

Portland Quarries Nature Park

Green Infrastructure Case Study

Restoring the cultural environment close to the London 2012 sailing venue



Selecting Weymouth and Portland as the sailing venue for the London 2012 Olympic and Paralympic Games accelerated strategic environmental and cultural investment in green infrastructure across the area. The Portland Quarries Nature Park has been created on the Isle of Portland to coordinate the restoration of several disused stone quarries that are locally and nationally significant for their geology and biodiversity, creating an innovative cultural destination for local people and visitors.

Snapshot

- London 2012 sustainability objectives complemented and extended a variety of local environmental initiatives
- A coordinated partnership programme underpinned and added momentum to the creation of the new Nature Park
- Additional green infrastructure has improved and increased the area's tourist offer and appeal
- The investment programme expanded access to the natural environment for local people including those with disabilities



View looking west across Chesil Beach and Portland towards Weymouth Bay from Tout Quarry

Key facts:

- Size of the Portland Quarries Nature Park when complete: over 60 ha (148 acres)
- Size of Kingbarrow Quarry Nature Reserve: 12 ha (30 acres)
- Size of Verne Yeates Local Nature Reserve: 16 ha (40 acres)
- Portland Sculpture and Quarry Trust established in 1983
- Portland Quarries Nature Park formally opened in 2013
- Key partners for the Portland Quarries Nature Park include Dorset Wildlife Trust, Weymouth and Portland Borough Council, Albion Stone Ltd, Stone Firms Ltd, Natural England, Butterfly Conservation, Dorset Environmental Records Centre, Dorset County Council, The Court Leet and the Viridor Credits Environmental Company.

Key environmental functions:

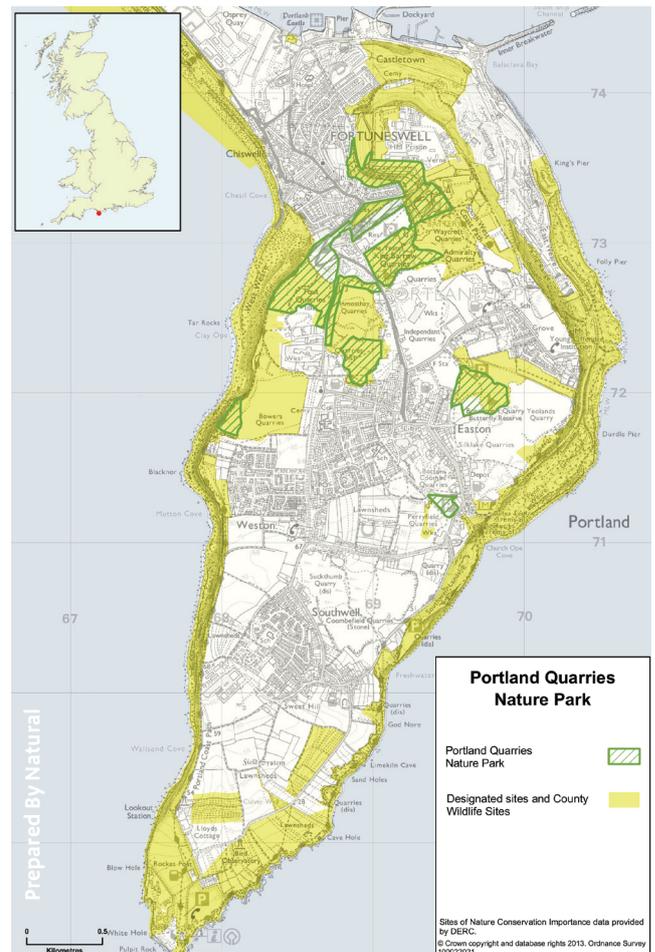
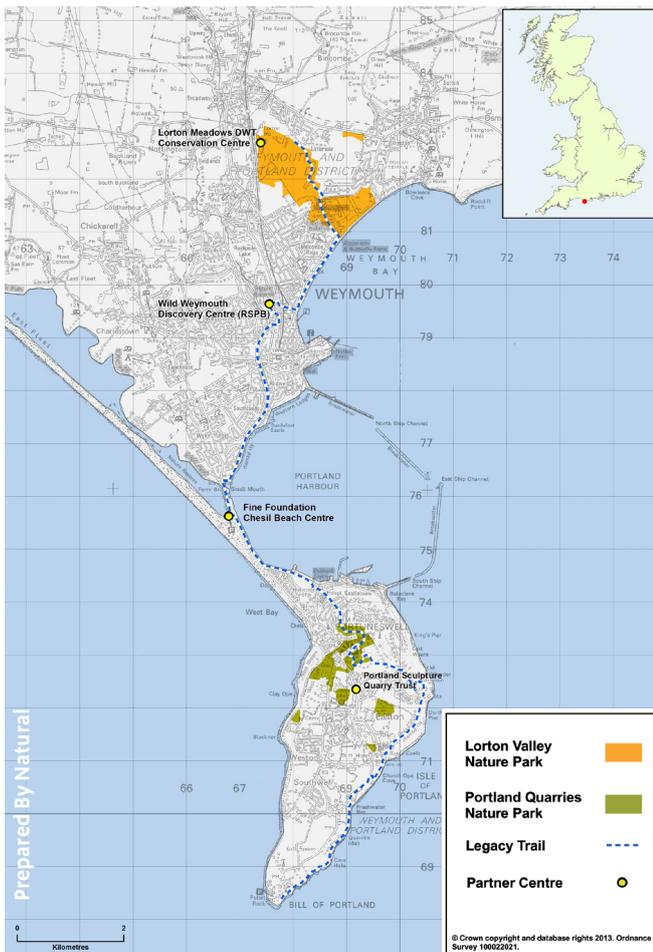
- Connecting and enhancing biodiversity habitats
- Remediating unused and redundant quarry sites
- Protecting historic and industrial heritage resources
- Developing cultural and educational facilities and opportunities
- Improving local recreation and leisure opportunities
- Expanding the tourist economy

