THE FLEET STUDY GROUP

FIRST PROGRESS REPORT, November 1976.

Inaugral Meeting

Report of the Working Party

1. Bibliographical Search.
2. Scientific Work reported to Working Party.
3. Visits to the Fleet.
4. Circulation of initial notice.
5. Provisional list of Activities.
6. Provisional Register of people contributing.
7. Proposed Development involving the Fleet
8. The future constitution.
9. Finance.
10. Future meetings.

Compiled by Mrs. J.M. FitzPatrick,
Secretary.

THE FLEET STUDY GROUP

FIRST PROGRESS REPORT - NOVEMBER 1976

The inaugural meeting of the Fleet Study Group was held on 24 April 1975 at the Weymouth College of Education and was chaired by the Principal, Miss N O'Sullivan. Those others present were as follows:

Mr Archibald	Deputy Regional Officer, Nature Conservancy
Miss H Brotherton	Hon Sec, Dorset Naturalists Trust
Mr R Burden	Rural Environment, DorsetPlanning Department
Mr J Churchouse	Representative for local Anglers
Mr Cross	Deputy Planning Officer, Dorset
Mr A Eden	Strangways Estate
Mr J Fair	Strangways Estate
Mrs J Fitzpatrick	Co-ordinator, Environmental Science, Weymouth College of Education
Mr Guest	West Dorset County Council
Dr P Head	NERC and Marine Biological Association
Mr E Hodges	Wessex Water Authority
Dr N A Holm	Marine Biological Association
Mr Homyer	Lyme Regis Council
Dr R J Huggins	Wessex Water Authority
Mrs B Keats	Chairman of the Scientific Committee, Dorset Naturalists Trust
Dr M Ladle	Freshwater Biological Association, Wareham
Mr P C C Mitchell	National Trust, Wessex Region
Mr G Poole	Senior Lecturer in Geography, Weymouth College of Education
Lt Comm D R Ridgers	Assistant Queen's Harbour Master, Portland
Mr D Seaward	Marine Molluscs
Mr J Soane	Conservation Officer, Dorset Naturalists Trust
Mr K R Soar	Principal Scientific Officer, AUWE
Mr G M Spooner	formerly Marine Biological Association
Dr Stevenson	Ministry of Agriculture &Fisheries, Weymouth
Mr D Womersley	Group Officer, Rural Environment Department of the Planning Office, Dorset

Apologies for absence were received from Mr Hillier, Weymouth & Portland Planning Department

Mr R E Reynolds, UK Atomic Energy Authority, Winfrith, while not sending a representative to the first meeting, will be happy to co-operate at a later date if needed.

Items discussed at the meeting included the following:

1. The interests of the Strangways Estate in the Fleet and Chesil Beach. Mr Eden told the meeting that the Estate had for centuries owned part of the Chesil Bank and the bed of the Fleet. A Trust was being formed to further the environmental assets of this important national site. Already the Little Tern colony was being wardened. The Navy and the Bridging Camp had co-operated with the Estate in order to reduce the disturbance to the birds. The problems of trespass and the adjacent caravan sites were, however, increasing. He was concerned with the need to discover possible sources of pollution and the changes which might cause it. He hoped that this meeting would stimulate the collection of scientific information about this unique area.

2. Dr P Head, representing NERC, gave the meeting some idea of the activities of other similar Study Groups already formed. He said that the majority were Estuarine Groups based on University or College Science Departments and were concerned with such areas as the Severn, the Forth, the Tay, Liverpool Bay and Poole Harbour. The aim of each has been to collect and publish their information. The interests and character of the Groups, however, reflected the interests of the people in them. He pointed out that although NERC funds had been available for research projects, the likelihood of obtaining any for this Group at present was small.

Concerning possible boundaries to the study area, Dr Head thought that it was not necessary to define them too rigidly. It may, however, be necessary to bear in mind the larger adjacent areas such as Portland Harbour and Weymouth Bay.

3. An informal exchange of information included the following topics:

(a) The Chesil Beach itself with reference to extraction, replenishment and stability.

