

Royal Geographical Society

with IBG

# Time and tide

Explore the Dee Estuary around Flint in North Wales



Discover a dramatic and constantly changing environment
Experience a fragile coastline at the mercy of the sea
Find evidence of the River Dee's industrial past
Enjoy a stretch of the new Wales Coast Path





# Created in collaboration with

# THE THIRD AGE TRUST



THE UNIVERSITY OF THE THIRD AGE

This walk was a runner up in a competition to design a walk held by the U3A in collaboration with the RGS-IBG





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# Time and tide

## Explore the Dee Estuary around Flint in North Wales

The Dee Estuary divides North Wales from England. It's a borderline landscape, a shifting, transitional place that's neither land nor sea but somewhere in between.

Depending on the tides, the estuary can look very different. You might meet fast flowing water lapping angrily at the shore or vast, shimmering mudflats home to a lively population of birdlife and seals.



This walk journeys through thousands of years of landscape change to find out how the estuary was created and how it has been used and adapted over time.

Follow part of the new Wales Coast Path to discover how the estuary was once a busy centre and transportation hub for manufacturing and trade.

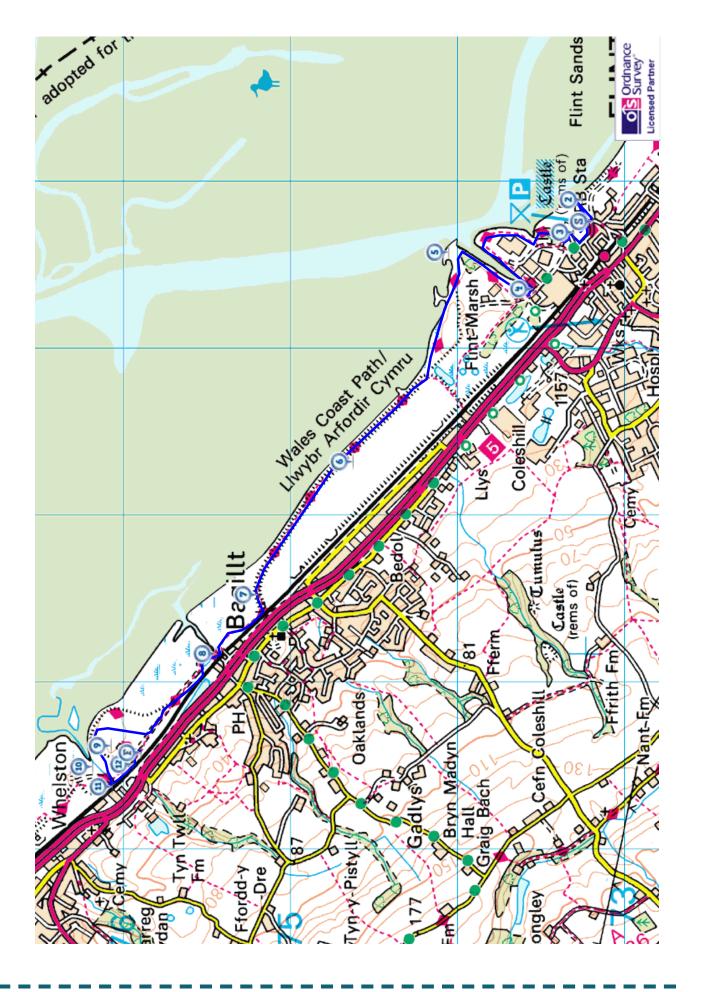


Find evidence of this industrial heritage and see how nature has returned to flourish here.

Discover a thirteenth century castle built by an English king. Watch fishermen return with their catch at a 'holy' harbour.

Meet Bettisfield Bob and find a Welsh dragon on top of a coalfield.

Top: The remains of Flint Dock, once a centre of trade and transport © Val Philipps Bottom: A grounded fishing boat in the 'holy' Harbour © Martin Haslett



## Practical information

**Location** Dee Estuary, Flintshire, North Wales

**Getting there Train** - Flint is on the main London to Holyhead railway line with

regular services from Chester, Crewe, Manchester Piccadilly and

London Euston.

**Bus** - Arriva Bus route 11 runs between Flint and Bagillt (to and from

Chester). Services every 30 minutes weekdays, hourly at weekends.

**Car** - Flint is approximately 12 miles from Chester on the A548. Free

parking is available at Flint Castle car park.

**Bicycle** - Flint and Bagillt are on National Cycle Route 5 - North Wales

Coast.

**Start point** Flint Castle car park, Castle Road, Flint CH6 5PH

Directions from railway station to start point Exit the station and go along the short road straight ahead (Lower Sydney Street). At the end turn left into Chester Street then turn left opposite the Swan Hotel to go uphill along Castle Road. Continue over the railway line. Follow the road round to the castle car park.