Introduction

Portland Harbour and Weymouth Bay was designated as the national sailing venue for the London 2012 Olympic and Paralympic Games. Investment for the Games has provided both focus and momentum for additional development in Weymouth and Portland and wider investment in green infrastructure across the area to increase access to the natural environment for both residents and visitors.

The Portland Quarries Nature Park is the focus of this case study and is located on the Isle of Portland close to the southern end of the Wild About Weymouth and Portland Legacy Trail. This 20km trail connects some of the best environmental and cultural resources in the area. It runs from the tip of Portland Bill in the south, via Chesil Beach Visitors Centre to the Lorton Valley Nature Park in the north (the subject of a separate case study). The route has been used as a mechanism to coordinate and connect environmental investment across the area to promote the wider business and tourist economy.

Work on establishing the Nature Park by a partnership of stakeholders on the Isle of Portland has been progressing over a number of years. It is a key element of the BIG Lottery funded Wild about Weymouth and Portland project and, when formally opened in 2013, will add to the legacy of the London 2012 Games. The Park comprises over 60 ha of disused Portland quarries that are known nationally as the source of building stone for some of the most famous buildings in the British Isles, including St Paul’s Cathedral and Buckingham Palace. The stone has been exported across the world and was also used in the construction of the headquarters of the United Nations in New York.



Location of Portland Quarries Nature Park. The area shown as Portland Quarries Nature Park is taken from the submission draft of the West Dorset, Weymouth & Portland Local Plan. Following Local Plan consultation the final boundary may change

The quarries provide the most important and accessible geological exposures of lower Purbeck limestone formed during the late Jurassic period some 135–145 million years ago and are considered one of the best places for interpreting geology from the late Jurassic period. The Isle of Portland is at the heart of the Jurassic Coast, which was granted World Heritage status in 2001 in recognition of its geological importance. Wider protection comes from the Isle of Portland to Studland Cliffs Special Area of Conservation (SAC) and a significant proportion of the land including common land, Crown land and Court Leet of the Island and Royal Manor of Portland, is designated a Site of Special Scientific Interest (SSSI).

