

THE
Gwent Levels
Sense of Place
TOOLKIT



Welcome to the Gwent Levels. This booklet provides lots of information and suggestions about how to explore the delights of this unique landscape.



DISCOVER THE DELIGHTS OF THIS UNIQUE LANDSCAPE

Contents

Welcome to the Gwent Levels Sense of Place Toolkit. This toolkit will help you explore the delights of this unique landscape and benefit from its many distinctive qualities.

This sense of place toolkit can support you to engage people in the landscape and contains resources to help you to develop and promote your community, organisation or business.

Thank you

This Sense of Place toolkit is dedicated to all those who have worked to enhance our understanding of the Gwent Levels, particularly the late Derek Upton and Rick Turner; we thank you all for your insights, advice, knowledge, skills and support.

Front cover: East Usk Lighthouse at Newport Wetlands © Crown copyright (2021) Cymru Wales

Introduction

What and where are the Gwent Levels?

The Gwent Levels are a living, working and evolving landscape extending from Cardiff and the Rhymney River in the west, to Chepstow on the River Wye in the east. Reclaimed from the sea and shaped by humans, the landscape is a testament to the power of human intervention, the resilience of nature and the passage of time. Sometimes overlooked as flat and unassuming, the Gwent Levels are a remarkable coastal landscape with high skies, low horizons, dramatic cloudscapes and a geometric network of narrow watercourses. They represent the finest example in Wales of a reclaimed coastal landscape, transformed by the communities that have lived, worked and played here over two thousand years. The earth yields nationally important archaeological finds that connect us with the land and its early inhabitants.

Today the Levels are a predominantly pastoral landscape that is drained and irrigated for productive farming, alongside a diverse range of semi-natural habitats for rare species. Water is ever-present in the landscape, creating fertile fields and



▲ Shrill carder bee © Chris Harris/Living Levels Partnership

◀ Overlooking Whitson and Goldcliff lagoons © Living Levels Partnership

presenting challenges to human settlement. Distinctive drainage patterns of canalised rivers, drains, reens and ditches, accentuated by lines of pollarded willows, define a planned and reclaimed landscape. A local lingo has evolved with the landscape to describe these distinctive features. Vibrant cities and towns around the edge of the Levels contrast its strong sense of tranquillity, remoteness and wildness away from human occupation.

Tension between land and sea

The modern landscape – much of which lies below sea level – is only viable due to the sea wall and complex drainage system developed since the medieval period. The reens and ditches, grips, pills and gouts were created to keep the land drained, irrigated and salt-free by allowing water to find its way to the estuary by gravity; a remarkable achievement on a coast with one of the highest tidal ranges in the world. Today's 'permanent' sea wall has evolved from a succession of structures needed over time to keep back the water. The story

“Reclaimed from the sea and shaped by humans, the landscape is a testament to the power of human intervention, the resilience of nature and the passage of time.”

of the Levels describes a constantly changing dynamic between the land and the water which has provided for people and animals, in different ways, since prehistoric times.

Distinct nature – an accidental oasis

Today, parts of the Levels are a hotspot for wildlife and eight locations are Sites of Special Scientific Interest (SSSIs), known for their distinctive rare plants and invertebrates, that have adapted to the water drainage systems. Tens of thousands of wetland birds visit the coastal mudflats and wetlands attracted by a rich food supply, whilst water voles and otters are found across the extensive 1,500 km network of ditches and reens. One of the UK's rarest bumblebees, the shrill carder bee, also has a population stronghold on the Levels. In recent years cranes and bitterns have returned here to breed after several hundred years of absence.



▼ Peacock butterfly © Chris Harris/Living Levels Partnership

► Putter rank at Goldcliff © Chris Harris/Living Levels Partnership





▲ Little egret
© Chris Harris/
Living Levels
Partnership

“...many habitats on the Levels are in poor condition. Sixty percent of the SSSIs are estimated to be failing.”

A tumultuous history

The story of how the Levels have been created and managed is one of engineering, ingenuity, creativity, and co-existence with nature. It has not always been harmonious, there have been floods, devastation, land abandonment and extinctions. Many clues from the past are present in today’s landscape from the footprints, tools and bones of early Mesolithic hunter gatherers preserved in the estuarine mud, to the markers memorialising tragic historic floods in the churchyards of the Levels.

The combination of local people managing a dynamic landscape, through systems developed over 2000 years with its associated history, vocabulary and wildlife, makes the heritage rare, special and a rich resource to be protected and preserved for future generations to enjoy.

Threats and pressures

The modern landscape is at risk of being degraded, undervalued and further developed in spite of the vast wealth of natural, semi-natural and man-made treasures that this unique landscape harbours. Despite extensive protection from a range of national and international designations related to its rich ecology, archaeology and cultural heritage, many habitats on the Levels are in poor condition. Sixty percent of the SSSIs are estimated to be failing. Our changing climate threatens the Gwent Levels as global heating and rising sea levels alter the delicate ecological balance. Pressure from new urban developments could potentially erode the

► Auroch’s horn discovered in 2020
© Black Rock Lave
Net Fishermen



character of the landscape, wildlife populations and cultural heritage, further fragmenting habitats and severing public access. It is therefore imperative to champion the heritage of this remarkable landscape to help carve out a more sustainable future for this fragile and important place. We encourage all those who live, work and play on the Levels to become ambassadors, and help ensure its heritage, history, wildlife and wild beauty are preserved for future generations to enjoy.

What is a sense of place?

A sense of place is an idea that every area has an identity and distinctiveness that makes it different from everywhere else.

A place creates different experiences and emotions for people, and by associating these feelings with a place, we feel a sense of belonging to that area, whether we live or work there or are just visiting. The different sights, sounds, smells and tastes we experience as we travel through a landscape, appreciating the history and hearing the unique stories derived from that place, all contribute to its sense of place.

The blend of wildlife, architecture, scenery and environment develop a unique sense of a place which people take with them wherever they go. It is these emotions and experiences that we would use to describe the area to someone who didn’t know it, and which underpin a fundamental connection to the area.

How to use this Sense of Place Toolkit

STEP ONE

What the Toolkit can do for you

This toolkit captures many of the experiences people have, memories they build, stories they hear and places they explore. It highlights how these can be used to promote and engage people in different ways with their surroundings. By celebrating the Gwent Levels, you can develop your organisation or business to engage more widely with people in the area. Capitalising on what’s special and distinctive about the area will also help develop a sustainable competitive advantage for your organisation, community or business.

This toolkit is a resource which provides a collection of places to visit and sights to see along with ideas and stories collected from local people and communities which provide a flavour of the area. If a particular topic is of interest to you, or your organisation, you can explore that section in more detail. Other sections might also give you a flavour of what else there is to uncover and explore in the area. This might provide ideas of how you could develop and build your organisation to engage more people or deepen the community’s involvement with you.

STEP TWO

How to navigate

This toolkit is divided into sections which focus on different qualities of the Gwent Levels. You may want to deepen your understanding in one section, or look across a few sections to broaden your knowledge of the area. Look at the inspiration pages to decide which section is for you.

An historic landscape

Uncover the clues of this land’s rich history. Features of buildings, remains of sea walls and even prehistoric human/ancient footprints in mud can still be seen and are just a few examples of how previous inhabitants have left their mark on the landscape.

A handcrafted landscape

Discover how this landscape has been crafted by people. From Mesolithic communities to Roman invaders and from medieval farmers to modern day engineers, this landscape has been shaped and used by humans for centuries.

A landscape of water

Discover the ways water dominates this landscape. From the ditches and reens that zigzag the fields, to the sea wall that runs along the coast, water is an ever-present reminder of how the land has been reclaimed from the sea.

A landscape of wildlife

Discover the diversity of wildlife that live on the Levels. The wetland habitats provide vital homes for a wide variety of plants and animals – including many that are seldom seen elsewhere and which have adapted to the specific environments that have been created here.

A landscape to conserve

Discover how this unique landscape is providing a home to species that need sanctuary in order to survive. The preservation and conservation of the land and its history is important for its survival.

A landscape to enjoy

Explore ways to entertain, play and enjoy leisure time on the Levels. Families, individuals and groups can find something to excite and delight them, whether they want to relax or have an adventure.

A cultural landscape

Experience the richness of local art, craft, folk music and food that makes this area special.

STEP 3

Deciding what's for you

Each section is split into smaller pieces of information which will help you decide how to use the resources.



Discover – general information about the section and the important points about that aspect of the Levels.



Clues in the landscape – a clue that may allow you to interpret and understand the landscape beyond its surface value.



Stories – a real-life case study or experience that could help you inspire people, or develop your ideas further



Hidden gems – a surprise that might amaze you. There are many objects, stories, people or places that are hidden away waiting to be discovered.



Rhythms of tide and times – making the most of what there is to do at a certain time, season or tide.



Action – ideas and inspiration on how to make a difference to your audience and promote and engage people in your organisation. A call to action.



Links – if you are interested in this section, here are some links to other areas to inspire you.



Levels lingo – inspiration from the local words and language.

Make your promise to **Wales**

Make a promise to care for our epic land at the Visit Wales website. Pledge to look after the local countryside, care for our communities and protect the beautiful land. Encourage others to do the same.

visitwales.com



STEP 4

Make the most of your area

Residents and visitors enjoy engaging with organisations that they can relate to. By promoting your place in the local landscape people will understand your relationship with the Gwent Levels. Having found the information you need in the toolkit you can now decide on a plan of action. Use the information in a way that benefits you, your organisation and the people around you. You can think about how to use the information to promote and celebrate the Levels and engage people in their environment.

Decide on a small action at first, something that could be achievable in a week. It could be engaging someone new in what you are doing, or inspiring someone you already know to engage in a different aspect of the Levels. Now you have the information it is down to you to spread the word.

You might include some of the information about the area on your social media feed or website. Or you could promote places that people could go nearby that may enhance their enjoyment of the area and therefore their engagement in your organisation.

Not-for-profit organisation

If you are an organisation, speaking to people outside of your usual sphere of influence could increase people's awareness of their surroundings and of you and your organisation. Think of places or other organisations that might have a link to what you do and whether you have anything that you could offer them. It could be information, some of your time or a way to link your organisations. For example, a wildlife organisation could be interested in the history of a local parkland, a sporting organisation could be interested

in places to eat following an activity, or a shop or café could include local produce in their menus and also sell on their shelves.

Community group or local resident

If you are a community group or resident you could use this sense of place document as a starting point when thinking about what makes the area special in your context. You will have lots of other ideas about what makes this area distinctive and could think about what you would include in a sense of place toolkit of your own. You could even make a leaflet outlining what makes your group special to people and other organisations and don't forget to include highlights from this toolkit that are relevant to you.

Business

If you are a business, you could use the information in this toolkit to celebrate the distinctiveness of the Levels and develop information to engage with your customers in new ways. You could highlight the benefits of the area and other complementary local businesses and ask them to do the same. By telling the story of your business you could develop a different relationship with your customers and encourage them to engage with you, and their surroundings more. You could consider using new local suppliers in the future, and highlight this in your marketing, which would widen your appeal and audience. By using local suppliers, you will also be helping to ensure that the maximum benefits of tourism remain within the local area.



28 things to discover!

The Gwent Levels offers many places to visit, explore and discover. What follows is a selection of ideas that give you a taste of the area's highlights: wide open landscapes, rare wildlife, routes along the waterways and clues to a rich history. The page numbers for each idea take you to more details and other things to discover. These pages can be used with your organisation, customers, residents or visitors to highlight what the Gwent Levels has to offer.



1 Time & tide

Page 22

A digital story and poetic narration exploring the history of the Gwent Levels over the past 12,000 years, from the end of the last ice age to the modern-day.

2 Roman life

Page 22

In Caerleon visit the National Roman Legion Museum and discover the impact the Romans had on the Gwent Levels landscape; then look around the town to discover the Roman bathhouse, amphitheatre and barracks.

Roman soldier reenactment © Gavin Jones



4 Goldcliff Stone

Page 24

Visit the National Roman Legion Museum to see the Goldcliff Stone; found in the mud, the stone records the engineering work of the Romans 2,000 years ago.



Gwent Archives

3 Gwent Archives & Glamorgan Archives

Page 23

So much of what is important about the Levels is historical. The archives hold photos, maps, documents and records; these clues and evidence help explore the history and stories associated with the Gwent Levels.

5 Reens & pollards

Pages 21, 34, 36 & 45

Reclaimed from the sea in Roman times, the Gwent Levels are a criss-crossed network of fertile fields and historic watercourses, known locally as reens. They are often lined with pollarded willows to stabilise the banks. Willow has been used in local crafts for many centuries.



Windmill Reen © Chris Harris

7 Views

Page 27

The Gwent Levels offers incredible views across its vast, open landscape of fields, waterways, hedgerows, pylons and church spires, before it meets the hills inland and the estuary at the sea.

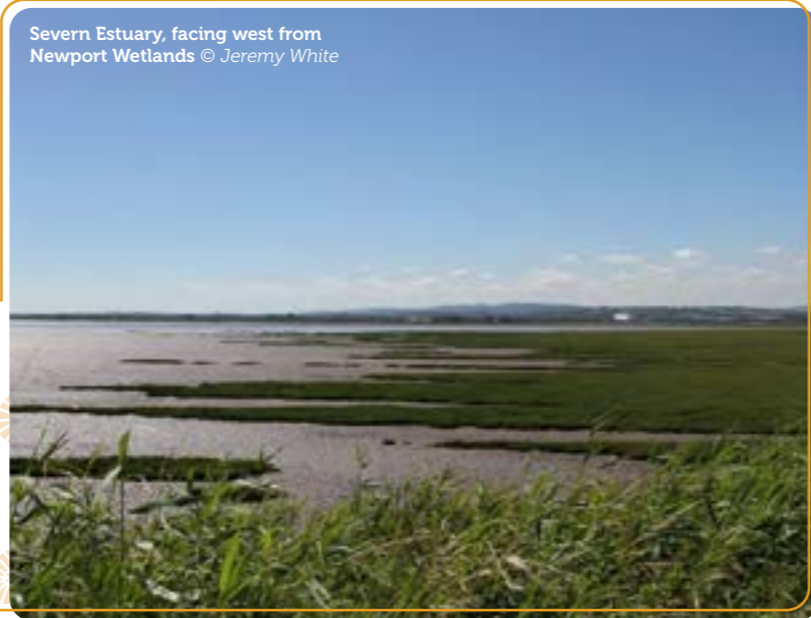


Sheep grazing on the foreshore © Chris Harris

6 Farming landscapes

Page 28

Traditional farmsteads and their buildings are part of the Gwent Levels local heritage and they make a significant contribution to its local character and distinctiveness, and to the communities and economies of the area.