Finish point Car park by former Bettisfield Colliery, Bagillt CH6 6HE

Return journey

You can return to the start point at Flint by bus (see Directions 13) at

the end of the booklet.

Walk distance 3 miles

**Level Gentle** – A mostly flat route following the Wales Coast Path.

**Terrain** Sections of the coast path can be muddy and slippery after rain.

**Conditions** One section of the walk is along a high sea wall so take care with

children, especially in wet and windy weather. Take warm clothing as

the estuary can be blustery.

#### Suitable for

**Families** – plenty of sights for all ages

**Dogs** – must be kept on a lead

#### Refreshments

There are various shops, cafés and pubs serving food in Flint and Bagillt. We recommend:

- Anne's Patisserie (2 Trelawney Square, Flint next to the railway station) for teas and coffees and excellent cakes (closed Sundays).
- **The Lunch Box** (56 Church Street, Flint) for take-away sandwiches and drinks.

#### Toilets

Please note there are no public toilets on the walk route.

## Places to visit St Winefride's Well, Holywell

This spring known as 'the Lourdes of Wales' is one of Britain's oldest pilgrimage sites

Seasonal entry times; minimal admission charges

www.saintwinefrideswell.com

## **Greenfield Valley Museum, Holywell**

Set in a 70-acre Heritage Park, the site includes a childrens farm, fishing reservoirs and ancient monuments (such as the remains of Basingwerk Abbey).

Free daily entry to the park; charges and seasonal opening times apply for the museum buildings.

www.greenfieldvalley.com

### Tourist information

#### **Discover Flintshire Tourist Information Centre**

Earl Road, Mold, CH7 1AP

Email: info@moldtouristinfo.co.uk

Tel: 01352 75933

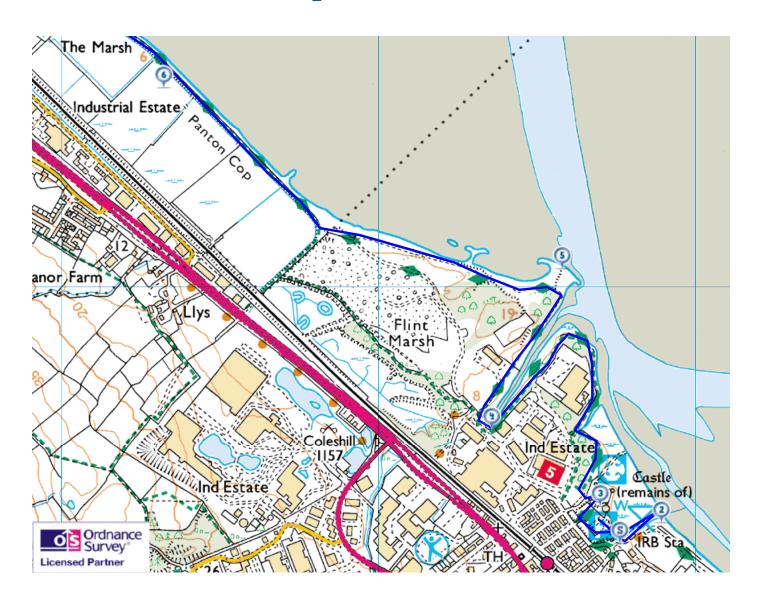
## **Flint Library** also has visitor information

Church Street, Flint CH6 5AP

Email: flint.library@flintshire.gov.uk

Tel: 01352 703737

# First part of the route

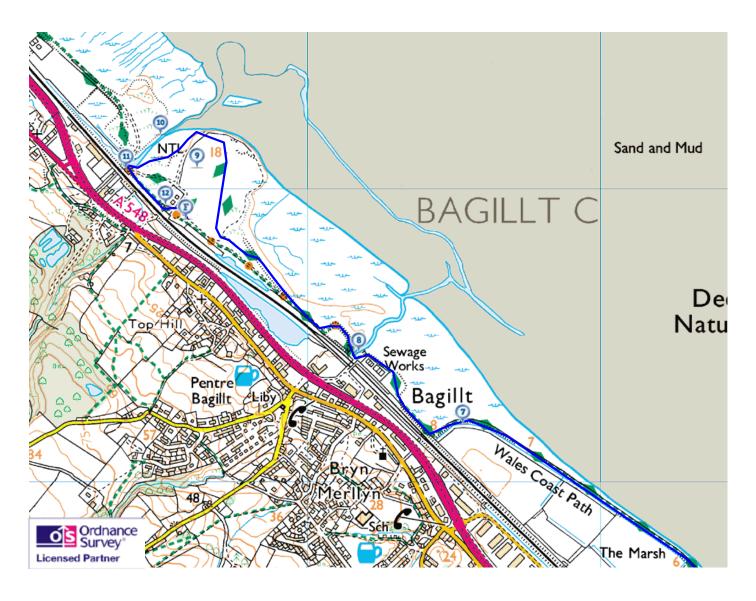


# Stopping points

**Start** Interpretation board at Flint Castle car park

- 2. Sands of Dee information board
- Flint Castle
- **\frac{1}{2}.** Flint Dock
- 5. Flint Point
- 6. Panton Cop sea wall