Combining a network of disused quarries to create a new Nature Park

A number of quarrying sites stopped being worked over many years, leading to significant problems with fly tipping, vandalism and illegal use by motorbike riders. This created a post-industrial landscape that, although rich in wildlife, was unattractive to visitors to the island. The Portland Quarries Nature Park links together four key quarries – Kingbarrow Quarry, Tout Quarry, Verne Yeates and Inmosthay Quarry – bringing new investment to these once neglected sites that are nationally significant for nature conservation, geology and cultural heritage.

The draft West Dorset, Weymouth and Portland Local Plan notes that the project is being brought forward as part of the Olympic Legacy, ensuring better public access, long-term management and interpretation for these culturally important sites. The Local Plan policy for the Nature Park is to ‘promote sustainable tourism, management of conservation and heritage interest, enhancement of public access and open spaces and opportunities for volunteer and community involvement’.



Silver Studded Blue Butterfly

Land assembly for the Nature Park began in 2006 by establishing the Kingbarrow Quarries Nature Reserve. Quarrying stopped around a century ago and the site regenerated naturally before the Dorset Wildlife Trust took on formal management responsibility. As with most of the quarries, the thin limestone soils, rocky slopes and scattered areas of grassland attract a rich variety of plant species including horseshoe vetch, wild thyme and spikes of pyramidal orchids that typify limestone grassland. In summer months, there are important populations of butterflies including chalkhill, small and Portland’s special silver-studded blue. In addition, the network of sites provide important habitat for migrating birds arriving from or departing to the continent via Portland, providing a popular destination for bird watchers during the spring and autumn migration.

Significant progress in establishing the Nature Park was marked by the designation of the Verne Yeates Quarry as a Local Nature Reserve in 2007 and the signing of long-term leases between the landowner and Dorset Wildlife Trust: for Kingbarrow in 2006 with Albion Stone Firms Limited and for Tout Quarry in 2012 with Stone Firms Limited.

The combination of these key sites along with land from the Inmosthay Quarry and more recently Trade Quarry form the initial Nature Park. They are identified in the West Dorset Weymouth and Portland Local Plan submission due for adoption early 2014. As opportunities arise in the future, and subject to land owner agreement, additional areas that have the potential to contribute to aims of the Nature Park will be included.



Management across the Nature Park has focused on enhancing the various ecological habitats of the quarries and upgrading access. Invasive species, and cotoneaster in particular, have encroached over the limestone grassland and rocks for many years and are now being removed through a variety of programmes across the island. The area benefits from a good network of footpaths and access to various parts of the nature park have been further improved with the introduction of a 'tramper', an all-terrain mobility buggy that can be hired locally and used on a set of designated routes.

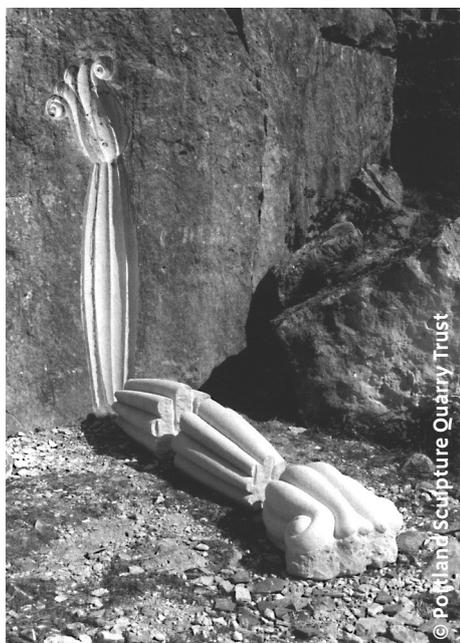
Weymouth and Portland tramper hire improves disabled access throughout across the Nature

Creating a tourist destination with historic and cultural resources

While there is still active quarrying on certain sites, a number have declined or been closed for many years and new cultural and recreational projects have been developed to restore and reinterpret the historic value of these sites. There are a large number of significant industrial archaeological features that are either unique to a particular quarry or connect individual sites together. These include horse drawn tramways and the Merchants Railway, which was constructed to transport stone from Tophill to first construct the tramways and then deliver stone to the quays of Portland Harbour and the Weymouth and Portland Railway. Massive dry stone walls, cuttings, tunnels, bridges and arches provide a wide variety of interesting features and therefore many opportunities for interpretation to expand the cultural offer for visitors.

