



Chesil Bank and the
Fleet Nature Reserve
Tel: 01305 760579
Fax: 01305 759692

Portland Beach Road, Portland, Dorset. DT4 9XE

Email reserve@chesil.fsworld.co.uk

Website www.chesilbeach.org

Newsletter Summer 2007

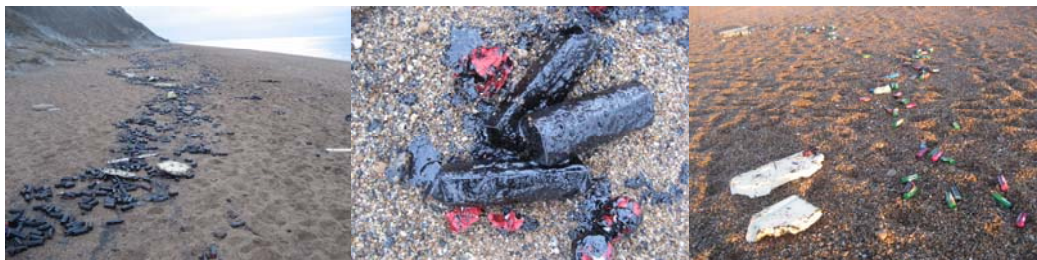
The storms and the Napoli

Sunday, 21st January, saw the beginning of an unprecedented number of oiled seabirds from populations of auks wintering in Lyme Bay being washed up on Chesil. With the majority of the birds coming ashore on the eastern end of the beach, the RSPCA turned out in force, and based by the Chesil Beach Centre, received over 400 live casualties collected from Chesil, Portland and further to the east along the Dorset coast in less than a week. Altogether over 1000 casualties were treated in the incident, and many more would have been affected. The RSPCA incredibly managed to release 400 birds, some having been intensely nursed for two months.



Conservation organisations and members of the public at the Chesil Beach Car park; an oiled Guillemot; the Reserve and Swannery staff and RSPB clear the beach adjacent to the Fleet

Apart from the birds, the impact of the Napoli on Chesil was thankfully light. The cargo, oil and oily debris that were lost from the vessel being beached at Branscombe thinned out as they were pushed further east by the prevailing tide and weather conditions.

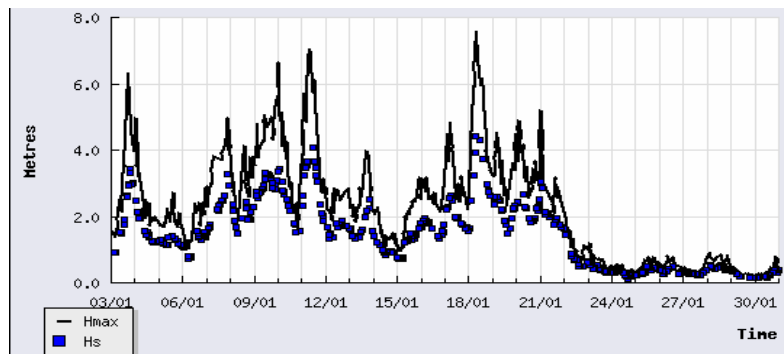


From the left, the photos show a line of oil and oily debris at Burton Bradstock, a close-up of the completely oiled packets of biscuits at Burton and a less dense line of less oiled biscuit packets at Abbotsbury. The photos also show pieces of polystyrene lost from broken containers

It seems to have been widely accepted that the beaching of the 62,000 tonne container ship Napoli and the consequential spillage of some of its containers and 50 tons of oil caused all the damage. There is no denying the spill of oil and oily debris, but the slick may have been too close to the shore and too small to impact on all

of the seabirds involved. It is understood that oil leaked from the boat whilst being towed towards Portland at a point where it showed signs of breaking up and it was decided to beach it at Branscombe. This is where the birds are more likely to have been and would better explain their concentrated drift onto Chesil with the help of the prevailing westerly winds.

