

Catalogue of the papers and correspondence of

Penelope Margaret Jenkin DSc

(1902 - 1994)

by Simon Coleman

NCUACS catalogue no. 134/7/04

Title: Catalogue of the papers and correspondence of Penelope Margaret Jenkin DSc (1902-1994), biologist

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LIST OF CONTENTS

	Items	Page
GENERAL INTRODUCTION		5
SECTION A FAMILY CORRESPONDENCE	A.1-A.18	7
SECTION B ARTICLE IN <i>FRESHWATER FORUM</i>	B.1-B.9	9
SECTION C RESEARCH	C.1-C.13	11
INDEX OF CORRESPONDENTS		15

GENERAL INTRODUCTION

PROVENANCE

The papers were received from the Freshwater Biological Association in April and August 2004.

OUTLINE OF THE CAREER OF PENELOPE MARGARET JENKIN

For a comprehensive survey of Jenkin's early career see 'Dr P.M. Jenkin (1902-1994) and the earliest days of the FBA's laboratory at Wray Castle', by J.W.G. Lund and E.B. Monaghan, *Freshwater Forum* Vol. 13, 2000.

Penelope Jenkin was born in London in 1902, the daughter of Bernard Maxwell Jenkin, consultant engineer, and Mary May Jenkin (née Giles), sculptor. She was admitted to Newnham College, Cambridge, in 1921 and achieved a First Class in Part I of the Natural Sciences Tripos and, surprisingly, a Third Class in Part II (Zoology). After graduating (1925) she took up a research post at the University of Glasgow and made important measurements of photosynthesis in Loch Awe – the first time that results using a single alga (i.e. a clone) were obtained in British fresh water. Her continued research in freshwater biology involved visits to many locations in Britain and Africa, including the Kenyan lakes (1929) where she worked on plankton and carried out a new study on the feeding mechanism of the flamingo. From 1930 to 1931, with J.T. Saunders, she carried out a detailed survey of temperature, chemical composition and plankton in Wicken Fen, Cambridgeshire.

In September 1931, while still a Newnham College postgraduate student, Jenkin moved to the new laboratory of the Freshwater Biological Association at Wray Castle, Lake Windermere. She made some of the FBA's earliest measurements of oxygen, chemical concentrations and temperature in the lake at various depths, and was the first independent research worker at an FBA laboratory. In the summer of 1932 she took the oral examination for her PhD, the examiners being the two key figures in the early days of the FBA, W.H. Pearsall and J.T. Saunders. They recommended her for an MSc, as the interview revealed her insufficient knowledge of phytoplankton. While at Wray Castle she also supervised work on the construction of the equipment, designed by her father, for the FBA's marine launch.

After leaving Wray Castle, Jenkin worked at the Marine Biological Association's laboratory, Plymouth (1933-1934). It was there that she achieved the correlation between light penetration and photosynthesis, something which had frustrated her at Windermere. In 1934 she took up the post of Assistant Lecturer in Zoology at the University of Bristol, later becoming Senior Lecturer, and she remained there until her retirement in 1962. For some of her years at Bristol she was a Warden of Clifton Wood House.

Soon after arriving at Bristol Jenkin joined the Society of Friends. During World War II she formed the Bristol Committee for the Friends Relief Service which helped to find homes for evacuees. She travelled much in Europe, attending Friends' meetings and retreats and spent much time at the Dyffryn Clwyd meeting in north Wales.

The University of Bristol awarded her a DSc in 1958. She was a keen flautist and gardener and remained very active in old age. She died in 1994.

DESCRIPTION OF THE COLLECTION

The papers date from 1926 to 2004.

Section A, Correspondence, dates from 1931 to 1933 and consists of letters to Jenkin from her father and mother, with one of hers to her father. Many of her father's letters relate to work on the equipment for the FBA's marine launch. The remainder cover personal and general matters, as do the letters from her mother.

Section B, Article in *Freshwater Forum* (see above), dates from 1978 to 2004, but mostly 1998 to 2000. It comprises correspondence between the authors and various individuals, universities, archive repositories etc, with photocopies of documents, concerning the details of Jenkin's career, particularly the early part. The correspondents include Winifred Tutin and other scientists with knowledge of Jenkin's career; Conrad Jenkin, her cousin and executor; and various institutions for which she worked. There is a small amount of correspondence between J.W.G. Lund and Penelope Jenkin (1978-1980). Included are photocopied documents relating to her grandfather, the celebrated engineer Fleeming Jenkin.

