

THE ISLE OF WIGHT

ASPIRING GEOPARK



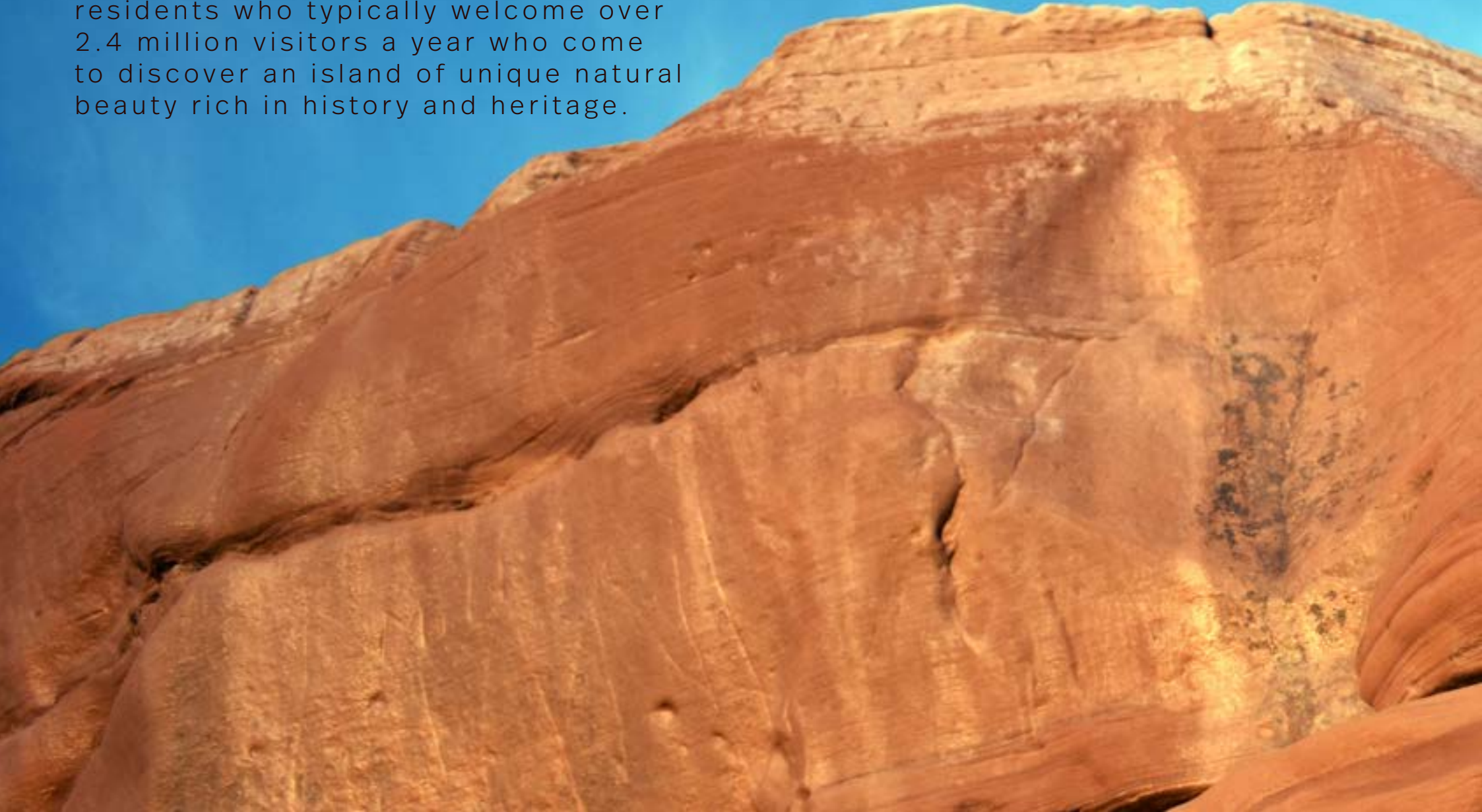




THE ISLE OF WIGHT

Aspiring Geopark

Welcome to the Isle of Wight Aspiring Geopark, including the richest dinosaur location in Europe. The Isle of Wight reveals 130 million years of earth history. It is home to approximately 130,000 residents who typically welcome over 2.4 million visitors a year who come to discover an island of unique natural beauty rich in history and heritage.







The Isle of Wight is located off the coast of southern England facing the coast of Hampshire, separated by the Solent. Facing the New Forest National Park in the west and the city of Portsmouth in the east, the home of the Royal Navy.




The panorama from the Island ranges from the Jurassic Coast World Heritage Site of Dorset in the west to the South Downs National Park in the east. The Island's main chalk ridge, the Downs, provides a link to Dorset in the west, across England to North Yorkshire, through southern England to France.







A photograph of a sea cave interior. The scene is dimly lit, with a strong light source from the left creating a dramatic silhouette effect. Large, rounded rock formations are visible, with some surfaces catching the light and showing textures. The overall atmosphere is mysterious and ancient.

The Island is a microcosm of the later Mesozoic and Cenozoic strata that are found across south-eastern England. The succession is laid bare in spectacular sea cliffs, stretching for a total of 98 km that provide essential viewing for both the amateur and professional geologists.

The Island has long been regarded as one of the most significant of the classic areas of British geology. Studied since the beginning of the 19th century, it remains an active area of study as we gain an ever-greater understanding of deep time.







Humans have occupied the Solent area since the Lower Palaeolithic. Long after the dinosaurs this landscape was shared by mammoth, bison, deer, and wolf.





Over 35 different types of dinosaur have been found in the Wealden rocks of the Island. This number continues to grow as old bones are reassessed. Dinosaur Isle Museum in Sandown is now recognised as the most important repository for dinosaur remains in the United Kingdom, outside of the national collection held at the Natural History Museum in London.



The Isle of Wight Aspiring Geopark comprises the entire coastline of the Island, embracing sandy beaches, estuaries, and spectacular sea cliffs. It includes the Isle of Wight AONB, SSSI's and marine conservation zones.