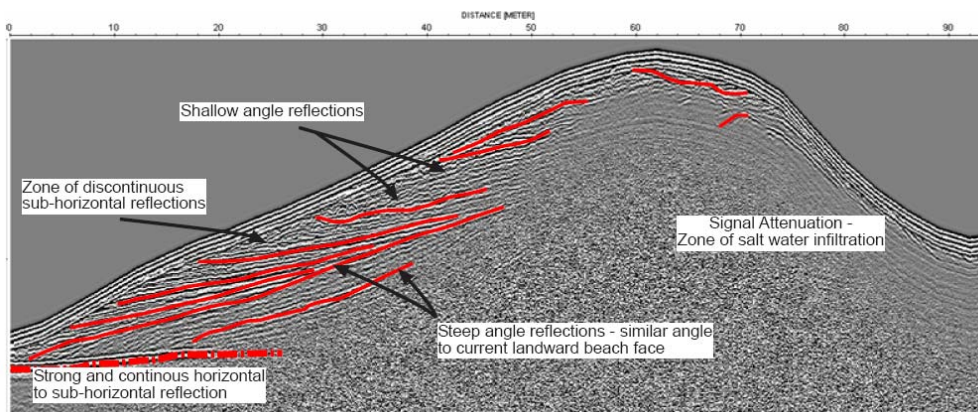
In addition to the live birds over three hundred dead ones were collected from Chesil, a high percentage of which showed no signs of oiling. Whilst it may have been possible for these apparently clean birds to have died of a small amount of ingested oil, it is much more likely that they died naturally as a result of the storms, which were heavy and sustained throughout the first three weeks in January. As the graph below shows, wave height above 2 metres was recorded daily in that period, above 4 metres on 9 occasions and above 6 metres on 4 occasions. This must have made feeding conditions for the Guillemots and Razorbills, the main sufferers, very difficult indeed. Once bodyweights drop below a certain threshold the birds die of hypothermia. Perhaps many of the oiled birds were already dying. Another consideration is that quite a few oiled birds were reported before the Napoli incident. Most of the dead birds were taken to the CEFAS labs in Weymouth to be frozen and await analysis. The RSPCA have some data on the weight of the birds. Hopefully a true picture of what occurred will eventually be pieced together.



There was a marvellous response from Dorset’s local authorities, conservation organisations and members of the public to deal with the birds and the debris. The RSPCA’s Certificate of Merit has been awarded to those who assisted the Society. For a full reserve report on the Napoli incident please see our website.

GPR Survey

Dr Jeremy Pill, the Fieldwork Demonstrator at Bournemouth University Conservation Science Department, has carried out initial Ground Penetrating Radar (GPR) surveying on Chesil along lines perpendicular to the beach front and topographic surveys of those lines using Differential GPS. GPR is a non-invasive method of looking at the makeup of the sub-surface, and in this case may help to identify subsurface geology - previous beach surfaces, slip surfaces and wash over fans and possibly the peat horizon (the remains of the a previous and more extensive Fleet lagoon) that the beach sits on. The identification of these horizons may help in the understanding of the formation of both Chesil and the Fleet. It is intended to survey at both the Abbotsbury end and Portland end of the Fleet Lagoon and one or more sites in between.



Ferrybridge North Shore

Only boats licensed by Blue Waters Horizons may be stored here. An annual licence to cover administration is available for £50 from BWH. The use of boats is subject to specific conditions for the benefit of the Fleet.

Bird news

Local birders' regular checks of the wintering (Russian) Dark-bellied Brent Geese paid dividends when a Red-breasted Goose was found in their midst on the 4th November. Predominately at Ferrybridge it was also seen at several other sites on The Fleet to 14th November and remarkably another individual was also seen briefly at Ferrybridge on the 15th February. Although these birds are relatively common in captivity most of the birders that saw them were confident they were genuine wild birds from Siberia. The Brent flock also played host to up to three Black Brants (Pacific Brent Geese) from the 4th November to 4th February and up to ten (High-Arctic) Pale-bellied Brent Geese from 3rd November to 7th March (plus an escapee at The Swannery throughout).