Severn Estuary, facing west from Newport Wetlands © Jeremy White

8 Medieval churches & castles

Pages 27, 52, 62

During the Norman period, around 900 years ago, local monks were creative engineers and cleverly modified the water channels in fields, relying on gravity to move the water off them. The monks were also important in shaping some of the early settlements and drainage patterns. Redwick is the best-preserved medieval nucleated village on the Levels.



High tide at Goldcliff © Chris Harris

9 Highest tides in Europe

Page 33

During very high tides the sea can be lapping against the sea wall and transform the estuary landscape; the Severn Estuary has the largest tidal range in Europe (over 14 metres).



10 Field drainage patterns

Pages 28, 29 & 30

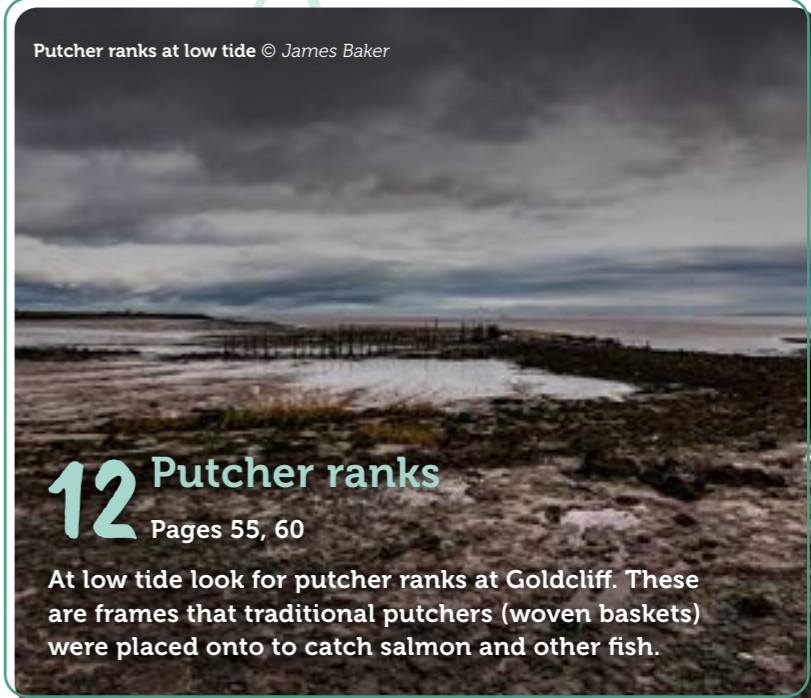
In the past, people have found different solutions to drain fresh water off the fields. Across the Levels you can see examples of different field drainage systems used over the centuries; an online interactive map allows you to see the field patterns they have produced and are often hidden from view.



11 The Great Flood

Page 35

In 1607, a huge flood covered the lowlands of the Gwent Levels (including parts of Cardiff), flooding farmland, low-lying houses, churches and grazing areas for sheep and cows. Many churches and sites on the Gwent Levels have plaques commemorating the Great Flood.



Putcher ranks at low tide © James Baker

12 Putcher ranks

Pages 55, 60

At low tide look for putcher ranks at Goldcliff. These are frames that traditional putchers (woven baskets) were placed onto to catch salmon and other fish.



13 Watery homes for wildlife

Pages 40 & 41

Discover the rich watery and interconnecting habitats which are home to diverse wildlife from dragonflies to otters, rare vegetation to submerged plants, and diving beetles to wasp spiders.

14 Species returning from the brink of extinction

Page 40

Listen for the 'plop' in the water of a water vole that has been reintroduced at Magor Marsh. The bittern and crane have returned to breed on the Gwent Levels since 2018 after an absence of hundreds of years.



Water Vole © Peter G Trimming (licensed under CC BY 2.0)

17 Levels Lingo

Pages 25, 31, 36, 43, 49 & 55

The landscape has its own fascinating local 'Levels Lingo' or vocabulary that provides an insight into the origins of the landscape over 1800 years and how it continues to be managed today. For example, 'Reaping' and 'scouring' refers to the twice-yearly ree maintenance tasks, of cutting down the vegetation and cleaning out the watercourses.



Monk's ree © Chris Harris

18 Orchards

Page 46

Orchards can still be seen standing in Goldcliff, Redwick and Magor and many relic orchards give you a glimpse of just one or two remaining apples, perry, damson or cherry trees. Chepstow's orchard and wildlife trail guides you through its orchards, and Magor and Undy have a community orchard.



Shrill carder bee © Chris Harris

15 Nationally rare bumblebees

Page 41

Look for the rare shrill carder bee at Newport Wetlands and Great Traston Meadows during the summer months feeding on flowering plants. The Gwent Levels are also home to the rare brown banded carder bee and the moss carder bee.



Murmuration of starlings at Newport Wetlands © Jenn Wright

16 Newport Wetland's murmuration of starlings

Page 42

Visit Newport Wetlands during the winter to witness the spectacular flocks of starlings as they come together to roost (sleep) in the reedbeds.

19 Newport's 15th-century ship

Page 47

Visit the Newport Ship after it was recovered from the muddy banks of the River Usk during the building of the Riverfront Theatre, Newport.



Newport Ship © Peter Power/Newport Museums & Heritage Service



Rogiet Country Park © Andy Karan

20 Flower meadows

Page 48

Rogiet Country Park and Tredegar House are home to extensive wildflower meadows during the summer months to provide food for pollinators. Many local landowners are also restoring wildflower meadows, of which 97% have been lost across the UK since the 1930s.





Cycle the Wales Coast Path © David Broadbent

21 Walking & cycling

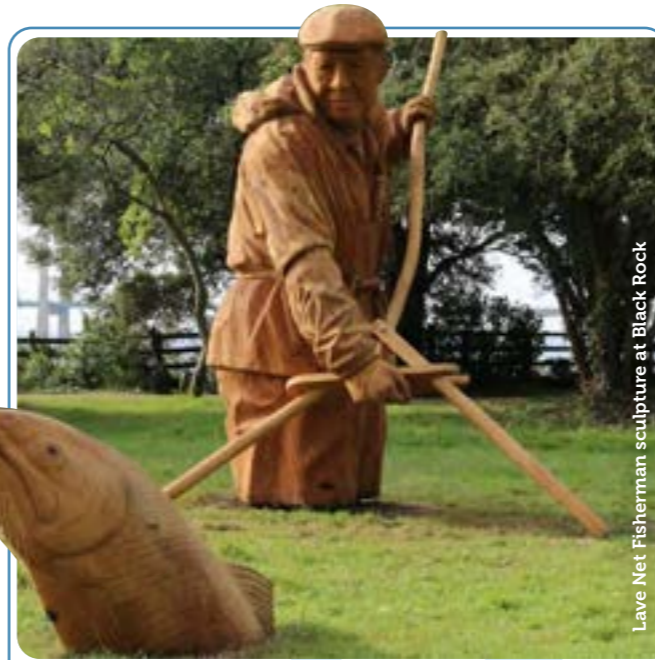
Pages 51 & 55

A network of routes takes you through some of the picturesque parts of the flat Gwent Levels landscape, including the Levels Loops and Links, with doable and bitesize suggestions.

22 Recording wildlife

Page 52

Note what you see around the Gwent Levels and record it online or via an app. Living Levels Wild Watch introduces key species that you can see at different times of year as well as how to record them and submit records.



Lave Net Fisherman sculpture at Black Rock

25 Sculptures

Page 57

A series of larger than life human sculptures representing key figures in the history of the Levels can be found across the Gwent Levels.



26 Local ales

Page 61

Gwent Levels based micro-brewery Anglo-Oregon have produced a trio of ales, which are inspired by the historic 'Levels Lingo' such as 'Stank hen' (a moorhen) and 'Brinker' (a landowner on the Levels).



Caldicot Castle © MonLife, Monmouthshire County Council

23 Caldicot Castle

Pages 22, 55 & 66

The magnificent Caldicot Castle has stood guard over the Levels for over 800 years. Spend a spring or summer day wandering the castle grounds and country park – take a picnic or stop off at the cafe.



Sluice gate at Hendre Lake © Ed Drevitt

24 Hendre Lake & Parc Tredelech

Pages 23, 39, 53, 66 & 67

Both parks and lakes offer walking and recreation on the outskirts of Cardiff; they are still connected by waterways to the rest of the Gwent Levels.



27 Summer fetes

Page 58

Summer fetes are a common feature in many villages across the Gwent Levels, while the Gwent Wildlife Trust hosts its family event Life on Marsh each summer, bringing the heritage to life.



28 Transporter Bridge

Pages 27, 37 & 58

A distinctive part of Newport's landscape, the remarkable Newport Transporter Bridge was built to allow workers to travel from the west side of the River Usk to work on the east, whilst allowing ships to pass underneath despite the huge tides.





MAGOR MARSH



HENDRE LAKE



TREDEGAR HOUSE



NEWPORT WETLANDS



ROGIET



BLACK ROCK

1 An historic landscape

The history of the Gwent Levels provides unique and fascinating stories that follow the rise and fall of sea levels, movements and settlement by different groups of people, and the use of gravity to build basic and innovative ways of draining water and making the land usable for farming; a legacy that lies in today's predominantly farmed landscape.

Use information about how previous generations have left their mark on buildings, in mud and on the landscape itself to connect people with their past.



Artist's reconstruction of how the Priory may have looked circa 1250 © Dextra Visual/Living Levels Partnership

A history in brief

- **THE GWENT LEVELS FORMED** around 11,500 years ago, when rising sea levels created the Severn Estuary. Along its low-lying edge formed a vast watery wilderness of tidal mud flats, creeks, saltmarshes, peat bogs, reed swamps and wet woodland.
- **HUMANS HAVE BEEN VISITING** the Levels for thousands of years, first as nomads, hunting game and fishing in the wild coastal marshes, later as farmers, grazing cattle and building trackways and small settlements during the drier summer months.
- **ROMAN MILITARY ENGINEERS** were the first to make an attempt to reclaim the land for year-round use. To create productive farmland, they built a network of banks, ditches, drains and sluices to control water levels. After the Romans departed, the drainage system failed, and the Levels reverted once more to a wild wetland.
- **SIX HUNDRED YEARS LATER,** the Normans made a more lasting attempt to tame the Levels. The monks of Goldcliff Priory and Tintern Abbey repaired and extended the Roman network of sea defences and ditches. They formed the pattern of reed-fringed ditches and reens, small fields and winding lanes that can still be seen on many parts of the Levels today.
- **FOLLOWING THE DISSOLUTION** of the monasteries, King Henry VIII introduced laws to govern the management of coastal wetlands. He created Commissioners and Courts of Sewers to oversee the maintenance of sea walls and drainage ditches. This system operated for the next 400 years.
- **THE LEVELS LANDSCAPE HAS** endured for many centuries. Despite great changes over the last 200 years, the Levels retain many of the features that would be familiar to the Benedictine brothers of Goldcliff Priory.



▲ 10,000 BCE © Dextra Visual/Living Levels Partnership



▲ Roman soldier AD200 © Dextra Visual/Living Levels Partnership



▲ West side of Tredegar House © Chris Harris/Living Levels Partnership

▲▲ Evan Morgan, Second Viscount Tredegar, the last member of the Morgan family to live at Tredegar House



Discover

Time and Tide

Look up Time and Tide, a digital story and poetic narration exploring the history of the Gwent Levels over the past 12,000 years, from the Ice Age to the Industrial Age.

livinglevels.org.uk/time-and-tide

For a detailed written timeline look up the unique history on the Living Levels website and the Living Levels Learning resource.

livinglevels.org.uk/a-unique-history
livinglevels.org.uk/learning-resources

Caldicot Castle

The magnificent Caldicot Castle has stood guard over the Levels for over 800 years and visitors can spend a spring or summer day wandering the castle grounds and country park – take a picnic or stop off at the cafe. The castle is closed October – April but the Country Park is open year-round.

Newport Museum

The museum has a display dedicated to the prehistoric archaeology of the Gwent Levels. The exhibition has involved the complete re-interpretation of the prehistoric collections, integrating replicas, reconstruction drawings and films to add context to artefacts, including the life-size reproduction of 7,300 year-old footprints, recorded by Reading University at Goldcliff.

National Roman Legion Museum

In Caerleon, visit the National Roman Legion Museum and discover the impact the Romans had on the Gwent Levels landscape; then look around the town to discover the Roman bath house, Amphitheatre and barracks. As you walk around the Gwent Levels after your visit, you can look for clues that suggest a Roman influence on the Levels, including some of the field shapes and embankments, or admire one of the reens which are thought to be Roman. Percoed Reen on the Wentlooge Levels is one such reen, situated alongside a quiet lane on National Cycle route 4.

Tredegar House

Set in a beautiful 90-acre park, Tredegar House is one of the finest examples of a 17th century Charles II era mansion in Britain.

Situated on the edge of Newport, the house was the home of the Morgan family, later Lords Tredegar, for over 500 years. The current house dates from 1672 and replaced an earlier stone building, parts of which can still be seen incorporated into the later brick mansion.

The estate has three formal gardens, the Orchard Garden, Cedar Garden and Orangery Garden, each with their own distinctive characters. There are also parklands, including a lake, to explore – perfect for picnics, dog walking and running.



Clues in the landscape

Piecing together the history of the Gwent Levels over the past 11,500 years or more has been possible by finding particular clues.

- Where the forests once grew seeds, pollen and wooden objects have been found in the mud.
- Burnt hazelnuts and wild boar tusks are evidence of people staying for short periods and moving on.
- Small stone tools called microliths were used to butcher red deer, wild boar and occasionally roe deer.
- A fish-rich diet is revealed by finding the bones of fish such as eels, mullet, salmon, sticklebacks, bib, goby and bass.

Hidden waterways

Recreational areas are still an integral part of the Gwent Levels. Hendre Lake has drainage ditches or reens running into it and out of it; at Parc Tredelerch water channels are hidden behind trees and vegetation, connecting to a network of around 1,448 kilometres (900 miles).



