Site Importance

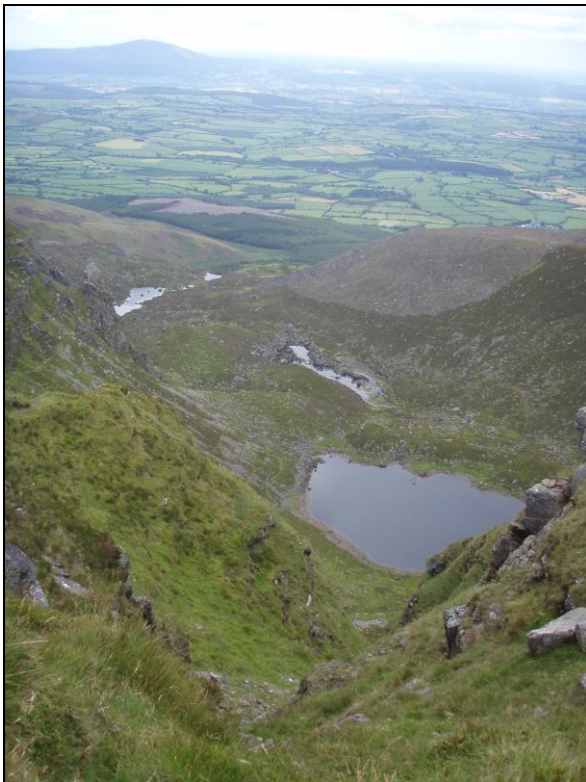
This is a particularly impressive corrie feature, being narrow and steep, and having a form different to that seen elsewhere in the Comeraghs with the lateral moraines and chain of lakes. The rock crags also add to its uniqueness. This is part of a complex of Quaternary geology of national importance.

Management/promotion issues

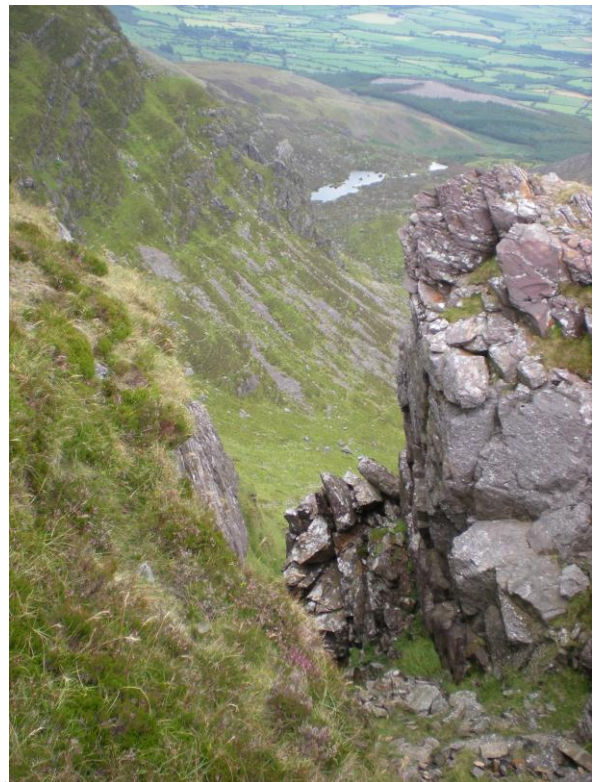
The corrie has a rough pathway up to it and little promotional signage in the general area. Though the feature is potentially under-promoted, the absence of a cut/built path and signs in fact helps to protect the locality as a pristine portion of montane terrain. The site is already part of the Comeraghs Mountains Special Area of Conservation and pNHA (SAC – 001952).



