

Aberystwyth environs, from south to north

Tanybwllch Cliff

The sloping cliffs to the south of Tanybwllch beach are clearly made of crumbly layers of mudstone, deposited on the bed of shallow seas in the Silurian period (430 million years ago) and known to geologists as Aberystwyth grits.



During orogenic (mountain-building) episodes 395 million years ago, these layers were compressed, raised and folded. Fossils are poorly represented.

In the glacial period 2 million years ago a variety of much harder igneous rocks were transported to the coast, often from vast distances away – pink and red jasper from North Wales, granites from Scotland and the Lake District, agates, quartz, and amethyst from far afield and even flint from North of Ireland.

In places on the coast of Cardigan Bay, the sea seems to have retreated some way from the base of the cliff line, leaving low-lying land that has been farmed and built on (for example, between Llanrhystud and Aberaeron).



Some 80 km north of Aberystwyth is Harlech Castle, built between 1283 and 1290. Antique (but in all likelihood romantically exaggerated) pictures show it occupying a crag immediately above the waves but now it is separated from the sea by several km of sand dunes.

Elsewhere, including the area around Aberystwyth Castle, the sea appears to have encroached further in historically recent times. For example, the remnants of St Mary's Chapel, which was washed away in 1650, can still be seen on Castle rocks.



Around the harbour in Aberystwyth archaeologists have found evidence of hunter-gatherer communities living in woodland areas dating from up to 9000 BC, a time when the sea seems to have been many km out. At Ynyslas, a few km north, low tides regularly expose a petrified forest on the beach.

So the indications are (at least to our non-geologist eyes) that the coast has tipped and buckled, while sea level has gone up and down quite a bit in the comparatively recent past. This is reflected in the local legend of the ancient drowned kingdom of Cantre'r Gwaelod beneath the waves of the Bay.

The stretch of cliffs from Penderyn Nature Reserve and Monk's Cave to Alltwen is generally separated from the sea by a rocky zone that gets covered by the high tide. There is a small colony of seals towards the southern end, most easily seen by boat.



The land on the clifftop is largely sheep pasture with some unimproved scrub. This is where we find one of our favourite birds, the chough. Love them or hate them, it can't be denied that the corvids as a family are resourceful and admirable animals. Crows, rooks and (increasingly) magpies are highly visible and have adapted to coexistence with humans despite a history of persecution.

But the chough keeps itself to itself, is a specialist of more or less remote, roughish pasture and is altogether a delightful creature. In appearance, behaviour, intelligence and sound it is a pleasure to experience and we count it as one of our favourite birds. We have also made the acquaintance of its continental cousin with the yellow extremities, the Alpine chough, on our frequent visits to Switzerland. We have been greatly entertained by the organised way in which these intelligent birds work together to perpetrate outrageous distraction thefts of food from humans at the outdoor restaurant on Mount Pilatus.



Another favourite corvid found on the cliffs to the south is the raven. A particular pleasure is to hear its extraordinary deep and sonorous call as it flies over. Other enjoyable birds of this habitat are the fulmar (nesting on the more inaccessible cliffs to the south) and our common but nevertheless spectacular raptors, the red kite and the buzzard.



Tanybwllch Beach

Tanybwllch is a beautiful sweeping storm beach between the distinctive crested profile of Alltwen hill to the south and the confluence of the Rivers Ystwyth and Rheidol to the north.



Although it's just a few minute's walks from the centre of town (and even closer to where we live), it often feels strangely secluded and pristine, particularly when the weather keeps people away.

Glacially-deposited shingle forms a steep bank between the sea and the lower reach of the Ystwyth. The river's original outlet to the sea was about halfway along the present beach but

this was closed sometime in the 18th century (a map of 1809 shows its course to be roughly as it is now) and the river was redirected to join the mouth of the Rheidol at the harbour bar.

The beach, riverbank and area in between is a nature reserve and despite its popularity with dogwalkers, campers and all-night beach party enthusiasts, it's home to a number of unusual plants and animals.



Every spring we make a point of looking out for the return of the wheatears, a small community of which spend the summer around Tanybwllch. Re-acquainting ourselves with these handsome little birds is always a highlight of the early months of the year.



