

THE CAVES OF THE ARAN ISLANDS, COUNTY GALWAY, IRELAND

by

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ABSTRACT

The information on the caves of the Aran Islands published in *Caves of County Clare* (Self, 1981) is incomplete. Further data has now been collected, largely from secondary sources and this is acknowledged as such. This material is collected together here.

INTRODUCTION

The Aran Islands comprise three main islands set in line across the mouth of Galway Bay (Figure 1) and a number of much smaller islets. The nearest island to Co. Clare is Inisheer (East Island). It is the smallest of the three main islands. The next island is Inishmaan (Middle Island) and the third is Inishmore (Big Island). Inishmore is substantially larger than the other islands, being about 14 km long by up to 4 km wide.

Although the Aran Islands are administratively part of Co. Galway, they are geologically an extension of the Burren district of north-west Co. Clare. The rock of the islands is a continuation of the dissected upland of Carboniferous Limestone strata that forms such spectacular scenery on the Clare mainland. In central and southern Co. Clare, Namurian shale and sandstone strata overlie the limestone. These rocks are not exposed on the Aran Islands. The youngest strata seen are about 30 m below the base of the Namurian subdivision. The islands are therefore composed entirely of rocks of the Carboniferous Limestone sequence.

The Aran rocks differ from those of the Burren by having much thicker beds of shale within the limestone sequence. The bulk of the rock is a massive grey limestone, dipping very gently to the south south-west. Differential weathering has produced a series of limestone terraces separated by steps containing the shale bands. The shale is also an effective aquiclude, giving rise to small seepage springs along the back of these terraces. It is usually here, in the shelter of these steps and close to water, that the islanders have built their homes. On the limestone terraces, rainfall goes directly into the ground and does not collect into streams.

Inishmore has a number of small turloughs. To the south-west of Cill Rónáin, An Turlach Mór is very responsive to rainfall: one day cattle may be seen grazing in a meadow, the next it will be flooded. To the south-east of Cill Mhuirbhígh there are three hollows where water wells out of the ground after rainfall: the hollow nearest the road, Poll an Chapail, must go down nearly to sea level as *enteromorpha* seaweed drapes the stones in its base.

The jointing of the rocks is similar to that of the Burren, with a major joint set oriented a little west of south and with another set approximately at right angles. Robinson (1995) gives a figure of 015° for the main jointing direction at the start of his book, and 012° in a later chapter. This compares with a 196° (i.e. 016°) jointing direction for north-west Co. Clare (B.B. Perratt in Tratman, 1969). On the Aran Islands, when the joints are eroded by rainfall they form grikes that can be as much as 60 cm wide and 3 m deep. The drystone walls of field boundaries usually

follow these jointing directions, dividing the landscape into rectangular blocks. Faults are small and not common, though there is an increase in their number at the western end of Inishmaan.

The author would be very grateful for any additions or corrections to the data presented here. It is recommended that visitors to the islands use the map *The Aran Islands* (Robinson, 1980) on which many of the sites are marked.