Other noteworthy sightings in November included a flock of twelve Spoonbills near East Fleet Farm on 4th; four Brambling over Abbotsbury on 1st; two Avocets at The Swannery on 2nd; a Short-eared Owl at Ferrybridge on the 12th; a Hooded Crow at Langton Herring on 18th; a Long-tailed Duck at The Swannery from 19th (to 7th March); a Ruddy Shelduck at Ferrybridge on 21st; up to two Velvet Scoters in the Moonfleet/Langton Herring area from 22nd (to 1st January); five Goosanders at The Swannery on 11th and 22nd; up to two Black-necked Grebes at the Swannery from 3rd (to 15th December) and a Merlin at Abbotsbury on 30th November.



The Ruddy Shelduck

After a severe storm a 'wreck' of Leach's Storm-petrels occurred in early December all along the South Coast. On 5th twelve passed through Ferrybridge and seven lingered at The Swannery, while a further three passed Ferrybridge on 7th. Other December highlights were a Whooper Swan at The Swannery on 10th and 11th and a Ferruginous Duck at Rodden Hive on 17th moving to The Swannery on 21st. Also of note in December were two Goosanders at The Swannery on 9th; a Black-throated Diver at Ferrybridge on 11th; a Marsh Harrier at Rodden Hive then Abbotsbury on 17th; an Avocet at Abbotsbury and Ferrybridge on 20th; two Great Northern Divers at Ferrybridge on 23rd; a Red-throated Diver off Abbotsbury Beach on 24th; seven Little Gulls at Abbotsbury on 27th and one at Ferrybridge on 31st.

The January highlight was a Ring-billed Gull at Langton Herring on the 20th but other sightings included a Great Northern Diver in The Narrows on 1st; a Black-necked Grebe at Ferrybridge on 2nd; two Goosanders at The Swannery on several dates; a Great Skua also there on 18th; a Little Gull at Ferrybridge on 23rd; a Slavonian Grebe off Abbotsbury Beach on 24th and an Eider at Littlesea on 28th.

In February, the Abbotsbury Scaup flock peaked at 14, the Eider was reported again at Littlesea on 18th and an Avocet was at The Swannery on 25th. Meanwhile off Chesil at Ferrybridge up to three Slavonian Grebes were on the sea from the 17th to the 19th; two Red-throated Divers were also seen there on 3rd, one on 4th and one 18th, whilst nine flew past on 19th and a Velvet Scoter was present on the 20th.

A Red-throated Diver and two Slavonian Grebes were off Chesil at Abbotsbury on 2nd March but the only other March reports were of a Goosander and a Merlin at Abbotsbury and five Firecrests at Ferrybridge on 7th; a pair of Mandarin Ducks at The Swannery on the 11th and a small party of Bearded Tits there too on 12th.

April headliners were a White Stork over The Swannery on 16th and a Cirl Bunting at Abbotsbury Beach on 26th, the first Abbotsbury record for 40 years. A Spoonbill was at The Swannery on 8th. Little Ringed Plovers were seen at Ferrybridge (two) on 2nd, at The Swannery (three) on 4th, (two) 17th and (one) 18th, with five in Herbury Works on 9th. Regular 'seawatching' by a dedicated band of local birders produced totals of nine Red-throated Divers; two Black-throated Divers, four Great Northern Divers; 531 Manx Shearwaters; one Sanderling; 2,487 Bar-tailed Godwits; seventy-four Whimbrel; thirteen Pomarine Skuas; eleven Arctic Skuas; two Great Skuas; forty-four Little Gulls (with one lingering at The Swannery on 24th); nineteen Arctic Terns; fifty-two Little Terns and one Black Tern. Some raptors were also seen coming ashore during 'seawatches' at Ferrybridge, with a Marsh Harrier on 28th and Hobbys on 29th and 30th April; over The Fleet a Red Kite was at Butterstreet Cove on 10th and Ospreys were at East Fleet on 13th and The Swannery on 17th and 18th. April Passerines of note were a Serin over the Bridging Camp on 21st; a Blue-headed Wagtail at The Swannery on 30th, two White Wagtails on 15th and a Grasshopper Warbler on 24th and a Ring Ouzel near Moonfleet on 15th. As for waterfowl a drake Garganey was at The Swannery on 24th and a pair on 28th.