Timeline

2004 Local Geodiversity Action Plan (LGAP)

2010 Revised LGAP

2019 Biosphere status for the Isle of Wight and surrounding waters

2021 (-2025) Isle of Wight Council Corporate Plan:

2023 Isle of Wight Cultural strategy

2023 Aspiring Geopark

ISLE OF WIGHT ASPIRING GEOPARK

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The Geological history of the Isle of Wight



Cretaceous

THE WEALDEN

The oldest rocks on the Island are called the Wessex Formation. Along with the Vectis Formation, they are known as the Wealden Group. They yield a diverse fossil fauna and flora including freshwater mussels, fish, pterosaurs, and dinosaurs. The Island is recognised as the richest source of dinosaurs in Europe, and one of the top ten dinosaur localities in the world.

The Wessex Formation at Yaverland. The red, colour mottled mudstones were formed when ancient rivers flooded, and soils formed. The grey, plant-debris beds are the source of most of the bones found.





The dinosaur footprint casts at Hanover Point are visited by thousands of visitors every year.

THE GREENSAND SEA

During the late Barremian through to the early Aptian 130-113mya, global warming led to sea level rise across much of northern Europe. Nowhere shows this better than the classic geological section on the west coast of the Island and at Yaverland on the east coast. You can follow the rocks from the terrestrial Wealden Group through the shallow seas of the Lower Greensand to the deep seas of the Chalk.

Atherfield is a world-famous site for fossils from the Lower Greensand, these include a wide range of bivalves and diverse heteromorph ammonites.

At Compton bay the 19th century geologists Henry Fitton and Charles Lyell worked out that the dinosaur bones found in Sussex were older than the Chalk, and therefore were of great antiquity.



Heteromorphic ammonites are ammonites whose shells grew away from the classic planispiral shape.



At Yaverland in just under a mile you can walk through space and time.





THE CHALK

The Late Cretaceous Chalk is one of the most landscape defining rock types of northern Europe. Built out of countless billions of microfossils, it contains layers of flints which can be mapped from England across the channel to France. On the Island it comprises the main east-west backbone of the Island. It forms towering sea cliffs in the east at Culver Cliff and the west between Compton Bay and Alum Bay. Sadly, for the most part only accessible by boat. These are however, the most complete Chalk sequences in the UK.

The Chalk at Whitecliff and Alum bay's is amongst the youngest in southern England. The Chalk is rich in fossils including belemnites and sea urchins. At Culver Cliff the Chalk links the Island to the South Downs and beyond.

The high cliffs below Tennyson down, expose a continuous outcrop of the White Chalk Group. Some of the small patches of vegetation are home to unique species of moth.

The iconic Needles marks the point where the Chalk disappears below the waves of the English Channel but tying the Island to the World Heritage Jurassic Coast of Dorset.

At the end of the Cretaceous much of southern England was uplifted, possibly as part of the formation of the Alps, or due to the heating of the Earth's crust by the North Atlantic plume. The top of the Chalk is eroded, but the overlying Paleogene rocks are parallel with the Chalk.

The Palaeogene

The Palaeogene on the Island is represented by Palaeocene, Eocene, and Oligocene. This is unique in the British Isles, and like the Cretaceous it is the only place you can follow the succession of rocks.

Throughout the Paleogene the area which is now the Isle of Wight fluctuated from land, shallow lagoons and estuaries to shallow seas. This was controlled by global sea level changes as the world warmed during the Palaeocene and Eocene, then cooled towards the end of the Eocene, and progressively so during the Oligocene. Overprinted on this pattern is the affect of local tectonics, with what is now the south of the Island uplifted, as the north side became a basin into which the Paleogene sediments were deposited.



The Palaeocene, Early and Middle Eocene sediments are seen at Whitecliff Bay and the iconic Alum Bay. Having been turned vertical the Reading Beds, Thames (London Clay), Bracklesham, Bournemouth, and Barton groups are quite narrow outcrops compared to their type localities on the mainland. However, their stratigraphic relationships and therefore the sequence of deposition of these respective groups can be seen on the Island. Many such as the Barton Group are rich in fossils, and the Leaf Bed (Bournemouth Group) are internationally recognised.



The Coloured sands at Alum Bay, are on every tourist must see list for the Island. They have been a focus for many years for humble 'have a go' to spectacular works of sand art.



Fossil shell from the Barton Clay at Alum Bay



Layer of flint pebbles at Whitecliff Bay record the erosion of the Late Cretaceous Chalk and ancient pebbly beaches during the Eocene.

LOBSTERS AND CRABS

The Late Eocene to Early Oligocene Solent Group forms the northern coast of the Island. With some limited marine horizons, it is essentially freshwater in origin, formed when the Solent was a low-lying coastal basin. Often compared to the Florida Everglades, the rocks contain a unique record of life from tiny insects to the remains of large mammals. The sequence includes the Grande-Coupure the change from archaic mammals and plants to modern forms.





Selection of Insect Limestone specimens



Jaw of *Palaeotherium*



Lymnaea (Galba) longiscata

The youngest part of the sequence is called the Cranmore Member and is found high in the cliffs near Hamstead, it comprises a series of shell beds, with distinctive fossils which allow us to correlate across Europe.



Rafetoides henrici

The Quaternary

The Solent, along with the Thames valley was one of habitats of our early ancestors. Layers of gravel terraces are found on both the Island and the adjacent mainland that record different river and sea levels. A few locations such as Newtown on the Island's north-west coast record a diverse mammal fauna dominated by bison and elephant.

Gravels capping the cliffs on the south-west coast occasionally yield the teeth of ancient elephants such as mammoth. They also are the source of Noah's nuts, ancient hazel nuts, which are the subject of one of the earliest records of fossils from the Island. Raised beach at Bembridge, dating to the Ipswichian 125, 0000 years ago.

Beautiful handaxes from Priory Bay on the Island's north-east corner. The sediments they come from have been correlated with deposits near Chichester on the South Downs. Its intriguing to think that the people living at the two locations would have been able to see the distant light of each other's campfires, across what is now the Solent and English Channel.



Hand axe

The Dinosaur heritage of the Isle of Wight

The Isle of Wight played an important role in the formative years of geology and palaeontology, providing much of the backdrop that inspired Charles Lyell to develop his 'Principles of Geology', as well as the fossil reptilian bones, that enthused early dinosaur workers such as Mantell, Buckland, Huxley and Owen. These included an iguanodontian sacrum that proved to be the crucial element that allowed Owen to invent the Dinosauria clade in 1842. Even Charles Darwin found the Island the perfect environment to begin writing his 'On the Origin of Species'.



