1. Welcome

Welcome to the Little Orme audio trail. My name is Sioned Edwards, I'll guide you through this captivating landscape. Discover rich history and the unique wildlife of the Little Orme's Head (Creigiau Rhiwledyn). Presented by North Wales Wildlife Trust supported by the Lottery Heritage Fund, on behalf of the Welsh Government.

The Little Orme is a remarkable coastal headland with dramatic cliffs, species-rich limestone grasslands, and stunning panoramic views. The exposed white crags before you were formed over 320 million years ago. Composed of coral and other marine creatures that once thrived in shallow tropical seas, south of the equator. Over time, layers of their remains accumulated on the sea floor, fossilising into the calcium-rich limestone.

Now a haven for wildlife; rare plants, insects and birds thrive in its distinctive habitat. Designated as a Site of Special Scientific Interest, home to the nationally scarce hoary rock-rose, and silver studded blue butterfly. These low coastal cliffs are host to one of the largest breeding populations of Cormorant in the UK.

Before we start, a few quick tips; appropriate footwear is advised, as the terrain can be steep, uneven and slippery when wet. Please be aware of the hazards associated with cliffs, including falling rocks and sudden drop-offs. Feel free to pause the audio at any time to take in the views, so let's begin...

Directions are provided at the end of each track to guide you to where you can listen to the next instalment of the audio trail.

Facing the welcome sign, turn right and follow the stone path uphill. You'll soon reach the third waymark for the North Wales and Wales Coast Path, with a wooden bench on your right- a good resting point to listen to the next audio clip







2. The living limestone grasslands

North Wales Wildlife Trust is dedicated to preserving the limestone grasslands of Rhiwledyn Nature Reserve, it's one of the rarest and most species-rich habitats we have in Wales.

As the days grow longer during spring and summer, they come ablaze with colour. Bountiful swards of wildflowers thrive on the nutrient poor soil; from the lilac of the small scabious to the golden yellows of common rock-rose and kidney vetch, creating a vibrant scene across the landscape. You might also spot delicate bee and pyramidal orchids, accompanied by the delightful fragrance of wild thyme; forming low-growing mats, with dense clusters of purple-pink flowerheads. And the creamy white flowers of dropwort.

This tapestry of diverse flowering plants provides food for an astonishing array of insects and butterflies, including marbled white, brown argus, and the rare silver-studded blue, all searching for the rich source of nectar throughout the warm sunshine.

The landscape you see today is testament to the dedication and efforts of our reserve team and volunteers, protecting our natural heritage. Significant progress has been made to restore and maintain the 5 hectares of Rhiwledyn. Traditional winter grazing methods keep soil nitrogen levels low and reduce competition from taller grasses in the summer. Scattered scrub is cut in rotation, to conserve a variety of age structures, providing food and important shelter for nesting birds.

However, this vibrant scene is under threat from invasive non-native species, particularly cotoneaster, which is monitored and removed. If left uncontrolled, it can smother and outcompete the specialist wildflowers found on limestone grasslands, having devastating effects on biodiversity.

Cotoneaster was introduced to the UK in the 19th century as an ornamental garden plant, and has since escaped into some of our treasured landscapes. In fact, cotoneaster has been identified as one of the top 10 species harming protected sites across North Wales.

Continue along the path uphill through the cluster of trees until you reach a wooden kissing gate and reserve's boundary, your next audio stop.







3. Hidden history

The Little Orme's rugged landscape is not only a geological marvel, but also holds a rich and compelling history within its hidden complex of crevices and caves.

Excavations at the height of quarrying in 1880 revealed prehistoric evidence suggesting humans once inhabited this headland. One female skeleton now known as 'Blodwen' was discovered here. Carbon dating confirmed that Blodwen had died around five and a half thousand years ago during the Neolithic period.

In the depths of one cave, archaeologists unearthed bones of at least four other people. Accompanied by ox bones and early Bronze Age artifacts; including amber beads and slate tools.

As time progressed to the Elizabethan era, amidst the persecution of Catholics in Britain, a similar cave was transformed into a clandestine printing press, known as 'The Chimney Cave'. In 1587, Squire Robert Pugh, a local landowner, backed by loyal Catholic supporters, used this cave to print a book called 'The Christian Mirror', (Y Drych Cristianogawl) the first of its kind to be published in Wales. Such as an act was considered treason and punishable by death. Nearby, Squire Pugh's home now known as Penrhyn Old Hall, had a secret "priest hole" concealed behind the chimney where Catholic clerics could hide.