Another enjoyable visitor is the whimbrel. We have seen parties of 25 and more spending a couple of weeks on the beach before continuing their migration. The whimbrels hang around with the resident group of oystercatchers, another favourite species of ours. We like their unmistakable peep peep cry, their beady red eyes and that absurd carrot of a beak.



Ringed plovers also frequent the beach, though they seem to travel quite widely and we've seen them passing through the harbour and also on Castle rocks. Very nice little birds indeed.

Clumps of rare creeping blackthorn, said to be 200 years old, can be seen on the shingle bank, and the scrubby undergrowth on the river's east bank seems to be a haven for songbirds – we've heard blackcaps and sedge, reed and grasshopper warblers, as well as the ubiquitous blackbird, chaffinch, dunnock and wren.



From this riverbank, the ground rises steeply to the 120 m hill of Pendinas, which is also part of the Tanybwllch nature reserve. Pendinas is the site of one of the largest prehistoric hill forts in Wales, occupied from 300 to 0 BCE. The fort comprises an upper area on the highest point of the hill, a slightly lower area to the north and a narrow connection (the isthmus) between the two. Most of what is known about the Pendinas site was uncovered in excavations carried out between 1933 and 1937 under the direction of Daryll Forde and reported in the 1960s by the Royal Commission on the Ancient and Historical Monuments of Wales. A new community project seeks to explore the bilingual heritage, culture and history of the hill fort and local nature reserve site.



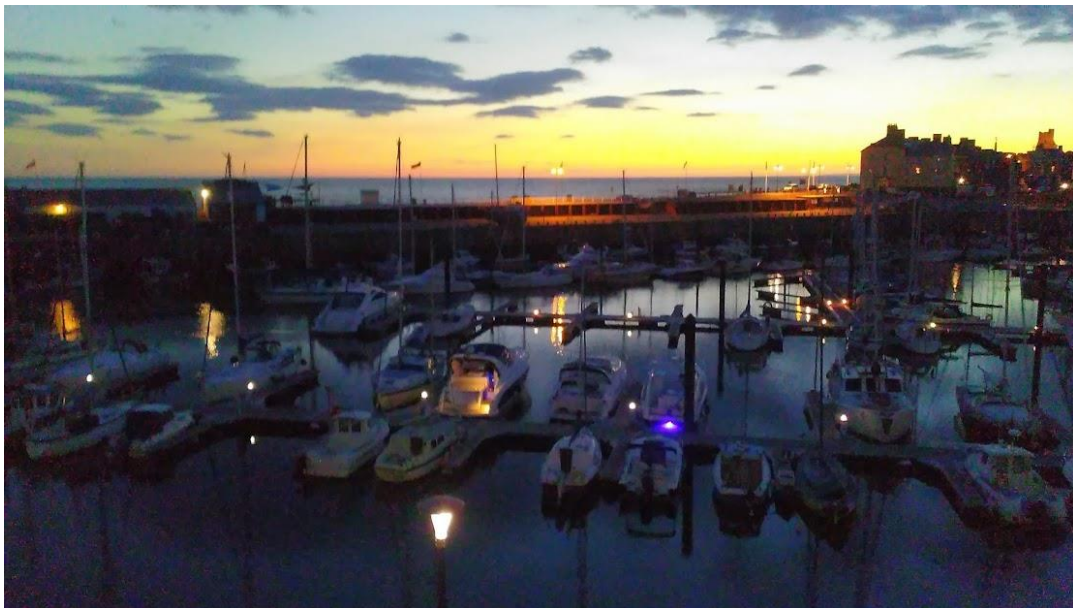
In 1858 an 18m tall stone column on a 1.8m podium was erected on the highest point of the South Fort. It is known as the Wellington Monument and the original intention was to put a statue of the old boy on top. This never happened, but the monument remains a prominent

feature, visible for many kilometres in every direction and is one of the first signs to the returning traveller (by land, sea or even air) that home is near.

Birds seen around the Tanybwllch-Pendinas reserve include the big raptors (buzzard, red kite), corvids, rock pipit, the various hirundines, and swifts.

The harbour

The harbour is literally on our doorstep and provides an ever-changing backdrop to our lives and those of a surprising number of creatures with whom we share this environment.



Before it became an independently-administered port at the end of the 18th century, Aberystwyth Harbour came under the jurisdiction of the harbourmaster at Aberaeron (25 km to the south) and was little more than sheltered moorings where the Rivers Ystwyth and Rheidol entered the sea.