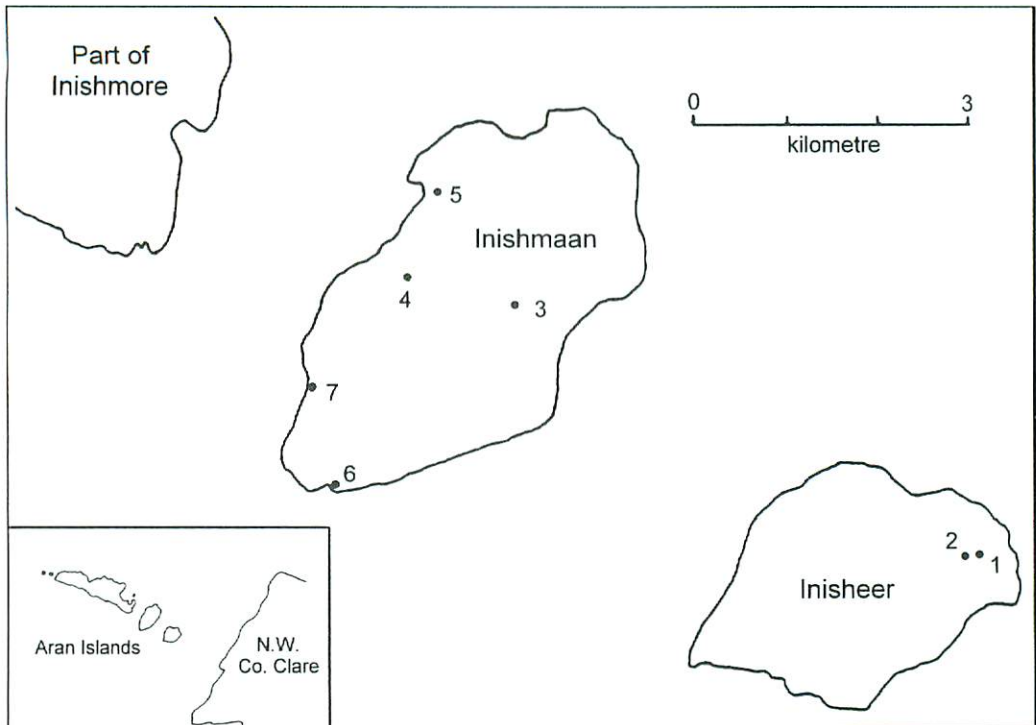


Figure 1. Location map of the caves of Inisheer and Inishmaan. 1, Loch Mór Cave; 2, Piper's Cave; 3, Rédh na h'Uanach; 4, Oonavoher; 5, Oonraghtagh; 6, Béal na bPoll Puffing Holes; 7, Poll an tSéideáin.

INISHEER (INIS ÓÍRR)

LOCH MÓR CAVE

Grid Reference: L 989.022 (approx.)

Td. Inis Óírr

Altitude: 15 m.

Robinson (*pers. comm.*) was told of a cave on the west side of Loch Mór by Mr. Fergal MacAmhlaobh, the then manager of the local Co-op store. Mr. MacAmhlaobh said that many visitors went to see it and that it was at an altitude of less than 15 m.

Between the lake and the road above, the hillside is a mass of narrow fields aligned along the contours. High stone walls or rocky scarps separate each field. Where these scarps run parallel to the jointing, many have narrow soil-filled cracks behind them (parallel to the scarp

face) due to mass movement. Where the scarps run obliquely to the jointing, they have open cracks and gullies. A brief search by the author failed to find a cave but, towards the northern end of this hillside, one of these gullies is quite wide and has a flake of rock wedged inside. A hollow underneath it makes a small “cave-like” shelter.

Syngé (1907) describes being shown “a curious cave hidden among the cliffs, a short distance from the sea”. He offers no other details, but may refer to this site. Other references to “a cave on the west side of Loch Mór” could refer to either this site or to Piper’s cave.

There is some reason to believe that Loch Mór may be connected to the sea. Peter Glanville (*pers. comm.*) reports that the water is brackish and that *enteromorpha* seaweed grows in its waters.

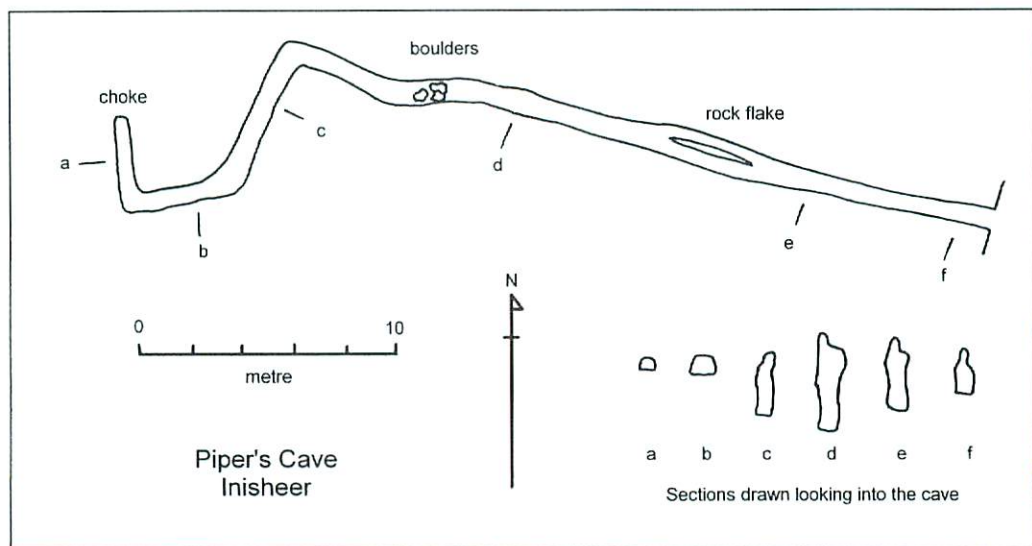


Figure 2. Survey of Piper's Cave

PIPER'S CAVE

Grid Reference: L 987.022

Td. Inis Oírr

Length: 39 m.

Altitude: 54 m.

The cave is located high on the hillside above Loch Mór, at the eastern end of the island. A road can be followed south, above Loch Mór, from a cluster of houses near the eastern end of the airstrip. The cave lies to the right of the road in the highest of a series of narrow fields aligned along the contours. The easiest access is from the grounds of a ruined house at the southern end of the village which gives entrance to this top field. The cave lies at the foot of a small cliff at an altitude of about 54 m, the highest point on the island being 63 m. The site is marked as “8” on the inset “The Villages of Inisheer” on Robinson’s map.