# Second part of the route



# Stopping points

- **7.** Bagillt Marsh
- 8. Station Gutter
- 9. Dragon beacon, Bettisfield Hill
- 10. Bagillt Harbour
- **11.** Milwr Tunnel outlet
- **12.** Former Bettisfield Colliery buildings

Finish Totem pole markers, Wales Coast Path

# 1. Welcome to the Dee Estuary

## Interpretation board at Flint Castle car park

The Dee Estuary is the broad waterway that serves as the border between North Wales and England. It's also a borderline landscape; a place that's neither land nor sea but somewhere in between.

This walk explores this estuarine environment to discover how the geography of this wide estuary has shaped the lives of the people who live along it. Along the route we will find out about the particular physical characteristics of estuaries, how they were formed and continue to evolve. We will also explore the estuary's unique ecology and try to spot some of the flora and fauna that thrive here.



View of the estuary from Hilbre Island in Liverpool Bay William Starkey, Geograph (CCL)



Wales Coast Path logo Hogyn Lleol, Wikimedia Commons (CCL)

The Flint coastline and banks of the Dee offer clues to the area's industrial past allowing us to uncover evidence of the many trades and industries that once lined the waterway.

And after the storms of 2013/14 we will consider some of the practical challenges posed by estuaries and see evidence of how humans have tried to protect the land in a constant battle with the sea.

This walk was created by Val Philipps, a retired geography teacher and keen walker who lives locally. The linear three-mile route follows the Wales Coast Path from Flint Castle to Bagillt - keep an eye out for the yellow and blue way markers featuring a shell design which denote the Path's route.

#### **Directions 1**

From the car park, take the footpath to the left of the lifeboat station. Go through the gate and proceed about 100 metres to the Sands of Dee information board.

## 2. Where two waters meet

## Sands of Dee information board

This is a good spot to take in the wide, sweeping view across the estuary and get a good sense of the geography of the area.

Across the water the land we can see is England. More specifically it is the west coast of The Wirral, a peninsula just to the west of Liverpool.

If you look at the map below you will be able to see the layout of the land. Notice the Dee is a classic 'V' shaped estuary while the Mersey is a funnel shape with a narrow neck.



View across the estuary to Parkgate on The Wirral Galatas, Geograph (CCL)



The Dee and Mersey estuaries with the Wirral in between Ordnance Survey © Crown Copyright, 2013

So just what is an estuary? Put simply an estuary is where a river meets the sea. In this case it's the River Dee which starts in Snowdonia, meanders east via Chester and then flows out into the Irish Sea at Liverpool Bay downstream from here. At its mouth, the estuary is five miles across.

Estuaries like the Dee are often 'V' shaped. This is because they are located at the lower course of a river. Where the river nears the sea its channel becomes deeper and wider. The river's meanders widen across flatter land and it begins to deposit much of the material it has been carrying along its course.

This estuary is unusual because, although it is very wide, it contains relatively little water. Most people think the Dee estuary's wide shape was formed by glacial ice which retreated northwards at the end of the last Ice Age. The river was then diverted through the soft sandstone and coal measures that underlay this area, and in doing so, so carved out this broad shallow estuary.





Left: Mudflats exposed on the Dee estuary at low tide / Right: The Dee Bore at Saltney Ferry in January 2014 Peter Aikman, Geograph (CCL) / © Val Philipps

Depending on the time of day the landscape can look very different. At high tide, you could be looking at a fast-moving river. At low tide you will be contemplating an expanse of mudflats. Because of its connection to open sea, the estuary is tidal and so twice a day the grey mudflats and saltmarsh are covered and uncovered by the sea.

You have probably heard of the Severn Bore on the River Severn in Gloucestershire. This huge wave sweeps up the river and can reach up to two metres in height. People have even been known to try surfing it! Other tidal rivers in Britain have a bore too, including the Dee. A bore occurs during a high tide when the incoming tide forms a wave that travels up the river against the normal flow of the current. Here, the funnel shape of the Dee estuary and the local tidal range combine to create the Dee Bore, best viewed from Saltney Ferry near Chester.