Stories & case studies

Footprints

Mesolithic (7,000 years ago) footprints discovered in the mud at Goldcliff were made when sea levels were lower and dried footprints became preserved under estuarine

mud on the same day. They were made by people hunting, fishing or scavenging along the shoreline at low tide. Today the tides are uncovering and washing them away; they are being studied by Prof. Martin Bell and his team at the University of Reading. Whilst the footprints are not accessible to the public, there are stunning panoramic views from Goldcliff both inland and across the estuary.

Look up the Lost Landscapes animated digital reconstruction. It reveals how the Gwent Levels might have looked during the Mesolithic period and can enhance our understanding of how this landscape was providing for people back then.

livinglevels.org.uk/lost-landscapes-intro

Gwent Archives, Glamorgan Archives & Cardiff Story Museum

All three venues hold photos, maps and documents; these clues and evidence help explore the history and stories associated with the Gwent Levels. You can also volunteer to help archive projects and resources. People's Collection Wales also preserves and celebrates the history of Wales through unique stories collected from people.

Newport Ship and boats

Discover more about the world's only surviving 15th-century ship. The Newport Ship is being conserved at a warehouse on the Gwent Levels. Search online for Barland's Farm Boat and Magor Pill Boat, both also recovered from the ground on the Gwent Levels.



▲ Flint tools found on the Levels © Professor Martin Bell

▼ Artist impression of the Newport Ship at sea © Dextra Visual/Living Levels Partnership



Hidden gems

► Roman stonemason creating the Goldcliff Stone
© Dextra Visual/Living Levels Partnership



Goldcliff stone

This stone was found in the mud near Goldcliff Pill and records the work of the Romans. Its inscription probably refers to digging ditches and draining the Gwent Levels in the 2nd or 3rd century (1, 800 – 1,900 years ago) and is on display at the National Roman Legion Museum, Caerleon. A replica of the stone lays near to the site at Goldcliff on the Wales Coast Path.

Peterstone gout and smuggling

At Peterstone, near the golf course, a freshwater channel flows through the old harbour wall into a collecting lagoon before draining into the Severn Estuary via a tidal flap or gout. The Romans first built an outlet here 1,700 years ago; the gout remains the main drainage point of this part of the Gwent Levels (Wentlooge). Today, it is a hotspot for wintering wading birds and ducks. Peterstone used to be an important port, and channels would be used to gain access by smugglers. In fact, at several nearby farms there are underground tunnels that were used by these smugglers.



Rhythm of tides & time

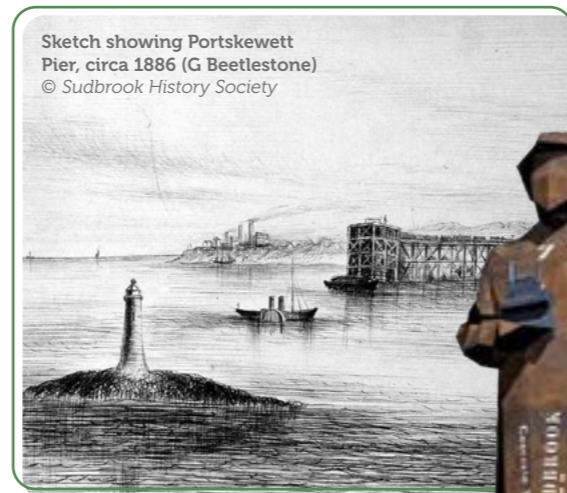
Black Rock: crossing the estuary

Black Rock has been used as a landing place for boats as far back as the Romans. In the later-1800s a railway line stopped at Black Rock and people took a boat to a connecting train at New Passage across the water. Stormy weather made travel across the Severn hazardous. Roman coins found in the mud here were probably thrown into the water as an offering to the gods for a safe crossing; shipwrecks buried in the mud over the centuries are testament to the dangers the Severn poses. At low tide you can still make out brick footings from the pier and behind you, to the right of the house, you can see the small stone bridge that went over the railway. This location also has panoramic views across the Severn Estuary and both Severn bridges while the Severn Tunnel, near Sudbrook, remains hidden below the estuary itself. Today it is also home to two 'People of the Levels' sculptures celebrating Lave net fishing and human engineering of the Levels.



Watch out video for clues that reveal Black Rock's railway past.

livinglevels.org.uk/sense-of-place-toolkit



► 'The Engineer' sculpture at Black Rock
© Living Levels Partnership



Levels Lingo

The place-name Magor is derived from the Welsh language name Magwyr, which is thought to come from the Latin word *maceria*. It translates as masonry walls or ruins, which have been a common sight on the levels for centuries. This could refer to the sea walls, a causeway built by the Romans or a ruined Roman villa that once stood in the area.

Goldcliff gets its name from the mineral mica that was once visible in the exposed cliff face at Goldcliff Point, site of Goldcliff Priory, and which sparkled like gold in the sunlight. ●

▼ Mica



Actions

- Research some key points about the history or a key feature of your organisation. Have these historical points to hand to engage your audience. You may find out something that will inspire you to take your organisation in a different direction.
- Promote the local historic sites and find out about the less well-known places and events that people might enjoy. Give people the information they need to find out more, including top local tips, websites, opening times, what to take, or the best times to visit.
- Local history groups may be willing to research or present to your organisation a historical subject relevant to your area of interest, and which you could then use with people you engage with.



Links

For more on the Newport Ship see 'A landscape to conserve' (page 47)

'A landscape of water' gives more details on the waterways and the Great Flood (page 35)

Listen to 'Stories from the Levels' online where local people tell of their experiences of working and living on the Gwent Levels livinglevels.org.uk/levels-stories

See where and how to explore the history and culture of the Gwent Levels through 'A landscape to enjoy' (page 50)

Find your way

Accessible Gwent Levels

Venues across the Gwent Levels, such as Magor Marsh, Tredegar House and the National Roman Legion Museum provide access for wheelchair users where practically possible; Newport Wetlands also has mobility scooters that can be booked. Check websites of individual venues for details. Accessible Countryside for Everyone outlines some of the accessible options along the South Wales coast.

accessiblecountryside.org.uk/southwales

2 A handcrafted landscape

Discover how this landscape has been crafted by humans. From Mesolithic hunter-gatherers to Roman invaders, from medieval farmers to modern day engineers, this landscape has been shaped and used by humans for millennia. This land has looked after its inhabitants through its orchards and industry, farming and fishing and has provided food and work for the people who live here.

This information can be used to inspire people to think about their relationship with the landscape and how they use it.

Overlooking Whitson and Goldcliff lagoons
© Living Levels Partnership



Discover

Views

The Gwent Levels offers vast, open-sky views across the flat open landscape of fields, waterways, hedgerows, pylons and church spires, before it meets the hills inland and the estuary at the sea. Here are just a few places with spectacular views:

St Brides: end of Beach Road: an easy access point to the Wales Coastal Path with great views across the channel and the entrance to Newport Docks and Uskmouth Lighthouse.

Langstone to Penhow Circular walk: views looking seaward across the Gwent Levels.

Black Rock: looking out to the Severn Estuary and the two Severn Bridges.



Newport Wetlands: views along the coastline and across to North Somerset.

Peterstone Wentlooge: coastal pathway giving views along coastline, Newport, Cardiff and across to Bristol and North Somerset as well as the inland hills of Draethen/Machen.

Elevated views: view from atop Newport Transporter Bridge and other vantage points including church spires which can often be accessed on special request via church wardens – Nash and Redwick churches are excellent examples.

▲ Peterstone
Wentloog Marshes
© Leighton Baker/
Living Levels
Partnership



East Usk Lighthouse
on Newport Wetlands
© Chris Harris/Living
Levels Partnership



▲ Local participants of the Life on the Levels oral history taken by © Emma Drabble and Nanette Hepburn

Life on the Levels

Look up 'Life on the Levels' to hear stories from those who live on the Gwent Levels and how it has changed over their lifetimes. The full archive of portraits, transcripts, audio and videos recorded for the project are at Gwent Archives; a selection of audio files can also be accessed on the People's Collection Wales website.

Character of the landscape

Traditional farmsteads and their buildings are part of the Gwent Levels local heritage and they make a significant contribution to its local character and distinctiveness, and to the communities and economies of the area. Incredibly, large parts of the Gwent Levels largely look the same today as they did back in the 1700s and 1800s. The way in which the fields drain water and provide rich, fertile grazing for animals means there has been little need for change. Despite this, more intensive agriculture has crept in leaving less space for wildlife and many areas have been built over, particularly the wet marshy land on the edge of Newport.



Clues in the landscape

Spotting drainage patterns in fields

Look for deliberate, straight lines (furrows) in fields which are regularly spaced; because they are draining the water, the soil beneath them is wetter and allows damp-loving plants, such as rushes, to grow along them, making them more visible.



Stories & case studies

Farming on the Gwent Levels

Across the Gwent Levels you can see patterns of fields that sometimes can be aged back to when their drainage system was laid out. The distinctive pattern of long, thin fields around Peterstone are part of a planned landscape that may be Roman in origin. The village of Whitson was probably founded in the 12th century. Its pattern of long narrow fields is reminiscent of the 'cope' system used in Holland, leading some to suggest that it may have been created by Flemish settlers. The fields east of St Brides are more irregular in shape, part of an unplanned medieval landscape, while those to the west are more regular, suggesting a later post-medieval planned landscape. Those in the 1800s – such as Caldicot – form a grid pattern



with rectangular fields from the Enclosure of common land; many fields contain undulating traces of former tidal creeks (now silted up).

Particularly during the 1600s and 1700s private landowners were experimenting with their farming practices. In the 1700s and the 1800s the Enclosure Act came in – this meant common land, used by local villagers for fuel, grazing and other materials, was returned to landowners and divided up into more farmland.

Redwick still has some of the larger rectangular fields that were once managed by the monks. 1830s maps show strips of farmed land neighbouring these large fields. These strips remained because they stayed under common law where local people working and living on the land retained their rights – they weren't handed back to the landowners unlike most areas when the Enclosure Acts were introduced.



"Look for deliberate, straight lines (furrows) in fields"

▲ Ridge and vurrow: Shallow drainage gullies or grips in a field near Redwick © Living Levels Partnership



Irregularly shaped fields near St Brides, suggesting Medieval origin, with Newport Docks beyond © Living Levels Partnership





▲ Magor and its surrounding countryside in 1830 © Gwent Archives



Hidden gems

Spotting ancient drainage patterns

While aerial photos reveal some of the patterns produced by the drainage systems, LiDAR, a special survey technique, show these patterns of drainage ditches and creeks in more detail.

Look up Living Levels GIS – this website shows maps of the Gwent Levels during the 1830s. By zooming in on the LiDAR map layers, you immediately see different patterns of fields by size, shape and arrangement. The black, white and grey patterns are the ditches and creeks that drain the water off the fields.

livinglevelsgis.org.uk



Rhythm of tides & time

● For a few hours visit Magor Marsh, see the relic fenland and field 'grips' that take water off the land into reens or visit the prehistory (Mesolithic to Roman) exhibition at Newport Museum.

● If you have half a day, visit Newport Wetlands, explore the reedbeds and look inland across the Levels from the sea wall.

● If you have a day to explore, try a coastal heritage walk from the visitor centre at Newport Wetlands, via the East Usk Lighthouse and the Wales Coast Path, to the Medieval churches of St Mary's at Goldcliff (12km), perhaps using the Newport Bus Fflecsi service to be dropped off and then picked up at the other end.



Levels Lingo

Landowners, farmers and residents often knew the strips of land, commons and reens by their local Levels name; this gave them a way of explaining where they were farming and orientating themselves around the Levels. Redwick's Broad Mead common strips were bordered by Windmill Reen to the east and Elver Pill Reen to the west. Two books of maps, one for the Caldicot Levels and one for the Wentlooge Levels, were produced by the Commissioners of Sewers in the first half of the 19th century. Some of the names shown on the maps give clues into the lands' use or its characteristics: "Sunny Bank", "Fair Orchard", "Bare Lands", "Brewers Ground" and "Spots Length" (Spot meaning a patch of land). ●



Actions

- Consider how you would use the features of the landscape to promote your organisation. People engage with organisations that they can identify with and make links to; by using your knowledge of the landscape on promotions and information you could engage with more people.
- Consider carefully how you promote local places of interest, consider which places would benefit from increased footfall and where your audience is likely to want to go.
- Look at your local area through the eyes of a child. Often children notice unusual things that adults miss that are intriguing; they might inspire you to find out more. Children often ask curious questions and researching the answers may surprise others.
- If you spot fly-tipping report it via the Fly-tipping Action Wales website. Many previous fly-tipping spots now have cameras, signs or regular checks; there has been a greater awareness made on how to dispose of waste.



Links

Find out more about how the landscape provides homes for nature in 'A landscape of wildlife' (page 38)

Discover how to explore the Gwent Levels in 'A landscape to enjoy' (page 50)

'A landscape of water' reveals more about how water has been managed over centuries and the Great Flood of 1607 (page 32)

Find your way

Train travel

Travelling by train between Chepstow and Cardiff gives stunning views of the Severn Estuary and the Gwent Levels that are inaccessible by foot or car. Spot field drainage patterns from the estuary side of the train between Chepstow and Severn Tunnel Junction. Look up National Railway Enquiries for train times and the Newport Bus Fflecsi service for connections to venues.



3 A landscape of water

Discover the ways in which water dominates this landscape: from the maze-like ditches and reens that zigzag the fields, to the sea wall that runs along the coast, water is an ever-present reminder of where this land came from.

For 800 years the pattern of ditches and reens derived from the field drainage system has remained relatively unchanged, effectively providing rich, fertile grazing for animals. Use this information to engage people with the sights and sounds of the water that are all around them.



Windmill Reen
near Redwick
© Chris Harris



Discover

Severn Estuary and its high tides ▶

The Severn Estuary, which borders the southwest side of the Gwent Levels, has the highest tidal range in Europe. At high tide the water levels can be up to 14 metres or more above that at low tide. Without sea walls, spring tides would flood onto the land affecting farmland, industry and people's homes.



▲ Low and high tide © Chris Harris

Magor Marsh ▼

Magor Marsh is the last remaining fenland on the Gwent Levels and the lowest point on the Caldicot Levels. As you move in land from the sea, the land doesn't rise upwards at first. Instead, the land slopes downwards and the water forms pools and bogs, important for rare plants and animals.