At the entrance, the cave is 1.5 m high and 0.6 m wide. It soon opens up inside, with passage heights of up to 3.5 m in places. The passage width remains less than 1 m. The first part of the cave follows a single joint heading a little north of west, with significant sculpting and pocketing of the roof. Superficially, the cave is similar in appearance to the classic “canyon”

passages of Co. Clare, but the variable roof line and lack of a "T" cross-section are quite different. After 10 m, a large flake of bedrock protrudes from the stony floor. After 20 m, the passage turns to the west and some fallen boulders must be negotiated. The cave now loops to the south-west and then west and the passage height is reduced by increasing quantities of debris on the floor. The passage reduces to a crawl and turns abruptly north, where the floor debris soon reaches the roof. The cave is devoid of speleothems but the walls have a thin coating of moonmilk in places.

According to legend, a piper went into this cave and came out on Inishmaan, from the cave Réidh na h'Uanach. His music was said to be heard under Carraig an Phóbaire, the Piper's Rock, on the west coast of Inisheer. Synge (1907) describes a conversation with an elderly local man about the fairies of Irish legend: "I was coming down where there is a bit of a cliff and a little hole under it, and I heard a flute playing in the hole or beside it, and that was before the dawn began". Robinson (*pers. comm.*) is certain that this story refers to Piper's Cave, but it is not known whether the name derives from this story.

INISHMAAN (INIS MEÁIN)

BÉAL NA bPOLL PUFFING HOLES

Grid Reference L 919.029 and L 921.029

Td. Ceathrú an Teampaill

Altitude 0 m

J. Feehan (in Waddell *et. al.*, 1994) reports that there are "puffing-holes" (marine blowholes) at the south-west corner of Inishmaan. "Puffing hole" is marked twice on Robinson's map, on either side of Béal na bPoll at the southern end of the island.

OONAVOHER

Grid Reference: L 928.051

Td. Ceathrú an Lisín

Length: 3 m.

Altitude: 60 m.

The majority of the housing on Inishmaan clusters about a road traversing the middle of the island from east to west. The cave lies close to this road on its northern side, about 400 m west of Dún Chonchúir (an oval cashel). A cottage called Seáinín Beag's is on the southern side of the road immediately opposite the cave. A grey wooden gate gives access to the field. The cave entrance is located in a small bluff.

The cave follows the main jointing direction, a little west of south, for 3 m to an artificial blockage of small boulders. The roof can be seen to drop down behind this obstruction, but no continuation of the cave is visible. There may possibly be a very low continuation at floor level as otherwise there would seem to be no reason for such a barrier. The passage dimensions are a little over 1 m in both width and height. The floor is stony and the walls have been sculpted by water erosion. The altitude of the cave is about 60 m. In comparison, the highest point on the island is 83 m.

This site is marked "cave" on the inset map "The villages of Inis Meáin" on Robinson's map. Robinson (*pers. comm.*) says that according to local belief the cave comes out in Kerry. He

notes that the cave is also marked on the Ordnance Survey map and that the name may be an Anglicisation of Uamhan an Bhothair, Cave of the Road.

OONRAGHTAGH

Grid Reference: L 931.061

Td. Ceathrú an Teampaill

Altitude: 10 m.

The cave is located on the north-western side of the island, just inland from the small bay Trácht Each. A little cliff runs inland from the bay, with masses of fallen rock littering its foot. The cave is a substantial chamber beneath a large block which has fallen from the cliff face. The entrance is not easy to find without local help and access can be gained only by lying on one's back. This area has many small rock shelters formed between or beneath boulders and the author only had time to look at the most obvious ones. The more substantial size of Oonraghtagh, compared with the other talus caves, only became apparent later when talking to local people.

The name Oonraghtagh is taken from the Ordnance Survey map and probably derives from Uamhain Thracht Each, Cave of the Beach of the Horses (Robinson, *pers. comm.*). This site is also known as Uamhain Ghrióra, Gregory's Cave, as St Gregory is said to have lived here. The cave is marked on Robinson's map as "25", and listed as Uamhain Ghrióra in his Places of Interest column.

St Gregory may have been the first to live in this cave, but its well-disguised entrance made it very useful as a hideaway. Synge (1907) recounts an anecdote told to him in the summer of 1898 by an old man of the island, the events being said to have happened sometime during this old man's lifetime. "A Connaught man killed his father with the blow of a spade when he was in passion, and then fled to this island and threw himself on the mercy of some of the natives with whom he was said to be related. They hid him in a hole, which the old man has shown me, and kept him safe for weeks, though the police came and searched for him, and he could hear their boots grinding on the stones over his head. In spite of a reward which was offered, the island was incorruptible, and after much trouble the man was safely shipped to America." Synge used this anecdote as the inspiration for one of his plays, "The Playboy of the Western World", published in 1907.

