

Minutes of the 126th Fleet Study Group meeting held on 18th July 2019

Present: Ed Harland (chair), Don Moxom, Lin Baldock, Frank Cox, Alan Holiday, Andy Powell (CEFAS), Monika Ditanji-Rapkova (CEFAS), Alex Hughes (CEFAS), Jonathan Cox (minutes)

Apologies: Jon Bass, Ruth Carpenter, Maxine Chavner, Stephanie Shilitoe

Minutes of the 125th meeting: Approved.

The Papers presented at the 125th meeting have been verified and circulated. If further bound copies of the papers are required Jonathan can bind these with a comb binder.

Reports from representatives (Ed Harland)

Portland Harbour Consultative Committee

- The end of the old Whitehead Pier is now marked for better visibility.
- Piling is being used to extend the Q pier.
- The de-gaussing range is to be renewed.
- The clean-up of litter from the breakwater is continuing.
- Proposals for a 2nd kite-surfing school and a jet-ski school have been turned down.
- Next Portland Harbour meeting scheduled for 5/9/19.

Dorset Coastal Forum

- Newsletters have been received.
- An Aquaculture open meeting occurred in Weymouth on 8/7/19.
- A Seaweed Aquaculture feasibility workshop was held on 12/12/18, with a follow-up meeting on 23/5/19.
- DCF, CEFAS and FLAG are looking at possibilities for seaweed aquaculture off the Dorset coast.

Research Reports

- Lin Baldock searching for *Ruppia* at Langton Hive, with small plants only found.
- A botanical survey was carried out at the Wildflower Meadow at the Swannery by Jonathan.

FSG website and discussion group

- Difficulties encountered trying to build a new FSG website. Wix is easier to use, whilst Wordpress is more difficult. Efforts now concentrated on rebuilding the Chesil website.

- 22 FSG members have joined the FSG discussion group, 13 had not yet joined. The address is fleetstudygroup@groups.io

FSG Data Repository

It would be useful if the Group had an online area which could be used to store reports and other relevant documents that could be accessed by group members. The current Chesil and FSG websites do not support this facility for a number of reasons. A quick survey of what is available on the web suggests that to get the amount of storage space needed will cost a significant amount of money in annual fees. This could be reduced by using links to documents stored elsewhere but the remaining documents will still occupy significant space. Members were invited to consider if there are any cheaper (free?) alternatives.

Presentations:

Little Terns Incubation (Don Moxom)

Don presented data gathered in 2003 that had recently been re-visited. Investigations had shown that the little tern colony at Ferrybridge had suffered a history of failed incubations. Temperature loggers were placed in nests and this was combined with visual observations to investigate if prolonged absences of the brooding adult were causing the problem. The investigation suggested that the problem was caused by an insufficient supply of warmth to the eggs and that the eggs were not adequately cradled in the nest. The idea of artificial scrapes suggested by John Dadds has significantly increased the mean egg temperature resulting in an increase in the number of fully incubated eggs.

Shellfish and Water Sampling in the Fleet (Andy Powell, CEFAS)

- Target organisms were total coliforms, E. coli and Vibrio, used as sanitary indicators for water quality. Pathogenic Vibrios occur naturally in the marine environment.
- All species proliferate in water that is warm and of low salinity.
- There are two main routes of infection, via eating raw or undercooked shellfish and via skin abrasions.
- The Fleet was studied in summer 2018, using the methods of membrane filtering and Idex technologies.
- The sites studied were the Swannery, the Moonfleet Manor Hotel area, and at Ferrybridge, with an additional control site at Newtons Cove.
- 560 suspected Vibrio isolates were recorded, with 20 strains sequenced so far.
- Proposals for future work include further sampling during the summer months, enhanced links with FSG and stakeholders, continued sequencing of isolates, and work on AMR profiling.
- A PhD study including on Pacific Oysters is being carried out by Monika Ditanji-Rapkova of CEFAS.

Long-term temperature logging in the Fleet (Lin Baldock and Jon Bass)

- Water temperatures have been monitored with data loggers installed along the Fleet and in and around seepages and springs along the shores of the Fleet.
- The springs are one of the designated features of the SAC. They host a population of a rare species: Defolin's lagoon snail *Caecum armoricum*.
- Detailed data has been obtained and further analysis of this is intended.

FSG Field Days 2019

The upcoming Field Day was discussed. The reference sites in the Upper Fleet will be visited and documented. CB04 had already been documented so sites from CB00 to CB12 will be visited. A methodology had been devised and tested on CB04. The methodology will be documented nearer the event. Sites visited will be classified as normal and minimal. Minimal sites will be recorded while causing minimal disturbance to the immediate area around the point.

Future meetings

Thursday Nov. 7th 2019, 11 am at Ilchester estate offices, Abbotsbury

Thursday March 19th 2020, location TBD.