Estuaries are a transition zone between the river environment and the marine one. The meeting and mingling of fresh and salt water provides an abundance of nutrients making it one of the most productive natural habitats in the world. The mud found in estuaries is actually twice as fertile as the richest farmland and it is teeming with invertebrate life. This in turn attracts huge numbers of birds and even seals.

#### **Directions 2**

From the information board retrace your steps to the castle car park. Follow the street ahead (Castle Dyke Road) and as it passes a row of redbrick cottages. Turn right and follow the main entrance path into Flint Castle.

# 3. Edward's first castle

## Flint Castle

Here stand the ruins of Flint Castle, a poignant symbol of a landscape fought over by the Welsh and English. The coastline has since changed shape, but when this site was chosen it was an isolated, rocky headland which provided a secure foundation to build a castle.

The headland is thought to be the origin of the town's name, Flint - meaning hard stone or rock. While little remains of the castle today, we can still get an idea of the commanding presence it must have had when it dominated this lonely stretch of coast. But why was a castle built here? Time for a quick history lesson...



The remains of Flint Castle's east tower Jeff Buck, Geograph (CCL)

When William the Conqueror became King of England in 1066 he didn't conquer Wales. However he did grant land along the border to powerful Norman lords who then attempted to extend their influence over the border. The Welsh resisted bitterly and most of Wales remained independent. However in 1272 Edward I became King of England and was determined to rule all of Great Britain. Five years later Edward gathered his army at Chester, twelve miles away, and marched to Flint. Here he began building the first of many castles strategically placed along the North Wales coast.





The commanding presence of Flint Castle has appealed to many artists.

Left: Artist unknown (1812) / Right: 'Flint Castle' (1838) by JMW Turner

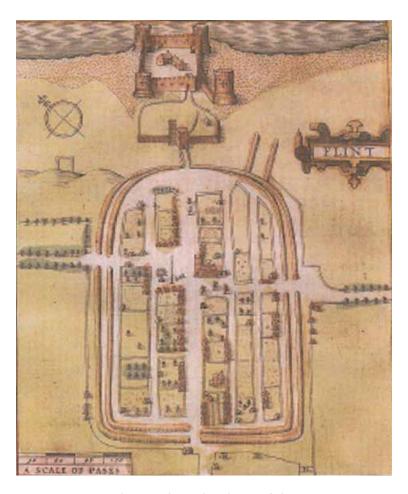
© www.flint.co.uk / Wikimedia Commons

Many of the Welsh castles Edward built were sited on estuaries including Harlech, Conwy, Rhuddlan, Caernarfon and Beaumaris.

Estuaries are prime locations for defence both because there is a lot of passing sea traffic and because they are strategic entrances to rivers which can then be navigated further inland.

Furthermore as estuaries are accessible from both land and sea, supplies and reinforcements can be brought in easily. Flint Castle was equipped from nearby Chester and provisions were brought in by sea.

Once Edward was ruler of Wales, English law was imposed upon the Welsh. Alongside the castles he built, which were both literal and symbolic centres of English dominance, Edward created new towns including Flint.



John Speed's medieval map of Flint showing the town's grid like street pattern (1610) © www.flint.co.uk

It is still possible to make out the rectangular layout of the medieval town with the broad Church Street running in a straight line up to the castle.

#### **Directions 3**

Having explored the castle now exit over the moat and immediately turn right over the grass heading into the silver birch trees. Where the path splits, follow it downhill towards the water. Continue on the path (passing a concrete, fenced-off area on the left) to walk alongside an inlet. Stop when you reach the information panel for Flint Dock at the head of the creek.

# 4. A hive of industry

### Flint Dock

It's hard to imagine now but just two hundred years ago this muddy inlet was once a bustling dock, a hive of activity for what was then one of the most industrialised towns in Wales. Look at the interpretation panel to see a photo of the docks in use.

Since then the inlet has become silted up and overgrown but this was once a busy harbour with boats loading and unloading cargoes including coal, timber, lead and chemicals from places as far as Ireland and even America.



Flint Dock - silted up and grown over with mudflats and saltmarsh John Haynes, Geograph (CCL)

Depending on whether the tide is in or out you might be able to make out some wooden stumps in the water. These are the remains of the wooden pilings which supported the loading wharves. In its heyday there would have been moorings for up to twenty boats a day here.

Once the larger ocean-going ships had sailed into the dock and deposited their cargo, wide flat-bottomed boats known as 'Flint Flats' were used to transport these goods up and down the estuary. The flats could ply the shallow waters and because of their broad flat base were able to transport heavy goods.



Boats being loaded at Flint Dock in the 1920s © www.flint.co.uk

The estuary offered both advantages and disadvantages for maritime trade. On the one hand the place where the river meets the sea is ideal for a port. Unlike the rougher open sea, boats could load and unload in the calm waters of the estuary.