POLL AN tSÉIDEÁIN

Grid Reference L 918.039

Td. Ceathrú an Teampaill

Altitude 0 m

The southern part of Inishmaan has a line of cliffs along its west coast. About half way along these cliffs, which here are about 30 m tall, there is a cave at sea level which responds to any pulse in the ocean. After a south-westerly gale it is a spectacular sight, with spray being swept inland above the cliffs. The name means Cave of the Blown Spray, a name it shares with a similar cave on the eastern tip of Inishmore. In favourable conditions, spray from each of these caves can be seen by an observer on the other island (Robinson, 1986). The name is marked on Robinson's map.

RÉIDH NA h'UANACH

Grid Reference: L 940.048

Td. Ceathrú an Teampaill

Altitude: 45 m.

This site is marked as "2" on the inset "The villages of Inis Meáin" on Robinson's map. Réidh na h'Uanach is the name of the field in which the cave is situated and means "Field of the Cave". The position of the cave can be clearly seen from the main road crossing the centre of the island, even though it is situated high on the hillside more than 100 m away. From the pub, which lies towards the eastern end of the main cluster of settlement, the road should be followed east for about 50 m to where a drover's track leaves to the right. The track divides and the right fork is taken directly towards the hillside. The track scales a steep rise and divides a second time; again the right fork is taken heading uphill. At the second steep rise, not as severe as the first, a rocky bluff can be seen in the field on the right. The cave entrance lies here. It is blocked by boulders and an old bicycle frame.

This cave might be substantial. A local man who visited it several years ago described it as "one hundred or one hundred and fifty yards long". Such estimates are often grossly exaggerated, but a similarity to Piper's Cave (Inisheer) could explain the legend linking the two caves (see above).

INISHMORE (ÁRAINN)

AILL NA nGLASÓG PUFFING-HOLES

Grid Reference: L 900.056 and L 901.056

Td. Cill Éinne

Length: 33 m and 85 m.

Altitude: 0 m.

Two marine blowholes have been reported by J. Feehan (in Waddell *et al.*, 1994) at the south-eastern corner of Inishmore. "(They) can be seen to the east and west of Aill na nGlasóg (the Glassan Rock) where two caves run inland, that to the west for 85 m and the one to the east for 33 m, before opening to the surface through the puffing-holes. The latter is much the more spectacular of the two, because it is a great yawning chasm through which the sea below can be seen and heard advancing and retreating far below." On Robinson's map, "puffing holes" is marked inland from Poll an Bhranda, the small cove bounding Aill na nGlasóg to the west.

According to Robinson (1986), the eastern hole is about 12 m in diameter, with a natural set of steps leading down into it. In bad weather, the ground inland becomes strewn with sand and seaweed ejected from the hole. The storm beach loops back from the cliff and lies more than 50 m inland from the hole, showing the power that the sea sometimes commands, with remnants of ancient storm beaches even further inland. The western hole is a grassy funnel leading down to a narrow cleft in the rock.

Feehan also states "a number of much smaller puffing-holes occur further to the north-west." Robinson (*pers. comm.*) disagrees.