(b) The fish and worm populations and the problem of over-fishing.

(c) The possible polluting effects of land use alongside the Fleet on the Zostera beds which provide food for water-fowl and mute swans.

(d) The movement of possible effluents in the enclosed waters of the Fleet with its own characteristic tidal flow.

(e) The range of tolerance of the fauna to changes in salinity, evaporation and other extreme conditions.

(f) The potential risk of tankers discharging oil in Lyme Bay or Portland Harbour. In view of this danger the seepage of water through the cans needed further study.

During these discussions the need to keep the activities of the Group scientific became apparent.

4. A Working Party was set up by the meeting, the terms of reference of which were:

(1) To review and evaluate the state of scientific knowledge on the Fleet.

(2) To identify gaps in the knowledge.

(3) To suggest priorities for work most likely to advance knowledge of the area.

The suggested membership of the Working Party was as follows:

Miss H Brotherton (Chairman)	Dorset Naturalists Trust
Mr A Eden	Strangways Estate
Mr J Fair	Strangways Estate
Mrs J FitzPatrick (Hon Sec)	Weymouth College of Education
Dr M Ladle	Freshwater Biological Association
Mr G Poole	Weymouth College of Education
Mr I Soane	Dorset Naturalists Trust
Mr K Soar	Principal Scientific Officer, AUWE
Mr D Womersley	Dorset County Council

THE FLEET STUDY GROUP

REPORT OF THE WORKING PARTY

Since its formation at the Inaugural Meeting of the Fleet Study Group in April 1975, the Working Party has met five times.

The following members have been co-opted:

Mr Alan Carr	Institute of Oceanographic Sciences, Taunton
Dr David Hibbard	The Culture Centre of Algae and Protozoa, Cambridge
Dr John Whittaker	Department of Palaeontology, British Museum (NH)

Dr E M Burrows has acted in an advisory capacity.

1. Bibliographical search for publications on the Fleet

The main aim of the Group initially is to collect information about what is already known of the study area; together with any other related information that may be of use for future assessment. This activity is essential before the state of scientific knowledge in the various sectors of interest can be evaluated. Only then will it be possible to isolate the gaps in our understanding and to decide on priorities for research.

After the inaugural meeting in April 1975, the Librarian of the former College of Education at Weymouth kindly offered to file any material deposited by members of the Study Group as part of the Dorset Collection in the College Reference Library. The library staff will undertake to classify and catalogue each item so that there is one card in the author/name catalogue, one in the classified index and one in the shelf index. An additional entry could be made for each piece of work and filed under "Fleet Study Group". Working facilities were offered to interested parties on registration at the desk.

During the 18 months activity of the Working Party, several important references, reprints, photocopies and photographs have been received. The Group is preparing an up-to-date list which it hopes to have ready for the April 1977 meeting. Clearly this must be an on-going activity and the Group feels that there are many people and organisations that may still have information that would be of value to them. A request form for further information will be circulated at this Easter meeting.

2. Scientific work reported to the Working Party

(1) 24 October 1975 (Second meeting of the Working Party)

Dr Whittaker gave a most interesting summary, illustrated by slides, of his work on the "Ostracods of the Fleet and Weymouth Bay" which he carried out between 1967-69.

The physical environment of the Fleet had had to be tackled for his work on these small Crustaceans because there was very little information that he could use. The important aspects studied and outlined by him were -

- tidal range and limits of marine influences.
- salinity pattern in space and over the two years.
- sediment characteristics along the Fleet bed.
- associated Fleet water vegetation especially the Algae and Zostera spp. He pointed out that Zostera decays and produces a thick reducing organic silt.
- the oxygen content of the water.
- pH (7.7-8.2)
- ions of Calcium and Magnesium.
- temperature regime of the water (much warmer in summer and cooler in winter than the surrounding sea).

He explained that the Ostracod fauna consisted of three main groups or assemblages related to their tolerance of salinity and tidal patterns. These groups were:

(a) Abbotsbury (10-20%) influenced by the Mill Stream inlet at the Swannery (some of the species occurred also in Christchurch Harbour).
(b) West Fleet - (12-30% in winter, 24-30% in summer) with poor marine species.
(c) East Fleet - with marine species not found below 25%, and similar to those in Weymouth Bay. Some species, however, were not found in Weymouth Bay.