May was heralded by a Bee-eater at Butterstreet on 1st, a first on the Reserve (and was later claimed at Rodden Hive). A Kentish Plover at Ferrybridge on 4th was the pick of the May waders but there was also a Little Stint there on the 1st; ten Sanderling on 13th (with thirty-two at The Swannery between 11th and 28th) and a Green Sandpiper at The Swannery on 4th and an Avocet there on 30th. Other birds of note at The Swannery included a Garganey from 1st to 5th; Marsh Harriers on 1st, 6th and 14th; a Hobby on 31st; a Nightjar on 23rd and two Roseate Terns on 23rd. Passage in Lyme Bay slowed in May but ‘seawatchers’ still managed totals of one Great Northern Diver, twelve Whimbrel, one Pomarine Skua, seven Arctic Skuas, one Great Skua, one Roseate Tern and thirteen Arctic Terns. A Little Gull was at Ferrybridge on the 7th.

Dormouse at the wrong address

Steve Hales rings the unfledged young of Blue and Great Tits that breed in Abbotsbury Swannery’s nest boxes. Imagine how startled he was to find in one box that was believed to be occupied by Blue Tits, the furry face of the Dormouse in the photo opposite.



Nutrient loadings received in the Fleet from its catchment

A valuable and interesting paper has recently been published on a key concern relating to the Fleet, which has been highlighted in several previous newsletters – its nutrient loadings.

Staff and students from Plymouth University have determined the levels of nutrients reaching the Fleet from its catchment from just beyond the mid 19th century to the present day by assessing historical data on land use changes, livestock numbers and human population. They consider that agriculture was the main nutrient source throughout which is not surprising as only less than 14% of the catchment is non-agriculture. Other inputs represent only minor contributions.

The paper rather alarmingly concludes that the Fleet has been increasingly overloaded with nitrogen and the upper Fleet with phosphorus in the form of inorganic material throughout the period of the study. However levels climaxed in 1980’s as farming became less intensive and preventative measures were taken to prevent run-off.

Work still continues on the conditioning of the Fleet water and recommendations made in the paper are being considered. The paper points out that ‘the lagoon has clearly retained its great inherent ecological values in the continued presence of such elevated loadings’, and that it may be inappropriate and impractical to consider any further management other than maintaining the current status.

‘Hindcasting of nutrient loadings from its catchment on a highly valuable coastal lagoon: the example of the Fleet, Dorset, UK 1866-2004 by Geraint J Weber, Patrick E O’Sullivan and Paul Brassey’ was published in December 2006 in Saline Systems 2006,2:15. It is an Open Access article (<http://creativecommons.org/licenses/by/2.0>)

Boat burning on Chesil shore

During the spring a boat was deliberately burnt on the shore of Chesil by its owner. It is understood that the act may have:-

- Constituted a violation of the Clean Air Act (as an illegal black smoke fire),
- Been an illegal disposal of waste
- Caused damage to an SSSI.

The owner has cleared away the debris but some charred remains, carried away by the tides, still litter the shores, a quantity of pebbles have been fragmented by the heat of the fire and though the area involved is admittedly relatively small and will recover some of the Fleet’s special marine life was destroyed. Natural England, the Environment Agency and Weymouth and Portland Borough Council are investigating the matter.



A Visit from Helen Philips, the Director of Natural England

Many readers will know that the country's statutory body for nature conservation, English Nature, has been amalgamated with the Countryside Commission to form Natural England in a move to provide a more comprehensive protection for the environment. It was a pleasure to receive the first Director of the new formation, Helen Philips, at the Chesil Beach Centre on a brief visit to Portland in May. It is understood that Ms Phillips was particularly keen to see where the seabirds affected by the Napoli were washed up and the venue of the 2012 Olympics' sailing.