Boats could then 'lay to' sheltered from the open sea until favourable winds and tides allowed them to continue their journey. But the tidal nature of the estuary meant ships would sometimes have to wait a day to sail back out. However, the major disadvantage to estuaries is that they are very prone to silting. Like all rivers, the Dee carries sediment along its course which is then dumped as it nears the sea.

The Dee also suffered another fate. When Liverpool developed as a major port, the Mersey estuary was dredged and the silt was dumped out in Liverpool Bay. The tides then washed the silt back into the Dee estuary, so speeding up the siltation. This process finally killed off the Dee's trade.

Though a quiet spot today, this area has long been industrialised. In 1699 a lead smeltery was built on the land just behind us. In the mid-nineteenth century it was converted into a huge chemical works said to be 'one of the most extensive works of the kind in the world'. These chemicals, produced from sea-water and sulphur, were used to make bleaching powder, disinfectant and soap. Chemical works were notorious for pollution, so this would have been a dirty, smelly, noxious and dangerous place to be.





Top: Aber chemical works beside Flint Castle Bottom: Courtald textiles factory © www.flint.co.uk

Later the site was taken over by Courtaulds to build a textile factory. It was an ideal geographical location: a reliable supply of water was available, coal could be brought in by rail and road from nearby collieries and wood pulp could be brought from the company's own forests in southern Africa via Liverpool and Ellesmere Port.

#### **Directions 4**

Facing the inlet, turn left and follow the Wales Coast Path sign to reach a road. Follow the sign to Flint Point, passing the Flintshire Coast board and keeping the banks of the inlet on your right. Continue on the path till you reach Flint Point which is marked by a small concrete obelisk, a beacon and an interpretation panel.

# 5. A view upstream

## Flint Point

This is another good place to enjoy the view and take in the breadth and length of the estuary, from its wide mouth at the Irish Sea back towards Chester in the other direction.

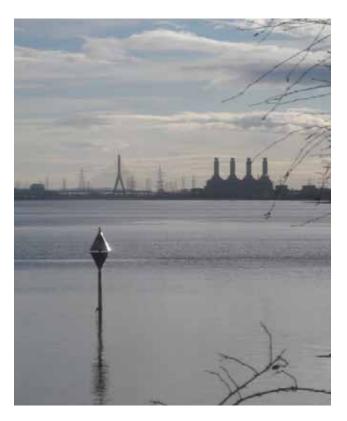
Looking upstream we can see that this is still an industrial estuary. There are several factories and industrial buildings built along the banks of the Dee.

From right to left, the green buildings and smoking chimneys is Oakenholt Paper Mill which makes items such as tissues and nappies.



The Coastal Path at Flint Point © Val Philipps

Next along, the large building with four chimneys is Connah's Quay power station. It uses gas extracted from Liverpool Bay to produce electricity.



Connah's Quay power station and the Flintshire Bridge Ceri Thomas, Geograph (CCL)

Once the gas was brought in along the estuary by boat but it is now transported via a pipeline through the Halkyn hills behind us.

The next structure we can see is the Flintshire Bridge. This iconic landmark is supported by cables suspended from a single tower. It is quite a feat of engineering and much loved by locals.

The next large building is the Shotton Steelworks. Though it still makes rolled steel, much of its production closed in 1980 when 6,500 workers were made redundant - a blow to the community that is still felt today. With this move coastal trade declined and the area ceased to be as industrial.

The white/grey buildings and smoking chimneys to the left of the steelworks is UPM Shotton. This vast complex is a recycling centre which processes about 640,000 tonnes of used paper a year for newsprint.

One very contemporary cargo you might still see being transported along the estuary is aeroplane wings. Further upstream the Airbus factory at Broughton makes wings for Airbus planes then transports them along the Dee on special barges. They then travel by boat to France where the planes are assembled.

Whilst you are here, take a look at the riverbank. It has been subject to fierce erosion. Great bites, like teeth marks have been torn from the banks by fast-flowing water. We will find out more about erosion at the next stop. For now keep an eye out for these signs and notice the large stones that have been put in place here to try and strengthen the sea wall.





Examples of erosion along the estuary John S Turner / John Haynes, Geograph (CCL)

#### **Directions 5**

From Flint Point, the route continues northwards along the banks of the Dee with wide views of the estuary. You can follow the Wales Coast Path; however it runs a little way inland and more spectacular views can be seen if you bear right after a few hundred yards and follow a path along the river bank, eventually rejoining the Coastal path.

When the main path turns left, keep on the smaller right hand path, go down a slope and through a kissing gate, turn left, then turn right again to reach the embankment of Panton Cop. Stop about halfway along.