There were two sets of Ostracods - the phytal species associated with the Zostera and Algae, and the benthic species whose distribution was less restricted.

In the discussion that followed, it became apparent that it would be possible to indicate areas of work that needed further study (see below).

Dr. Burrows expressed concern about Dr. Whittaker's reference to the appearance of a reddish fluorescence for a short time, indicating a bloom of a planktonic organism. A bloom of Phaeocystis, if it occurred, could indicate a particular pollution problem and the presence of this organism should be monitored. She also thought that one priority should be a determination of the pattern of tidal flow and the distribution of salinities both horizontal and vertical. In view of the special feature of the Fleet containing a more or less trapped body of water with a few small freshwater inlets, she thought it important too, to determine levels of nutrients such as nitrate and ammonia which, if too high, could bring about changes in the ecosystem.

(2) 23 January 1976 (Third meeting of the Working Party)

Dr. David Hibbard gave an account of his exploratory work on the Phytoplankton of the Fleet Waters. He explained that he had looked at samples of Fleet Water on several occasions as a source of interesting organisms. So far he had not made a detailed survey but from these explanatory samples he emphasised how important it was to look at the Phytoplankton. These small green plants were very important to the Fleet ecosystem as they were the main source of primary production, apart from the Zostera and other Algae, and as such were the providers of oxygen within the Fleet Waters; therefore they must be safeguarded. He then put forward a suggestion that the Fleet at the Abbotsbury end was behaving like a large above-tide rock pool, supporting large numbers of only a few species of phytoplankton. He emphasised that there were very few places in the world where one could study a situation such as existed at the Fleet and therefore it was important and interesting in its own right. The populations of phytoplankton were seasonal and cyclic, one type being replaced by others. These bursts of activity would be mainly a temperature response. The Fleet was rich in nutrients from the seasonal rotting of Zostera and bird droppings. This was reflected in the behaviour of the algae populations. If, however, nutrients became excessive in amounts, plankton blooms could occur, deoxygenating the water and resulting in mass fish mortality.

He went on to explain that the phytoplankton were so small that they needed an electron microscope for their initial determination. He kindly offered to try to do this for us if a limited number of samples could be collected and sent to him at Cambridge. Dr Hibbard promised to send instructions for collection and dispatch of the samples, ie type of container, treatment, number and position of collection stations, number of samples (eg 8 points on the Fleet initially?). It would at least be a start if a limited number of samples could be handled at regular intervals. It was also stressed that it would be necessary to obtain the physical data from each sampling point and it was hoped that someone locally would do this.

The Chairman thanked Dr Hibbard on behalf of the group for giving up his time to come to the meeting from Cambridge. Mr Eden also promised to look into the problem of obtaining the samples and arranged for Dr Hibbard to see Mr J Fair after the meeting.

(3) 24 April 1976 - Dr Hibbard commented further on his studies on the phytoplankton

Dr Hibbard reported that he had been receiving samples every two weeks from the Abbotsbury end of the Fleet, collected and sent to him at Cambridge by Mr J Fair. Samples from other areas were collected when and where possible for comparison. That day he had himself collected from six stations all the way down the Fleet. He had the samples in cold storage and would be working on them when time permitted. He also added that the red ciliate that had been found was non-toxic.

3. Visits to the Fleet

(1) Visit of Miss Caroline Moryson as part of a study on Botulism of wildfowl.

Mrs Fitzpatrick reported on Miss Caroline Moryson's visit for mud samples on 23 March 1976. Miss Moryson is Dr Smith's assistant at the Nuffield Institute of Comparative Medicine working on Clostridium botulinum. This anaerobic spore-forming bacterium is known to exist in seven forms, A-G, producing immuniologically distinct toxins. C is the one normally implicated in bird mortality, A, B and E have been known to cause human illness. In their work on London lakes and water-ways, B was the commonest. Of the seven stations sampled on the Fleet, three contained the B type and four gave a negative result.