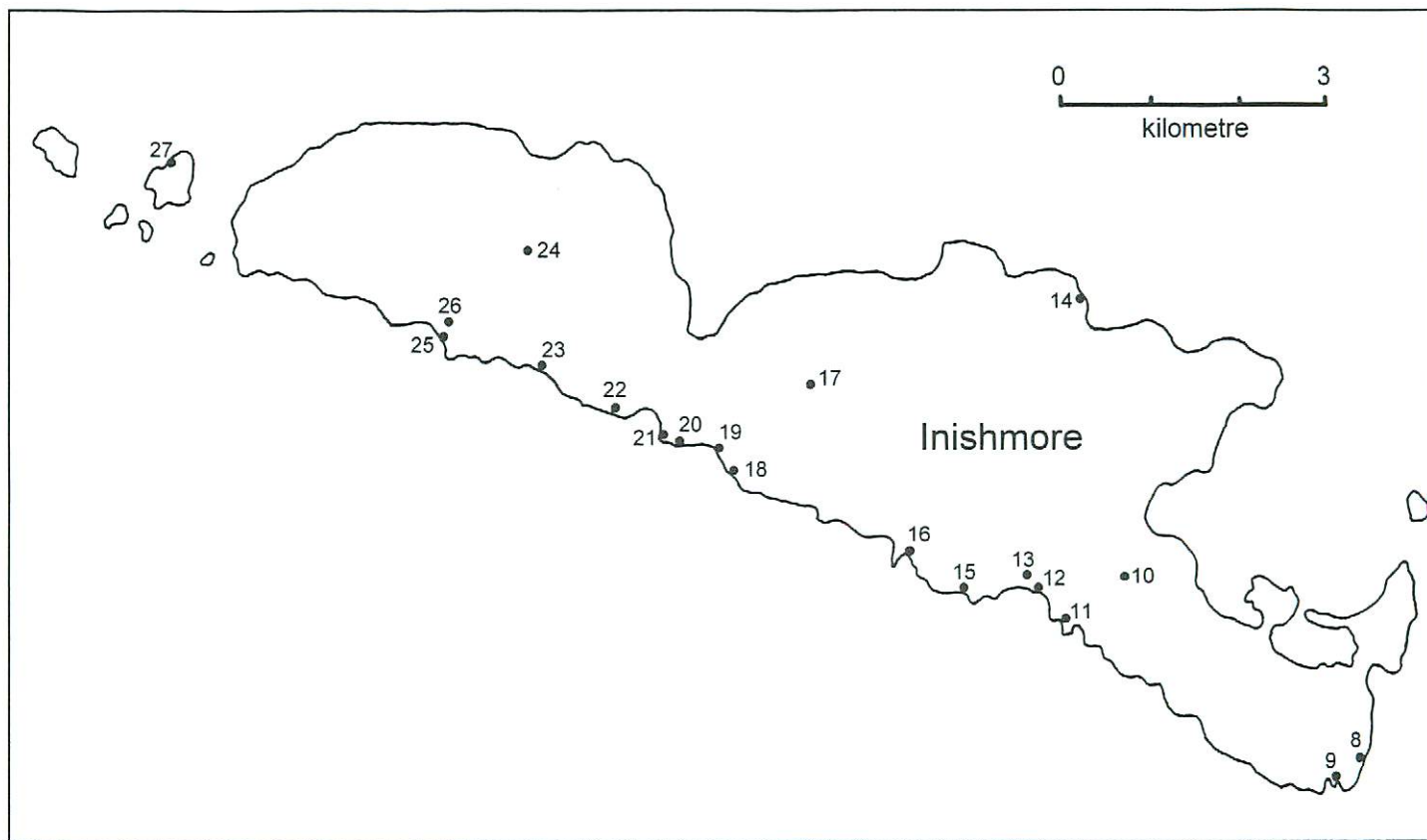


Figure 3. Location map of the caves of Inishmore. 8, Poll an tSéideáin; 9, Aill na nGlasóg Puffing Holes; 10, Cill Éinne Caves; 11, Dún Dúchathair Caves; 12, An Aill Bhriste; 13, Poll Talún; 14, Scailp Mhikey; 15, An Poll Gorm; 16, Poll an Iomair; 17, Scailp Eireamháin; 18, Poll Uí Néadáin; 19, Leic an Niocháin; 20, Poll na bPéist; 21, Blind Sound Cave; 22, Poll an Tobac; 23, An Sraoilleán Caves; 24, Dún Eoghanachta Cave; 25, An Poll Dubh; 26, Scailp na bPlátaí; 27, Brannock Island Caves.

AN AILL BHRISTE

Grid Reference L 866.077

Td. Cill Éinne

At An Aill Bhriste, the Broken Cliff, a great mass of rock has come half-adrift from the cliff top and forms an arch between it and a rock stack based on the terrace below (Robinson, 1986). The name is marked on Robinson's map.

AN POLL DUBH

Grid Reference L 799.104

Td. Eoghanacht

Altitude 0 m

An Poll Dubh, the Black Cave, lies at the foot of the 90 m high sea cliffs in the western part of the island. A traditional fisherman's route descends these cliffs, starting with a chimney descent of the fissure Scailp na bPlátaí (see below). There then follows an airy traverse and a rope climb of about 12 m, to reach the top of a pile of rock-fall debris stacked against the cliff.

Local legend claims the cave connects with An Loch Dearg, the Red Lake, on the north coast of the island. A piper once entered the cave and was never seen again, though his music is sometimes heard under the village of Creig an Chéirin. According to another source, the piper was a fugitive outlaw from Connemara; anyone who hears his mournful music will be called to the Piper's Castle, whence none return (Robinson, 1986). The name is marked on Robinson's map.

AN POLL GORM

Grid Reference L 858.076

Td. Eochail

Altitude 0 m

Along this section of the coast, shale bands divide the limestone cliffs into two, three or four storeys. The number of divisions depends on the height of the cliff. The lowest storey either stands out from the cliff as a terrace, or is worn back into wide-arched caves. An Poll Gorm, the Blue Cave, is large enough for one of the island's small trawlers to sail into (Robinson, 1986). The name is marked on Robinson's map.

