grassland areas. invasive and will lead to the loss of important Cotoneaster is being removed as it is highly throughout the quarry. Where possible, the and the non-native Cotoneaster are found Privet, Buddleia, Wayfaring Tree, Sycamore uncommon lichen species. Taller scrub of Wild and open bare soil areas are also home to immigrant from southern Europe. The rocks the impressive Hummingbird Hawkmoth, an including the day time flying Burnet moths and The quarry also attracts a wide range of moths

bare ground, its wings closed for camouflage. Blue. The Grayling butterfly may be seen sunning itself on patches of caterpillar food plants including Chalkhill Blue and the rare Adonis are also dependent on the sparse turt and stony soils which suit their

Portland. Other butterflies Blue butterfly, unique to race of Silver-studded is important to a particular foot Trefoil. The latter plant and Kidney Vetch and Bird's Squinancywort, Horse shoe herbs like Small Scabious, grassland with low growing colonized by limestone The quarry has been slowly



walls are ideal for common lizards and slow-worms. to nectar and food plants whilst the warm slopes and dry stone such as Eyebright and Thyme. Butterflies in turn are attracted colourful and fragrant with many low growing, flowering plants a haven for wildlife. In the spring and early summer, the quarry is Tout's scree slopes, grassy glades and sheltered gullies provide



consider the material as part of the place, as part of the earth." a fine job. Working on stone in a quarry is a challenge. You have to and hard team work that is a model for us all. Working with stone is complex machinery nor explosives, was a mixture of science, intuition layering and fissuring to cut the stone. Their technique, using neither of men that worked it, using blocks and wedges as well as natural "The quarry itself is a powerful inspiration and tribute to the small bands

Falling', summed up many peoples' feelings about this special quarry. air workshop. Antony Gormley, when working on his sculpture 'Still Stone carving and sculpture courses are held in the Trust's open boulders, constructed in shale, or worked from the landscape itself. history and time. The works are carved into rock faces, extracted to learn about sculpture, geology, ecology and enjoy the sense of Work by national and international artists creates vantage points,

mineral extraction. creativity, saving it from further back to the quarry through their protected and artists have given the remaining landscape has been defenses in West Bay. Since then, the quarry stone walls for sea boulders were extracted from 1983, a year after 30,000 tons of Trust project in Tout began in The Portland Sculpture and Quarry



open workshop areas.

places to find them. Students may be creating further pieces in of the quarry. The map lists the different sculptures and the Searching for them will help you explore all the interesting parts landscape left by the quarrymen and mellowed by nature. Tout is a unique place where sculptures are carved into a





onto the West Weares below. be tipped over the cliff edge much of the waste stone to was conveniently placed for Chesil Bank, the quarry Lookout'. Overlooking the been used. Tout means of Purbeck Slatt Beds have but in places smaller blocks Limestone, Chert and Roach

stone walls seen throughout Tout. These were made largely of Portland The poor quality stone was stacked by the quarrymen in massive dry to be removed without the use of complex machinery or explosives. Winning the Stone', meant a considerable amount of overburden had

Base Bed, from 30 to 60 feet down. extremely hard to extract the best stone, Whit Bed and called 'lawnsheds'. Using the natural joints, they worked 1750, by family quarry gangs, who owned strips of land Quarries', were originally worked by hand, from around Once, one of 80 working quarries on the Island, 'Tout

Quarrying



Fascinating place. rocks, history and wildlife of this and learn along the way about Discover over 60 'hidden' sculptures

conservation and sculpture. industrial archaeology, nature explore is important for geology, methods. The landscape left to Stone was quarried using old remaining quarries where Portland Tout Quarry is one of only two

Geology

The rocks exposed by quarrying are of late Jurassic age, 135-140 million years old. 'Islands' of unquarried rock, such as at the sculpture 'Still Falling' (45), show the natural rock sequence with both Purbeck and Portland limestones.



Be Stone No More - Pierre Vivant Photo: PSQT

On the top, the thin beds of Purbeck limestone were formed in shallow water lagoons that surrounded low, forested islands; evidence of this is in the rock layers. Some contain fossil ripple marks, just like the ones you would see on a beach today. Other layers are ancient soils, complete with fossil trees.

The massive layers of limestone above the sculpture are known as the 'Hard Cap' and this rock formed in a swamp or lagoon. The deep single holes are not drill holes but cavities left by ancient trees. The holes are surrounded by a bumpy surface created by sediment trapped in algae that grew around the branches when they were drowned in the swamp.

Below the Purbeck beds is the Portland limestone series, created in a warm, shallow tropical sea, like the Bahamas today. These rocks are made of calcium coated layers of sand grains and fragments of shell. The sculpture 'Still Falling' is carved into this rock sequence.



Feet - 'Roach Stone'. A shelly limestone packed with easily seen fossils. Harder oyster shells stand out proud as well as the moulds and casts of marine molluscs, bivalves such as the locally known 'osses eads', supposedly looking like horse heads or the spirally coiled snails called 'Portland screws'. Body - 'Whit Bed'. A good quality limestone.

Head - Base Bed or 'Best Bed'. A very fine, white limestone. The Base and Whit Beds, formed in deeper waters, are easily cut and Photo: PSQT sculptured and are used across

the world as well as for many of the sculptures in Tout. The grey and blues below are due to silica-rich chert in the cherty beds.

At 'Be Stone No More' (44), there is flow-stone or tufa where water has run down the rock face depositing calcite, similar to the way stalactites are formed in caves.

Clues to the Past



Around Tout there are many features from past quarrying days. Look out for signs of old tramways, hidden shelters made by quarrymen, tunnel entrances and the 'Beaches', beautifully constructed dry stone walls.