(2) Visits to the Fleet for collection of algae.

As a result of collections of algae made during 1976 by Dr E M Burrows, Mr W F Farnham, Mrs J Fitzpatrick and Dr J Whittaker, a list of 115 species of algae has already been compiled covering the Chlorophyceae, Phaeophyceae and Rhodophyceae. Fifteen of these species are new records for Dorset and two species have only very recently been recorded elsewhere for the British Isles.

The Fleet is very rich in Cyanophyceae and Bacillariophyceae but so far no-one has worked on these.

Miss J Moore from the British Museum paid a visit to the Fleet to check an early record of Lamprothamnium papillosum. She found this alga still to be present in the Fleet.

The British Phycological Society hopes to hold its 1977 Field Meeting based on the College of Education at Weymouth and might be able to include the Fleet in their comprehensive survey, the results of which they publish.

(3) Mr D Seaward visited the Fleet on 20 March 1976 as part of his Mollusc Survey.

(4) NERC Coastal Habitat Survey. Dr N Holme, Mr H T Powell and two Assistants visited the Fleet in September 1976 as part of the Habitat Survey covering the coasts of the British Isles.

4. Circulation of an Initial Notice of the Group's aims, activities and request for information to various Scientific bulletins and individuals.

The notice sent out in May 1976 is included below:

THE FLEET STUDY GROUP, DORSET

A study group was formed at Weymouth in April, 1975, to gain a more comprehensive knowledge of one of the most valuable coastal sites of Dorset.

Because of the unique features of the Chesil Beach and its associated lagoon, the Fleet, the area has been designed a grade one SSSI, but it is of national and international importance.

The main scientific interest lies in -

1. the Chesil Beach from Portland to West Bay, its formation and structure.
2. the sediment of the floor of the Fleet which apart from its present trend, contains a good continuous record of post-glacial sedimentary changes.
3. the physico-chemical characteristics of the Fleet water with its salinity gradient, its shallow depth, its complex tidal exchange.
4. the biological communities - including the Zostera beds, the ancient colony of Mute Swans at Abbotsbury, a large winter Widgeon population and a summer nesting colony of Little Tern.

The aims and activities of the group are -

- to review and evaluate the state of scientific knowledge of the area. This would include hydrological and sedimentary processes, chemical and ecological research and Quaternary studies. A bibliography of published work is being compiled and copies of the relevant papers and reports are being deposited in the Reference Library of the College of Education, Weymouth.
- to identify gaps in the knowledge of the area.
- to suggest priorities for research most likely to advance knowledge of the area. This knowledge would be available for assessment of the effects of any proposed changes in the area which might threaten its stability.

As yet, the area is relatively undistrubed by tourism and development, but the group are well aware of the potential dangers that threaten this scientifically unique and valuable but vulnerable site. Although a certain amount is known about the area, more scientific work is urgently needed especially on specific aspects (especially 3 and 4 above).

The group is, therefore, anxious to obtain information of any past or present work that might relate to any of the above aspects of the Study area.

Mrs. J.M. FitzPatrick, the Secretary of the Fleet Study Group, c/o Dorset Institute of Higher Education, Weymouth, would be very grateful for information from anyone working on similar problems elsewhere or from anyone who felt that they could include this study area in their investigations on however limited a scale.