Even so, it was the centre of a significant fishing and cargo industry and began a major expansion in the early years of the 19th century, becoming Wales's second busiest port at its height.



A major figure in the development of Aberystwyth Harbour was one George Bush (no less), who directed the construction in 1836 of the stone pier that marks its southern edge.

The rocks to build the pier were quarried from the foot of Alltwn and transported by a tramway running above Tanybwlich beach. Odd bits of this construction are still visible.

The harbour then entered a period of expansion and prosperity, adding shipbuilding and transatlantic passenger services.

The opening of the Shrewsbury to Aberystwyth railway line in 1864 marked the start of an extended period of decline for the Harbour, accelerated by severe damage to the stone pier in the storms of 1867.



By the 1970s this area of town was very run down and clearly in need of redevelopment. The proposal to construct a marina met with a long period of protest and the project did not begin until the mid-90s.

As beneficiaries of the scheme, living where we do, we obviously can't be truly objective about the rights and wrongs of the Marina development. But it does seem to have revitalized the whole area, and to judge by the wildlife that literally passes our window every day, it can't have irreparably damaged the environment.

Considering the marina, and the harbour in general, are such busy places, a surprising number of normally shy creatures come and go. For example, we have seen seals, otters and kingfishers literally a few metres from our window. The harbour has a considerable population of large grey mullet, again easily visible from the window in the summer months, and we also frequently see salmon leaping on their way up the river Rheidol.



The river enters the harbour from the north after passing under Trefechan bridge. The original 1800 bridge, designed by John Nash, was washed away in the Great Flood of October 1886. The present bridge dates from 1888. Further upstream is Pont-yr-Odyn, the Kiln Bridge, which opened in 2003. At low tide, a shingle bank beneath the bridge is a favourite meeting and bathing spot for gulls and corvids. Species using it include herring, black-headed and lesser black-backed gulls, jackdaws and crows. The occasional oystercatcher, mallard and swan pass by.



Feeding birds on our balcony is rather an antisocial and unhygienic practice, but it does enable us to observe closely the personalities and intelligence of the corvids. Particularly the jackdaws, birds that have interested us since we read about Konrad Lorenz's work with this species.

As well as daws, rooks, and crows, our balcony has been visited by robins, pied wagtails, blackbirds, sparrows, rock pipits. One-off sightings include a willow warbler and a female black redstart.

Other birds we see around the harbour include dunnocks, wrens, cormorants, shags, gulls, starlings, goldfinches, goosanders, a heron, a muscovy duck, a shoveller, and a little grebe. During a severe winter, we have seen redwings.

Castle and college

South Beach extends from the harbour mouth to Castle Point. This is where we get regular sightings of the Cardigan Bay dolphins. The dolphins roam throughout the Bay but are seen most often further south. Of course, everyone regards the dolphin as some kind of spiritually elevated, even saintly, animal, but they have a dark side. There is evidence that the decline in the local population of porpoises is linked to attacks by dolphins. You don't get to be the top predator in your food chain without being a ruthless and efficient killer.



Dolphins may have smiley faces and an engaging attitude to humans, but we're not so sure that a mackerel feels too well-disposed towards them.



Off Castle Point is Cormorant Rock which gets its name from the fascinating bird that likes to congregate there. It's visible from our window and, through the binoculars, we've seen up to thirty cormorants and shags gathered to digest their catches and dry off their feathers.



The Castle dates from 1277 and is one of the ruins that Cromwell knocked about a bit (in 1649). The War Memorial, designed by Italian sculptor Mario Rutelli and built 1921-23, is a striking construction in the Castle grounds featuring the figure of Victory gesturing to the open sea. Her dramatic unclad embonpoint has given “promise of pneumatic bliss” to generations of the town’s adolescents and less worldly-wise undergraduate students.

In 1865 work commenced on a large Hotel alongside Aberystwyth Castle, originally conceived as a way of getting rich from the surge of visitors arriving by the new railway line from Shrewsbury and the Midlands.



The venture was cursed from the start and eventually, the unfinished building was purchased (for £10000) by the Welsh National University Committee. In 1872, to great rejoicing within the town and the principality, it was opened as a University (the first in Wales) with 26 students.