Section C, Research, chiefly consists of manuscript data and notes in Jenkin's hand, including two notebooks, recording her experiments in Wicken Fen, Cambridgeshire, 1931 to 1932. The two notebooks also contain manuscript records of Jenkin's research at Loch Awe during the summers of 1926, 1927 and 1930. There are also data and notes in the hand of J.T. Saunders who directed the work at Wicken. The remainder of the papers - a typescript of an apparently unpublished paper by Jenkin and pages of data - relate to experiments in Lake Windermere, 1931-1932, during her time at Wray Castle. The papers in this section had already been catalogued by the FBA as part of its series of 'Unpublished Collections'.

There is also an index of correspondents.

Simon Coleman
Bath, August 2004

SECTION A **FAMILY CORRESPONDENCE, A.1-A.18** **1931-1933**

Contents of a file, the cover of which has been kept and is described in A.1.

The correspondence was given to the Freshwater Biological Association by Jenkin's cousin and executor, Conrad Jenkin.

A.1-A.16 Bernard Maxwell Jenkin (father)

A.17-A.18 Mary May Jenkin (mother)

A.1-A.16 **BERNARD MAXWELL JENKIN (FATHER)** **1931-1933**

B.M. Jenkin was an engineer and was hired by the FBA to design equipment for its first motor launch on Lake Windermere. The work on the launch, carried out at Borwick's shipyard during 1931 and 1932, was overseen by Penelope Jenkin while she was engaged on research on the lake.

Almost all the letters are to Penelope Jenkin from her father. The majority (1931 to early 1932) relate to detailed technical matters associated with the motor launch, often including diagrams. Further pages of notes and diagrams in B.M. Jenkin's hand, and a few in Penelope Jenkin's hand, are interspersed with the letters. The remainder of the letters cover personal and general matters. There is one letter from Penelope Jenkin to her father (A.1).

A.1 Various letters. January-July
1931

Cover of the original file containing the papers in A.1-A.18. On it is an inscription by Conrad Jenkin (briefly describing B.M. Jenkin's letters) and one in Penelope Jenkin's hand: 'BMJ '31 - '32 re Lake W'mere'.

Letter (January 1931) to B.M. Jenkin from The National Physical Laboratory re the design of a plankton recorder.

Letter (July 1931) from Penelope Jenkin (at Cambridge) to her father, chiefly re equipment for the motor launch.

Family correspondence

A.2-A.16	Letters from B.M. Jenkin to Penelope Jenkin.	1931-1933
	A.5 and A.7 include notes in Penelope Jenkin's hand.	
	There are a few undated, incomplete letters which were found among the 1931 letters. These have been left where they were found in the original chronological sequence.	
A.2-A.7	October-November 1931.	
	6 folders.	
A.8-A.12	December 1931-January 1933.	
	5 folders.	
A.13-A.15	February-May 1933.	
	3 folders.	
A.16	Other material found among the correspondence in A.2-A.15.	1931, c.1931
	Reprint of a paper by Penelope Jenkin, 1931.	
	Photograph of a group of men taking [?plankton] samples from freshwater, c.1931. Annotated on the back in Penelope Jenkin's hand and crossed out.	
A.17-A.18	MARY MAY JENKIN (MOTHER)	March-May 1933
	Letters to Penelope Jenkin from her mother re personal and general matters.	
	2 folders.	

SECTION B

ARTICLE IN *FRESHWATER FORUM*, B.1-B.9

1978-2004

'Dr P.M. Jenkin (1902-1994) and the earliest days of the FBA's laboratory at Wray Castle', by J.W.G. Lund and E.B. Monaghan, *Freshwater Forum* Vol. 13, 2000.

In the introduction the authors state that their original intention was to write a brief article on the earliest days of the FBA's laboratory at Wray Castle. It was to be based on the manuscript material described in this catalogue but, the authors explain: 'It became clear that there were inconsistencies between certain unpublished and published statements about Penelope's work and career, as well as in some statements in FBA Annual Reports. Further, the realisation that apparently there was no account of her scientific career led to the production of this article, written with special reference to her work at Wray Castle'.