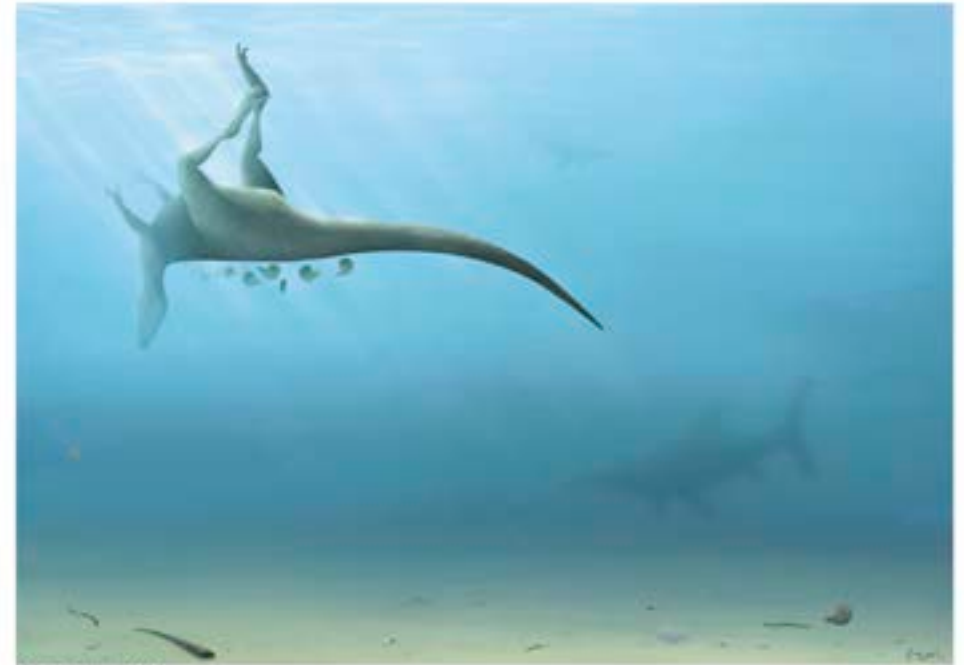
Today the Isle of Wight continues to play a key role in geology and palaeontology, one which has seen an exponential increase in the last decade and attracted international attention. The Island has a wealth of fossils ranging from the Early Cretaceous to the Recent, including mammals, fish, insects, molluscs and marine reptiles, but it has always been most famous for its dinosaurs.



Recent years have seen a marked rise in the interest of dinosaur finds from the Island. Some of this can be attributed to the revival of Dinomania following the release of films like Jurassic Park, but more importantly are the rapid technical advances being made in dinosaur research through CT scanning, histology, easier access to global data and the progress of cladistics. The Isle of Wight represents an Early Cretaceous terrestrial ecosystem, stretching some five million years from the Hauterivian-Barremian boundary to the Aptian marine transgression. Its dinosaur fauna are unique and represent a time that lacks a globally rich fossil record. The constant erosion of over five miles of cliffs facing the Atlantic makes the Isle of Wight the most prolific source of dinosaur material in Europe, and the collection is now considered second only to the Natural History Museum in London for its rarity, size and scope. The Island has been the source of many dinosaurs new to science, but the collection now holds the holotypes of ten dinosaurs. For many years these have included three theropods, *Neovenator salerii*, *Eotyrannus lengi*, and *Yaverlandia bitholus*. When *Neovenator* was found in the 1970's it represented the most complete large meat-eating dinosaur found in Britain.



However, in the last three years there have been six further additions: *Brighstoneus simmondsi*, a new iguanodontian; *Ceratosuchops inferodios* and *Riparovenator milnerae*, two fish-eating dinosaurs; The White Rock spinosaurid, probably Europe's biggest meat-eating dinosaur; *Vectaerovenator inopinatus* a theropod found in marine deposits and *Vectiraptor greeni* a small, probably feathered dinosaur. There are two others, both close



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Vectaerovenator Adrift

to publication, and a raft of material that awaits preparation and investigation. We're on a roll, and these discoveries are changing the way we think about diversity, evolution and dispersion of dinosaurs in the Early Cretaceous of Europe.

The collection also has enormous potential for public benefit, enhanced by the current interest in dinosaurs, and as a Geopark we would aspire to develop the museum and the collection to reach out to schools to promote the natural sciences, and to provide material and ideas to encourage the ever-growing numbers of university students and researchers who see the Island as a source of inspiration for their studies and projects. We want to tell the story of the Island's role in the development of geology and palaeontology over the last two centuries, while seeking to protect our heritage and coastline by raising awareness, to ensure future discoveries continue to be made accessible to future generations.



Geomorphology and mass movement

The Isle of Wight is 37 kilometres in length from the Needles in the west to Bembridge in the east, and 21 kilometres from north to south. The coastline, including estuaries, is approximately 168km long. The northern coast of the Isle of Wight is generally characterised by relatively low-lying coastal slopes, with five estuaries and rivers draining north into the Solent channel. By contrast the southern coast is characterised by steep coastal cliffs and landslides, and is exposed to the full force of storm waves from the English Channel and the Atlantic ocean.

The structure of the Island is dominated by a strong east-west monocline forming a prominent Chalk ridge which runs east-west through the centre of the Island, and exposed at either end to form the iconic Chalk cliff headlands at The Needles in the west and Culver Cliff in the east. Chalk also caps a range of hills in the south of the Island, known as The Downs, which are up to 241 metres high, but typically the sedimentary rocks forming the Isle of Wight are relatively weak and are vulnerable to progressive erosion. Another prominent feature of the Isle of Wight is The Undercliff, which is a coastal landslide complex along the southern shore extending for approximately 12km from Luccombe in the east to Blackgang in the west. It also extends approximately 500m inland and nearly 2km seawards. The town of Ventnor and surrounding villages are built on the south-facing terraces of the landslide complex. The Ventnor Undercliff is the largest coastal landslide complex in the United Kingdom and the largest urban landslide complex in north-western Europe. Approximately 7,000 people live on the landslide.