AN SRAOILLEÁN CAVES

Grid Reference L 810.101

Td. Eoghanacht

Altitude 0 m

When the tide is rising, the breakers roll further and further up the slanting floor of the bay An Sraoilleán and disappear into dark slits along the base of the cliff (Robinson, 1986). The name is marked on Robinson's map.

BLIND SOUND CAVE

Grid Reference: L 824.094
 Length: 10 m
 Altitude: 5 m

Td. Cill Mhuirbhígh

A cave can clearly be seen from the cliff top at An Sunda Caoch (Blind Sound), a cliff-walled bay in the middle of the south coast of the island. Access to the cliff top is from the tourist path to Dún Aonghasa, but there is no access to Blind Sound from the cliff top. An approach must be made from the village of Gort na gCapall which lies 1 km to the east. From the village, a path leads to the coast and a landing slip at Port Bhéal an Dúin. A rock terrace can then be followed along the coast and beneath the cliffs past Poll na bPéist, The Worm Hole, and around the headland of Carraig na bPiseog into Blind Sound, where it peters out. The cave is a tunnel-like aperture at the back of this terrace, about 5 m above sea level. Blind Sound Cave might possibly lie in the same shale strata as are seen above Poll na bPéist. Robinson (*pers. comm.*) has been into the cave for 10 m, and says that it could go further. From the cliff top on the opposite (northern) side of the bay, there appears to be a low bedding cave in the cliff face beneath Blind Sound Cave.

CILL ÉINNE CAVES

Grid Reference L 88.07 (very approx.)

Td. Cill Éinne

Robinson (1995) mentions that during the severe cholera outbreak of 1832, the villagers of Cill Éinne fled their homes to live in little caves and huts among the crags. These may have been no more than rock shelters, or clefts with flagstones laid over them. A little to the north of An Turlach Mór (and about 1.5 km north-west of the Cill Éinne crags) there is a nook in the scarp face known as Pluais an Ghréasaí, The Den of the Cobbler. In Cill Mhuirbhígh townland, there are a number of similar small caves that were used as temporary shelters in times of trouble (see Scailp Eireamháin, below).

DÚN DÚCHATHAIR CAVES

Grid Reference L 869.073
 Altitude 0 m

Td. Cill Éinne

The peninsula fort of Dúchathair stands on a headland that is suffering attack by the sea. The neck of the headland has been undercut on either side into enormous caves, according to Pochin Mould (1972). However, according to Robinson (1986, and *pers. comm.*) the cliffs are being eaten out into colossal overhangs, not caves, from the bay to the west. The debris of past cliff falls suggests that, within a few centuries, all that will remain of the fort will be a remnant isolated on a sea stack. The name is marked on Robinson's map.

DÚN EOGHANACHTA CAVE

Grid Reference: L 808.114

Td. Eoghanacht

Length: 6 m.

Altitude: 65 m.

This site is marked "cave" on Robinson's map and lies about 200 m west of the cashel Dún Eoghanachta. There is one main road traversing this part of the island. Having followed the road past the cashel, a factory building is seen on the left. 100 m beyond this point, Na Seacht dTeampaill, The Seven Churches is a famous landmark on the right hand side of the road. A drover's track leaves the road to the left (south) between these two places. The cave lies close to the track in a small cliff about 600 m to the south, hidden in bushes. Robinson (*pers. comm.*) suggests dropping down to the entrance from above the scar, but on a very brief reconnaissance, the author failed to find this cave. Robinson describes the cave as a narrow cleft sloping slightly downwards, length about 6 m. The altitude of the cave is about 65 m, the highest point on this part of the island being 106 m. A local story claims that a couple went into this cave and that they are still going.

LEIC AN NÍOCHÁIN

Grid Reference L 832.091

Td. Cill Mhuirbhígh

Leic an Níocháin, the Flagstone of the Washing, is an area of shoreline formerly used by the village women of Gort na gCapall for washing clothes. The cliff face above this secluded bay has recently leaned forward, tearing a fissure 1 m wide and 30 m long in the land above (Robinson, 1986). The name is marked on Robinson's map.

POLL AN IOMAIR

Grid Reference L 852.080

Td. Eochail

Altitude 0 m

The small bay Poll an Iomair is so named because it is shaped like three sides of a square trough, or font. There are low-roofed caverns along the foot of its walls (Robinson, 1986). The name is marked on Robinson's map.

POLL AN TOBAC

Grid Reference L 818.097

Td. Cill Mhuirbhígh

Altitude c. 60 m

Robinson (1986) mentions a cave "a third of the way down the dizzy cliff just east of Dún Aonghasa". The cave derives its name from a consignment of tobacco, washed ashore on the north coast from a wrecked sailing vessel, and hidden there from the coastguards. The name is marked on Robinson's map.