▶ Our video on the sea wall at Peterstone reveals more about the clues to its past and its role over the centuries.

livinglevels.org.uk/sense-of-place-toolkit



Magor Marsh (bottom-right) is an important place for plants, animals and birds
© Living Levels Partnership



▲ Sheep grazing on the foreshore, Prince of Wales Bridge behind © Chris Harris

Managing the water

The Romans first began draining the Gwent Levels around 1,900 years ago, enabling fields to be suitable for grazing their cattle, sheep and horses throughout the year. During the Norman period, around 900 years ago, local monks were creative engineers and cleverly modified the water channels in fields, even crossing one over the other, like a mini-aqueduct and relying on gravity to move the water off the fields. These channels exist today as ditches and reens (see Levels Lingo) all across the Gwent Levels, including Monks Ditch, a major reen near Whitson. Saltmarsh and wet pasture land became rich grassland which grew well on the fertile soil, ideal for grazing sheep, cows, goats and pigs. Some farmland, particularly on higher ground, was arable – it was ploughed and grown for crops, such as wheat, used in bread-making.



Clues in the landscape

An ancient and medieval farming landscape

The thick estuary mud and water helps tell the story of the Gwent Levels' past. The sediment that covers the area is a mix of silt, clay, sand and gravel that creates almost perfect conditions for the preservation of ancient remains. The remains of cows have been found that date back to the Romans and Iron Age footprints from cattle have been found in the mud. By doing experiments on ancient cattle bones (isotope analysis), researchers have found that 20% of grazing animals reared for Caerleon may have been reared outside of south-east Wales, delivered by ships that sailed up the river Usk and docked at Caerleon. Some of the wooden jetties, where the cattle walked off the boats, have been preserved in the mud. The Newport Ship, Magor Pill boat and the Barland's Farm boat have all been preserved in the thick mud and clay that has been laid down by the tides.

▼ Ancient preserved footprint © Chris Harris/Living Levels Partnership



◀ Archaeologists working on the recovery of the Magor Pill boat © Amgueddfa Cymru – National Museum Wales

▼ Full-sized reconstruction of the Magor Pill boat remains © Amgueddfa Cymru – National Museum Wales



Stories & case studies

The Great Flood

In 1607, flood waters breached the sea defences and covered the lowlands of the Gwent Levels (including parts of Cardiff), flooding farmland, low-lying houses, churches and grazing areas for sheep and cows.

The clues point overwhelmingly to this being a particularly violent storm with:

- A very high tide related to a spring tide and a full moon
- Winds coming from the west
- Weather allowing the sea to be higher than usual (low pressure weather)

Development of the sea wall

During the Bronze-age, 2800 – 4500 years ago, rectangular buildings were used for raising animals on the salt marsh during the summer. People built walls of soil around areas of drier,



higher ground to protect their sheep and cows, from the incoming tides. During the Middle Ages these separate sea defences began to merge into a single sea wall. Managing water on the Gwent Levels has always been a collective effort including landowners repairing their sea walls and keeping open ditches on their land. This has been enforced

◀ Pamphlet about the floods in Somerset © Courtesy of Stephen Rippon

by successive bodies from the Monmouthshire Commissioners of Sewers to Natural Resources Wales today, with their permissive powers to enter properties and carry out reen 'reaping and scouring' in order to manage flood risk.

Sea Level rises

In modern times, sea levels are rising at an accelerated rate associated with our changing climate; these have important consequences for the Gwent Levels. Many cities, towns and villages have been built just above the height of sea levels that existed in Roman times when high tides were 1.67m lower. Their resilience to rising sea levels will be challenged, particularly during ever more common freak storm and flooding events, meaning serious conversations and solutions are needed.



Hidden gems



▲ Plaque commemorating 1607 flood, St Mary Magdalene, Goldcliff © Living Levels Partnership

Flood marks and plaques in churches

Many churches on the Gwent Levels have plaques commemorating the Great Flood. Those at Goldcliff and St Brides were made soon after it happened while Redwick has two flood marks at slightly different heights; that at the end of the chancel wall is older and thought to relate to the actual height of the 1607 flood. There is now a commemorative flood obelisk and interpretation board in Peterstone, installed by the Local Community Council; the church where the original marker is located is now in private ownership.

Local history groups

Delve into the history of the Gwent Levels' watery landscape over the past 200 years by joining a local history group such as Redwick, Caldicot, Rumney, the Three Parish history group in Nash or the Chepstow Archaeology Society. The Gwent Archives, Glamorgan Archives and Museum of Cardiff are also great places for researching historical documents and becoming an archive volunteer.

▼ St Mary Magdalene, Goldcliff © Living Levels Partnership



Rhythm of tides & time

The Severn Estuary's highest tidal range in Europe, and one of the highest in the world, means the sea walls and coastal defences are crucial in protecting the land from flooding at high tide; the **Wales Coast Path** mostly runs along the sea wall, providing plenty of opportunity for exploration. At low tide look out for the large stone blocks and the 'wave-return' wall that reflects the energy of the waves back out to sea.



Levels Lingo

The unique water drainage system on the Gwent Levels uses ancient words to describe it.

- Reens: In the past these have been ditches dug over centuries and carefully maintained to take surface water to the sea. Today reens are the main drainage ditches on the Levels, managed by Natural Resources Wales. These are different to field ditches which are the responsibility of the landowner.
- Grip: A small open furrow or ditch which carries water off a field.
- Gout: An Old English word that can refer to a channel that takes water through a structure to the sea.
- Pill: A tidal creek on the coastal side of a gout along which the water flows out to sea.
- Bungum: Silty clay used to bung up holes in the bank.
- Nogger: A wooden peg to plug a hole (nogghole) in a plank in the bottom of a reen. In the summer these could be removed to allow the land to be watered. ●



The reinforced sea wall at Goldcliff © Chris Andrews (cc-by-sa 2.0)



Actions

- Use your organisation to raise awareness about the imperative for good water management and the challenges this holds for the future in the context of sea-level rise, a changing climate and increased risks of flooding.
- Observe and interpret the different levels of the drainage system with its grips, ditches, reens and pills (explained in Levels Lingo).
- Help keep the water across the Gwent Levels clean by reporting any pollution incidents you see to Natural Resources Wales (0300 065 3000); look online for advice and support with reducing diffuse pollution (nutrients, pesticides, faecal bacteria, chemicals and fine sediments that are lost from the land into rivers, ditches, reens and groundwater).



Links

Watch digital stories telling the history of the Gwent Levels in 'An historic landscape' (**page 22**)

Find out more about the wildlife that thrives amongst the water habitats in 'A landscape of wildlife' (**page 38**)

For more information on field drainage patterns look up **Gwent Levels GIS** online.

Find your way

Exploring the Gwent Levels along the Wales Coast Path

Look up Wales Coast Path and its interactive map to find the local routes. Newport City Council have an online leaflet/map that highlights the path's route across the Caldicot and Wentlooge Levels to meet the City of Newport, a distance of 23 miles/38km. The route takes you along the sea wall to Newport Wetlands and the East Usk Lighthouse, inland through Gwent Wildlife Trust's Great Traston Meadows, past the Newport Transporter Bridge and the West Usk Lighthouse and on to Peterstone Gout. This route continues west into Cardiff.



4 A landscape of wildlife

The Gwent Levels is home to a rich assemblage of wildlife and eight areas are designated as Sites of Special Scientific Interest (SSSIs); the watercourses are one of the best locations in Wales for aquatic wildlife.

Discover the interconnecting watery habitats of ponds and lakes, reedbeds, reens and ditches, which are home to diverse wildlife that is rare in other parts of the UK: from dragonflies to otters and from nationally rare bumblebees to diving beetles. To best see and appreciate the wildlife and sensitive habitats, stick to designated footpaths and signage; this avoids disturbing wildlife such as nesting birds.

Use information about flora and fauna to inspire people to experience the nature around them.



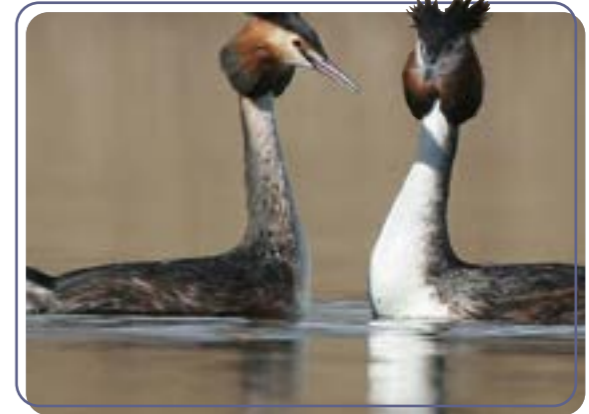
Avocet © Ben Andrew



◀◀ Male tufted duck and the lake at Parc Tredelerch, both © Ed Drewitt
◀ Wildflowers at Rogiet Country Park © Andy Karran/
Gwent Wildlife Trust



◀◀ East Usk Lighthouse and the reedbeds at Newport Wetlands © Chris Harris/Living Levels Partnership



◀ Great crested grebes, often seen swimming on Hendre Lake © Andy Karran



Discover

These locations are places where visitors and residents have a good chance of finding wildlife. Memory treasure maps – found on the Living Levels website – provide more details on what to see and where, historical/heritage information, access and routes.

Tredegar House and Parkland, Newport

The extensive and free to access parklands beyond the house have a lake, variety of large trees and wide-open grasslands.

Magor Marsh, Magor

The marshy relic fenland is a SSSI in its own right and home to water voles, colourful marsh-living plants and rare pondlife.

Newport Wetlands, Nash, Newport

The pools, reedbeds, rich-flower grassland and scrub are home to a huge range of wildlife including the nationally rare shrill carder bee, bearded tits and reed warblers.

Hendre Lake, St Mellons, Cardiff

Beautiful lake surrounded by grassland and trees, frequently home to a range of woodland and water birds (including grebes and kingfishers).

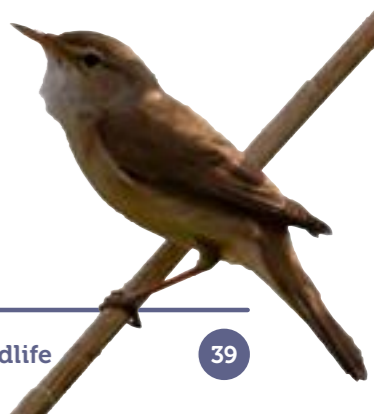
Parc Tredelerch, Rumney, Cardiff

The lake was originally cut off from the Rhymney River as an oxbow lake; today it is home to mute swans, grebes and tufted ducks surrounded by lush and colourful lakeside plants.

Rogiet Countryside Park, Rogiet

Transformed from busy sidings for rail goods, the countryside park is now brimming with colourful wildflower meadows, pollinators and birdlife.

▼ Reed warbler





Clues in the landscape

Water vole

If you hear a 'plop' in nearby water, it is likely to be a water vole. Look for their tunnel holes in reens and ditches, and distinctive tell-tale nibbles on water plants and grasses – a 45° diagonal cut. At Magor Marsh apples are often left out on visible rafts for the water voles to snack on.



Water vole © Peter G Trimming



Otters are secretive and shy across the Gwent Levels © Bernard Landgraf

Otters

Look for otters' webbed footprints in mud showing five paws and their musky poo (spraint) often left in prominent places along riverbanks, on rocks or under bridges to mark out their territories. Otter spraints are usually dark greenish, slimy and full of fish bones, scales and crayfish parts.

Reedbeds

Reedbeds at Newport Wetlands and Magor Marsh provide habitats for a range of wildlife including otters, dragonflies, cuckoos, water voles and birdlife that only lives in reedbeds such as reed warblers and bearded tits.



▶ Reedbeds at Newport Wetlands and hairy dragonfly, both © Chris Harris/Living Levels Partnership



Stories & case studies

The Gwent Levels is one of the largest areas (10,500ha) of coastal and floodplain grazing marsh surviving in the UK. Over half of this has been designated Sites of Special Scientific Interest because of the range of aquatic plants and invertebrates associated with the reens and ditches of the drainage system.

Aquatic plants

Plants such as water plantain, with its delicate white flower, and arrowhead thrive in the clear waters. Submerged plants, such as pondweeds, and floating-leaf plants, such as water starworts and frogbit, are also common throughout the drainage system.

Underwater creatures

The assemblage of water beetles found on the Gwent Levels is unique in Wales and home to rarities, such as the UK's largest, the great silver

water beetle. It is found nowhere else in Wales and restricted to only a few other sites in southern England.

Wading birds

The Gwent Levels is an important place for nesting waders such as lapwings, redshanks, snipe and avocets.

Returning species

The reedbeds and marshes are also home to cranes, bitterns and marsh harriers and they are now nesting here for the first time in hundreds of years.

Shrill carder bee

This is one of Britain's rarest bees, named for its high-pitched buzz. It is found on the Gwent Levels in late summer feeding on flowering plants, particularly plants from the pea family such as vetches.

▶ See our video to find out how to look for and identify the shrill carder bee and why it is surviving here

livinglevels.org.uk/sense-of-place-toolkit



▶ Shrill carder bee © Chris Harris



▶ Lapwing © Kev Chapman



Hidden gems

Bearded tits

In the reedbeds at Newport Wetlands, beautiful bearded tits are difficult to see unless you know their call. Listen to their 'pinging' calls on the RSPB's website. If you hear this along the paths, look up and you might catch sight of a small group flying just above the reeds.

See our video for clues to spot bearded tits and other secretive reedbed wildlife such as bitterns, kingfishers and otters.

livinglevels.org.uk/sense-of-place-toolkit

Rootless duckweed

This plant is the smallest flowering plant in the world and is found on the Gwent Levels. While this species of duckweed is hard to see, look for the common duckweed on a reen or pool – its tiny round leaves often cover the water's surface.