The landslide is deep-seated and generally slow moving, which allowed the historical development of parts of the area, particularly since the mid-19th century.

However, the impact of coastal landsliding and the long-term effect of ground movement on the urban environment is considerable, and the risks of landslide reactivation are increasing due to climate change.

The physical form of the Ventnor Undercliff landslide complex is the result of erosion by the sea at the toe of the landslide, which acts on the gently dipping stratigraphy (approx. 2 degrees to the south), comprising of Upper Greensand and Lower Chalk sequences overlying relatively impermeable Gault Clay and clay layers within the Sandrock (Lower Greensand). The landslide complex formed due to notable sea level rise at the end of the last Ice Age. The relic landslides form interlocking units which can be relatively mutually supporting, therefore where movement is triggered it can destabilise neighbouring areas and eventually result in a much wider re-activation. Landslide features to be found within the Undercliff complex include multiple-rotational slides, compound slides, a graben-like feature which occurs just landward of the zone of multi-rotational sliding, a Gault Clay scarp up to 20m high, mudslides developed along the coast, and rockfalls along the rear scarp of the landslide complex and affecting scarp slopes. The western and eastern limits of the landslide complex at Blackgang and Bonchurch are historically the most active areas and there the exposed landslide phenomena can be clearly seen within the coastal slopes. The landslide complex is sensitive to groundwater levels and winter rainfall.



There are also coastal landslide phenomena around the Cowes-Gurnard headland in the north of the Isle of Wight, and recent activity visible at locations like Totland Bay in the west.

These interests contribute to the exceptional variety and landscape value of the coastline and the Island. The Isle of Wight coast conjures images of sand and shingle beaches, extensive colourful cliffs, sandy spits, high Chalk cliffs, sheltered harbours, and the imposing presence of the Needles stacks. The varied geology and geomorphology provides for a very rich natural environment with a diversity of habitats, and the coastline and much of the inland landscape is protected by national and international environmental designations. The geomorphology and coastal landscapes provide a valuable asset both to local residents and support the tourism economy. The majority of towns and villages on the island are located along the coastline and estuaries. The evolving coastline with its continually-refreshing geological exposures also exposes numerous communities to risk through the hazards of coastal erosion, cliff retreat, flooding and landslide reactivation.

The Isle of Wight encompasses a diversity of geology and geomorphology, with widespread exposures along extensive stretches of coastal cliffs revealing millions of years of environmental change. The geology is of great significance on account of the completeness of a variety of time periods, the diversity of landscape phenomena present, and the accessibility, that make a special contribution to the understanding and appreciation of earth science and geological history of the region and of Britain and beyond.



Definitions and Delivery

WHAT IS A GEOPARK?

Quoting directly from the UNESCO Global Geoparks (UGGp) website:

UNESCO Global Geoparks are single, unified geographical areas where sites and landscapes of international geological significance are managed with a holistic concept of protection, education and sustainable development. A UNESCO Global Geopark uses its geological heritage, in connection with all other aspects of the area's natural and cultural heritage, to enhance awareness and understanding of key issues facing society, such as using our earth's resources sustainably, mitigating the effects of climate change and reducing natural hazard-related risks. By raising awareness of the importance of the area's geological heritage in history and society today, UNESCO Global Geoparks give local people a sense of pride in their region and strengthen their identification with the area. The creation of innovative local enterprises, new jobs and high-quality training courses is stimulated as new sources of revenue are generated through geotourism, while the geological resources of the area are protected.

UNESCO Global Geoparks empower local communities and give them the opportunity to develop cohesive partnerships with the common goal of promoting the area's significant geological processes, features, periods of time, historical themes linked to geology, or outstanding geological beauty. UNESCO Global Geoparks are established through a bottom-up process involving all relevant local and regional stakeholders and authorities in the area (e.g., landowners, community groups, tourism providers, indigenous people, and local organizations). This process requires firm commitment by the local communities, a strong local multiple partnership with long-term public and political support, and the development of a comprehensive strategy that will meet all of the communities' goals while showcasing and protecting the area's geological heritage.



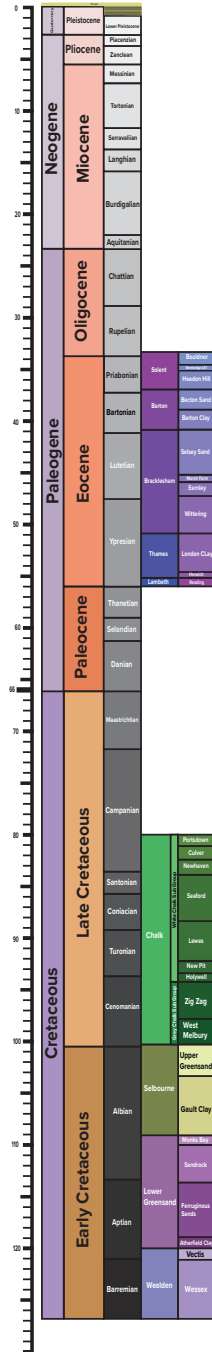
WHAT IS GEODIVERSITY?

Translated to our Island we will define geodiversity as being the rocks and soils that underlay and form our landscape, the minerals, and fossils the rocks contain or formed from. The cliffs and the processes of erosion and mass movement that formed them. The shifting sands and pebbles of our rivers and beaches. But also, the stories the geology record, and how we tell those stories and people that have told them.

THE ISLE OF WIGHT UNESCO BIOSPHERE RESERVE

This award was made by the United Nations Man and Biosphere Co-ordinating Council in June 2019. This status celebrates that the Island can demonstrate to the highest level that there is a balanced relationship between people and nature, and that nature can continue to thrive here. The Island was the 6th region of the UK to be awarded this recognition. It is Point six of the Geopark Action Plan to link our aspirations with those of the Biosphere, this we will achieve by sharing the same outlook and goals to conserve and celebrate all that nature has given us.





