

Dry stone walling exchange and organisation

EUROPEA Erasmus+ Project Mobility



„The island should be named The Stone Labyrinth“; 360 km of stone walls on 6 km²

History

In the graveyard is the ruin of a church that was built in the 10th century. Another church ruin at the western side of Inis Oirr dates back to the 11th century and is protected as a national monument.



One of the famous sights of Inis Oirr is the ruin of a castle of the 14th century. At this time the Aran Islands were controlled by the O'Brien's. The castle was built to defend the island against the rising power of the O'Flatherty's. The sea trade to Galway is controlled by the three Aran Islands.

The stone walls around the castle date back to between 500 B.C. and 500 A.D. So these were the oldest buildings that we found.

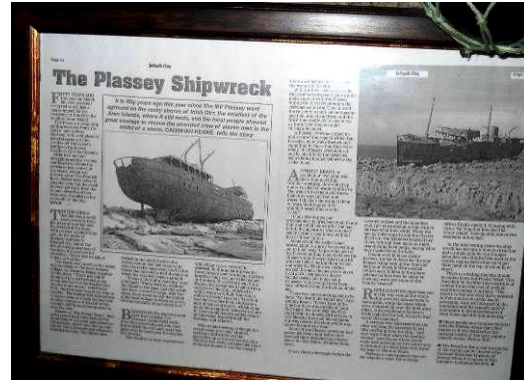


On the island are appr. 360km of stone walls. The walls were made of limestone from the island, they protect the soil from getting blown away by the strong sea wind and they keep the cattle on the land of the owner. Most of the walls were built in the 17th, 18th and mostly in the 19th century. In the 1960ies was the last time when many walls were built.

The Aran Islands were not influenced too much by the two world wars, and we were told that not many men from the island had to join the army in the second world war.

The Plassey Shipwreck

In the 1960s a cargo ship crashed into a reef and sank. The sailors got rescued in baskets that were pulled by ropes to land. Some time later a strong storm flushed the wreck to land.



Sea, Water & Fish

As far as we found out fishing was economically more important in former times than nowadays. People told me that there are still some fishermen and fishing boats that go fishing near the coast.



After getting off the ferry we immediately saw Sandy, a wild bottlenose dolphin that has lived at the harbour since 2000. It is used to people and even swims with them near the sand beach. There are instructions at the beach how to behave so that neither Sandy nor you get hurt.



The shore of this small island is mostly rocky like the all the land was originally. Inis Oirr has three sand beaches; the biggest of them is on the north side.

What you don't expect about this small island is that there are so many wells and underground streams of fresh water. Furthermore, there is a quite large lake in the east of Inis Oirr.



The importance of fresh water for any kind of life and for people is also shown in the fact, that the biggest well, located near the western coast, is named "Tobar Einne", which means "Holy well".



Since there is not too much water on some places of the island, farmers stack stone piles that are sloping and cover it with sheet metal or concrete so that the water flows in to a basin underneath.

Life and people

There are many horse carriages driving tourist around the island. Some roads are unfit for cars. People are very friendly and communicative. It is no myth that the Irish enjoy singing more than we do in Austria.

There are nearly no cats, but for this small island there are many stray dogs. Inis Oirr has internet and telephone connection.

People have their animals (ducks, cows, sheep) mostly near their houses. But agriculture is not important anymore, only a few cows and sheep graze on the meadows. People live mostly on tourism and a little bit fishing. Inis Oirr is visited by tourists often for the weekend or for a day's trip.

Agriculture, plants and animals

On Inis Oirr there were no trees at all except willows near a well. Since many meadows are not used anymore and there is less cattle or sheep than there was, many blackberry bushes grow whenever the owners don't remove them. On Inis Oirr there are nearly no fields, only a few potatoes are grown.



There are not many plants that don't exist at us. At the lake we saw fresh water birds: swans and herons.

Originally, Inis Oirr was bare rocks, more precisely limestone. How could it be used for agriculture, more specifically as meadows? Simply, the land is man-made, which for sure was no easy work:

- Men removed the upper layer of rock. Because they needed stone walls for fencing in the cattle.
- To make the soil they brought sand and seaweed to cover the rocky land.
- They brought the seaweed, because it made humus and kept the sand from getting blown away.



While in Ireland the average farm cultivates 30 hectares of land, on Inis Oirr it is 6 ha. Due to the poor land, that is enough for 3 – 4 pieces of cattle only, the grassland can be “harvested”, this is grazed, only once a year. The yield of the soil is not sufficient (no grain, no maize, poor vegetation) for fattening cattle for beef, so only calves and probably a little milk is produced – but no animals for slaughtering.

On all three Aran islands are nowadays 200 farmers only, approximately 30 of those are on Inis Oirr.