	List of Journals/ Individuals	Replies
X	1. Nature	No reply to date
✓ X	2. NERC Newsletter	Miss A. Watson, Environmental Science student at Southampton University offers help.
✓ X	3. Estuarine & Brackish Water Sciences Bulletin	W. Farnham M.Sc. Lecturer in Marine Botany, Portsmouth Polytech. He is already helping Dr. Burrows with the Algae list and skindiving for samples in the Fleet. He would like to involve his students on projects on the Fleet (organisms or communities and their salinity/ temperature preferences).
		Dr. M. Wilkinson, Secretary of Phytological Society hopes to hold a meeting in Dorset next year.
✓ X	4. British Ecological Soc. Bulletin	Dr. D.W. Sutcliffe from Windermere (F.B.A.) will help identify Gammarids. He wants to know if G. insensibilis and G. inaequicande are present in the Fleet.
	5. New Scientist	Editor passed on to Mr. John Tinker the Environmental Consultant.
	6. Marine Biol. Station (Prof. Naylor).	No reply to date
✓	7. Marine Biol. Station Plymouth	Too expensive to include notice in their journal now but displayed on the notice board for staff.
		Dr. Holme visited the Fleet in their coastal survey - Autumn 1976
✓ X	8. Dorset Nat. Trust Newsletter (see I. Soane Miss H. Brotherton)	1. Colin Bibby (RSPB) letter and records of his visits 20 June 1974 and 23 June 1976; estimated Little Tern pairs as 81 in 74 and 48 in 76. 2. Mrs. Constance O'Shea would like to help with the Chesil Bank flora at the W. Bexington end.
	9. Bulletin Institute of Biology	?
✓	10. Mr. David Le Cren Director of Freshwater Biological Association, Plymouth	letter of advice. 1. Well though out project needing support Dr. M. Lex, University support Div. NERC. awarded on the basis of the quality of research to be done. 2. Institute of Marine Env. Research (IMER) 67/69 Citadel Rd., Plymouth (Estuarine and inshore ecology.

	3. Quaternary studies. Sub-Dept. of Quat. Study The Botany School. Downing Street, Cambridge. Dr. R.W. West (Reader). 4. Best to encourage an interest from 1 or 2 professional institutes or university researchers and get them to seek grants with local expertise and facilities to help.
✓ 11. Mr. Daniel (Weymouth Lecturer)	Before he completed his M.Sc. course at Oceanography Department, Southampton - delivered a notice and will be keeping in touch with the department.
✓ 12. Dr. Hibbard	Will be sending his own report on the Phytoplankton
✓ 13. Dr. Whittaker	Updating his own publication including the algae list from Dr. Burrows Provided references for Zostera etc.
✓ 14. Mr. Carr	Letter with addresses for tidal and hydrological research (a) Institute of Oceanographic Sciences, Birkenhead, Cheshire. (b) Institute of Hydrology, McLean Building, Crowmarsh Gifford, Wallingford.
	Levelling information (to Mr. Poole)
15. Mr. Eden	for information
16. Dr. Ladle	Bibliographical references from Plymath.

✕ = published in the Society's publication

✓ = replies.

Note: If any other information can be added to this list would members of the large group kindly inform theSecretary.

5. Provisional list of Scientific Investigations to be carried out on the Fleet

The bibliographical search has so far indicated that there already exists a great deal of information about the geomorphology and geology of the area. Much less is known about the hydrology and ecology of the Fleet waters.

A provisional list of scientific investigations has been attempted and discussed by the working party. Four main areas are considered:

(a) Geomorphology
(b) Hydrology
(c) Ecology
(d) Human Activities.

This list will act as a reference point both for the bibliographical list collected and the scientifc work done, in progress, or to be done. Already the group have discussed priorities and the timing of these investigations. By the next meeting - Easter 77, it is to be hoped that the group will be able to call on specialists in each section to comment on the needs of and gaps within their sections so that more positive suggestions can be made (See list of contributors to work in Section 6.)

ACTIVITIES ON THE FLEET

Discipline	Study	Sub Study	Study required and/or in progress
1. Geomorphology	a) Chesil Beach formation and structure		See A. Carr's Work *establish bench marks for surveying and levelling. (Initial survey)
	b) Fleet - formation and structure	i *present state and topology	Survey, location of major sedimentation and erosion areas (use of aerial survey) Rates of change.
		ii Nature of sediment	Survey, structure composition, pH etc.
		iii Post-glacial sedimentary changes	
* 2. Hydrology	Fleet waters	i Volume	depth - establish a series of standard sections.
		ii Movement of water	Tidal exchange and retention of water. Current directions and velocities (surface and below). measured for different states of tides, seasons and weather. discharge of streams into Fleet.
		iii Turbidity - light penetration	
		iv particulate suspended matter	Organic and inorganic relate to 1b(ii) above and turbidity.
		v Salinity	Distribution of salinities relative to tidal state, seasonal variation of weather, inputs from streams, precipitation both at surface and below.
		vi Temperature	seasonal vertical profiles
		vii Water Chemistry	
		...	
		(a) freshwater streams	Survey of free O_2 Biological oxygen demand
		(b) the Fleet itself.	NH_4 NO_3 PO_4 K etc.
3. Ecology	a) Flora	i Aquatic plants	
		a) Phytoplankton	Survey of species, their distribution and productivity
		b) Benthic Algae	"
		c) Higher Plants	e.g. Zostera "
		ii Land plants Chesil Beach & shoreline	Survey of shingle and salt marsh species.