GEOCONSERVATION ON THE ISLE OF WIGHT: THE CURRENT SITUATION AND THE CHALLENGE

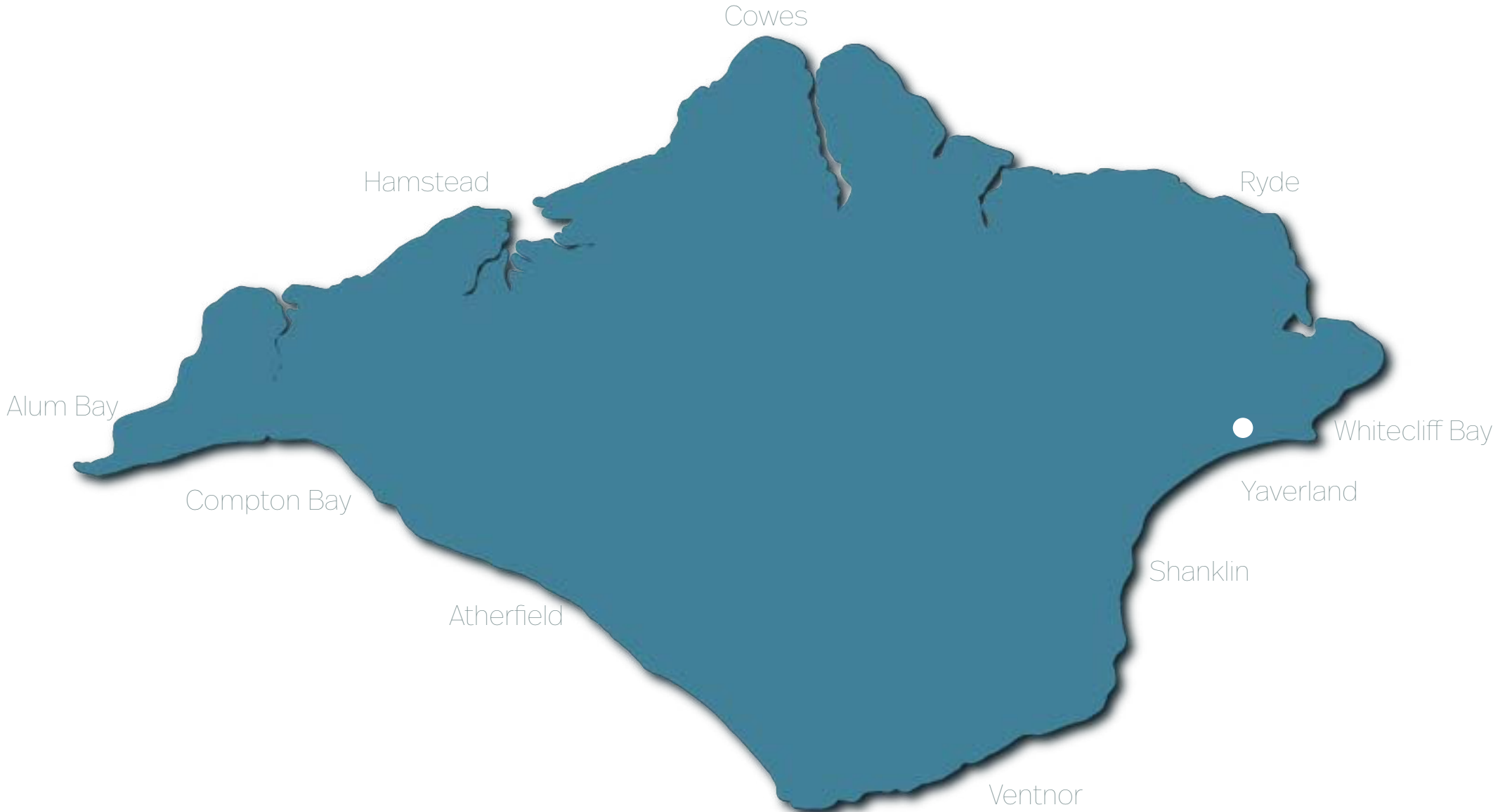
Site of Special Scientific Interest status for much of the Island’s coast provides the essential legal framework to give protection and question the need for developments such as sea defences. Natural retreat of the coastline keeps the sites clean and in good condition.

We believe that the Island presents an exciting new dimension to the Geoparks Network as a rapidly eroding soft cliff location. These cliffs are rich in fossils which if not collected would be destroyed, lost for ever. Fossil collecting happens daily on most sites, with the Dinosaur Isle Museum team working to ensure that the most important finds remain here on the Island and become part of the local collection.

The Isle of Wight Geopark would strive to achieve its action point 12, to implement a code of conduct for fossil collecting. We hope to bring to the Geopark Network a practical solution to the need to preserve a rich palaeontological heritage at risk from nature itself.

WHAT WOULD THE ISLE OF WIGHT GEOPARK LOOK LIKE?

To comply with the need to be a unified geographical area, the Isle of Wight Geopark would comprise the Island’s coast, cliffs, estuaries, beaches, and foreshores. This includes’ s many existing SSSI, AONB and marine conservation zone sites. This would bring into the geopark major palaeontological sites such as Compton Bay, along with geomorphological phenomena such as mass movement and the chines. Furthermore, the inclusion of popular tourist beaches such as Sandown and Ryde, would enable people using those beaches to engage with our heritage. The visitors to tourist attractions such as the coloured sands at Alum Bay, or the theme park at Blackgang Chine would be encouraged to understand that it was the geology that drew them to those places.



● - Dinosaur Isle Museum

Action Plan – Bringing The Isle of Wight Geopark to life

Action 1

REVIEW LGAP DOCUMENT

- Update, and make it a dynamic document to reflect changes in nomenclature and interpretation
- Create a new high resolution image database hosted by Dinosaur Isle Museum



Action 2

CONTINUE AND GROW OUR PARTNERSHIPS WITH UNIVERSITIES, MUSEUMS, AND GEOPARKS

- Revisit and review existing MoU's with Portsmouth, and Southampton universities
- Form new partnerships with education providers on and off the Island
- Seek to re-energise partnerships with Dinopolis, and MUJA
- Establish new international links and MoU's



Action 3

FORM A PARTNERSHIP OF INTERESTED PARTIES TO LEAD AND DEVELOP OUR ASPIRATIONS

- Gain support from Isle of Wight Council
- Form a body to take forward our aspirations
- Seek funding to form governing body and delivery of actions leading to a successful application to become a Geopark