“Old College” is a striking neo-Gothic pile that is now looking for a new role since the University has largely relocated to campuses elsewhere.

College Rocks stretch from Castle Point to the Pier. Amongst the notable birds that frequent this habitat is the strangely named purple sandpipers – strange because there isn’t a hint of purple anywhere in their plumage.

Spotting the purple sandpiper is a mid-winter game. They are easy to overlook, not just because of their sombre camouflage but also because they don’t seem to do very much except sit around all fluffed up and look sleepy. By contrast, a much busier bird often accompanies them – the turnstone. It lives up to its name, turning stones and darting about in pursuit of tasty titbits. Strangely for a wader, the turnstone seems to dislike getting its feet wet and dances away from incoming waves as if its life depended on it. This is consistent with stories of turnstones hitching rides on ferries to avoid the possibility of wet feet. The turnstone is very catholic in its food preferences. There are even reports of it cheerfully munching on human cadavers washed up on the beach.

Other birds of this area are oystercatcher, ringed plover, the usual gulls and corvids, and, most spectacular of all, starlings.



Poor storm-lashed and truncated Aberystwyth Pier (the earliest record of a pier in the same location dates from 1801) is the winter roosting place for tens of thousands of starlings that perform extraordinary displays of synchronized aerobatics each evening prior to roosting. Why do they do it? Perhaps it’s an adaptation to the presence of predators (the occasional raptor has been seen in the area), or some kind of social bonding ritual. One curious feature is that, with the exception of the noise made by their wings, the birds are completely silent during their display, in contrast to the merry squawking, fizzing, and chattering they indulge in when perching or feeding.

Constitution Hill

Sitting at the northern end of the promenade is a 150 m high lump of crumbling mudstone held together by a thin layer of grass, gorse, and guano. The zigzag paths leading to the top are worth taking for the views when you get there. Alternatively, there's the 192 m long Electric Cliff Railway, dating from 1896 (originally water-powered but converted to electricity in 1921).



The panorama at the top takes in virtually the entire sweep of Cardigan Bay, from the islands off Cardigan and the Preseli Hills of Pembrokeshire to the south right round to the tip of the Llyn peninsula which points at Ireland, just over the horizon to the west.

The view can be experienced in a different way inside the Camera Obscura, a 1985 reconstruction of a Victorian amusement, said to be one of the largest of its kind in the world and to look out over a combined land- and sea-scape of more than 2500 km².



Northward from the Hill runs the cliff path to Clarach and thence to Borth. The wildlife visible from Constitution Hill and along the path includes seals, greater black-backed gulls, cormorants, oystercatchers, raptors, and corvids. It's said that leatherback turtles visit to feed on the abundant jellyfish in the Bay, but virtually no one's actually seen them.



Beyond Clarach an extraordinary feature is visible as a reef extending several km into the bay from the secluded beach at Wallog – Sarn Gynfelyn. The scientific explanation for the sarnau, which are found at several points along the Cardigan Bay coast, is that they are long subtidal banks of glacial moraines. The more romantic version of their story is that they are the remains of causeways leading to Cantre'r Gwaelod, Wales's version of the myth common to many coastal nations across the world of an ancient drowned civilization.

Further north is some of the scenic glories of these parts – the estuaries of the Rivers Dyfi and Mawddach. If these landscapes occurred anywhere else, say a country with an aggressively

promoted worldwide brand like Ireland, they'd be marketed without mercy by the tourist people. Wales has never got the hang of this kind of image-peddling and so generally the country's extraordinary scenery remains pretty much a secret. I suppose those of us who live here must want it that way since it preserves the qualities we like and keeps out the riff-raff.

Within the broad sweep of the Dyfi estuary are several internationally important habitats and rich diversity of flora and fauna. Of particular note are the Ynyslas sand dunes, Cors Fochno (Borth Bog), the RSPB reserve at Ynys Hir, and the Cors Dyfi Nature Reserve, home of the amazing Dyfi Osprey Project.

The birdlife of the estuary includes large seasonal populations of migrant geese, ducks and swans, an increasing population of little egrets, and rare raptors such as the marsh harrier and osprey.

The Dyfi Estuary is where south Wales ends and North Wales begins, a boundary that is more than merely geographical but also represents a change of culture, economy, geology, history, and dialect. Which adds to the richness of living in this beautiful, elusive little country.