	b) Fauna	i. Invertebrates a) Zooplankton b) Benthic c) in & around the Fleet ii Vertebrate a) *Fish b) *Birds c) Mammals iii Microorganisms	 Survey of distribution Population studies " Population studies including size and movement of individuals and populations. Winter and summer migrants and residential population studies. Bacteria counts. Survey of selected species, e.g. Clostridium botulinum.
*4. Human Activities	Land & Water		Survey and monitoring change.

N.B. Most of these studies are interelated and also require regular seasonal monitoring. Those marked with * would seem to be of high priority.

6. Register of people contributing to work on the Fleet - December 1976

1. GEOMORPHOLOGY

Mr. A. Carr	Institute of Oceonographic Sciences. Bibliography, reprints of on work on Chesil Beach. Bench mark dates and other information now in Ref. Library. D.I.H.E. Weymouth.
* Mr. G. Poole)	Physical Geography Lecturers, D.I.H.E.
* Mr. P. Stimpson)	Morphology and sedimention studies with students.
* Miss J. Whybrew	Env. Sc. B.Ed. Student. D.I.H.E. Sedimentation analysis.

2. HYDROLOGY

Dr. J. Whittaker	British Museum, preparing the first part of his D.Phil thesis on the physical features of the Fleet Water for publication.
* Mr. B. Parsons	Bristol Polytechnic. Survey work with students 1976 (&77)
* Mr. J. McSavage	Physical Science Lecturer, D.I.H.E. Sediment analysis and water chemistry with students.
* Miss T. Hardy	Env. S. student, D.I.H.E. A salinity study of the Fleet.

3. ECOLOGY

(a) Flora

(i) Algae/Phytoplankton

Dr. E. Burrows	Retired from Liberpool University Botany Department, collecting/identifying algae samples; preparing an algae survey.

Mr. W. Farnham	Portsmouth Polytec., helping Dr. Burrows;skin-diving for algae samples and hopes to start student studies on the Fleet - Summer 1977,
Dr. D. Hibbard	Culture Centre for Algae and Protozoa, Cambridge. Collecting and identifying samples of Phytoplankton from the Fleet. Mr. J. Fair helping with the sampling.
Dr. M. Wilkinson	Field Sec. British Phytological Society is hoping to arrange an algae survey of the Fleet as part of the Summer meeting 1977.
Mr. N. Hindy	Has been approached but is unable to spare time to survey Diatoms.
Dr. N. Holm	Marine Biological Association, Plymouth, has included the Fleet in the Coastal Survey that is being carried out for NERC in Autumn 1976.

(ii) Terrestrial Plants - Chesil Beach and Shoreline.

* Mrs. J. FitzPatrick	Co-ordinator Env. Science, D.I.H.E. Plant survey and studies with students.
Mr. S. Jackson	Tern Warden 1975, plant list recorded during tern breeding observations.
Miss C. O'Shea	DNT offer of help at West Bexington.
*Miss S. Hellyer	Env. Science student, D.I.H.E. A study of the yellow-horned poppy, West Bexington.