Action 4

PARTICIPATE IN THE GEOPARK NETWORKS

- Commit to proactive participation in Geopark network meetings
- Develop dialogue and partnerships with existing Geoparks
- Work with the UK geoparks network to develop an application



Action 5

WORK TO INCREASE THE PUBLIC UNDERSTANDING OF THE ISLAND'S GEOHERITAGE

- Continue the delivery of education programmes at Dinosaur Isle Museum
- Work with groups offering nature and landscape studies and learning
- Deliver a programme of targeted public workshops across the Island, focusing on lesser-known localities near to population centres
- Use digital resources to promote understanding and access to the Island's geoheritage



Action 6

LINK OUR ASPIRATIONS WITH THOSE OF THE BIOSPHERE



Action 7

UNDERTAKE AN AUDIT OF EXISTING GEOTOURISM PROVISION AND USE THE GEOPARK TO PROMOTE TOURISM

- Commission a study to establish the value of geotourism to the Island economy



Action 8

WORK WITH EXISTING STEM AND COMMUNITY EVENTS TO PROMOTE GEOHERITAGE

- Engage with events such as the Noel Turner STEM fair and Hullabaloo to promote geoheritage



Action 9

PROMOTE SITE-BASED UNDERSTANDING AND VISITING

- Collaborate with major landowners such as National Trust, English Heritage, and the Isle of Wight Council to make available information and interpretation for people visiting sites
- Encourage use of public transport



Action 10

COLLABORATE WITH RESEARCHERS TO CONTINUE TO DOCUMENT THE ISLAND'S PALAEOONTOLOGICAL HERITAGE

- Ensure Dinosaur Isle Museum collections remain accessible for research
- Ensure researchers are aware of new discoveries



Action 11

IDENTIFY THE DEVELOP GATEWAY LOCATIONS SUCH AS MUSEUMS

- Bring other Island museums and interested parties into a partnership
- Formally recognise organisations and attractions as gateways into the Geopark



Action 12

DEVELOP A CODE OF CONDUCT FOR FOSSIL COLLECTORS

- Engage local fossil collectors to debate issues and concerns
- Look at examples of best practice codes of conduct
- Formulate and enact a new code for collecting



Action 13

EVALUATION

- Commit to continued evaluation and improvement
Seek to share our experiences with likeminded areas also seeking membership





GEOPARK ACTION PLAN STRATEGIC LINKS

In this section we illustrate the links between the Geopark Action Plan and key strategic documents the Isle of Wight Council Corporate Plan 2021 and The Isle of Wight AONB Management Plan 2019-2024. Links will strengthen and expand in 2023 with the publication of the Isle of Wight Cultural Strategy when published.

GEOPARK ACTION 1	STRATEGIC LINKS	OUTCOMES
Review LGAP document	IW AONB P5 Ensure AONB given full regard to policies relating to geology	A clear understanding of the Island’s geoheritage for the steering group, informing the geopark vision
GEOPARK ACTION 2	STRATEGIC LINKS	OUTCOMES
Continue and grow our partnerships with universities, museums, and geoparks	IW AONB P7 Importance of recording palaeontological finds	<p>More collaborative work including student projects based on the Island’s geoheritage</p> <p>Renewed and new MoU’s with European partners in particular those associated with geoparks</p> <p>New partnerships with members of the Global Geopark Network</p>
GEOPARK ACTION 3	STRATEGIC LINKS	OUTCOMES
Form a partnership of interested parties to lead and develop our aspirations	<p>IWC objective 37 Elevate the role of the creative industries</p> <p>IWC objective 41 Support and enhance the Biosphere</p>	<p>Steering group formed and working to take forward the Geopark application.</p> <p>Management body formed following successful application</p>
GEOPARK ACTION 4	STRATEGIC LINKS	OUTCOMES
Participate in the geopark networks	IWC objective 39 Regenerating the visitor economy	Successful geopark application

GEOPARK ACTION 5	STRATEGIC LINKS	OUTCOMES
<p>Work to increase the public understanding of the Island's geoheritage</p>	<p>IWC objective 22 Digital connectivity</p> <p>IW AONB P6 Support responsible development of promotional activities</p> <p>IW AONB P31 Support the relationship between landscape and people</p> <p>IW AONB P54 -56 Encourage/support appropriate tourism</p> <p>IW AONB P57-59 Promote sustainable recreation, use of rights of way and educational/sports activities</p>	<p>Improved resident population's understanding of the Island's geoheritage and its value to the community</p> <p>More geoheritage resources available to the public</p> <p>Greater public engagement with the geoheritage</p> <p>Local businesses engaged with the geopark</p>
GEOPARK ACTION 6	STRATEGIC LINKS	OUTCOMES
<p>Link our aspirations with those of the Biosphere</p>	<p>IWC objective 37 Elevate the role of the creative industries</p> <p>IWC objective 41 Support and enhance the Biosphere</p> <p>IWC objective 45 Embed biosphere and climate change strategy</p>	<p>Biosphere and geopark working in unison</p>
GEOPARK ACTION 7	STRATEGIC LINKS	OUTCOMES
<p>Undertake an audit of existing geotourism provision, and use the geopark to promote tourism</p>	<p>IWC objective 39 Regenerating the visitor economy</p> <p>IW AONB P6 Support responsible development of promotional activities</p> <p>IW AONB P54 -56 Encourage/support appropriate tourism</p> <p>IW AONB P57-59 Promote sustainable recreation, use of rights of way and educational/sports activities</p>	<p>Impacts and benefits of geotourism understood by policy makers and tourism bodies</p> <p>Increase in tourists including geoheritage as part of their visit</p> <p>Tourism bodies making greater use of geoheritage in promoting the Island as a destination</p>