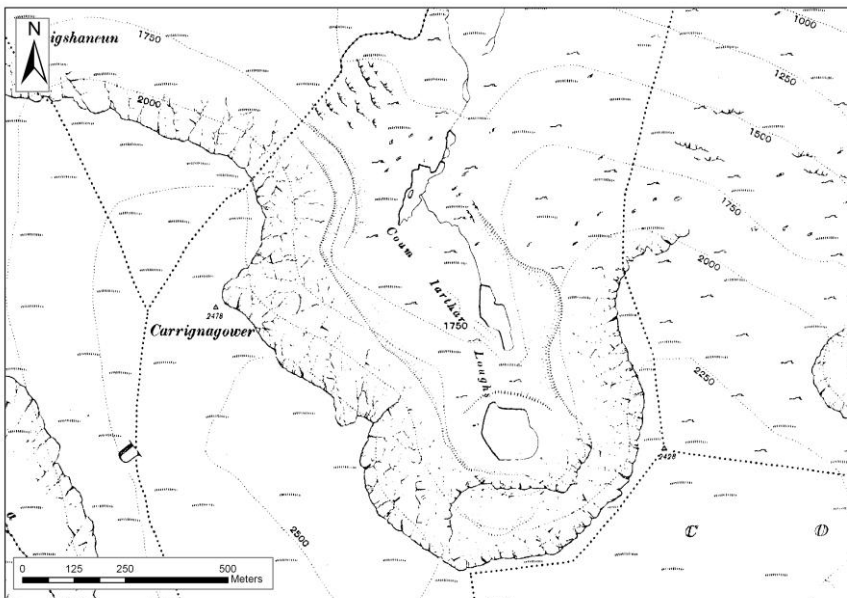
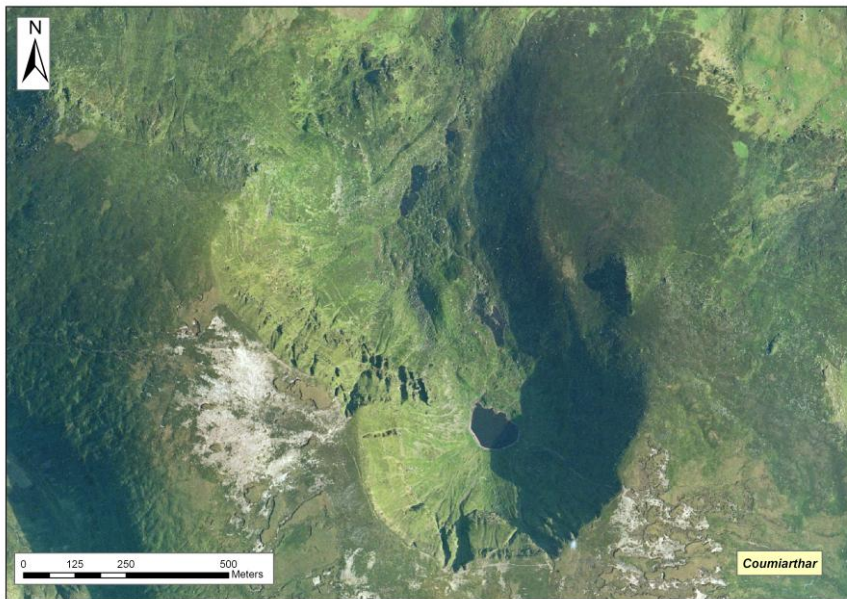
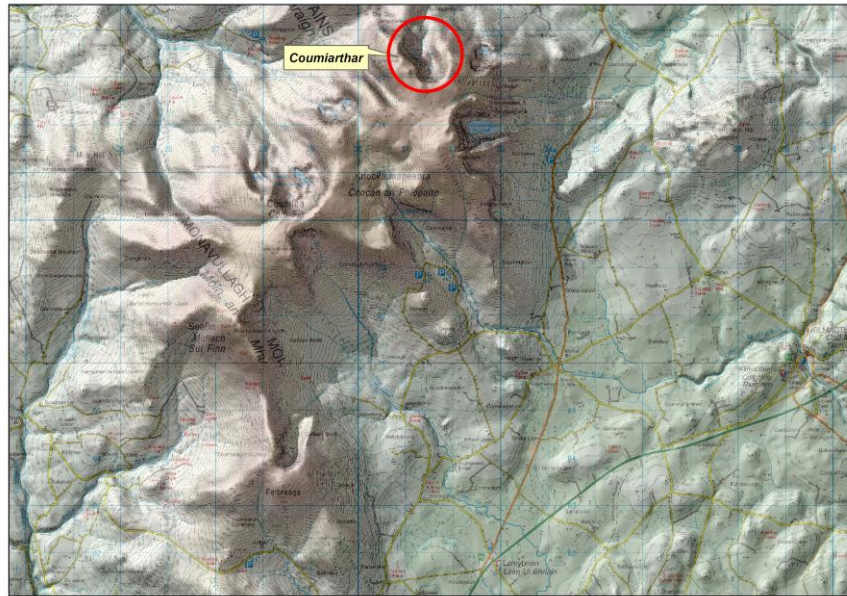
Pater noster lakes at the base of Coumiarthar.



View of corrie backwall, the lakes and moraine at the corrie entrance of Coumiarthar.



Steep gully in the backwall of Coumiarthar.



WATERFORD - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Sgilloge Loughs Corrie
Other names used for site	
IGH THEME	IGH7 Quaternary
TOWNLAND(S)	Curraghduff
NEAREST TOWN	Ballymacarbry
SIX INCH MAP NUMBER	Waterford 6 and 14
NATIONAL GRID REFERENCE	230000 111400
1:50,000 O.S. SHEET NUMBER	75 1/2 inch Sheet No. 22

Outline Site Description

Sgilloge Loughs Corrie is a deep glacial corrie situated along the northern flank of the Comeragh Mountains.

Geological System/Age and Primary Rock Type

The feature was formed during the Quaternary (Ice Age) by glacier ice scouring out a deep, armchair-shaped hollow at the edge of the mountains.

The majority of the feature therefore comprises ice-scoured bedrock, which itself is of Devonian age, informally called the Old Red Sandstone. The rock itself is mostly conglomerate.

Main Geological or Geomorphological Interest

This corrie has an almost-vertical backwall up to 230m in height. Two pater noster lakes floor the feature, so called because they form a series of linear lakes connected by a single stream, similar to the form and outline of rosary beads (hence 'Pater Noster', or 'Our Father' in Latin).

The corrie is bounded by a particularly impressive end moraine ridge, which stretches across the entrance to the valley and partially bounds the lake features. The moraine comprises well-drained, bouldery material, and the area around Sgilloge Loughs Corrie is littered with large erratic boulders.

The ice has scoured out blocks of these leaving some spectacular rock crags and benches along the valley backwall and sides.

Site Importance

This is a particularly impressive corrie feature, being wide and steep. The rock crags and benches also add to its uniqueness. This is part of a complex of Quaternary geology of national importance.

Management/promotion issues

The corrie has a rough pathway up to it and little promotional signage in the general area. Though the feature is potentially under-promoted, the absence of a cut/built path and signs in fact helps to protect the locality as a pristine portion of montane terrain. The site is already part of the Comeraghs Mountains Special Area of Conservation and pNHA (SAC – 001952).



Sgilloge Loughs Corrie, with two lakes at its base.



View west across the corrie backwall.



The large end moraine ridge can be clearly seen at the far side of the lake viewed from the corrie backwall.