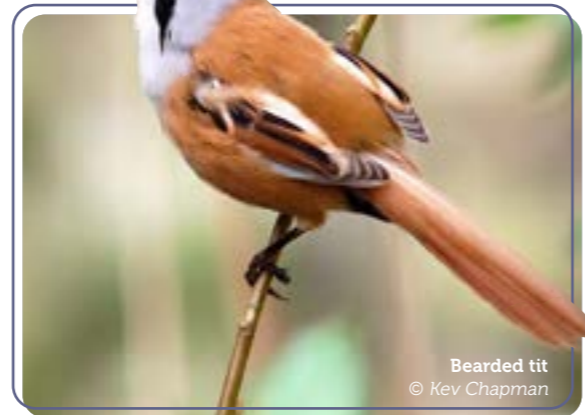
Southern marsh orchids

Visit Great Traston Meadows, Pye Corner, for its spectacular display of over 5,000 southern marsh orchids in June and July.

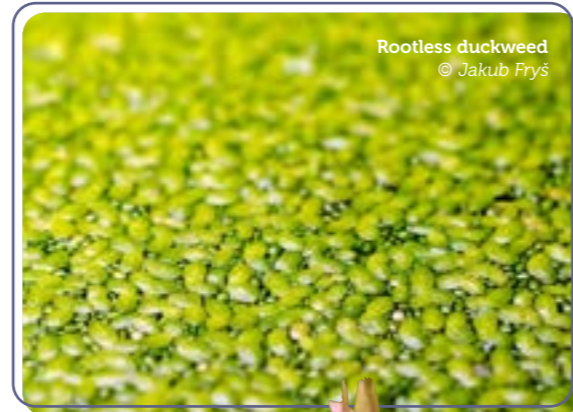


Rhythm of tides & time

During the winter months thousands of starlings from across Europe visit the Gwent Levels and roost (sleep) in the reedbeds at Newport Wetlands; their mesmerizing flocks, known as murmurations, can be seen at dusk.



Bearded tit
© Kev Chapman



Rootless duckweed
© Jakub Fryš



Southern marsh orchid
© David Evans

Look for birds such as curlews, dunlin, redshanks and shelducks feeding on the estuary mud off the sea walls at Goldcliff, Newport Wetlands and Peterstone Gout from late summer through to early spring.



Levels Lingo

A common Levels nickname for a moorhen is a stankhen which comes from 'stank', the Levels word for a weir or dam or ditch of slow-moving water which temporarily holds back the water. The reens are much talked about on the Levels as a home for wildlife, the exact derivation of the word is unclear. It could come from the Welsh word rhewyn, which means ditch, or the old English word ryne.



Modern stank at Chapel Reen, nr Goldcliff
© Living Levels Partnership



Actions

- Go wildlife watching at one of the places suggested above. It could inspire you to promote your organisation or business in a new way. For details on how to record, look up Living Levels: Wild Watch.
- Point people in the direction of their local venue to see wildlife and describe what they could see.
- Book onto a wildlife walk or a nature skills course with Gwent Wildlife Trust or RSPB to increase your skills and knowledge of your local wildlife and habitats (courses listed on their websites).
- Promote both virtual and in person local wildlife events. Explore how you could use your organisation to get involved in these. You could provide a place for people to look for wildlife, a noticeboard to record sightings or a website hosting information about local flora and fauna.
- Be vigilant for Invasive Non-native Species such as mink, zebra mussels, giant hogweed, Japanese knotweed, Himalayan balsam and report to Natural Resources Wales if you have seen any.



Links

The cycle network and Wales Coastal Path takes you through a range of wildlife habitats and locations – see 'A landscape of water' (page 32) and 'A landscape to enjoy' (page 50)

See 'A landscape to enjoy' for making adventures across the Gwent Levels (page 50)

Read 'A cultural landscape' to find out how nature has influenced the culture of the Levels (page 56)

Find your way

Getting around the Gwent Levels by bus

The Newport Bus Fflecsi service means buses will pick you up and drop you off in the service area and not just at a bus stop. A bus picks you up at your request, changing its route so that all passengers can get to where they need to go.



5 A landscape to conserve

Discover how this unique landscape is providing a home to species that increasingly need sanctuary and a network of suitable habitats in order to survive.

Preserving the history, heritage and habitats that make this area unique is an important responsibility and everyone can play a part. Use this information to encourage people to conserve the environment and preserve its heritage for the generations that will live here in the future.

Orchards were once part of every farm and widespread across the Gwent Levels
© Living Levels Partnership



Discover

Making space for wildlife

At first glance, many parts of the Gwent Levels look the same today as they did back in the 1700s and 1800s – low-lying fields surrounded by drainage ditches, known as reens, and hedgerows. They have always been used to farm cows and sheep because the vegetation is so rich and lush. Despite this, intensive agriculture has crept in, meaning less space for wildlife as farming practices increase production; these include greater numbers of sheep and cows grazing fields, use of fertilisers (including slurry) and herbicides. There is also a loss of permanent, species-rich grasslands due to conversion to monoculture or arable farming, and a change to producing silage rather than hay.

Those places where wildlife still lives in greater numbers can be helped further across the Gwent Levels by:



- On SSSI designated land: ensuring you have the appropriate consents and permissions; maintaining wet field ditches by managing bankside vegetation with an annual flail mow; and pollarding willow trees so that they do not grow too big and destabilise banks and ensuring ditches are cleared out (re-cast) in rotation every 7-10 years. By ensuring ditches do not become overgrown and silted up you are protecting biodiversity (important plants and invertebrates can complete their life cycles) and reducing flooding risks.

▲ Cows grazing on the Levels' rich, luscious vegetation and wildflowers
© Chris Harris



◀ Re-casting ditches and reens protects biodiversity
© Kate Rodgers



▲ Drashing: clearing vegetation in a reed using a longhandled hook © Gavin Jones/Living Levels Partnership

- Leaving a mix of open field ditches while letting some hedgerows grow so they bulk out and produce blossom and foliage.
- Cutting and collecting cuttings from grassland areas once a year to encourage native wildflowers, making log piles and leaving dead wood and trees.
- Conserving ageing orchards and planting new apple and pear trees in your garden or former orchards.
- Upholding your waste Duty of Care – if you dispose of any household waste, make sure the company you hire to clear it is reputable and check they have a Waste Carrier's Licence and report fly-tipping you spot at public sites to your Local Authority.

Lost Landscapes

Look up the words Lost Landscapes Gwent online to find and watch digital reconstructions of how the Levels have changed over 8,000 years from Mesolithic times up to the modern-day.

livinglevels.org.uk/lost-landscapes-intro



Clues in the landscape

Grassy fields with just one or two old fruit trees are clues to what would have once been an entire orchard. Look out for their spring blossom or autumn bounty of apples or pears.

Look for changes in what grows where in fields: crops or grasses may vary in quality or colour over the old grip lines. Look for field surface signs such as slight linear depressions. Walk the ditches after rainfall – you might hear a pipe running that you cannot see.



To find clues that reveal these drains in a field see our video at

livinglevels.org.uk/sense-of-place-toolkit

Look for rabbit burrows and mole hills at Newport Wetlands. The soil they dig up is full of ash from the power station and was once dumped here; reedbeds now grow where the ash was removed to make watery habitats for wildlife. It is also a brilliant substrate for wildflowers and contributes to the floral diversity at the site. The lighthouse is also much lower than the current pathways because of the build-up of fly ash around it.



Stories & case studies

Orchards

Orchards were once widespread across the Gwent Levels, providing every farm with their own supply of cider, apple juice, apple cider vinegar, and canned fruit; the better the cider the better the seasonal worker they would



attract. Many talk about this in the Life on the Levels oral histories. There was once a mobile cider press based at Nash. It would move from farm to farm, crushing the apples to make cider, while a mobile canning machine would can orchard fruit to store and eat over the winter. Some orchards still remain standing in Goldcliff, Redwick and Magor and are being conserved. They are incredibly important for rare wood boring insects. Look up Chepstow's orchard and wildlife trail where you can visit some or all of its orchards. There is also an orchard at Tredegar House, a newly planted orchard at Duffryn woodland and a community orchard at Undy which is open to the public.

The Newport Ship

In 1468, the Newport Ship visiting from Portugal, was undergoing repairs when it toppled over into the mud. With no modern machinery to lift it back up the ship was left where it fell. It became preserved in estuarine mud until 2002 when it was found during the construction of the Riverfront Theatre. It is the world's only 15th Century ship, built originally in Spain. There are many clues to the life of the ship and its Portuguese sailors: the ship is now being conserved and can be visited. An animated digital reconstruction has been made which shows how she would have looked at sea. Look up Newport Ship online.



Hidden gems

At low tide branches and wood sticking out of the mud may in fact be the remains of trees that lived thousands of years ago, preserved until now in the estuarine mud. If you see something of interest let one of the local museums know or contact the Glamorgan-Gwent Archaeological Trust.

▲ Thriving orchard on the Gwent Levels © Living Levels Partnership

▼ Artist's impression of The Newport Ship at sea © Dextra Visual/Living Levels Partnership



▼ Auroch's horn discovered in 2020 © Black Rock Lave Net Fishermen



Look up historical finds that the Black Rock Lave Net Heritage Fishery team have found in recent years. An amazing collection of finds from the Gwent Levels foreshore, from Mesolithic to the Roman era, is housed at Newport Museum, including the complete skeleton of an aurochs.

Now extinct these magnificent beasts were once a common sight along the submerged forests of the former shoreline.

Listen for the 'booming' call of a rare heron-like bird, the bittern, that lives hidden in reedbeds at Newport Wetlands and Magor Marsh. The male's song sounds like someone blowing across the top of an empty bottle. Look up the call on the RSPB's website.



Rhythm of tides & time

Rogiet Country Park, a former railway siding (and marsh before that), is home to wildflower meadows during the summer months; Magor Marsh has marsh plants such as ragged robin, lesser spearwort and southern marsh orchids.

► Wildflower meadow at Rogiet Country Park © Andy Karran



▼ Bog oak revealed at low tide, Goldcliff © Chris Harris/Living Levels Partnership



Museums conserve historical artefacts including many found on the Gwent Levels. They are great places to visit during the wetter, winter months and include the National Museums of Wales, the National Roman Legion Museum, Chepstow Museum and the Museum of Cardiff. Newport Museum and National Roman Legion Museum both have interactive displays about the Gwent Levels.



Levels Lingo

Some unique expressions have been developed due to the distinctive way that the drainage and landscape of the Levels must be managed. Earthing, turving and heading are the processes to repair and raise the height of a sea wall. Reaping and scouring refers to the reem maintenance tasks of cutting down the vegetation and cleaning out the watercourses, traditionally using a drashing hook (long-handled curved blade) and crab (long-handled fork). A brinker is the person who owns land on one side of a reem, wall or pill and is responsible for its maintenance. ●

▼ Mr Rees, a brinker of Peterstone Wentloog © Carole Newton



Actions

- Encourage and provide homes for wildlife local to yourself as an individual, organisation or business. Find out what plants and animals you already have. Contact the Gwent Wildlife Trust to research what you can do to help more wildlife thrive. This could provide a local talking point and engage people in your organisation.
- Find out about all the ways that you could get around without using a car. There are many cycle tracks and bus routes around the Levels. Consider offering a discount (if you provide purchases as part of your organisation) to people who have travelled to you using public transport.
- Use some of the local conservation successes to engage people in championing and recording wildlife. For example, water voles have been successfully reintroduced onto the Levels; some people will be surprised and excited about this. This could be used as a way to encourage people to take more care of the environment, take rubbish home, join a litter pick or reduce plastic use, and record (and report) the wildlife they see.
- Consider campaigning to protect the Gwent Levels; there are frequent planning threats to Levels' unique landscape that require considered responses and robust wildlife and archaeology survey data to protect against.
- Chat with Natural Resources Wales about S.16 land management agreements.



Links

'A handcrafted landscape' explains more about field patterns from different era (page 26).

See 'An historic landscape' for more information on the Mesolithic footprints (page 23).

Gwent Archives has a modern archive conservation studio where you can see the delicate work of repair and conservation carried out.

Find your way

Horse riding around the Gwent Levels

A fantastic way to enjoy some of the coastline and countryside of the Gwent Levels is on horseback. Black Rock to Sudbrook, and byways near Undy in Monmouthshire, allow riders to use part of the coastal path. See directory for equestrian/riding centres.



6 A landscape to enjoy

Explore ways to entertain, play and enjoy leisure time on the Levels. From remote peaceful walks to bustling play areas, from cycling to historic exploration, whether you want to relax or have an adventure there is something for everyone. Families, couples, individuals and groups can find something to excite and delight them: whether that be nature-watching, angling, golf, sailing, shooting, horse riding, camping/caravanning. There are plenty of places to enjoy a locally sourced bite to eat and great places for a night away or a short break. Use this information to highlight and promote a variety of activities in this naturally beautiful area.



Cycle the Wales Coast Path
© David Broadbent



Discover

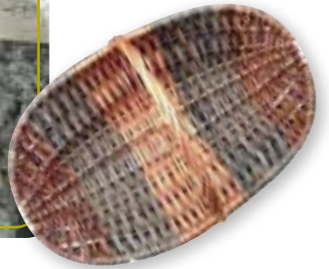
Walking

A network of routes takes you through some of the picturesque parts of the Gwent Levels; the Levels Loops and Links are a mixture of achievable, bitesize suggestions to enjoy in a couple of hours or some longer, full day walks. Look them up online and get a flavour of their routes on page 62 in the Directory.

Waymarking and digital route guides are downloadable from the Living Levels website or walking leaflets available from most local visitor centres will guide you. While out walking, look out for interpretation boards explaining some of the views and features of the landscape you will encounter. If you want to find out more, QR codes will take you to the Living Levels



◀ Sarah Hatton
Willow Weaving
– both images
(her and willow
basket)
© Sarah Hatton/
Hatton Willow



website which has more detailed information and a directory of stories about the landscape. The walks are part of the Wales Coast Path.

Find out more about the landscape

To discover more about the landscape and its heritage, locally-based organisations, including Gwent Wildlife Trust, National Trust and RSPB Cymru, offer guided nature tours, events and craft-based activities such as basket-making using locally sourced willow.



◀ Exploring
Newport Wetlands
© David Boardbent





Clues in the landscape

Wildlife recording

Make your wildlife sightings count by recording them online. Look up Living Levels: Wild Watch online for tips and ideas, and submit sightings through LERC Wales app (pictured below).

Bell ringing

Tall-spired churches scattered across the Gwent Levels are home to several bell-ringing groups that welcome newcomers whatever your religion or backgrounds. To get involved check the Llandaff & Monmouth Bellringers Association website or speak to your local vicar for contact details of the Tower Captain.