Fasciation

A coast path walker's eye was drawn to a buttercup, believed to be the meadow buttercup *Ranunculus acris*, that she saw in the Moonfleet area because it had a curiously flattened stem. It is understood that the condition of flattened and ribbed stems and small ill-formed flowers is an example of fasciation which can occur randomly in a wide range of plants. Fasciation may also be caused by genetic disruption or infection or initiated chemically or even physically, for example, by frost action or insects.



A Heritage Lottery Fund grant enhances National Marine Week celebrations on Portland and this year's Dorset Coastlink's Seafest at the Chesil Centre

National Marine Week is traditionally celebrated in Dorset by the county's Coastlink centres at Studland, Durlston, Kimmeridge, Lulworth, Chesil and Charmouth. This year it is the turn of the Chesil Beach Centre to host Seafest an event in which all the centres participate. Both the National Marine Week and Seafest consist of a range of activities and displays.

This Year, in an attempt to involve a wider area of Portland in National Marine Week and Seafest, the Chesil Beach Centre linked with IVY (Island Volunteers for You) and the Portland Ranger, and made a successful application to the Heritage Lottery Fund to support a comprehensive celebration. Jo Morland has been appointed co-ordinator for the project, and has put together the week's programme, details of which are enclosed. We hope you will agree that there are exciting events and activities to experience and that you will join us on as many occasions as you can.

The McEwan pebbles!

Many readers will remember how Pulitzer prize winning author, Ian McEwan, got himself into trouble by unwittingly revealing when being interviewed on his latest novel 'On Chesil Beach' that he had taken some pebbles from Chesil. A petty issue really, but a good illustration of how devious the media can be?! Subsequent to the interview, the Centre received a phone call asking about taking pebbles from the beach. The correct answer was given – that it is illegal, the pebbles being private property, part of an SSSI, and that all the material is required to act as an important sea defence. The follow up question was 'what could happen if some were taken? Again a good answer – 'you could be fined'.



The McEwan pebbles being returned to the beach!

We understand that the caller was a Daily Mail reporter who then pieced together his story, making a headline out of McEwan's act and putting him on the spot. It was also implied that the guardians of the beach were after or should be after his blood. Sensibly McEwan returned the pebbles, which more or less took care of the matter, and on balance the publicity probably did more good than harm.

Another article on the same subject in The Independent (4th April) unhelpfully implied that a huge fuss was made of taking a few pebbles from the beach when further to the west at Charmouth people are not discouraged from hammering into cliff faces and removing fossils. This is a totally different thing of course because at Charmouth there is plenty of cliff material available to fall in the sea. Sea defence is not an issue there compared with Chesil where there is no more material available to replace any lost. But whilst we know this, it has to be admitted that the public as a whole do not. This is a challenge we have to meet, and maybe the publicity has done us more good than harm!

Slipway

The slipway into the Fleet at the north shore Ferrybridge has now been completed. The slipway is not a public facility but has been constructed to enable the nature conservation management of the Fleet to be more effective and to service mooring holders. The slipway is controlled on behalf of the owners, the Ilchester Estates, by Blue Water Horizon Ltd.

‘Rock around the Coast 2007’

For the third year running Dorset Coastlink Centres are running Rock around the Coast, a series of seven guided walks along the Jurassic Coast from Charmouth to Studland from Tuesday, 31st July to Monday, 6th Aug. A few guest speakers, optional refreshments and visits are built in to the programme. This is a fantastic opportunity to explore this world-renowned coastline with its wildlife, history, geological and archaeological treasures! Join any number of the walks. For more information or to book, please call 01929 400155

Asparagus

Prostrate Asparagus *Asparagus prostratus* is a rare maritime plant of exposed cliff top, stabilised sand dunes and more rarely the upper parts of salt-marshes. It is confined to the Atlantic coasts of Europe from Northern Spain north to South Wales and east to The Netherlands.