Naturally, actually similar to Austria, the main problem is the steady decrease in the number of active farmers. Older farmers give up farming, younger people can't live on that small scale production as a result of hard work.

Examples for the hardness of farm work:

- Farmers have to care for sick cattle very good because if one dies this could mean the loss of have the farmer's herd. Having enough stones, they often simple built a shelter wall around sick animals to protect it from the wind.
- Mowing of parcels can done only by hand or motor scythe.
- Making hay is done by hanging the grass over the bordering stone walls for drying. It is cheaper to buy hay from the mainland and get a large bale by ferry.
- The original gates between the parcels surrounded by stone walls were made of stone. For bringing cattle from one place to the other, stones were removed and build up again. Nowadays metal gates are used. These are mostly considered as an acceptable modern element in the man-made landscape, quite contrary to some other easy-to-open gates made of waste.





The problems for agriculture can be summarized as follows:

- small-scale farms with poor soil
- small size of land parcels bordered by the stone walls
- lack of fresh water
- hardness of work

Under an Aran Island environmental project, biologists work with farmers on approaches, since the result of farming is not only food: farmers maintain the landscape which is the base for tourism and therefore the main economical factor of the island, and they preserve a biological diversity.

The REP (rural ecological programme, which is similar to our ÖPUL that ran from 2015 to 2022) offers one measure for maintaining stone walls. But there are many issues covered by REP (e.g. building maintenance, crop rotation, green covers, plant protection), where the farmer applies in which measures he wants to take part over the programme period. Biologists would prefer a more target-oriented programme concerning the walls, landscape and grassland on Inis Oirr.

Parcels that are not cultivated anymore get covered with scrub, mostly blackberry bushes. Ivy is not regarded as a danger to the landscape directly, but indirectly: Ivy does not spread over land; it only grows up and on the stone walls. But once it damages the stone wall, the land is not fit for cattle grazing anymore and will be abandoned and habited by scrub. After some years of lying bare, you will not even see the famous stone walls anymore underneath ivy and blackberry bushes.



To make the land more attractive to farming, some parts of walls are broken down on purpose in order to make access to the meadows more easily. Some of the traditional paths called “boreens” that lead to the land parcels are just “cow-wide” and unfit for being reached by tractor, up to 1.5 km away from the farm.



A short selection of plants to be found, the first picture simply shows a well-balanced, desired habitat of grazed land being covered with the growth of one whole vegetation years.



birdsfoot trefoil



orchid
(one of many species)



yellow rattle



golden rod



many species of moss



and fern



ivy broom
(a 100% parasite on ivy)



quaking grass
(burngrass)



devil's bit scabious



hart fern



harebell

Apart from the meadows, due to the sea climate, plants conquer even the most unfriendly places quite quickly:



The dry stone wall experience

In the stonewall workshop, 5 trainers and 23 participants were building a traditional Aran Islands single wedged wall, out of limestone from the island.

Inis Oirr in itself is the perfectly chosen place for this workshop welcoming participants from Ireland, Scotland, America, Menorca (Spain), Germany and Austria. 360 km of dry stone walls, mostly built in the 18th and 19th century and in the 1960ies, cover the small island, sometimes fencing in a parcel of the size of only 1 are. The specialist is fascinated by the number of different building styles and techniques that can be found in such a small area.





The technique of the single wedged dry stone wall is mostly used for free standing walls. In the region of Cork are traditional retaining walls built this way. The principle is simple, and the experienced dry stone waller can use his experience: he only has to think "one turn different".

Technical rules that are completely common:

- Thickness of wall: 50% of height (which seems to be true for every dry stone wall).
- As much friction / contact among stones as possible (here the difficulty is in the edges of the stone: if the highest point is in the middle, the slab will be unstable and move).
- Fixed and interlocked stones.
- Filling with smaller stones / splinters give additional friction and stability.

The “eye for the stone” of the waller has to find the same stones as at our horizontal random walls, since the problems are the same: not too big holes, enough area on the layer side, no elevation on layers that cause instability, not getting too thin too quickly.

As the photos show, the face of the walls is always quite rough, a beauty of stones that is unusual to us. Of course the face can be made more neatly or purposely rough, but in total the technique of vertical stone walling is faster than that of horizontal walling. The course finished 50 m of a 1.30 m high wall, which gives 65 m², within effectively two days of practical work.

Specific rules for wedged stone walls:

- Incessant vertical joints, no horizontal joints!
- Difference of height between neighbouring vertical stones: minimum 75 mm.
- Minimum height of top stones: 200 mm
- Minimum thickness of top of the wall: 200 mm
- Keep stones strictly vertically



Finished: a new vertical DSW

A rough arrangement of eight photos in two rows depicting the workshop wall along the main road on Inis Oirr, opposite the camping place and next to the children's playground and soccer field, between the western and eastern village.



Thanks to everyone who contributed to our experience 😊!

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