GEPARK ACTION 8	STRATEGIC LINKS	OUTCOMES
<p>Work with existing STEM and community events to promote geoheritage</p>	<p>IW AONB P6 Support responsible development of promotional activities</p> <p>IW AONB P57-59 Promote sustainable recreation, use of rights of way and educational/sports activities</p> <p>IW AONB P57-59 Promote sustainable recreation, use of rights of way and educational/sports activities</p>	<p>Geoheritage embedded as a key element of all STEM events and activities. Also, at other events and fairs such as Hullabaloo, Woolverton Garden Show</p>
GEPARK ACTION 9	STRATEGIC LINKS	OUTCOMES
<p>Promote site-based understanding and visiting</p>	<p>IWC objective 39 Regenerating the visitor economy</p> <p>IWC objective 43 Develop sustainable transport</p> <p>IW AONB P6 Support responsible development of promotional activities</p> <p>IW AONB P31 Support the relationship between landscape and people</p> <p>IW AONB P43 Encourage sustainable access to the AONB through use of public transport</p> <p>IW AONB P54 -56 Encourage/support appropriate tourism</p> <p>IW AONB P57-59 Promote sustainable recreation, use of rights of way and educational/sports activities</p>	<p>Increase in tourist including geoheritage as part of their visit</p> <p>Tourists using public transport to visit sites</p> <p>Use of online resources promoting self-guided visiting</p> <p>Local businesses engaged with the geopark</p>

GEOPARK ACTION 10	STRATEGIC LINKS	OUTCOMES
Collaborate with researchers to continue to document the Island's palaeontological heritage	IW AONB P7 Importance of recording palaeontological finds	Frequent research publications on Island topics and specimens
GEOPARK ACTION 11	STRATEGIC LINKS	OUTCOMES
Identify the develop gateway locations such as museums	<p>IWC objective 39 Regenerating the visitor economy</p> <p>IW AONB P6 Support responsible development of promotional activities</p> <p>IW AONB P27 Arrest the decline of heritage assets</p> <p>IW AONB P54 -56 Encourage/support appropriate tourism</p>	<p>Dinosaur Isle Museum as the hub of the Geopark</p> <p>Other appropriate tourist sites including National Trust and English Heritage promoting geoheritage</p> <p>Local businesses engaged with the geopark</p>
GEOPARK ACTION 12	STRATEGIC LINKS	OUTCOMES
Develop a code of conduct for fossil collectors	<p>IW AONB P6 Support responsible development of promotional activities</p> <p>IW AONB P7 Importance of recording palaeontological finds</p>	<p>Code agreed with fossil collectors with good level of engagement</p> <p>More important finds remaining on the Island and accessioned into Dinosaur Isle Museum</p>
GEOPARK ACTION 13	STRATEGIC LINKS	OUTCOMES
Evaluation	IWC objective 39 Regenerating the visitor economy	Continued assessment and sustained improvement

Tourism and the Island's economy

The Island has been a popular holiday destination since the 19th century. Queen Victoria and her husband Prince Albert made their home at Osborne House in the 1850's. Many famous people came on holiday such as Charles Darwin and Lewis Carroll stayed in Sandown and Shanklin. The pioneering photographer Julia Margaret Cameron lived near the poet Alfred Lord Tennyson at Freshwater. Cowes Week one of the world's biggest yachting events still dominates the summer season. Whilst the Island hosts the legendary Isle of Wight Festival.



One of the Island's key tourism sites, Alum Bay was founded on the coloured sands, generations have visited and taken home glass tubes filled with the different coloured sands.

The Island's economy is mixed with maritime, agriculture, and service industries, however, tourism remains a key element of the economy, here are some of the key facts:

The Island's economy generated £2.8 billion in 2017

(Source: Isle of Wight Economic Profile 2019)

In 2018 tourism contributed £470 million to the Island economy
Economic Impact of Tourism on the Isle of Wight 2018 Tourism South East Research

Tourism capitalises on the Island's coastline, countryside, and heritage

(Source: Isle of Wight Economic Profile 2019)

Employing approximately 8,000 people, one in six people are employed in the tourism economy

(Source: Isle of Wight Economic Profile 2019)

16% of the population employed as a result of tourism on the Isle of Wight

(Source: Economic Impact of Tourism on the Isle of Wight 2018 Tourism South East Research)

78% of tourists come because of the quality of the environment

(Source: Visit England Destination Tracker)

41% of visitors come from London and south-east England

(Source: Visit England Destination Tracker)

With just 8.3 % of tourists saying they would return to the Island, and 51% not returning in less than 3 years, the Island "would benefit from carving out a clearer set of reasons to visit"

(Source: Visit England Destination Tracker)



TOURISM AND GEOHERITAGE

Webber et al. 2006 found that geodiversity generated between £2.6 and £4.9 million to the Island in 2004/5, this was when the Island attracted between 2.3 and 2.4 million visitors. Based upon a year in which £352 million tourist spend was recorded, Munt (2017) estimated that geoheritage generated 2.8% of the Island's tourist income. Figures may not have changed much in that time if anything the tourism spend has probably declined along with the industry.

Dinosaur Isle Museum provides an annual return to the regional museum's survey, the return for the season 2021/22, based upon 44,000 visitors indicated that the museum contributes c £1.1 million to the local economy.

Geoheritage is the theme of the accredited Dinosaur Isle Museum in Sandown, which has recently been recognised as holding the most important dinosaur collection in the UK outside of the national collection. Attracting between 40,000 and 50,000 visitors a year it is the hub of the Island's fossil heritage, with a collection of c. 35,000 specimens.

Other attractions with geological collections include The Swiss Cottage Museum at Osborne House where a small but diverse collection is part of the Royal Collection. Dinosaur Expeditions CIC are located on the south-west coast and exhibits a range of local fossils and provides public fieldtrips along the coast.

There is a thriving business of fossil walks, not only offered by Dinosaur Isle Museum and Dinosaur Expeditions, but also by local fossil collectors, Wight Coast Fossils, also from the fossil shop in Godshill. Most of the fossil walks are focused on Compton Bay on the west coast where dinosaur footprint casts can be seen, but also at Yaverland and Shanklin in Sandown bay.

Building the Isle of Wight Aspiring Geopark Partnership

We are at the beginning of our journey towards a Geopark for the Isle of Wight, this brochure is the starting point, laying out why

the Island deserves the accolade, and what we can bring to the European and Global networks.

The Island is one of the richest palaeontological sites in the world in particular for dinosaurs, fossil mammals, molluscs, and insects. The Cretaceous and Paleogene cliffs are soft and eroding away rapidly exposing fossils constantly.

Our coastal landscapes are dynamic and provide a textbook study of mass movement, and how our rivers have responded to sea level rise and erosion.