Much of the historic field pattern has been designated as a Scheduled Ancient Monument (SAM) and Site of Nature Conservation Importance (SNCI). Near Portland Bill is the Culverwell Mesolithic site that is thought to be the oldest evidence of permanent settlement in Britain. Within the Nature Park, the southern ramparts of the massive Verne Citadel, completed in 1861 to defend Portland Harbour, provide a key historical feature and are designated as a SAM. The most prominent cultural initiative on the Isle has been the establishment of the Portland Sculpture Quarry Trust in 1983 at Tout Quarry to support and promote the work of a wide variety of recognised and emerging artists.

There are now in excess of 60 carvings and installations across the disused quarry landscape including 'Falling Fossil' by Stephen Marsden and Antony Gormley's 'Still Falling', one of the earliest sculptures to be created on the site.



Stone sculptures at Tout Quarry. On the left, 'Falling Fossil' by Stephen Marsden and to the right, 'Still Falling' by Antony Gormley

Tout Quarry and the wider Nature Park is a key destination on the Weymouth and Portland Legacy Trail. By creating a tourist destination with a growing national profile, it is planned that the Portland Quarries Nature Park will encourage increasing numbers of visitors, more repeat visits and longer stays to improve commercial benefits for local businesses and facilities across the island and wider area.

Promoting and coordinating partnership delivery

A key stage in the formal establishment of the Nature Park has been the role played by a proactive partnership to develop and coordinate resources within each individual site. The location of the Olympic venue at Weymouth and Portland added valuable momentum to a number of projects, some of which have been running for more than 20 years. The work of the partnership has included the removal of rubbish from many of the sites, the completion of significant health and safety works to allow public access, the restoration of key archaeological features, the opening up of new routes and large-scale habitat management works. Local people now see the quarries as a valuable asset and the projects have enjoyed long-term support from the Court Leet and the Portland Town Council. Fly tipping and use by motorbike riders are no longer seen as major issues within the Nature Park areas.

To facilitate the work of the partnership, Natural England established and chaired the Isle of Portland Conservation Forum (IPCF) to coordinate and focus conservation activities across the island. The Forum worked with the Weymouth and Portland Ranger post that is now based with the Dorset County Council, providing a lead for nature conservation, volunteering and public engagement.

Key achievements of the IPCF have been setting up the Portland Quarries Nature Park Steering Group, also chaired by Natural England, and securing additional funding through a series of successful grant bids and Environmental Stewardship agreements. These include the Wild About Weymouth and Portland Access to Nature grant and over £850,000 of funding from the Viridor Credits Environmental Company that has been used by the Portland Living Landscape Project. This is restoring over 200 ha of limestone grassland and investing in new interpretation materials. Grant funding from Natural England supported the 'Seeing Through Stone' exhibition that provided integrated learning about Portland's quarry environment, the design of a wildlife corridor for Independent Quarry and initial refurbishment to improve access for the former Drill Hall House.

Lessons learnt from establishing a strategic investment framework

Over many years, Natural England has helped to establish and support a variety of environmental conservation initiatives across the Isle of Portland. It has provided direct funding and staff resources, established formal Conservation and Enhancement Scheme agreements and undertaken statutory land-use and development control activities. This latter role has been critical in negotiating the release of land from the local quarry companies, securing £33,000 match funding for the Portland Living Landscape Project, agreeing ecological restoration objectives and developing a strategic planning framework with the Borough Council to guide long-term investment.

From being considered as a rather neglected post-industrial liability, the Portland Quarries Nature Park has helped to re-establish this network of quarries as a key green infrastructure resource within the new Local Plan to support the local economy. Draft proposals now recommend including additional land within the Nature Park as and when it comes out of production. Natural England will continue to use its statutory role to promote the expansion of the Nature Park and, where possible, secure additional funding and resources for management.

The Portland Quarries Nature Park has been instrumental in securing the long-term future of one of the most important and iconic quarry landscapes in Britain. Through this strategic initiative the local and nationally important cultural, geological and ecological resources of these individual sites can be protected and enhanced through better management, access and interpretation. This will benefit both local communities and the wider tourist economy of the area.

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