# 6. Defending the shore

## Panton Cop sea wall

This raised embankment with the estuary on one side and pasture on the other is Panton Cop. 'Cop' is a local word meaning the top of a steep bank. It is this high bank we will be walking along for the next three-quarters of a mile.

Panton Cop is an entirely man-made structure. It's a tall sea wall built as a flood defence to protect the farmland on the left and the railway line to Holyhead just across the fields. When we researched this walk in January 2014 a high tidal surge had breached Panton Cop causing a large section to be eroded and washed away.



The man-made embankment of Panton Cop John Haynes, Geograph (CCL)

This area of the coastal path is particularly fragile because the River Dee is running through a deep channel at this point. When the tide is high, you can see the strong currents eroding the weak mud beds.

Estuaries are particularly vulnerable to both flooding and erosion as the water is travelling from two directions to meet here. This is where the River Dee meets the sea so large amounts of freshwater are flowing into the estuary from upstream. At the same time these waters are subject to marine tides so the water level is continually changing. In fact the Dee Estuary has a high 'tidal range' so the landscape is very different depending on whether the tide is in or out. Tidal range refers to the vertical difference between average high tide and average low tide. In the Dee the average spring tide (the highest type of tide) reaches 7.7 metres and drops to 4.1 metres during neap tides (the lowest type of tide.)

As we continue, look out for stone groynes on the bank. Groynes are simply piles of stones built in a curve to disperse the river current and deflect the waves away from the riverbank. Locally-quarried stone has also been dumped along the coast to reinforce the sea wall.

#### **Directions 7**

Continue along the top of the embankment until it ends and you reach a flat, grassy area. Follow the Wales Coast Path keeping the grassy area on your right. Stop anywhere along here to find out about Bagillt Marsh.

### 7. Nature takes control

## **Bagillt Marsh**

At the last stop we saw how humans have built defences to protect their land and resources from the twin risks of river erosion and flooding. But long before humans built their embankments, groynes and sea walls, nature had its very own barrier between the land and sea. This flat, grassy area is a salt marsh, a good example of a natural coastal defence.

Salt marshes begin life as mudflats. In areas of sheltered water, like here on the estuary, the slow-moving sediment held in the water begins to build up. As plants arrive and grow, their roots help to stick the mud particles together and trap even more sediment so the mudflats become more stable creating a salt marsh habitat.

Though nowadays salt marshes are recognised as nature's way of reducing erosion and are protected by legislation, this wasn't always the case. In the past, salt marshes were perceived as coastal 'wastelands' and many were destroyed through land reclamation schemes. After Hurricane Katrina hit the United States in 2005, it was suggested that conserving salt marshes could have helped reduce the widespread damage that occurred.





Species returning to Bagillt Marsh include natterjack toads and common lizards Marek Szczepanek, Wikimedia Commons (CCL)

Though it might look like a wilderness, this environment is actively managed by Flintshire Countryside Service. They regularly clear the scrub and gorse which left alone would run rampant. A scrape (a shallow man-made pond) is being planned to encourage natterjack toads back to the area. This rare and threatened species was once native to this area of Northeast Wales but is in danger of dying out. Last summer the common lizard was seen on the marsh for the first time for many years, evidence that nature is now recolonising this once industrial area.

#### **Directions 7**

Continue following the Wales Coast Path. Pass through a kissing gate and you will shortly reach a small inlet known as Station Gutter with a gravel parking area and an information board.

## 8. Decline and fall

### Station Gutter

This small creek, which is still used by local fishermen, used to be a very busy quay. At its peak up to thirty ships a day sailed in and out of this dock carrying coal, lead and copper.

You can still see parts of the wooden wharves where the boats moored to be loaded and unloaded. Also take a look at the information board to see the size of ships that once docked here.



This silted up inlet used to be a busy quay

© Val Philipps

Though the Dee Estuary was once more commercially important than the Mersey, over time it lost its pre-eminence due to coastal processes and human progress in the form of the railways.



Bagillt station from the footbridge (1962) Ben Brooksbank, Geograph (CCL)

Increasing siltation and the expanding salt marsh made it difficult for larger ships to sail down the estuary and dock. At the same time, the railways took over as the prime means of moving goods and people along the coast.

When Bagillt railway station behind us opened in 1849 it was an important stop on the Chester to Holyhead line. It was later closed as part of Dr Beeching's controversial railway cuts in the 1960s. However, we can still see parts of the disused station including the platforms and metal footbridge.

#### **Directions 8**

Follow the signs toward Bettisfield along a tarmaced cycle way. Go up through a gate and onto a raised path. At the end of the path follow the Wales Coast Path signs through a kissing gate and up some steps. Continue up the hill and stop when you reach a beacon.