POLL AN tSÉIDÉAIN

Grid Reference L 903.057
 Altitude 0 m

Td. Cill Éinne

At the eastern end of Inishmore, the hillside is known as An Teannaire, The Pump. It is possible, if the tide is out and the sea is reasonably calm, to traverse from here the foot of the easternmost angle of the cliffs of the Atlantic coast. Here the swells coming up the channel from the open ocean have excavated a cave in a shale bed. As waves enter the cave, the air inside is trapped and compressed and columns of foam are blasted back out again. The cave responds best to a south-easterly gale when it is a spectacular sight (Robinson, 1986). The cave shares its name with a similar cave on Inishmaan. In favourable conditions, spray from each of these caves can be seen by an observer on the other island. The name is marked on Robinson's map.

POLL NA bPÉIST

Grid Reference: L 825.092
 Altitude: 0 m

Td. Cill Mhuirbhgh

Poll na bPéist, The Worm Hole, is an excellent example of marine erosion. A rectangular block of rock, more than 30 m in length and about 12 m in width, is missing from the marine terrace. Seen from the cliff top, the straight, joint-controlled sides give Poll na bPéist the artificial appearance of a grim and sinister swimming pool, with the sea filling the void from below.

According to Feehan (in Waddell *et al*, 1994), the péist is a reptilian monster with which Gaelic imagination often peopled the deep in past ages. Access is from the village of Gort na gCapall to Port Bhéal an Dúin, then beneath the cliffs and along the lowest level of the shore at low tide. If caught by a rising tide, the cliffs are climbable without equipment in places. The name is marked on Robinson's map.

Along this part of the coast, about 6 m above Poll na bPéist, there is a broad and mamillated rock terrace beneath the upper part of the cliff. The base of this upper cliff is of shale, varying between 1.2 m and 2.4 m in thickness, which has been eroded to a depth of up to 12 m. The floor of this horizontal slot is undulating, but the ceiling is flat and fossil-studded. The rear wall of shale glistens with seeping ground water (Robinson, 1986). The nearby Blind Sound Cave may also have formed in these beds.

In the summer of 1971, the Sub Aqua Club of Queen's University, Belfast dived from the Worm Hole through to the open sea (Pochin Mould, 1972).

POLL TALÚN

Grid Reference L 865.078

Td. Cill Éinne

Poll Talún, the Hole in the Ground, is marked on Ordnance Survey maps as a puffing hole but this is not correct. It was a window down through an overhang of the cliffs, and lay about 9 m from the cliff edge. This opening in the roof of the overhang is due to a small fault, which can be seen in the cliff face. According to a local story, Aran's last fox had its earth on a ledge of the cliffs here, which it reached by swinging from its jaws from a fern growing in the hole (Robinson, 1986). The name is marked on Robinson's map, but the cliff edge has now collapsed into the sea and Poll Talún is no more.

POLL UÍ NÉADÁIN

Grid Reference L 832.089
Altitude 0 m

Td. Cill Mhuirbhigh

To the south of the village of Gort na gCapall, there is a sea cave that was formerly used as a hiding place for weapons during the "Land War" of the 1880's (Robinson, 1986). The name is marked on Robinson's map.

SCAILP EIREAMHÁIN

Grid Reference L 840.099

Td. Cill Mhuirbhigh

Scailp Eireamháin is a cleft about 1 m wide and a few metres long, partly roofed, caused by a mass of rock sagging out of a little cliff face. Éireamhán is supposed to have been a hermit. Refugees from Connemara lived in this cave during the Famine (Robinson, *pers. comm.*). The name Scailp Eireamháin is marked on Robinson's map.

In this part of the island, Robinson (1995) mentions some other small caves that were used as temporary hideaways or shelters: a crevice in An Creig Mhór, a cave (or perhaps a cleft with a few flags across it) in a strip of scrubby woodland known as An Choill, and a cave in a little cliff above the Turlough at Gort na gCapall.

SCAILP MHIKEY

Grid Reference L 872.108
Altitude 0 m

Td. Eochail

Robinson (1986) describes "a labyrinthine cellarage in which (thè sea) sighs and grumbles even on calm days". There are three holes in the roof of these caves, the largest of these holes being known as Scailp Mhikey. Sand and seaweed accumulations in the caves were formerly extracted by means of ladders. The caves lie close to a 1930's kelp kiln, marked "19" on Robinson's map.

SCAILP NA BPLÁTAÍ

Grid Reference L 800.105
Depth 15(+?) m
Altitude 90 m

Td. Eoghanacht

Scailp na bPlátaí, the Cleft of the Plates, is so named because a stone thrown down it falls with an echoing clatter. The sea cliffs are here about 30 m tall and mass movement has opened up a fissure wide enough for a climber to let himself down it, with the aid of various fallen blocks wedged inside. The first 15 m or so of descent is part of a traditional fisherman's route to the bay of Poll Dubh (Robinson, 1986). The name is marked on Robinson's map. A similar, but much narrower, fissure can be found about 500 m to the east.