(b) Fauna

(i) Invertebrates

Dr. M. Ladle	Freshwater Biological Association, F.B.A. Wareham
Dr. J. Whittaker	Ostracods in the Fleet 1967-69.
Mr. D. Seaward	Mollusc survey. Visit in 1976 with Mrs. FitzPatrick, Dr. Whittaker and students. He has kindly offered to identify snail samples if sent to him.
Mr. L. Daniel	Biology Lecturer D.I.H.E. Annelid survey of Fleet mud.
Dr. D.W. Sutcliffe	F.B.A. Windermere will check Gammarids if collected and sent to him.
* Miss S. Patterson	Env. Science B.Ed. student. Corophium Study of the Fleet.
Mr. J. Churchouse	Weymouth Anglers. Lugworm information.

(ii) Vertebrates

(a) Fish

Dr. M. Ladle	F.B.A. Wareham.
Mr. J. Churchouse	Weymouth Anglers.

(b) Birds

Dr. D. Godfrey	Birds of Estuaries Population Studies.
Mr. I. Robertson	Portland Bird Observatory
Mr. F. Clafton	Portland Museum
Mr. S. Jackson	Tern Warden 1975
Mr. D. Moxam	Tern Warden 1976

Mr. C. Bibby	RSPB, 2 visits 1974 and 1976. Little Tern population figures.
* Mr. D. Wheeler) * Mr. B. Woods)	Env. Science B.Ed. students, D.I.H.E. Oiled bird survey on Chesil Beach for RSBB.
* Mr. B. Woods	Survey of Widgeon population 1976-77 on Fleet.
* Mr. D. Moore	Env. Science B.Ed. student, D.I.H.E. Red shank study on the Fleet.
Mr. M. Owen	Wildfowl Trust, Slimbridge, Widgeon and other wild fowl counts.
Dr. C. Perrins	Edward Grey Institute, Oxford. Swan Survey.

Microbiology

Miss C. Moryson	Dr. Smith's assistant from the Nuffield Institute of Comparative Medicine, London Analysis of weed samples for Clostridium botulinum in March 1976.

Other activities

1. Photography - aerial

Mr. Eden	Strangways Estate
Dr. J. Whittaker	
Mr. K. Soar	A.U.W.E.

2. Historical background

Miss N.M. O'Sullivan	ex-Principal, Weymouth College of Education (now D.I.H.E.).

Advice

Mr. D. Le Cren	F.B.A. Windermere
Dr. D. Ranwell	Coastal Research, E. Anglia University.
Mr. D. Womersley	County Planning Department, Dorchester.
Mr. J. Soame) Miss H. Brotherton)	D.N.T.

Reminder

Would those people expecting to work on the study area, please notify the Secretary, D.I.H.E., Cranford Avenue, Weymouth. Information about tides, access, boats can then be obtained from Mr. J. Fair, Strangways Estate.

* Educational Use of the Fleet.

7. Proposed development involving the Fleet study area

The group is aware that it should be informed of any proposed development involving the study area. To date, there are two main such activities -

1. Weymouth and Portland main drainage proposals.
2. International Yatching Centre. Portland Harbour.

The group was asked to send a representative to the meeting, 25th March, 1975, held at Weymouth, when the Wessex Water Authority invited questions about the proposed drainage scheme. Mr. G. Poole attended the meeting and reported that the present details suggest the following:-

1. Pipe lines to extend from Chesil Beach near the car park for 1100 metres, where rapid dilution and diffusion of sewage was expected.
2. The head workings to be sited in the Camp Road areas overlooking the Fleet.
3. The tunnel connection 1 and 2 would problably be a single concrete tunnel.

Alternative schemes had not been considered.

The sources of possible trouble were therefore:

1. Contamination of the Beach under abnormal conditions of wind and tides.
2. Possible but unlikely overflow from head works due to unforseen occurences.
3. Use of the Fleet for flushing outfall.
4. Disturbance of Fleet bed or Chesil Beach during construction of the tunnel.

The discussion that these proposals provoked served only to empahsise the need for basic integrated scientific information of the area before the group could comment on the prossible results of any particular action. The group would like to stress that it is purely a scientific information gathering and collating body.

The group will be keeping a list of proposed activities on the Fleet which may be of use to establish priorities of work to be carried out.