# 9. Beacon of identity

## Dragon beacon, Bettisfield Hill

This large promontory overlooking the estuary was once the waste tip of a colliery. It has since been landscaped and is now a popular place for walking.

In 2011 a local resident suggested that a beacon in the shape of the Welsh dragon should be erected on top. The dragon was designed by a local craftsman and carefully positioned so that it faces the rising sun on the longest day of the year.

The oldest recorded use of the dragon to symbolise Wales is from the 'Historia Brittonum' written around 820. However, dragons are thought to have been the battle standard of King Arthur and other ancient Celtic leaders earlier than this. Following the annexation of Wales by England, the red dragon became part of the English monarch's coat of arms.



The Bagillt dragon stands on top of a spoil tip © Val Philipps

Here along the coastline the English influence is more notable than further inland. Away from the estuary (and further from the border) you'll find significant numbers of people, particularly those farming in the hills, who use Welsh as their first language. But equally there have been strong English influences from the nearby cities of Liverpool and Chester. During the Second World War many children from Liverpool were evacuated to this area, and more recently there have been rehousing schemes moving people from Liverpool to North Wales.

#### **Directions 9**

Facing the Bettisfield information board go ahead across the grass gradually bearing left to a path through the gorse which eventually leads down the slope to a kissing gate. Walk across the road to look out over an inlet known as Bagillt Harbour or the Holy Gutter.

## 10. Holy Gutter

## **Bagillt Harbour**



'The Holy' at low tide with fishing boats left in the mud
© Val Philipps

This inlet, known as 'The holy' by locals, was once the main dock serving Bagillt. During its heyday in the nineteenth century, there was a busy wharf on the northwest side of the quay built on land reclaimed from the saltmarsh. The dock served the many local collieries in this area and was important and busy enough to connect up with the railway system.

Depending on if the tide is in or out, this creek appears very different. At low tide it will look like an impassable muddy creek, impossible to imagine as a working harbour. See if you can spot some of the original wooden pilings sticking out of the mud. These once supported the extensive wharves.

Today locals still moor their boats here though there are now just eight full time fishermen. The main catch is flounder, a flatfish adapted to living in shallow waters like estuaries. Cockle fishing is also still carried out in this part of the Dee. Licenses for cockling are given out to a maximum of 50 fishermen who beach their boats at low tide and hand-pick the cockles. Like oysters, cockles are found in intertidal zones and flourish in sandy, sheltered habitats.

#### **Directions 10**

Follow the path inland along the edge of the inlet. When the road splits go through the metal gate following the Wales Coast Path. Stop by a tunnel outlet where a large volume of water gushes out.

## 11. Ten mile tunnel

### Milwr Tunnel outlet

The water gushing out of this tunnel has flowed for over ten miles down through the Halkyn Mountains, the elevated land you can see beyond, to empty here into the Dee.

The Halkyn mountains are rich in lead. At their peak in 1850 the mines produced over 12 per cent of Britain's total lead output.

The Milwr Tunnel was built to drain water out of these lucrative lead mines which were plagued by flooding. This drainage tunnel allowed the miners to reach the deep seams of underground lead, zinc and limestone without the need for expensive pumps.



The Milwr Tunnel outlet John Haynes, Geograph (CCL)

This tunnel is part of a huge network of mines and cave systems that extend for up to sixty miles underneath the hills. A hundred-metre long passage and a deep underground lake make this system attractive to cavers and explorers who have photographed and mapped many of the old mine workings.

A staggering twenty three million gallons of water per day gush out here. The drainage system is so effective that that the nearby River Alyn, which flows through Mold six miles away, is often left dry during summer.

#### **Directions 11**

Do not go ahead through the kissing gate but with your back to the water follow the yellow arrow along a gravel path with a steel fence on your right. Go through two kissing gates to meet a road. Walk up the road and stop near the derelict redbrick building with a sculpture in the window.

# 12. From coal to countryside

# Former Bettisfield Colliery buildings

This semi-rural yet semi-industrial area is a quiet spot today. There are a few disused buildings and a car spares yard but nature seems to be recolonising the area. There are fragrant gorse bushes and the place is alive with birdsong.

Areas like this are what the nature writer, Richard Mabey, once termed the 'unofficial countryside', a place that's neither town nor country.

But it was once a bustling, noisy, smelly and dirty place. These derelict buildings are all that remain of a huge colliery.



Birch trees along the Wales Coast Path John Haynes, Geograph (CCL)

Bettisfield was the largest of eleven coal mines worked here in Bagillt in the nineteenth century. It opened in 1872 and employed over 600 men. Two mine shafts were sunk to extract both domestic coal and steam coal used by steam trains and ships. Seams of coal extended out under the Dee estuary and mine shafts were dug down to reach it. Surprisingly they were never flooded!