BRANNOCK ISLAND (OILEÁN DÁ BHRANÓG)

Brannock Island is the largest of a group of small islands known collectively as the Brannock Islands. They are located to the west of the western end of Inishmore.

BRANNOCK ISLAND CAVES

Grid Reference L 769.124
Altitude 0 m

Td. Eoghanacht

In the north-western part of this island, there is a sea-washed terrace beneath a deeply undercut cliff. Two rectangular cave entrances at the back of this terrace have a most unusual feature: huge blocks have fallen out of the overhangs, creating skylights into the caves and leaving two long lintels of rock above their entrances. The larger of the two lintels has a span of 12 m, with a width of about 1.2 m and a depth of 1.8 m. These caves do not have a local name (Robinson, 1986).

DISCUSSION

In the descriptions given above, it is clear that more is known of the locations of the caves of the Aran Islands than of their nature or contents. It is also clear that there are several different types of cave, both karst and pseudokarst. Some separation of the different types of cave is possible, despite the limitations of our present state of knowledge.

Some caves are clearly of karst origin. These include Piper's Cave (Inisheer), Oonavoher and Réidh na hUanach (Inishmaan) and, probably, Dún Eoghanachta Cave and Poll an Tobac. Noting that few details are known of the Inishmore caves, these sites have several features in common. The Inisheer and Inishmaan caves are located in some of the highest land in the islands and their entrances are found at the foot of small cliffs. Usually such cliffs are formed in limestone beds immediately overlying shale bands, which give rise to the distinctive terracing of the islands. On Inishmore, Dún Eoghanachta Cave also follows this pattern. Poll an Tobac lies in the upper part of an actively eroding sea cliff.

The two caves seen by the author (Piper's Cave and Oonavoher) are water-worn canyon passages, but appear quite different from the caves of nearby Co. Clare. Clare caves are typically vadose canyon passages, flat-roofed and with lateral phreatic development at roof level to give a classic "T" shape in cross-section. Aran canyon passages have no lateral development at roof level and have a very variable roof line, which suggests that they are entirely phreatic. Given the present steep topography of the islands and the presence of thick shale aquicludes (presumably just beneath the caves), one would expect tubular passages to form. The presence of tall phreatic canyons may indicate a period of paragenetic development (upwards erosion, with sediments protecting the cave floor), possibly due to sub-glacial water movement during a cold stage of the Quaternary. On Scrois na gCapall, by the north-western shoreline of Inishmore, there is a long undulating channel cut into the limestone pavement by water flowing at pressure under a melting glacier (Robinson, 1995). Clear evidence of paragenetic development can be seen in Upper Poulmagollum, one of the older cave passages in Co. Clare.

No estimate can be made of the age of the karst caves of the Aran Islands, nor is it possible to guess whether they are the result of allogenic or autogenic drainage. The location of

Piper's Cave in particular, so high on such a small island, suggests that these caves were formed when the Aran Islands were part of a larger land mass. It is possible that cave development was restricted by the shale aquicludes to the upper part of the limestone succession.

The majority of the caves described in this paper are found in the sea cliffs at or close to sea level. It would be natural to assume that these caves have formed by the mechanical erosion of the sea. However in nearby Co. Clare, sea caves are only well-developed in Namurian strata. In the limestone, coastal caves have proved to be from a previous cycle of karst development, for example Poulsallagh, Poulcraveen, Urchin's Cave, Mermaid's Cave and many others. The more exposed nature of the Aran coastline favours sea cave development, so it is more likely that these caves are of marine pseudokarst origin. Poll na bPéist has excited the interest of cave divers who are hoping to find karstic passages running inland, but there is no evidence either to support or refute this idea. In the cliff above Poll na bPéist, the shale band has been deeply eroded by the sea during winter storms, forming a cave-like slot above high tide levels. More information is needed.

The third group of caves are of mass movement origin. The known examples are mostly found on the Atlantic coast of Inishmore. Leic an Níocháin and Scaill na bPlátaí are open fissures where the cliff edge has broken away from the strata inland. Such coastal features are often called "toppling block" gulls and are due to undermining of the base of the cliff. A more likely explanation for such fissures on Inishmore would be simple sliding of the limestone on an underlying shale bed. In principle, this movement is the same as for the better known gull caves of the Cotswolds and the Cleveland Hills. However, in the Cotswold examples there is more than one plane of movement, so the caves form within the strata and thus have roofs. An Aill Bhriste may be a similar fissure in a more mature stage of development, now largely destroyed by collapse, or perhaps it has already reached the stage of maturity where it should be called a talus cave. Oonraghtagh (Inishmaan) is an example of a true talus cave, being formed within cliff-fall debris.

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