The press was subsequently discovered later that year when smoke from the cave caught the attention of a passing fishing boat. Reports suggest Sir Thomas Mostyn, the local Justice of the Peace, sent a troop of 40 militia men to investigate. But the entrance proved too difficult to enter. The guards stood watch overnight, only to find the perpetrators had escaped through a natural chimney by the morning.

In 1962, excavations of the cave unveiled fascinating evidence backing up this story; characteristic marks found on the cave floor suggest joists were once laid inside. Walking among these ancient rocks, imagine the secretive operations and whispered conversations that once echoed.

Continue through the kissing gate along the Wales Coast Path. When you reach a cross junction turn left uphill, following the path until you get a view of Llandudno Bay, turn left uphill when you'll reach the Trig point. Pause the audio for now, once at the top enjoy the panoramic views and press play to continue listening...







4. The Alligator and the Elephant

Hopefully it's a clear day for your visit. Looking west you'll be able to see Llandudno Bay and the headland of the Great Orme. The word Orme is derived from the Old Norse word "Ormr", meaning "Dragon" or "Serpent", reflecting the shape of the Great Orme. According to legend it protected the bay from sea invasion. Vikings mistook the Great Orme from their longships for a gigantic sea serpent and were said to be far too terrified to come ashore. Today, viewed from land the Great Orme is aptly known as 'The Alligator' and Little Orme 'The Elephant'.

To the southwest is the Carneddau mountain range in Eryri National Park, of which Carnedd Llewelyn is the tallest. Its summit is 1062 metres above sea level, that's only 19m less than its more famous cousin, Yr Wyddfa (Snowdon). Colwyn Bay sits to the southeast and away to the northeast out into the Irish Sea, you'll notice the offshore wind farm of Gwynt y Môr.

The contrasting habitat of scattered scrub, limestone grassland, and rock beneath your feet supports an abundance of lichens, mosses, fungi, and diverse plant species. They help feed and shelter insects and butterflies. One such butterfly is the rare silver-studded blue. Males have silvery-blue wings, while females are brown with blue highlights. They rely on these grasslands and can be seen flying low from June to August. The caterpillars have a special relationship with ants, who protect them from predators in exchange for a sweet substance. When ready to transform, the caterpillars pupate in shallow chambers, often in ant nests, where the ants guard them until they become adult butterflies.

Retrace your steps back, at the grassy cross junction take a left to pick up the Wales Coast Path waymark. Follow the path until you see Penrhyn Bay and the quarry (careful of the sudden drop off), turn right and continue until you reach the old winding gear. Your next audio stop is found on the kissing gate.







5. Industrial past- The limestone rush

The quarry's story began in 1889, transforming the eastern headland. Edward Fiddler purchased a lease to quarry the foreshore from Mostyn Estates. Selling this onto Joseph Storey of Lancashire; an experienced quarry owner, he founded The Little Orme's Head Limestone Quarry Company, it soon became one of the largest and most productive sites, employing many skilled quarrymen.

Limestone was shipped to Scotland supplying the chemical works and steel blast furnaces. Different companies were involved over the years, and when the quarry later reopened during the 1920s, limestone was used to produce valuable Portland Cement, under the new Allied Cement Manufactures Ltd. Until demand ultimately fell and in 1931 it closed for the final time.

Today, remnants of this industrial past dot the landscape, can you see the winding gear from the old break house? Stone was loaded from here into gravity-driven railway wagons down to the bay, while hauling up empty ones connected via cable on tracks. Now forming part of the scenic Wales Coast Path.

Remarkably, even at the height of its productivity, the quarry remained hidden from sight of Victorian holidaymakers enjoying the beach of Llandudno Bay. Preserving the Trwyn y Fuwch headland, we can still enjoy the beauty of limestone grasslands and wonderful wildlife today.

Go through the kissing gate down the steep path. Taking care as the gravel track can be slippery. When you reach the bottom bear left towards the exposed limestone rock and Porth Dyniewaid (Angel Bay). Where your next audio point is found on the interpretation panel.







6. Porth Dyniewaid

Porth Dyniewaid commonly known as Angel Bay, is a sanctuary for the majestic grey seals. These fascinating creatures are a highlight of the bay. Their distinctive Roman noses gave them their Latin name 'Halichoerus grypus, meaning hooked-nose sea pig. They're highly intelligent and skilled hunters, diving deep to catch fish, squid and other prey. Males can grow up to 2.5 metres long and weigh as much as 300 kilograms, while their smaller female counterparts are equally captivating.