In Dorset it is confined to the Portland/Ferrybridge area where it has a long and chequered history. First discovered in the mid 18th century by Dawson Turner ‘by the Ferry to the Island’ referring to Ferrybridge and near the ‘extremity of the Island’ meaning near Portland Bill. These populations survived until the beginning of the 20th Century when the Torpedo factory was built on the colony at Ferrybridge, and the Portland Bill population was lost to quarrying activity. By chance the plant survived by the railway line on Hamm Beach where it was first recorded in 1951 and was re-found in 1997. One large female plant is still present.

Prostrate Asparagus is a dioecious plant and with only a female plant on Hamm Beach and the nearest male in Cornwall chances of the population increasing are remote!! The Steering Group, headed by The National Trust, responsible for implementing the Prostrate Asparagus Action Plan instigated some trials using hand pollination to try and increase recruitment. This was fairly successful and in 2006 it was decided to use the Dorset female as the first full-scale hand pollination project. In early June 2006 freshly cut stems of male flowers were bought from two sites in Cornwall and 60 female flowers were hand pollinated by ‘kissing’ the male anthers against the female stigma. The flowers were then marked using coloured string tied loosely around the stem of the female flower, with different colours for the male plants from the two different donor sites in Cornwall.



*On the left the male donor from Tubby's Head, north Cornwall
And on the right the female Asparagus prostratus in flower, Hamm Beach*

A total of 44 berries were picked when ripe in early September 2006, the flesh stripped and the resulting 92 seeds sown. After a very anxious wait the first seeds germinated in late April 2007. There are now 83 seedlings, a germination 90% rate that will be grown on for a further nine or ten months. It is planned that 20 seedlings will be planted alongside the female at Hamm Beach in March 2008 to produce a healthy mixed population that will be naturally viable. A further 20 will be planted near to Portland Bill to re-establish a colony on the Island. The National Trust and Natural England funded the work.

Bryan Edwards
Dorset Environmental Records Centre

A moult study on the Abbotsbury Swans

Rearing young is a long and painstaking matter for a pair of swans. The whole process of nest building, egg hatching and protecting unfledged cygnets takes from March to September. During this six-month period the adults do not leave their charges and therefore have no wish to fly, but that is not to say that wings are not required. Wings are used to defend their young and their territory against other swans and predators. Naturally wing and other feathers suffer a lot of wear not only being used in their defensive role but generally as the swans move around on land and in vegetation.

It is therefore quite convenient for the adults during this period to undergo a whole body moult, which renders them flightless for six weeks, and is completed just as the cygnets themselves are ready to fly. Brand new wings all round – just right to take the family unit up and down the Fleet and elsewhere during the winter in search of food.

During the moult, new wing feathers or quills however can be easily damaged whilst growing and any damage incurred could result in a loss of flight until the next moult can be undertaken in the following year. Loss of flight for a swan in the winter could be disastrous.

The need to avoid any confrontation and use of wings during the moult therefore is vital, but does this mean that the cygnets cannot be protected for six weeks? The answer is no. The male swan or cob delays his moult until the female has completed hers and can take on the protective role from him. There is no coincidence here, the timings are precise, and it is a fact that has been known about for a long time. With pairs that lose their cygnets early on the cob and pens moult together there being no reason for the cob to delay.



Emerging primary wing feathers

Professor Chris Perrins who has been studying these swans since the early 70's is now investigating how the cobs can delay their moult. This season blood samples have been taken from identified pairs on a regular basis and it is hoped from the examination of these that the hormonal process, which triggers off delay, can be identified.

Two beach clean ups but at least a quarter of million empty plastic bottles left untouched!

Once again thanks to members of the public who assisted the Reserve in clearing litter from the Fleet shores in the clean up held on 31st March and on 15th April, the main access points on Chesil at Ferrybridge and Abbotsbury as part of the annual Great Dorset Beach Clean. Our own Fleet clean was well supported with 42 people amassing 115 bags of rubbish.