We hope that joining the Geopark networks will enable the Islander's and visitors to truly recognise and embrace our rich heritage. Stimulate the tourist economy and find new ways to engage and celebrate our landscape.

In building our partnership we will involve landowners, the local authority, government agencies, interest groups and business owners. Our first steps are to bring together the local authority, tourism and interest groups to formulate the vision, to deliver on the action plan outlined in these pages.



LIST OF POTENTIAL GEOSITES:

Ryde west beach to Binstead
Fishbourne
King's Quay
Osborne beach
East Cowes
Gurnard cliffs
Thorness Bay
Burnt Wood
Newtown spit
Hamstead
Bouldnor
Cranmore
Fort Victoria
Colwell Bay
Totland Bay to Headon Hill
Alum Bay and the Needles
Freshwater Bay
Compton Bay
Brook
Sudmoor Point
Chilton Chine to Cowlease Chine
Atherfield to Blackgang
Rocken End/ St Catherine's Point
Horeshoe and Monks Bay
Ventnor landslip
Luccombe Chine
Shanklin cliffs
Little Stairs Point
Yaverland to Culver Cliff
Whitecliff Bay
Forelands
St Helens
Priory Bay
Seagrove Bay

LIST OF EXISTING DESIGNATIONS:

SSSI's (geological)
Bembridge Down
Bembridge school and cliffs
Bonchurch landslips
Bouldnor and Hamstead cliffs
Brading marshes and Bembridge Ledges
Colwell Bay
Compton Chine to Steephill Cove
Compton Down
Headon Warren and West High Down
King's Quay shore
Lacey's Farm Quarry
Priory Woods
Prospect Quarry
Thorness Bay
Whitecliff Bay and Bembridge Ledges

RIGS
Sandown Zoo (Wildheart Trust) to Yaverland
Sandown to Shanklin cliffs including Lake cliffs

Heritage Coast designations
Hamstead
Tennyson

Marine Protected areas
South Wight SAC
Solent Maritime SAC
Solent and Southampton Water SPA
Solent and Isle of Wight Lagoons SAC

Solent and Dorset Coast SPA
Bembridge MCZ
Yarmouth to Cowes MCZ
The Needles MCZ



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PHOTOGRAPHY

TRUDIE WILSON

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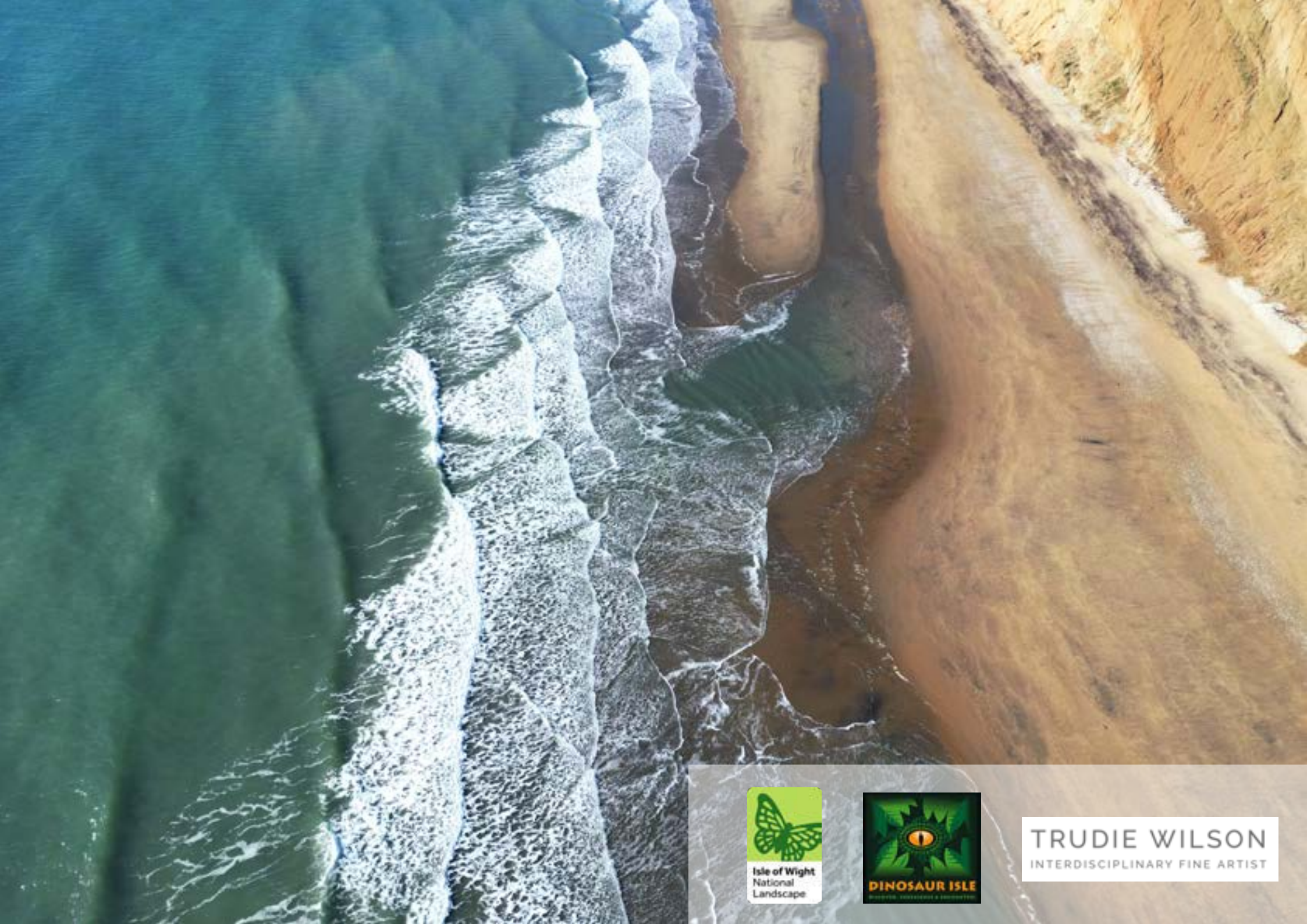
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Isle of Wight
National
Landscape



DINOSAUR ISLE
MUSEUM, THEATRE & GARDENS

TRUDIE WILSON
INTERDISCIPLINARY FINE ARTIST