The material described in this section was used by the authors in the preparation of the article and documents their wide-ranging research to establish the facts of Jenkin's early career. A large part comprises their correspondence with universities and organisations at which she worked, including significant correspondence with archive repositories etc at the University of Cambridge (B.1-B.2). Most of the other correspondents are individuals who knew Jenkin or were familiar with some of her work. There is a small amount of Jenkin's correspondence (some photocopied). Included also are photocopies of papers by Jenkin and photocopies of various documents relating to her and to her grandfather, Fleeming Jenkin. A list of organisations and individuals consulted by the authors is at B.1.

The existing arrangement of the material by the authors has been almost entirely retained. The contents of B.9 were within a folded piece of paper inscribed 'Miscellaneous'. Most of the material is dated 1998-2000.

Included are the following:

At B.3: correspondence with Conrad Jenkin re papers of Penelope Jenkin and her MSc thesis, 1995-2004

At B.4: correspondence between J.W.G. Lund and Penelope Jenkin, 1978-1980, chiefly re the former's request for information about B.M. Jenkin's core sampler. Photocopied 3pp typescript by Penelope Jenkin (inscribed '1964') entitled 'Notes on Professor W.H. Pearsall during the first year's work of the FBA at Wray Castle, 1931-1932', containing her reminiscences of her time at Wray Castle and of her PhD oral examination.

Article in *Freshwater Forum*

At B.6: photocopy of 'Substance of [Jenkin's] dissertation submitted for MSc with the original plates'. The dissertation for her MSc (awarded by the University of Cambridge, May 1948) is lost but Lund and Monaghan, in their article, explain the circumstances surrounding the lost dissertation and the significance of the photocopy in this folder.

At B.8: correspondence between J.W.G. Lund and Winifred Tutin, 1998-1999, concerning Jenkin's career, with accompanying notes by Anne Richards.

SECTION C RESEARCH, C.1-C.13 1926-1983

Contents of two envelopes whose titles are given below.

The material had already been catalogued by the Freshwater Biological Association. The FBA's original catalogue numbers are given in brackets after the titles of the envelopes.

C.1-C.11 'Wicken Brickpits 1930-1931' (UC 171)

C.12-C.13 'Chemical data for Windermere 1931-1932...'
(UC 47)

C.1-C.11 'Wicken Brickpits 1930-1931' (UC 171) 1926-1983

Notebooks and files, mostly containing data and notes in Jenkin's hand, relating to her experiments in Wicken Fen, Cambridgeshire, May 1930 - August 1931. Parts of the notebooks in C.1 and C.2 cover her work at Loch Awe during the summers of 1926, 1927 and 1930.

The work at Wicken Fen was eventually published by Jenkin as a paper 'Temperature, hydrochemistry, and plankton in Wicken Brickpits, 1930-1931. A year's survey of two alkaline, dimictic ponds directed by the late J.T. Saunders, from the Zoological Laboratory, Cambridge', *Hydrobiologia* 97, 1982. For various reasons (see the off-print of the paper in C.11), the work was not published in Saunders' lifetime. In the 1970s Jenkin heard of new research being carried out at one of the Wicken brickpits and, realising the historical value of the original studies, prepared the records for publication.

C.1 Pocket hardback notebook in Jenkin's hand with the title (typewritten) 'Wicken Brickpits field notes 1930-31. P.M. Jenkin'. 1926-1931

Experimental data and notes (mostly pencil). Notes on the weather and other observations are included.

From the front:

The first part (approximately one third) records work at Loch Awe, August 1926 and August 1927. The second part relates to measurements at Wicken Fen, May 1930-August 1931.

/...