In the course of surveying Chesil for nesting Ringed Plovers, Steve Hales was startled by the number of plastic bottles he was seeing trapped in the Shrubby Sea-blite at the back of the beach. He counted the bottles in a typical measured stretch and they averaged 10 per metre. From that he estimated that between Abbotsbury and Ferrybridge including bottles on higher areas of the beach there is somewhere in the region of a quarter of a million!

Because of the inaccessibility and sensitivity of the inner shore of the beach, rubbish is never collected from there. Fortunately periodic high waters cause the bottles to float above the vegetation in which they are trapped to be subsequently wind blown to the land shore. This prevents a mass build-up of plastic but nevertheless there must be some continuous degradation impacting on the shingle and the water.

The Website www.chesilbeach.org

We are delighted to have our website up and running, and thank Ed Harland for all the work that he has carried out to achieve this. Please look now!

Bird flu news

There is no evidence to support numerous media claims that Bird Flu is spread by wild migrant birds. A recent comprehensive review of scientific literature (Ibis, volume 149, pages 202-214) shows that bird flu outbreaks from the east:-

- Did not follow migration routes or timings of the movements of wild bird populations
- That if wild birds were involved the spread of the disease would have been on a wider front
- Travelled along major trade routes with the largest and most widespread outbreaks occurring in countries with poor border controls

Many readers will know that in 2005, ten selected pairs of the Fleet's unique herd of Mute Swans were transferred some distance from the Fleet to a barn that was specially adapted for the swans to live in complete security. With the reduction of the threat of AI to the UK, the swans have now been returned to Abbotsbury where they are happily breeding. Bio-security is still a top priority at the Swannery however, and the barn is being reserved for any future need that the swans may have.

Forthcoming events on the reserve

July.

Tues 31st - Low tide walk at Ferrybridge. Meet Chesil Beach Centre 1pm. Wear wellies or water sandals. £1.50 child, £2.50 adult.

August.

Sun 5th - Fossil walk Pirate's Cove. Meet the end of Camp Rd 2pm. Wellies advisable. £3 adult, £2 child

Sat 11 - 19th Marine week *A special opportunity to take part in a series of marine related activities and guided events on Portland.*

Thurs 30th - Low tide walk at Ferrybridge. Meet Chesil Beach Centre 1pm. Wear wellies or water sandals. £1.50 child, £2.50 adult.

September.

Sat 8th - Autumn birds walk. Meet Chesil Beach Centre 1am. Adult £3, child £2.

Sat 15th - Autumn flowers of the Fleet. A gentle stroll around the Ferrybridge area at this changing time of year. Meet Chesil Beach Centre 2pm. Adult £2.50, child £1.50.

Sat 29th - Low tide walk at Ferrybridge. Meet Chesil Beach Centre 1pm. Wear wellies or water sandals. £1.50 child, £2.50 adult

October.

Sun 7th - West Fleet in the autumn. Join the warden on a walk taking in the birds, wild flowers and geology. Adult £2.50, child £1.50, wellies advisable. Meet Abbotsbury Swannery car park, 10am.

Sun 28th - Fossil walk at Ferrybridge. Meet by the Oyster farm 11am. Approx 2 hrs but muddy ground! Wear wellies. £3 adult, £2 child.

November.

Sun 4th - Scavenger Hunt. A good excuse to see what the winter storms have thrown up on the beach. Meet Chesil Beach Centre 2pm. Child £2, adult free!

Sun 25th - Wintering birds of the Fleet. Meet the field gate at Butter St 2pm. Adult £3, child £2.

December.

Sun 9th - General interest walk at Ferrybridge taking in history, habitats and beach formation. Meet Chesil Beach Centre 2pm. Adult £2.50, child £1.50.

Grid References for Meeting Points.

Chesil Beach Centre - SY668755
Abbotsbury Swannery - SY846577
Camp Rd (end) - SY652772
Field Gate Butter St - SY635801

This newsletter has been compiled by Warden Don Moxom.

To book a ride on the Glass Bottom Boat, the Fleet Observer, please phone 01305 759692.