

Minutes of the 124th Fleet Study Group meeting held on 15th November 2018

Present: Ed Harland (chair), Don Moxom, Nick Owen, Matt Doggett, Charlie Wheeler, Maxine Chavner, Kevin Donnelly, Stephanie Ashman, Emma Rance, Frank Cox, Marc Kativu-Smith, Jonathan Cox (minutes)

Apologies: Lin Baldock, Jon Bass, Charlotte Bolton, John Dadds, Rachel Waldock, Steve Feist, Alan Holiday, Steve Hales

Minutes of the 123rd meeting: Approved.

Dr Sue Eden

Don Moxom gave a remembrance tribute for Dr Sue Eden who has died recently. She was a long-term member of the Fleet Study Group who joined the group in 1989 and made many contributions to the group. She is well-known for her work on Dormice, but was also a salt-marsh specialist and a botanist, and she discovered the rare Four-leaved Allseed growing at Ferrybridge. Her husband Roy Eden, who was an expert on moths, pre-deceased her.

Reports from representatives (Ed Harland)

Portland Harbour Consultative Committee, 6th June

- Curiosity Park for divers in Balaclava Bay is in use.
- Whitehead Pier-end to be marked for better visibility.
- Ham Beach summer exclusion zone now active.
- Small oil spill on southern arm of Portland Harbour was thoroughly cleared.
- A programme of voluntary cleaning of the breakwater is now occurring.

Dorset Coastal Forum

- A programme of voluntary cleaning of the breakwater is now occurring.
- The annual meeting is scheduled for 29th November at the WPNSA Sailing Academy, with tickets at £35.
- The use of 'smart pebbles' is being trialled to monitor beach movements.

Plymouth Coastal Observatory Annual Partners meeting, 17th October

- Held in Exeter, with c.50 attending.
- Using citizen science to help chart the changing coastline.
- Richard Edmonds investigating the Lyme Regis landslip of 1839.
- Investigations regarding the use of 'mega-nourishment' to restore eroded beaches.
- Investigations of the impacts caused by Storm Emma, particularly on the South Devon coastline.
- Research into how best to deal with old coastal landfill sites now subject to erosion.

Coastal Access inquiry

- Still ongoing.

Portland Harbour Oysters Several Order

- Several Order allows an organisation to fish for shellfish (oysters, scallops, mussels, etc.) or issue licences to others who wish to do so.
- Portland Port application is progressing slowly.
- A public consultation has been held.
- A long-lining system for scallops (scallops tethered to underwater ropes as they grow) is being trialled.

Natural England TAG (Technical Advice Group) (Stephanie Ashman and Maxine Chavner)

The following surveys were carried out in 2018:

- Little Terns APP (abundance, productivity & provisioning) survey carried out for 2nd year at Chesil, part of a wider APP study of terns across the south coast. Camera data from 2017 and 2018 currently being analysed.
- NVC (National Vegetation Classification) survey of the SAC coastal vegetated shingle and the saltmarsh habitats carried out by Footprint Ecology. Dr Phil Wilson and Marion Read carried out survey of western end of reserve and the Swannery embayment, whilst Sophie Lake and Gavin Saunders carried out survey on Chesil Beach. The 2018 data is to be compared with the results of a similar survey carried out in 2005 by Giles Groome & Karl Crowther.
- Pacific Oyster survey carried out for first time for 20 years, including snorkel survey from Bridging Hard area to Pirates Cove. Concern regarding discovery of Slipper Limpets that could become damagingly invasive.
- Seagrass survey of the Fleet has been carried out, including much use of drones. Fleet has largest seagrass beds in the south-west. Drone piloted by NE NNR manager Bob Ashington, with ground-truthing by kayaks and Go-pros. Initial results analysis suggests some recovery of seagrass beds, and possibly an increase in the rare Foxtail Stonewort *Lamprothamnion papulosum*. Some concern regarding masses of the bulky marine algae *Chaetomorpha* shading seagrass and entangling and uprooting it.
- Sediment survey to assess PAHs (polyaromatic hydrocarbons) in the sediments of the Fleet, focusing on areas near New Barn Farm, Langton Hive Point, Moonfleet, Butterstreet Cove and Chickerell Hive. Surprisingly high levels discovered in some areas, and possible causes discussed in the meeting included uncombusted petroleum products, combustion processes, and natural hydrocarbons from underlying geology. Bioturbation by marine worms or molluscs was suggested as a possible cause of PAHs being uplifted in the sediment layers.

Proposed surveys in 2019:

- Further Little Tern APP study.
- Evaluation of recreational activities along the Fleet.
- Toxic contaminants survey.

- Presence and distribution of Lagoon Sandworm *Armandia cirrhosa* in the Fleet and Portland harbour.
- Further Seagrass survey.