Now used by a local business, parts of the old colliery buildings - mainly the winding house - are still standing. In fact they are listed, reflecting the importance of coal in Flintshire's history.





Left: coal miners at work in a tunnel. Right: remains of the Bettisfield Colliery winding house From the collection of David Johnson www.miningartifacts.org / © Martin Haslett

The winding house forms a big part of the village's history and there is much support in the local community to restore it. It's currently in a poor state of repair but suggestions to turn it into a museum or café have been welcomed.

However, difficult access under the low railway bridge worsens the problem as it is impossible to bring in large vehicles and the equipment necessary for the restoration work.

Next to the car park see if you can spot a wooden sculpture. This is Bettisfield Bob. Bob represents a miner from the colliery and was carved from Corsican wood by a local craftsman. Bob is a point of interest along the coast path and honours the area's coal mining history.



Bettisfield Bob © Val Philipps



The Wales Coast Path has proved an attraction for locals and tourists

© Caroline Millar

#### **Directions 12**

Continue a short distance into the car park. Stop by the wooden benches and carved totem poles.

# 13. Reinventing the estuary

## Totem pole markers, Wales Coast Path

These totem pole sculptures and the group of trees alongside them were planted in May 2012 to mark the opening of the Wales Coast Path.

The path is part of the world's first round an entire country, beginning at nearby Chester and finishing at Chepstow nearly 900 miles away.

Recent figures suggest that in the twelve months after opening, the path attracted nearly three million visitors and brought £32million to the Welsh economy.

Users are a mixture of locals, often walking short sections with their dogs, and visitors who use the path as part of a longer walking holiday. The latter group is important in boosting the local economy, by spending money at local businesses that offer accommodation, food and other leisure activities.

From a place of trade and industry to one of recreation and leisure, the Dee estuary is finding ways to reinvent itself.

This walk has hopefully opened your eyes to the history of this area and how the characteristics of the estuary have shaped and defined its use and fortunes over time.

We have seen some of the economic and strategic opportunities presented by the estuary, finding evidence of docks that once supported busy local industries, a colliery now transformed into a landscape feature and a castle from which England exercised its power over Wales.







Scenes from the Dee Estuary
© Caroline Millar / Lesbardd, Wikimedia Commons (CCL) /
Eirian Evans / Geograph (CCL)

We have learnt about the physical characteristics of the estuary, the tidal influences, the river course and the unique estuarine environments of mudflats and saltmarsh which host specialised flora and fauna. We have also experienced the estuary's strange boderline landscape which floods twice a day, is neither land nor sea but somewhere in between.

We hope you have enjoyed this estuarine walk and the story of this landscape has inspired you to discover more about the unique and diverse places of Britain.



Sunset over the Dee Estuary Paul McGeevy, Flickr (CCL)

#### **Directions 13**

To return to Flint we suggest taking a local bus, Arriva route number 11. From the car park by the colliery buildings, go under the railway bridge and across the main road into Bagillt High Street. The bus stop is near The Feathers pub. Alight in Flint outside The Ship pub.

# Further information

#### **Visit Wales**

www.visitwales.co.uk

## **Flintshire County**

www.flintshire.org

### **Discover Flintshire**

www.discoverflintshire.co.uk

#### **Wales Coast Path**

www.walescoastpath.gov.uk

## **Dee Estuary Birding**

www.deeestuary.co.uk



The Dee Estuary © Adrian Warren and Dae Sasitorn

## **Credits**

The RGS-IBG would like to thank the following people and organisations for their assistance in producing this Discovering Britain walk:

- Val Philipps for creating the walk, providing photographs and the audio commentary
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   Turner for additional photographs reproduced under Creative Commons Licenses
- Oakenholt Farm Bed and Breakfast for a comfortable stay

# Try other walks in the Discovering Britain series that explore estuary environments

#### Neither land nor sea

# Discover the tidal creeks and mudflats of the Thames Estuary in Essex

http://www.discoveringbritain.org/walks/region/east-of-england/essex-estuary.html



#### The turn of the tide

# Discover the Killard peninsula where Strangford Lough opens into the Irish Sea

http://www.discoveringbritain.org/walks/region/northern-ireland/killard.html



## Boats, bangs, bricks and beer

# Discover how Faversham Creek in Kent helped to build Britain

http://www.discoveringbritain.org/walks/region/south-east-england/faversham.html



## Not just another Devon seaside resort

## Discover a different side to Teignmouth

http://www.discoveringbritain.org/walks/region/south-west-england/teignmouth.html





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There is a tremendous variety within our shores – whether in the countryside, in towns and cities or at the seaside. And every landscape has a story to tell about our past and present.

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