► Ornithologist and activist Mya-Rose Craig leading a wildlife workshop © Dr M Craig Birdgirl

► Bellringing at St. Mary's Church, Nash, Newport © Chris Harris/Living Levels Partnership



Stories & case studies

Lave net fishing

A traditional way of fishing in the Severn Estuary, known as lave net fishing, is where people take a large net fixed to a frame to catch fish, such as salmon on a rising tide. On the Gwent Levels, a small group of people, the Lave Net Fishermen, still keep the tradition of lave fishing going. They are based near Black Rock and come from the neighbouring villages of Sudbrook, Portskewett and Caldicot. They are the last Lave Net Fishermen in Wales. Look them up to visit the fishery or find out more.

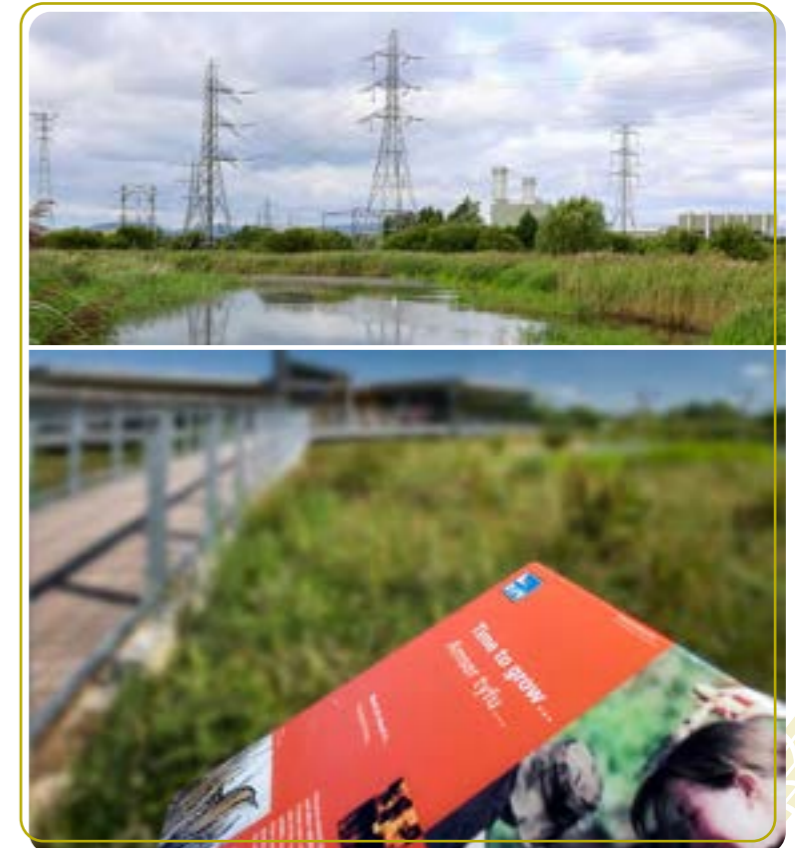
► Mother Shipton moth © Chris Harris/Living Levels Partnership



► Lagoon and interpretation board at Newport Wetlands © Chris Harris/Living Levels Partnership

Past and present

Many key venues across the Gwent Levels have had a very different past life. Part of Newport Wetlands, now a thriving wetland for wildlife, was once where fuel ash from the neighbouring power station was buried. Parc Tredelerch, a naturalised lake and parkland on the east-side of Cardiff, hides waterways which reveal its connection to the wider Gwent Levels. The lake itself was once an oxbow lake – an area of water cut off from the main river. Rogiet Countryside Park was a busy railway yard, known as a marshalling yard, up until 1987. It was full of sidings and trucks waiting to take goods such as coal, cows and steel to markets across the UK. Prior to this it was marshland.



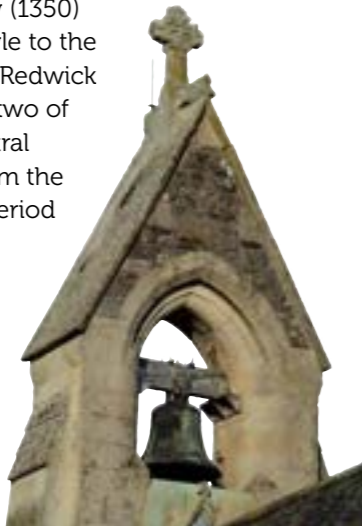
Lave Net fishing in the Severn Estuary © Black Rock Lave Net Fishermen's Association



Hidden gems

Undy's church bell

Undy's church bell dates back to the 14th century (1350) and is similar in style to the two oldest bells of Redwick church. These are two of six bells in the central tower and date from the pre-Reformation period and are thought to be some of the oldest working church bells in the country.



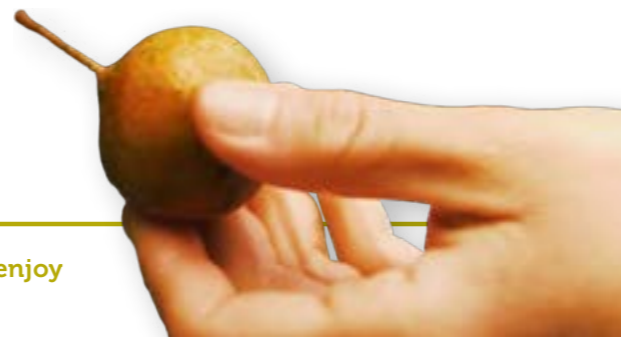
Rhythm of tides & time

There is something to see all year round. In summer, the Levels are a verdant and fertile landscape with lush vegetation across meadows and along watercourses; in autumn the orchards are a rich tapestry of orange leaves and plump apples and perries (pears). This contrasts with the wilder remoteness experienced on the Levels in winter. Some places are still best enjoyed in drier conditions, Black Rock can get muddy in wet winter weather, whereas Newport Wetlands and Tredegar House can be enjoyed all year round. See our calendar on page 66 for more ideas of places to visit at different times of the year.



Relic sea wall ▲

Behind the modern sea wall at Rumney Great Wharf there is a relic sea wall that runs for 560 metres; the surviving clay bank is thought to date back to construction in 1591.



Levels Lingo

Leisure pursuits on the Gwent Levels use the unique lexicon and landscape. Fishing with a lave net was a common sight on the Levels for centuries; the net traditionally comprised two arms, called rimes made from a willow plait, called a withy. Using a putcher (pictured above), a funnel-shaped basket was also a way of catching salmon and eels; the tradition continues as a pastime. Reen vaulting was once a popular local pastime practiced by people on the Gwent Levels, involving leaping a reen using a pout (pole). The practice is documented in oral histories recorded by local people who have lived, worked and played on the Levels in the 20th century. Renowned actor, Lyn Harding (b. 1867 d.1952) who was born in St Brides, Wentlooge, was apparently a proficient reen-vaulter! (His career spanned stage, silent screen, talkies and radio productions).



Watch our video for clues on how to spot putcher ranks near Goldcliff.

livinglevels.org.uk/sense-of-place-toolkit



Links

Explore 'An historic landscape' for more stories and ways of discovering the history of the Gwent Levels (**page 20**)

Find out more about how the Gwent Levels is enjoyed through art, music and folk stories in 'A cultural landscape' (**page 56**)

Find out about the many ways in which the heritage of the Levels is being cared for in 'A landscape to conserve' (**page 44**)

Find your way

Cycling through the Gwent Levels

Sustrans National Cycle Network Routes 4 and 88 take cyclists through the region. Route 4 crosses the M48 Severn bridge before taking in the spectacular views of Chepstow and Caldicot castles and Newport Wetlands. Some sections of route 88 are complete, one which links Newport and Caerleon and runs alongside the River Usk, and another starts near Tredegar House heading to Marshfield along a quiet area of the Wentlooge levels.



Actions

- Look at your local area through fresh eyes by taking someone out who is new to the Levels; talk to them about what they notice and how this area is distinctive. They may notice things that you can highlight to people new to the area, or be of interest to people visiting or working with or in your organisation. We often take areas local to us for granted and can't see what will inspire others.
- Collect maps, guides and leaflets about local places to go to relax or explore. Use these with people already in your organisation to widen the area they explore. As they explore ask them to talk to people about the organisation and engage people in what you do.
- For information about how to use the Wales Coast Path to promote your business search for Wales Coast Path Toolkit.
- Research which local places stock local produce and promote these places to people within your organisation. For those that don't ask whether they would stock local food and drinks, you could strike up a conversation about local orchards or the Levels Lingo ales for inspiration.



7 A cultural landscape

Experience the richness of local arts, crafts and literature, inspired by the Levels, that makes this area special. The features of the landscape have played their part in creating a culture of outdoor life: putcher fishing and reen vaulting were once part of Levels' life and today the ancient landscape inspires poetry, sculptures and even beer. Use this information to promote local people, events and places that engage people in the culture of the area in new and exciting ways.



National Museum
Cardiff © Crown
copyright (2021)
Cymru Wales



Discover

Sculptures

Celebrating the man-made Levels, a series of sculptures representing key figures in the history of the Levels can be found at locations across the Gwent Levels. The figures bring to life the heritage of the Levels and the stories of the people who have lived, worked, worshipped and played here. See the directory for locations and sculpture identities.



◀ The Brinker
at Magor Marsh
Nature Reserve
© Sarah Hatton &
Melanie Bastier



◀ Maeglas
underpass mural
© Gavin Jones/
Living Levels
Partnership



▲ Bronze relief map of the Gwent Levels at Newport Wetlands
© Chris Harris/
Living Levels Partnership

Art installations

By the Transporter Bridge look for the With Passing Ships art installation on the coastal path opposite the Blaina Wharf pub.

The sculpture, Six Pillars of Wisdom, by Andrew Small, is a mixture of digital and industrial art on the corner of Commercial Road and George Street, Newport.

The Maesglas Underpass mural transforms this space into a colourful and permanent art installation reflecting the wildlife of the Levels.

A large-scale bronze relief model of the Gwent Levels landscape and historical timeline explains key milestones and features of the Levels landscape (installed at Newport Wetlands).

Seven Sisters Mosaics: Six mosaics depicting the contribution women of Newport have made to the city's history – created by Stephanie Roberts – can be seen opposite the Old St Paul's Church on Commercial Street in a newly developed area called St Pauls Walk.

The iconic Newport clock, Nick of Time (pictured right), is now re-displayed on a roundabout at the Glan Llyn development, off the A4810 Queen's Way. It was removed from Newport's John Frost Square in 2008 to make way for the Friars Walk development. It was originally built in 1992 to represent Newport at the Ebbw Vale Garden Festival before relocating to John Frost Square. It is fondly remembered by local people as on the hour the clock would dismantle to reveal hidden characters inside!

Festivals

Look up the Chepstow Festival of Arts and Tredegar House Folk Festival which happen in the spring or summer.

Many villages on the Levels have their own summer fete; watch out for road signs and mentions in the local papers.

Each July Gwent Wildlife Trust hosts their family festival at Magor Marsh Nature Reserve called Life on Marsh, which celebrates the natural heritage of the Gwent Levels.

Local artists and music

#artsnewydd is a great way to find out about arts in and around Newport.

Find out more about local artists and culture through The Phyllis Maud Performance Space and Barnabas Arts House Theatre (the old toilet block), Craft in the Bay (Cardiff) and The Riverfront Theatre & Arts Centre (Newport). For individual artists related to different specialisms, such as willow weaving, coracle-making and flint knapping – all traditions kept alive by artists working locally, explore key words online.

- Ladybird Craft Centre: arts and craft centre and café in Caldicot.
- ISCA Morris dance to traditional Welsh tunes and dance around Newport and Gwent Levels.
- Rumney Folk Club have a semi-regular open mic night gathering of traditional Welsh music.
- Look up SESIWN (Society for the Traditional Instruments of Wales) for local Welsh folk sessions in south-east Wales.
- Live music in Y Maerun pub in Marshfield.



Clues in the landscape

Views for painting/photography

The Gwent Levels faces the coastline in a west-south-west direction affording uninterrupted views for many miles along the coastline and beautiful light across a wide sky.

The Uskmouth B power station

The brick architecture is an example from the 1950s that was phased out shortly after construction in favour of metal-clad steel structures. The station's single stack is one of the finest remaining fluted chimneys in the UK.



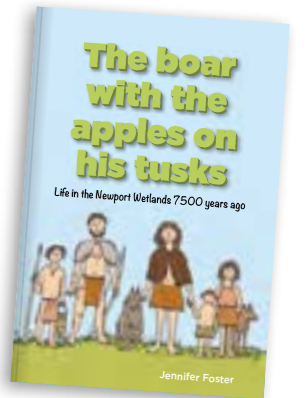
Stories & case studies

Folk tales

The book *Gwent Folk Tales* includes stories such as the Whitson Henwife, one of the tales from the 1607 'Great Flood'. Author of the book and storyteller Christine Watkins explains, "The oldest tales concerning the Gwent Levels are shaped by the sea and rivers, and involve magical animals. These include the Hen Wen, the old white mother-sow, the enchanted boar Twrch Trwyth, the wise old Salmon of Llyn Lliwan, the Star-browed Ox that Gwynllyw followed... and many more besides".