8. The future constitution of the Fleet Study Group

After considerable thought and discussion, the working party proposed that the Fleet Study Group should be reconstructed along the line of the present working party, reinforced by a few additional members. Other interested parties, including those who attended the inaugral meeting, would be put on a mailing list and would be sent progress reports prepared by this revised group.

The membership of the Fleet Study Group would, therefore, consist of ONE representative of the following:-

1. Bodies and Institutions concerned with the Fleet

the Strangways Estate
the Dorset Naturalists Trust. D.N.T.
the Nature Conservancy Council N.C.C.
the Dorset County Planning Department (also representing the West Dorset District Council)
the Dorset Institute of Higher Education D.I.H.E.
(formerly Weymouth College of Education)

and 2. essential scientists in each of the following disciplines -

Geomorphology
Hydrology
Ecology - Botanical
Zoological

The group would consist of NINE permanent members. The chairman should, if possible, be a local Scientist of one of the above disciplines.
The secretary should be a member of the D.I.H.E. (see library, secretariat and room facilities).
Provision should also be made for the co-option of other members by the Chairman, when and for the length of time considered necessary by the group .

This group would be required to meet three time annually.

The term of office - possible re-election after three years.

The aims of the group - as laid down originally and formulated in the public notice.

The mailing list

A list of all those people who have offered information or help is being drawn up and will be revised at intervals. This list would also, as previously stated, initially include all those who attended the Inaugral meeting in April, 1975. But subsequently, it would include only those names who have shown positive interest, either in the form of bibliographical information or who have been carrying out and/or intend to continue scientific work on the Fleet. Those people would then be circulated with any Progress Reports produced.

Future Work on the Fleet

Since it was generally felt that the Working Party represented a sufficiently wide range of interest and was fortunate enough to have access to appropriate areas of expertise, it would be able to suggest the direction that any scientific work on the Fleet might take.

It is requested that the Group be notified, through the Secretary, of any intentions to undertake projects in the study area. The Secretary will ask the Strangways Estate for permission for access which must be obtained. In this way, it would enable the Group to keep a proper record of the scientific activities on the Fleet.

The Group are extremely grateful for the publication and reponse to their notice sent out in June 1976. It will continue to welcome the inclusion of the Fleet within any reasearcher's sampling programme until such time when the Group itself can attract money for research, it would seem that interested scientists should make their own application for grants from their own departments or institutions.

9. Finances

Mr. Brewington, the new Director of the Dorset Institute of Higher Education (Bournemouth College of Technology and Weymouth College of Education) has been informed of the services offered to the Group by Miss O'Sullivan, the former Principal of the College of Education. He has approved of the following services being continued -

1. Secretariat - typing/postage.
2. Library facilities for storage of bibliographical material.
3. Place of meeting at the Weymouth part of the new Institute.

At present, all work is on a voluntary basis. There is a very limited amount of finances forthcoming from the Strangways Estate for Conservation/Scientific studies. Application for small items should be made through the Secretary of the Study Group.

In the future, it is to be hoped that grant-aided research, on much needed problems, can be obtained by the group itself once it has gathered momentum. In the meantime we hope that the gradual build up of interest and information, that has already begun, will continue.

10. Future Meetings

Agenda for the second meeting of the members of the Inaugral meeting of the Fleet Study Group.

To be held at the Village Hall (in Rodden Row) Abbotsbury, on Saturday, April, 1977.

10.30	Welcome Apologies Progress Report No. 1. (already circulated) - comments and questions.
11.00 - 11.15	Coffee
11.15 - 12.15	Brief reports from the main 'leaders' of sections Geomorphology Hydrology Ectology - Botannical Zoological
12.15	Circulation of form for information to be filled in by members.
12.30	Future meetings 1. Proposals for symposium 2. Approval of prepared constitute of the future Fleet Study group.
1.00	Lunch - picnic (or pub) according to weather.
2.00 - 4.00	Field visit to Abbotsbury gardens and Swannery if season permits.

Please tear off and return to the secretary.

Name _____ Address _____

I will be present all day ☐

at the a.m. meeting ☐

at the p.m. field visit ☐

I will be bringing _____ interest colleague(s)