Research

- /...
- From the back:
Brief further notes re the Loch Awe experiments, August 1926; several pages of notes re later experiments at Loch Awe, August-September 1930, preceded by a note (written later) by Jenkin: 'Notes on recorded work on Loch Awe, Argyllshire, trying out our unsuccessful plankton recorder. PMJ'.
- C.2 Softback notebook in Jenkin's hand with the title (typewritten) 'Wicken Brickpits, 1930-1931. Laboratory [sic] records. Penelope Jenkin analyses for O₂, Phosphates [sic] and silicates. from May 27th 1930 to June 11th 1931 (Those for July and August 1931 are missing [sic] from my file. PMJ)'. 1930-1931
- Experimental data, calculations and notes (mostly pencil). There are a few later pen annotations by Jenkin.
- From front:
Experiments at Wicken Fen, 1930-1931. Included is an intercalated page of manuscript notes signed 'JTS [J.T. Saunders]' at the bottom.
- From back:
Several pages relate to experiments at Loch Awe, July-September 1927. A few pages are dated August 1930 and probably relate to Jenkin's later work at Loch Awe (see C.1). Another page is dated 'Ap. 23 1930'.
- C.3-C.8 'Wicken Brickpits 1930-1931. Laboratory records. J.T. Saunders analyses for: NH₃, and Alkali reserve, Chlorides, Ca and Mg. Conductivity (Not in PMJ 1982)', contents of an envelope so inscribed. 1930-1931
- Manuscript experimental data in J.T. Saunders' hand, divided into six groups of papers with typescript labels which are reproduced below.
- There are some brief later annotations in Jenkin's hand.
- C.3 'Trial runs on methods before 24.ix.'30.
NH₃ - 18.vi.'30 to 20.ix.'30
Alkali reserve 25.v.'30 to 20.ix.'30
Cl. undated.
Wicken Brickpits 1930'. May -
September
1930

Research

- | | | |
|-----------|---|----------------------------------|
| C.4 | 'NH ₃ , Alkali reserve - I 24.ix.'30 to 21.xii.'30.
Records either on same, or adjacent, sheets for each date.
Wicken Brickpits III and Br'. | September -
December
1930 |
| C.5 | 'Conductivity. Wicken Brickpits III and Br. 25.x.'30 to 8.iv.'31.
Not referred to in P.M. Jenkin, 1982'. | October 1930
- April 1931 |
| C.6 | 'Ca & Mg. Wicken Brickpits III & Br.
25.x.'30 to 25.v.'31'. | October 1930
- May 1931 |
| C.7 | 'Chlorides. Wicken Brickpits III and Br.
26.xi.'30 to 25.v.'31'. | November
1930 -
May 1931 |
| C.8 | 'NH ₃ , Alkali reserve - II 3.1.'31 to 21.viii.'31.
Records on same or adjacent sheets for each date.
Wicken Brickpits, III and Br'. | January-
August 1931 |
| C.9 | Contents of an untitled file.

Manuscript data and notes in Jenkin's hand.

At the top of the first page is a later note by Jenkin: 'Raw data of some plankton counts'. | September
1930 - June
1931 |
| C.10-C.11 | 'Photostat copy of full data on Temperature, Hydrochemistry & Stability in Wicken Brickpits, 1930-1931, from field and laboratory records, deposited with Wicken Fen Committee. Penelope M. Jenkin. <i>Hydrobiologia</i> (1982) 97: 37-61', contents of a file so entitled.

Photocopies of (mostly) manuscript data (in Jenkin's hand), some with later annotations in her hand. Included at C.11 are later typescript notes, signed by Jenkin (1983), relating to her paper in <i>Hydrobiologia</i> (1982); and an off-print of the paper with a few annotations in her hand.

2 folders. | c.1981-1983 |

Research

C.12-C.13	'Chemical data for Windermere 1931-1932. Penelope Jenkin' (UC47)	1931-[after 1942]
C.12	Typescript data, some photocopied. On some pages are later annotations in Jenkin's hand.	1931-1932
C.13	<p>'Seasonal changes in chemical analysis of water samples from Windermere in 1931-1932'.</p> <p>9pp photocopied typescript by Jenkin, so entitled, with later corrections and annotations in her hand.</p> <p>Apparently unpublished. Jenkin's survey of temperature in Lake Windermere, referred to in the typescript, was published in 'Journal of Animal Ecology', II, 1942.</p>	[after 1942]

INDEX OF CORRESPONDENTS

BONEY, A.D. ('Don')	B.1
JENKIN, Bernard Maxwell	A.1-A.16
JENKIN, (David) Conrad	B.3
JENKIN, Mary May (née GILES)	A.17, A.18
JENKIN, Penelope Margaret	B.4, B.6, B.9
LUND, John Walter Guerrier	B.1, B.3-B.5, B.8
MONAGHAN, Elaine B.	B.1, B.2, B.5
MORTIMER, Clifford H.	B.5
SAUNDERS, John Tennant	A.9, B.6
TUTIN (née PENNINGTON), Winifred Anne	B.8
WORTHINGTON, Edgar Barton	B.8