The Boar with the Apples on his Tusks

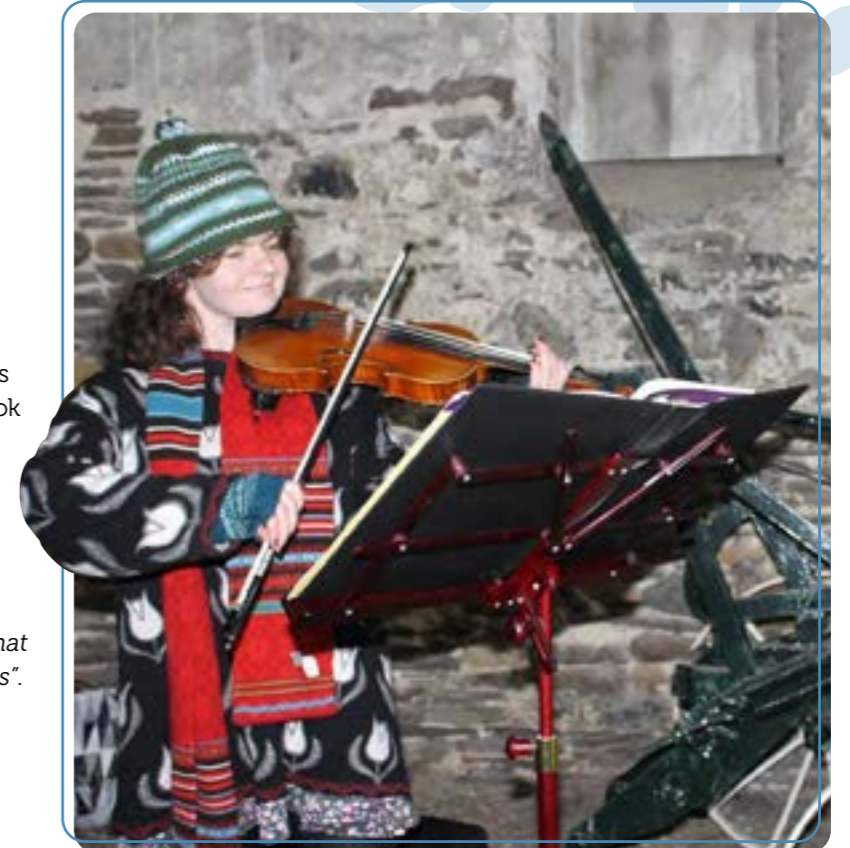
This book follows a family of prehistoric hunter-gathers, 7,500 years ago, as they return to their summer camp on Goldcliff Island and their subsequent adventures. It is written and illustrated by Dr Jennifer Foster and is available to buy from Newport Wetlands. A Welsh adaptation by Angharad P. Jones, *Y Twrch â'r Afal yn ei Geg*, is also available to buy online.



Folk music

Kat Batchelor is a Welsh-based folk fiddle player: "One aspect of Newport folk music I'm very interested in is dance tunes, especially folk dances, as they often moved with people and therefore include place names. One feature very common on the border is a dance with a Welsh place name which is danced to an English or Manx tune – you see how regionality is upheld whilst the tunes have travelled across borders or into the ports."

▼ Kat Batchelor performing at the Tredegar House St David's Day celebrations
© Gavin Jones/
Living Levels Partnership





Rhythm of tides & time

There are plenty of cultural opportunities to fit into any schedule. See our calendar on page 66 for more ideas.

- Half day or evening: look up the Tin Shed Theatre which uses every aspect of theatricality to explore the Gwent Levels.
- A great family day out can be had at one of the Levels two medieval castles, Caldicot and Chepstow.

There is great food to be enjoyed in the Levels from a number of pubs, cafes and visitor centres. At several pubs in the Levels, including the Farmer's Arms in Goldcliff and Waterloo Inn in Nash, you can sample the special range of local ales, based on unique Levels Lingo, that have been developed by local micro-brewery Anglo-Oregon Brewing company.

If you have a day to explore, Caerleon and Caerwent have a strong Roman past with heritage to see.

▲ Chepstow Castle © Crown copyright (2021) Cymru Wales



Hidden gems

Salmon Putchers

Putcher fishing is a traditional method for catching salmon, and other fish, that dates back to at least medieval times, and may be much older. From Goldcliff look for salmon putcher frames called ranks poking vertically up out of the water at low tide. Putchers, conical woven willow baskets with a narrow neck, would be stacked on the ranks at low tide, ready to catch the salmon swimming with the incoming tide.



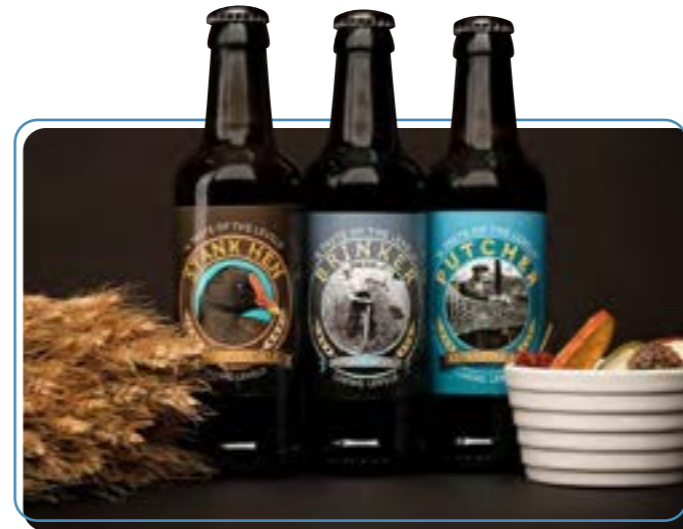
Tin Shed Theatre Company performing Big Skies beside East Usk Lighthouse © Derek Thow



Levels Lingo



The micro-brewery Anglo-Oregon Brewing Company is based on the Gwent Levels. They have produced a trio of ales, which are inspired by the historic 'Levels Lingo'. You can order bottles of 'Stank hen' (a bird called a moorhen), 'Brinker' (a landowner on the Levels) and 'Putcher' (narrow-headed basket once used for catching salmon). ●



Links

For more about the special wildlife that lives on the Gwent Levels see 'A landscape of wildlife' (page 38)

To explore the Gwent Levels and see some of the places and venues mentioned see 'A landscape to enjoy' (page 50) and 'A handcrafted landscape' (page 26)

Find out more about the history of the area in 'An historical landscape' (page 20)

Find your way

Using the car on the Gwent Levels

Access to many parts of the Gwent Levels are along smaller B roads with space for cars on either side of the road to pass; there are smaller single lane roads when travelling near Peterstone and Redwick. Car parking can be found at most venues where parking is free or there is a small charge. Check websites of venues before visiting.

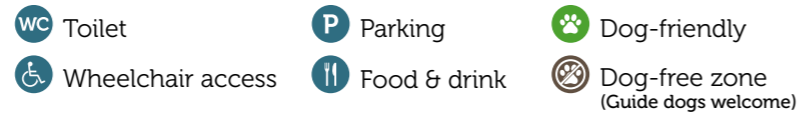


Actions

- Research the local produce of your area. What is produced, grown, crafted or created near your organisation? Make links with local places which could support you to promote your organisation, or you might be able to use local produce to support your organisation's work, e.g. in a shop or café.
- When promoting your organisation consider how you might use the unique language of the area to engage people. Communities, residents and visitors are often keen to experience or try something that is named after a local place or piece of history, or uses local language.
- Consider how you would use local artists to promote your organisation. Some local artists may be willing to provide your organisation with artwork or design in exchange for being able to promote their work.



Directory



Accommodation

See also Camping/caravanning

B&Bs:

The West Usk Lighthouse B&B

The Rose Inn, Redwick

For others, please check Trip Advisor.

Four star plus accommodation

St Pierre Mathern Marriott Hotel and Country Club, St Pierre Park, Chepstow.

Celtic Manor Resort, J24, M4.

For others, please check Trip Advisor.

Castles

Caldicot Castle, Church Rd, Caldicot NP26 4HU
visitmonmouthshire.com/caldicot-castle

Chepstow Castle, 1 Bridge St, Chepstow NP16 5EY
cadw.gov.wales/visit/places-to-visit/chepstow-castle

Churches

St Brides Church, St Brides, Magor, NP26 3JE

St. Mary's, St Mary's Rd, Nash Newport NP18 2BZ

St Mary's, Magor Square, Magor, NP26 3LY

St Mary's, Church Road, Undy, NP26 3HH

St Mary Magdalene's, Goldcliff, Newport, NP18 2AU

St Stephen & St Tathan, Pound Lane, Caerwent, Caldicot, NP26 5AY

St Michael & All Saints, Llanfihangel Rogiet, Caldicot, Monmouthshire NP26 3UR

Priory Church of St Mary, Upper Church St, Chepstow NP16 5HA

St. Tewdric's, Mathern, Chepstow NP16 6JA

St Mary's, Church Lane, Marshfield, CF3 2UF.

St Thomas's, Church Row, Redwick, Caldicot, NP26 3DE.

St Michael and All Saints Church, Llanfihangel Rogiet, Caldicot, NP26 3UR.

Arts Venues

Ffwrwm Arts and Crafts Centre, High St, Caerleon, Newport NP18 1AG

Wales Millennium Centre, Bute Place, Cardiff, CF10 5AL

Tramshed, music and arts venue, Clare Road, Cardiff, CF11 6QP

Le Pub/Le Public Space, bar/music/arts venue in Newport city centre, 14 High Street, Newport NP18 1AG

Barnabas Arts House in Pill, New Ruperra Street, Newport NP20 2BB

The Phyllis Maud Performance Space in Pill, Courtybella Terrace, Newport, NP20 2GW

The Riverfront Theatre, Kingsway, Newport, NP20 1HG

Dog-free zones

Magor Marsh

Newport Wetlands: main footpaths and play area across the reserve of Newport Wetlands (there is one permissive dog walking route on the perimeter of the reserve marked by pawprint signs).

Dog-friendly zones

While visiting locations across the Gwent Levels please follow the countryside code, which can be found online. Enjoy the Levels and keep your dogs and wildlife safe and happy by keeping dogs on leads and always clean up after your dogs (and take any bagged dog poo home with you). Be aware that the Gwent Levels is full of special wildlife and livestock that you might not be able to see.

Black Rock

Caldicot Castle Country Park

Hendre Lake

Newport Wetlands: There is one permissive dog walking route on the perimeter of the reserve marked by pawprint signs.

Parc Tredeleirch

Rogiet Countryside Park

Tredegar House gardens & park

Wales Coast Path and sea wall

Features on the landscape

East Usk Lighthouse (1893)

The lighthouse stands partly buried in pulverised fuel ash, just east of the mouth of the River Usk at Newport Wetlands, and is visible to ships approaching from the southwest. It has leading lights, and its role helps ships find the safest entry from the Severn Estuary into the deep-water channel through the mouth of the River Usk.

West Usk Lighthouse (1821)

The West Usk Lighthouse served as a real lighthouse warning ships right up until 1922 when it was decommissioned. It has since been renovated and is now a quirky B&B and wedding venue. West Usk Lighthouse B&B, Lighthouse Rd, St Brides, Newport NP10 8SF.

Llanwern Steelworks (1962)

The Llanwern Steelworks was built in 1962 across a large expanse of the Gwent Levels. When opened there were more than 13,000 workers and contractors on site. It was the first oxygen-blown integrated steelworks in Britain. Steel making ceased in 2001 and the site now rolls steel.

Severn Tunnel Pumping Station, Sudbrook (1886)

Still operating, and used to pump the water out of the Severn Railway Tunnel.

Lakes

Hendre Lake (managed by Cardiff City Council), Water Avens Close, St Mellons, Cardiff CF3 0RG. Limited parking, no toilets.

Parc Tredeleirch (managed by Cardiff City Council), Lamby Way, Rumney, Cardiff CF3 2HP. Limited parking, no toilets.

Leisure and hobbies

Anglo-Oregon Brewing Company.

Chepstow Racecourse, Chepstow. NP16 6BE.

The Preservation Society, 26 Victoria Road, Chepstow, NP16 5QW.

Wye Valley Producers Collection point – Bulwark Industrial Estate, Bulwark Rd, Bulwark, Chepstow NP16 5QZ

Wye Valley Meadery, Unit 5F, Castleway Industrial Estate, Caldicot, NP26 5PR.

Camping/caravanning:

Tredegar House Country Park Caravan and Motorhome Club Site, Tredegar House, Coedkernew, Duffryn, Newport NP10 8TW.

Tŷ Coch Farm, B4239 Saint Brides, Newport NP10 8SR.

Cardiff Caravan and Camping Park, Pontcanna Fields, Fields Park Rd, Cardiff CF11 9XR.

Fishing/angling:

Gwent Angling Society. There is private fishing at Hendre Lake, St Mellons (visit Hendre Fishing Lake Facebook page).

Peterstone Fishing Lakes, Walnut Tree Farm, Wentlooge, Newport, NP10 8SQ.

Cefn Mably Lakes, Cardiff CF3 6LP

Horse riding and trekking:

Severn Vale Equestrian Centre at Tidenham, Chepstow.

David Broome Event Centre at Crick, Chepstow.

Ponderosa Equestrian Centre (riding lessons), Llanwern Newport NP18 2DW

Springfield Riding Stables, St Brides

Golf courses and country clubs:

St Mellons Golf Club, CF3 2XS.

Newport Golf Club, Great Oaks Park, Rogerstone, NP10 9FX.

Cardiff Golf Club, Sherborne Ave, Cyncoed, Cardiff CF23 6SJ.

Peterstone Lakes Golf Club, Broad Street Common, Cardiff, CF3 2TN

St Pierre Marriott Hotel & Country Club Golf, St Pierre Park, Chepstow, NP16 6YA.

Celtic Manor Resort, Coldra Woods, The Usk Valley, Newport NP18 1HQ.

Llanwern Golf Club, Church Lane, Llanwern, NP18 2DW.

Parc Golf Club, Church Lane, Newport, NP10 8TU.

Sailing clubs:

Newport and Uskmouth Sailing Club, W Nash Rd, Newport NP18 2BZ.

Cardiff Sailing Centre, Queen Alexandra House, Cargo Rd, Cardiff CF10 4LY.

Walking/cycling tours:

Celtic Walking Trails celtictrailswalkingholidays.co.uk/walking-holidays/south-wales-coast-severn-estuary

Dylan's Tours. Dylan Jones, dylanstours.cymru

Museums

Chepstow Museum, Gwy House, Bridge St, Chepstow NP16 5EZ
monlife.co.uk/heritage/chepstow-museum

Museum of Cardiff (Cardiff Story Museum), The Old Library, The Hayes, St Davids Centre, Cardiff, CF10 1BH
cardiffmuseum.com


National Museum Cardiff, Cathays Park, Cardiff, CF10 3NP
museum.wales/cardiff

National Roman Legion Museum, High Street, Caerleon, Newport, NP18 1AE
museum.wales/roman



Newport Museum and Art Gallery, Central Library, 4 John Frost Square, Kingsway Centre, Newport NP20 1PA    
newport.gov.uk/heritage/en/Museum-Art-Gallery

St Fagans National Museum of History, Cardiff, CF5 6XB    
museum.wales/stfagans

Sudbrook Interpretation Centre, Sudbrook Non-Political Club, Camp Road, Sudbrook, Caldicot, NP26 5TE 
bit.ly/3yJfygg

Tredegar House and Parkland (house managed by the National Trust), Pencarn Way, Newport NP10 8YW    
nationaltrust.org.uk/tredegar-house

Nature Reserves

Don't forget to use the **LERC Wales app** to record any wildlife you see.




