

Geomorphology and Sedimentology of Lakes and Reservoirs

Edited by

J. McManus

and Chapter 2: Lake Sediments and Geomorphological Processes: Some

R. W. Duck

*Department of Geography and Geology,
University of St Andrews, Scotland*

JOHN WILEY & SONS
Chichester · New York · British Columbia



Contents

List of contributors

vii

Series Preface

ix

- Chapter 1 Sedimentation in Natural and Artificial Impoundments: an Indicator of Evolving Climate, Land Use and Dynamic Conditions
R. W. Duck and J. McManus

1

- Chapter 2 Lake Sediments and Geomorphological Processes: Some Thoughts
J. A. Dearing and I. D. L. Foster

5

- Chapter 3 Effects of Urbanization on Lake Sedimentation: the History of Two Lakes in Coventry, UK—Preliminary Results
S. M. Charlesworth and I. D. L. Foster

15

- Chapter 4 Towards Improved Interpretation of ^{137}Cs Profiles in Lake Sediments
D. E. Walling and Q. He

31

- Chapter 5 Incorporation of Chernobyl-derived Radio caesium into Reservoir Sedimentary Sequences
J. S. Rowan, D. L. Higgitt and D. E. Walling

55

- Chapter 6 Reservoir Sedimentation Rates in the Southern Pennine Region, UK
D. P. Butcher, J. C. Labadz, A. W. R. Potter and P. White

73

- Chapter 7 Estimation of Sediment Yields in the Cameron Reservoir Catchment, Fife, Scotland, Using Two Different Approaches
H. Al-Jibburi and J. McManus

93

- Chapter 8 Lacustrine Sediment Budgets in the Coast Mountains of British Columbia, Canada
P. Owens and O. Slaymaker

105

Chapter 9	Sedimentation and Desiltation in the Sefid-Rud Reservoir, Iran E. Tolouie, J.R. West and J. Billam	125
Chapter 10	Particle Tracing Experiment in a Small, Shallow Lake: Loe Pool, UK J. K. Marsh, A. J. Bale, R. J. Uncles and K. R. Dyer	139
Chapter 11	Aspects of the Environmental and Depositional History of a Rock Basin Lake in Eastern Scotland, UK K. J. Edwards and G. Whittington	155
Chapter 12	Seismic Reflection and Sonar Survey as an Aid to the Investigation of Lake Sediment Stratigraphy: a Case Study from Upland Wales S. P. Cronin, H. F. Lamb and R. J. Whittington	181
Chapter 13	Underwater Geomorphology of Loch Lomond Readvance Ice Limits in Loch Muick, Aberdeenshire, UK P. A. Lowe	205
Chapter 14	Seismicity and Bed Sediment Morphology in a Perthshire Reservoir, UK R. W. Duck, J. McManus and J. Lord	225
Chapter 15	Electron Microprobe Analysis of Diatoms and Lake Floor Sediments of Loch Leven, Scotland J. Peakall	241
Chapter 16	Late Pleistocene Rhythmite Sedimentation at the Margin of the Dead Sea Trough: a Guide to Palaeoflood Frequency I. Reid and L. Frostick	259
<i>Geographical Index</i>		274
<i>Subject Index</i>		275