Lanos Arch (1854), an impressive dry stone arch, fronts one of several parallel, stone-walled gullies leading to the Coast Path. These gullies allowed two-way traffic. Stone was carried along the cliff edge by a horse-drawn tramway to Priory corner. There it joined the Merchants' railway down to Castletown. Waste stone and overburden was taken through the gullies to the cliff side and tipped over. The remains of the tipping bridges can still be seen.

Along the Coast Path and on the footpath leading to the tunnel into held the rails on either side.

Throughout the quarry there are many quarryman's' huts, built into the retaining walls, to discover. Beside the main track there are blocks with drill holes from more modern extraction of stone using pneumatic drills and explosives.



Land within the Local Nature Reserve is of local, national and inter ientific Interest and Special Area of Conservation

This leaflet was produced by the Portland Coast & Countryside Project, a partnership of Natural England, Weymouth & Portland Borough Council, Dorset Wildlife Trust and Dorset Countryside, which aims to promote conservation, awareness and enjoyment of Portland's











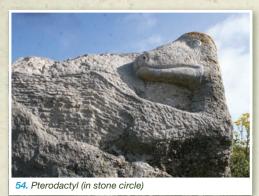




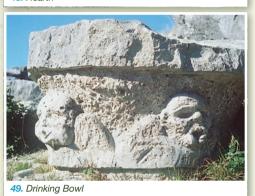














Discover over 60 'hidden' sculptures and learn along the way about rocks, history and wildlife of this fascinating place.

- 'Dreaming Head and Estuary' stone carving in a large boulder of cap stone by Keir Smith.
- 'Flow through the rocks' stone carving
 Han Sal Por.
- 'Representation of a Baroque garden' work in landscape - Shelagh Wakely.
- 4. 'Wreck' work in landscape Rosie Leventon.
- 5. 'Philosopher's Stone' construction in shaleRobert Harding.
- 6. '16 Candles' relief carving David Tuckwell.
- 'Crouching figure' stone carving Reiko Nireki.
- 8. 'Flowing Rocks' work in landscape Harry Klar.
- 9. 'Dry stone landscape' constructed in shale Nick Lloyd.
- 10. 'The Arena of Fools' incised work- Kerry Trengove.
- 11. 'Pterichthys' (a fish out of water) stone carving- Richard Farrington.

Through Lano's Bridge to...

- 12. 'Shrine' relief carving Hiroshi Makimara.
- 13. 'A Tear for Stone' stone carving Anonymous.
- 14. 'Seat and Boat' stone carving Mike Hick.
- 15. 'Yogi seeker' constructed in shale
- S. Chandrasekeran.
- **16. 'Wessex'** Hill figure, shale with limed cement Andrew Kirkby.
- 17. 'Chair' Stone carving Simon Foster-Ogg.
- 18. 'Serpent Steps and Alignment' construction in



- shale and standing stones Christine Fox.
- 19. 'Among the Stars that hide and seek' relief carving- Alain Ayres.
- 20. 'Sentimental Arch' stone carving Barbara Ash.
- 21. 'Cornucopia' high relief Clare Stratton.
- **22.** 'Mirrored Sun' work in landscape Chris O'Neil & students from Wimbledon school of Art.
- **23.** 'A Homage to Lichen' stone carving and cast cement Patrick Howett.

Stone carving and sculpture workshop.

- **24.** 'Sunstone' stone carving Phil Nicol.
- **25.** 'Flying the Kite' stone carving Mary Kenny.
- 26. 'Window' stone carving Justin Nicol.
- 27. 'Iguana' stone carving John Roberts.
- 28. 'Chesil' stone carving Chris O' Neil.
- **29. 'Stone Whirlpool'** work in landscape *Amanda Glover*.
- 30. 'Stitch in Time' drilled stone and rope
- Graham Westfield.

 31. 'Vessel' stone carving Gerard Wilson.
- 32. 'Fallen Fossil' stone carving Stephen Marsden.
- 33. 'Orobous' high relief Jan Nunn.
- 34. 'Ascent' stone carving Joe Hamilton.
- **35.** 'Stone of the Summer Solstice' Portland stone dust/cast cement Roger Davies.
- 36. 'Plant Form' stone carving Sylvia Stuart.
- 37. 'Waterfall' construction in shale
 - Hamish Horsley.

- 38. 'Calendar Stone' sawn stone Barry Mason.
- 39. 'History Lesson' stone carving
 - Angelo Bordonari.
- 40. 'Zen Garden' work in landscape
 - Phillip King and students from the Royal College of Art.
- **41. 'From the ruins'** Construction in shale and stone Lorna Green.
- 42. 'Water Bowl' stone carving Valerie Josephs.

Through pedestrian entrance from wide street...

- 43. 'Woman on Rock' incised work Dhruva Mistry.
- **44. 'Be stone no more'** stone carving *Pierre Vivant*.
- 45. 'Still Falling' incised work Antony Gormley.
- **46.** 'Ribbed form' stone carving David Kelly.
- **47. 'Leaning Torso'** stone carving *Hennie Hansel*.
- 48. 'Hearth' stone carving Timothy Shutter.49. 'Drinking Bowl' stone carving Jonathan Sells.
- **50. 'Horizontal figure'** stone carving Anonymous.
- **51. 'The Green Man'** stone carving in roach stone embedded with fossils *Valentine Quinn*.
- 52. 'Searchlights' stone carving Michael Farrell.
- 53. 'The Beauty of Surveillance' relief carving
 - James Harries.
- **54. 'Cirkel van stenen'** (stone circle) A collection of sculptures in the upper workshop by Groupe 85 from Holland.