Magor Marsh (managed by Gwent Wildlife Trust), Whitewall Road, Magor NP26 3DD. Toilets available when the learning centre is open, e.g. for public events and school groups; donation appreciated.    
gwentwildlife.org/nature-reserves/magor-marsh


Newport Wetlands (managed by Natural Resources Wales; visitor centre managed by the RSPB), West Nash Road, Nash, Newport NP18 2BZ. Toilets, mobility scooters available, wheelchair friendly path, chargeable parking.    
rspb.org.uk/reserves-and-events/reserves-a-z/newport-wetlands

Goldcliff Lagoons, Goldcliff Road, Newport. With bird hides (ramps to hides) – no toilets and limited parking. 
livinglevels.org.uk/stories/2019/5/3/goldcliff-lagoons





Great Traston Meadows. There is space for two cars in the small car park directly off Nash Road. A circular walk is signposted around Great Traston Meadows – this takes around 30 minutes to complete. The Wales Coastal Path passes through the reserve. 
gwentwildlife.org/nature-reserves/great-traston-meadows-sssi




Rogiet Poorland. Limited parking for 1-2 cars at reserve entrance. 
gwentwildlife.org/nature-reserves/rogiet-poorland




Lower Minnetts Field. Parking at Slade Wood. 
gwentwildlife.org/nature-reserves/lower-minnetts-field

Brockwells Meadows. Parking for two cars opposite entrance. 
gwentwildlife.org/nature-reserves/brockwells-meadows-sssi

Parks

Caldicot Country Park at Caldicot Castle, Church Rd, Caldicot NP26 4HU. Here a cliff edge marks the old edge of the coastal inlet on which the castle was built (and extended to Caerwent). Found at OS grid reference ST489883; what3words: nightlife.crass.youths    



Parc Tredelerch (managed by Cardiff City Council), Lamby Way, Rumney, Cardiff CF3 2HP. Limited parking and no toilets.   

Rogiet Countryside Park (managed by MonLife on behalf of Monmouthshire County Council), Rogiet, NP26 3TZ. Limited parking and no toilets.   



Rumney Hill Gardens, Rumney Hill, Cardiff, CF3 4BA  

Slade Woods
woodlandtrust.org.uk/visiting-woods/woods/thicket-and-slade-woods




Walnut Tree Farm Park & Education Centre, St Brides, Newport, NP10 8SQ    
walnuttreefarm.uk

Warren Slade Wood. Managed by MonLife for Monmouthshire County Council.  
bit.ly/36v8Tuh

Places of Interest

Black Rock Picnic Site, Black Rock Road, Portskewett, NP26 5TP   

Black Rock Heritage Lave Net Fishery. (see Facebook page)

Caerwent Roman Town, Caerwent, Caldicot, NP26 5BA    
cadw.gov.wales/visit/places-to-visit/caerwent-roman-town

Dewstow Gardens, Caerwent, Caldicot, NP26 5AH    
dewstowgardens.co.uk

Fourteen Locks Canal Centre, Cwm Lane, Rogerstone, Newport, NP10 9GN   

Newport Transporter Bridge, Brunel Street, Newport, NP20 2JY.
newport.gov.uk/heritage/en/Transporter-Bridge

The Newport Ship, 20 Queensway Meadows Industrial Estate, Estuary Rd, Newport, NP19 4SP    
newportship.org

Sculptures

 and  at all sites

Black Rock, **The Engineer & The Fisherman**.

Goldcliff, the **Goldcliff Roman stone**.
Lighthouse Inn, St Brides, **The Centurion**.

Magor Marsh, **The Brinker** (a person who owns land on one side of a reen, wall or pill and is responsible for its maintenance).

Newport Wetlands, a **bronze relief** (cross-section of the Gwent Levels landscape).

Parc Tredelerch, **The Mesolithic Spear Fisher** (in the lake).

Tredegar House, **The Estate Worker**.

Tourist Information Points

Chepstow: Castle Car Park, Bridge Street, NP16 5EY

Newport: Library, Museum and Art Gallery Reception, John Frost Square, NP20 1PA

Cardiff: The Old Library, The Hayes, Cardiff, CF10 1NE

Caerleon: Post Office, 5 High Street, Caerleon, NP18 1AE and Caerleon Library, Town Hall, NP18 1AE

Transport Links

Trains stop at Chepstow, Caldicot, Newport and Severn Tunnel Junction as well as Rogerstone, Cardiff Central, Queen Street, Grangetown, Ninian Park and Cathays.

Flecsi buses can be booked in advance with Newport Bus to venues such as Newport Wetlands and the pickup location pre-arranged with driver.

Volunteering opportunities and local groups

There is a range of volunteering opportunities available across the Gwent Levels including wildlife survey and recording, archive research and transcribing historical documents, bell ringing, leading wildlife activities for children, active conservation work and much more. Below are some of the organisations that may offer opportunities:

Bumblebee Conservation Trust
bumblebeeconservation.org

Chepstow Archaeology Society
chepstow.org.uk

Friends of the Gwent Levels
gwentlevels.org.uk

Glamorgan Archives
glamarchives.gov.uk

Gwent Archives
gwentarchives.gov.uk

Gwent Association of Voluntary Action: register and get access to volunteering opportunities across Gwent including Newport and Monmouthshire
gavo.org.uk/volunteering

Gwent Wildlife Trust: Gwent Levellers volunteer group mostly based at Magor Marsh and other opportunities.
gwentwildlife.org

Keep Wales Tidy: local groups doing litter picking and clearing up areas.
keepwalestidy.cymru

Llandaff & Monmouth Bellringers Association
llanmon.org.uk

Natural Resources Wales: volunteer opportunities, e.g. at Newport Wetlands.
naturalresources.wales

Newport County Council/ Monmouthshire County Council: rights of way volunteers, conservation volunteers, venue volunteers (e.g. Caldicot Castle) and other opportunities.
monmouthshire.gov.uk

Newport Wetlands RSPB reserve volunteers
rspb.org.uk/newportwetlands

Newport Wetlands RSPB Wildlife Explorers (for children 8 – 12)

Three Parish History Group, Nash

Tredegar House
nationaltrust.org.uk/tredegar-house

Walking routes

Look up Living Levels Loops and Links for downloadable leaflets:

Caldicot to Black Rock (8km): this circular route takes you from the magnificent Caldicot Castle down to the coast, along the Wales Coast Path to the Iron Age fort at Sudbrook, and on to Black Rock picnic site for spectacular views over the Severn Estuary.

Rogiet and the Railways (7km): look for clues from this area's industrial past as you wander around the country park.

Bishton Circular (5km): this circular route takes you from St Cadwaladr's to St Mary's church at Llanwern, over Llanwern Hill for some spectacular views, and back to Bishton.

Newport Wetlands to Goldcliff (12km): an exhilarating walk from the visitor centre at Newport Wetlands, via the East Usk Lighthouse and the Wales Coast Path, to the Medieval churches of St Mary's at Goldcliff.

Redwick to Porton (5km): a pleasant mix of rural and coastal footpaths takes you from the impressive Church of St Thomas at Redwick to Porton.

Castleton and Marshfield circular walk (7km): rural paths lead from roadside parking in Castleton across fields to spectacular views over the Levels and Severn Estuary.

The Lighthouse Inn to West Usk Lighthouse (3km): a brisk walk along the sea wall footpath.

Magor and Undy Moors (5km): this historic circular walk takes in historic sites from the area's monastic past.

The Newport Marathon route also runs through parts of the Gwent Levels.



Calendar



JANUARY

During the winter months experience thousands of starlings flocking together in a mesmerising display called a murmuration, as they come together to roost (sleep) in the reedbeds at dusk at Newport Wetlands. Guided visits can be booked with RSPB from the visitor centre.



FEBRUARY

During the colder months, it is a great time to take in a museum – the Roman Legion Museum in Caerleon or Newport Museum are good for a half day visit, or St Fagans National Museum of History for a full day. Newport Museum has a display dedicated to the prehistoric archaeology of the Gwent Levels.

Look for nesting grey herons and little egrets at Magor Marsh.



MARCH

Around Tredegar House, Hendre Lake and Parc Tredelerch listen out for the melodic robins, blackbirds, and wrens during the day, as they sing to defend their mates and nests. Warm sunshine brings out the orange-tip, green-veined white and brimstone butterflies, and the hairy dragonfly.

Enjoy St David's Day Festival at Tredegar House.

APRIL

A visit to one of the Levels two medieval castles, Caldicot or Chepstow is a great family day out.

Spot the first swallows arriving from Africa. They love the Gwent Levels, feeding on the insects attracted to places the cows graze, and nesting in farmyard barns and horse stables.

As spring sunshine returns, a network of routes takes you through some of the picturesque parts of the Gwent Levels; the Levels Loops and Links walks are a mixture of different length walks to enjoy.

At Goldcliff Lagoons, part of Newport Wetlands National Nature Reserve, nationally declining wading birds such as lapwings, redshanks and avocets will be busy hatching chicks on damp meadows and islands, protected by predator-proof fencing.

MAY

Catch a glimpse of apple blossom in Chepstow, Undy, Duffryn or Tredegar House orchards. Look for the orchids in bloom across wildflower meadows.

If you have a day to explore, try a coastal heritage walk along the Wales Coast Path, perhaps using the Newport Bus Fflecsi service to be dropped off and then picked up at the other end.

Sign up to the annual Tredegar House Folk Festival.

May is a great time to spot baby waterbirds; ducklings, goslings, and cygnets (baby swans) in family groups at Magor Marsh, Newport Wetlands, Hendre Lake, Parc Tredelerch and Tredegar House.



JUNE

The oak avenue at Tredegar House will be in leaf, providing a foliage full of invertebrates for birds, bats, and parasitic insects to feast upon.

Visit wildflower meadows at Rogiet Park; over the next few months they will be looking their best.

June is great for marsh plants at Magor Marsh including ragged robin, lesser spearwort, and yellow flag iris. Visit Great Traston Meadows, for its spectacular display of over 5,000 Southern marsh orchids in June and July.



JULY

Pop down to Magor Marsh reserve to enjoy an annual family festival, Life on Marsh.

Look out for the summer high water table with water penned in to irrigate the land.

Adult dragonflies emerge from the water and fly around hawking for insects to eat.



AUGUST

Visit a summer fete or festival in the villages and towns across the Gwent Levels.

Lots of family activities are on offer during the summer holidays at Tredegar House and gardens.

Look for birds such as curlews, dunlin, redshanks and shelducks feeding on the estuary mud off the sea walls at Goldcliff, Newport Wetlands and Peterstone Gout from late summer through to early spring.

SEPTEMBER

Go wassailing – this involves blessing apple trees and asking for a good harvest for the following year through drinking and singing.

Visit orchards to see plump perries (pears) and apples such as a newly planted orchard at Duffryn woodland, a community orchard at Undy which is open to the public and Chepstow's orchard and wildlife trail. Look out for local cider to sample.

Spot one of Britain's rarest bumblebees, the later emerging shrill carder bee. Look for it at Newport Wetlands and Great Traston Meadows.



OCTOBER

Visit the Newport Ship, the world's only remaining 15th Century ship.

'Chepstow Walkers are Welcome' walking festival – sign up for a guided walk and enjoy autumnal colours along one of the many circular walks around the Levels.

Butterflies such as the red admiral can be seen on sunny afternoons, feeding on late-flowering plants or ripe fruits, sometimes getting 'drunk' on the fermenting fruits!

Berry-laden bushes at Black Rock, Parc Tredelerch and Rogiet Park are good places to look for newly arrived redwings from Scandinavia, and blackcaps preparing to migrate south to the Mediterranean.

NOVEMBER

Try a guided walk on a nature reserve or a skills course such as willow weaving or identifying and recording wildlife.

Balls of mistletoe with white, sticky berries grow up high on tree branches at Magor Marsh and attract the mistle thrush.

Museums conserve historical artefacts including many found on the Gwent Levels. Chepstow Museum and the National Museum of Wales, Cardiff are great places to visit during the wetter, winter months.



DECEMBER

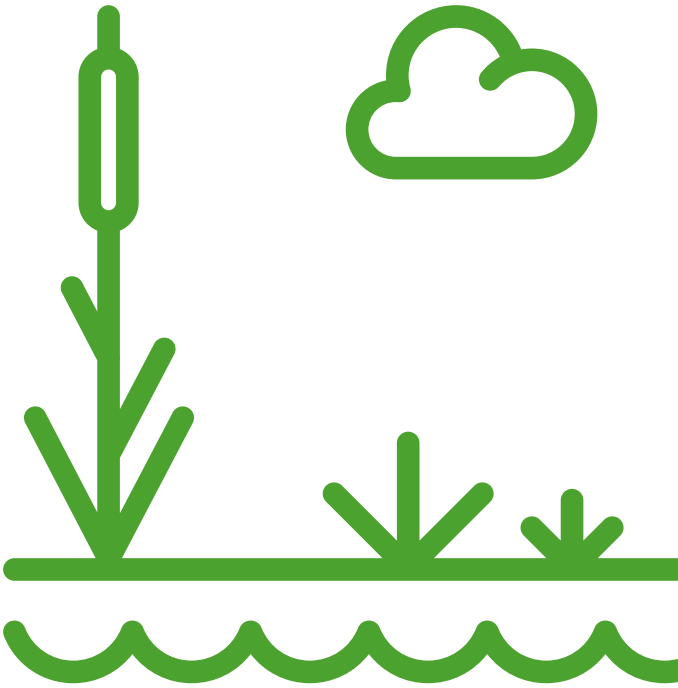
Look out for mallard and tufted ducks on Hendre Lake and Parc Tredelerch amongst the black-headed gulls. If you are quick, you might spot a kingfisher flash past, or a grey heron quietly fishing by itself.

Listen for the 'pinging' calls of the bearded tits at Newport Wetlands; these secretive colourful birds are best found by their calls on calm, bright days. On bright, sunny days robins will be singing, both male and female, to defend small feeding areas.

Look up the Tin Shed Theatre which uses every aspect of theatricality to explore the Gwent Levels.



Lefelau Byw Living Levels



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livinglevels.org.uk