Late summer and into autumn, the bay becomes a bustling nursery, expectant mothers haul ashore to give birth to fluffy white pups. These adorable newborns, weaned for just 3 weeks only on milk, which is over 50% fat! Are soon left to start their own journey.

The UK hosts around 40% of the world's grey seal population! Their presence is vital, to ensure these incredible mammals remain undisturbed from damaging stampedes keep dogs on a lead, please don't venture down to the beach. Enjoy the seals from the top of the cliff. Morloi Conwy Volunteer Group dedicate their time and effort to monitoring them. Insights about the seals seen at the bay can be found on the noticeboard, including details to get involved or how to report disturbance, abandoned pups or sick seals.

The headland is also a haven for birds, including Choughs, Cormorants, and Fulmars. Watch for Choughs soaring around the old quarry and listen for their distinctive high-pitched "Chee-ow" call. With their glossy black feathers, bright red legs and curved red bills. Part of the crow family, these intelligent and playful birds, are often seen in acrobatic flight, swooping and diving along the cliffs. Caves and old quarry crevices make ideal breeding habitat. However, choughs became a species of conservation concern in the 20th century; conservationists have worked hard to restore and traditionally maintain the short coastal grasslands they need for food, rich in insects and grubs.

Cormorants are often seen perched gracefully on rocks, with their wings stretched out to soak up the sun's warmth after a successful dive. The Little Orme is home to one of the largest breeding populations in the UK. Truly remarkable fishers, catching prey with their long, hook-tipped bills while swimming under water.

With the interpretation panel behind you, continue ahead to join the meandering gravel path, until you reach a small Wales Coast Path waymark post. Here, storyteller Andy Harrop-Smith shares the local legend of mermaids of the bay.







7. Tales of the tides- The mermaid of Penrhyn Bay

According to local legend, long before the seals made Angel Bay their home, it was a refuge for mermaids. They used the bay to shelter from the storms and would often be seen basking on the rocks at the foot of the steep cliffs.

A Mermaid was once caught in a terrible storm, the waves lashed and she was washed ashore, injured on the sands of Penrhyn Bay. She was found by fishermen, and she begged them to take her back to her family at Angel Bay, where she could be cared for. But the cruel fishermen refused, intending to keep the Mermaid and charge people to see her. Unfortunately, the poor creature died of her injuries or perhaps a broken heart.

But before she died, she cursed the fishermen, proclaiming that no fish would swim in those waters, and so they would always be poor and hungry. The curse was fulfilled, and a fish-famine fell upon the seas off the North Wales coast. Legend has it that St. Bridget was one day walking along the beach at Penrhyn Bay, she was so sad to see the poor people in a state of near starvation for lack of fish. The Saint cast rushes into the sea and prayed for an end to the famine. Miraculously the rushes were transformed into fish, which multiplied into large shoals. The fish were named 'sparlings', meaning 'rush like'. The mermaids curse had been lifted.

Continue along the tarmac path, as you approach a left-hand bend, on your right in front of the old quarry cliffs, you'll see your last audio point on the Wales Coast Path waymark finger post.







8. An unexpected role of a seaside town

As World War II loomed over Britain, the seaside town of Llandudno found itself thrust into an unexpected role in sea defenses, and coastal artillery practice. In 1940, to escape bombing raids across London, the government relocated their Royal Artillery Coastal School, from Shoeburyness to the West Shore of the Great Orme, and later moved to the eastern flank of the Little Orme.

By 1942, this quiet disused quarry was transformed into an active military training camp. Old quarry buildings were repurposed to house operations, complete with bunkers and gun emplacements. Proving to be a key site for artillery practice, due to its high elevation and strategic coastal view. The Coast Artillery School was made up of different regiments including; Gunnery, Twenty First Coast Battery; demonstrating fire practice seaward at anchored target vessels, and Wireless Wing; trialing innovative radar techniques.

Men stationed here from Inland Revenue, the British Army, and US Army personnel integrated into local communities. Having a lasting effect on the area, taking part in sporting and social activities. Many formed relationships with locals, leading to marriages and families that intertwined their lives with Llandudno.

From the tarmac path take the narrow gravel path that curves to the right. Pass through the metal kissing gate and between the houses. Followed by a sharp right hand turn through a wooden kissing gate.

Continue along the tree-lined path uphill to join a lane that leads to Colwyn Road. Turn right to return to the start of the trail.

Thank you for joining us, we hope you've enjoyed exploring the rich history, diverse wildlife, and unique landscape of the Little Orme. From the ancient rock layers beneath your feet, to the vibrant habitats that flourish above, this headland is a true gem of North Wales.