Chesil Bank & the Fleet Nature Reserve update (Charlie Wheeler)

- Small fish surveys carried out in the Fleet by SIFCA. Sand Smelt were frequent, and Garfish was one of the more unusual species recorded.
- Reserve staff involved in enabling the seagrass survey by drone carried out by Bob Ashington of NE, and a re-survey with a new drone camera by Matt Doggett and Lin Baldock.
- Bat surveys in Abbotsbury Beach area by Adrian Bicker using calls analysis to detect bat movements. *Nathusius Pipistrelle* was a key species studied, and many bats were recorded moving westwards. Infra-red was also used to search for bats roosts.
- Weather station installed on top of hide, to use in correlation with the bat surveys.
- Sediment surveys using core sampling by Sarah Bagwell.
- NVC and botanical surveys carried out within the reserve area as described in TAG report above.
- Microfossils study by Prof. Hart of Plymouth University, searching for foraminifera, statoliths and otoliths, as well as belemnites and ammonites.
- A good year for the terns colonies. 37 nesting pairs of Little Terns produced 65 chicks (between 25 and 37 of which were successfully fledged). The tern artificial island in the Fleet supported more than 80 pairs of Common terns that hatched more than 150 chicks, of which 140 were successfully fledged. 119 of these were ringed.
- Boundary fences were extended at Langton Herring and at the Abbotsbury Beach dragon's teeth WWII defences.
- Additional 'Soft Mud' warning signs were installed near Little Sea.
- The Abbotsbury Beach boardwalk and signs pedestal were cleared of extensive encroaching shingle, and panels installed to reduce further encroachment.
- Notable birds records: Cattle Egrets much increasing, with 40+ recorded in October and November. Greenland White-fronted Geese and two Hen harriers recorded, plus a Whooper Swan at the Swannery from April 2018.

Aerial Survey of seagrass habitats in the SAC (Matt Doggett)

- Report of 2017 survey by Matt Doggett and Lin Baldock. 430 ha were surveyed by drone and ground-truthing.
- The 2017 survey aimed to determine the level of recovery of the Seagrass beds from 2016, when a drone survey revealed a large area of bare sediment lacking seagrass in the bed of the Fleet. Possible causes of this bare area were discussed, including the possible effects of the overtopping of the shingle ridge during the exceptional storms of February 2014.
- Survey carried out between the Narrows and Clouds Hill. Following the drone surveys ground truthing was carried out by CSI (Community Seagrass Initiative) in kayaks.

- Regrowth by both Seagrass and Lamprothamnion papulosum was recorded.
- Stitching together drone photos made more difficult by moving ripples and large featureless areas of water surface, which can confuse the software. Large areas of photos overlap plus including shorelines in the photos aided the process. Some photos required laborious manual stitching together.

Walking survey of the seaward side of the shingle ridge (Jonathan Cox)

- A brief report was given of a walk along the seaward side of the shingle ridge between Abbotsbury Beach and Ferrybridge in early October. There were noticeably lower levels of litter and flotsam observed along this seaward side compared to observations made in previous years, probably due to the extended calm weather in this year's summer heatwave, plus a reduction in waste dumped by ships.
- Photos were shown of a large cylindrical hollow plastic structure washed up, possibly a type of fender. The portion of the structure that had been submerged for some time had been colonised by abundant mussels plus a large conical species of barnacle that was tentatively identified as *Balanus perforatus*, a species known to colonise ships and other artificial structures.

Chesil Beach Litter monitoring site visit (Ed Harland)

- The beach litter monitoring transect on the beach opposite the Moonfleet Hotel was re-recorded by 4 FSG members on August 18th. A presentation about this will be given at a future meeting.

Wadeway visit (Ed Harland)

- The planned visit to the Wadeway has been postponed this year, and the next likely available opportunity when time of year and tides are suitable may be in August or September 2019. Further thought and discussion are needed regarding what is intended to be achieved here.

Any Other Business

- Marc Kativu-Smith: (i) The Fleet Observer glass-bottomed boat had had a good year, much helped by the heatwave summer. A new engine has been purchased for the boat. (ii) Liaison with anglers to try to reduce beach litter, including an idea of encouraging a brief beach clean every time they go fishing. (iii) The issue of helicopters flying low over the beach and the Fleet and disturbing wildlife, in particular birds, was discussed and suggestions to try to improve the situation were made.
- Frank Cox: (i) Dredging by Portland Port has been occurring. (ii) An MMO licence application has been submitted for an extension to the Queen's pier.
- Don Moxom: (i) Geoff Poole's archive contains Chesil and the Fleet material, and it would be good if a way of enabling this material to be made accessible could be found. (ii) The FSG archive needs updating since this was last done in c. 2014.

Future meetings

Thursday March 14th 2019 - this meeting will be the 125th meeting of the group. Ed suggested this could be a review meeting in which members review the current situation on the Fleet and Chesil Beach with regard to their areas of interest/ expertise.

Thursday July 18th 2019