

Forest Farming

TOWARDS A SOLUTION TO PROBLEMS OF WORLD
HUNGER AND CONSERVATION

J. Sholto Douglas & Robert A. de J. Hart

WITH A PREFACE BY
E. F. SCHUMACHER

New Edition

INTERMEDIATE TECHNOLOGY PUBLICATIONS
1985

Best Available Document

TO MY FATHER

Odin and his two brothers soon turned their attention to Earth. There was much about Earth that was beautiful, and much that they loved. So they set a ring around the planet, out of which grew the magic tree Yggdrasil, which, by spreading its branches over the world held it safe for the coming of man. Thus the *Sibyl's Vision* says:

I know a tree, called Yggdrasil,
tall tree and sacred,
sprinkled with white clay,
thence come the dews,
that fall in the dales;
it stands ever green,
over Destiny's spring.

(From the ancient Norse Sagas)

J.S.D.

Forest Farming

If by means of forest farming world production of foodstuffs and raw materials can be increased substantially and, where appropriate, tree crops linked with industrial development, something of real significance will have been achieved – both for the better sustenance of mankind and for the preservation and enhancement of our environment.

BY THE SAME AUTHORS

J. Sholto Douglas

***Forest Farming: An Ecological Approach to Increase Nature's Food Productivity*, United Nations Educational, Scientific and Cultural Organization, Paris, 1973.**

***Beginner's Guide to Hydroponics (Soilless Gardening)*,
Pelham Books, London, 1972.**

***Beginner's Guide to Applied Ecology*,
Pelham Books, London, 1974.**

Robert A. de J. Hart

***The Inviolable Hills: The Ecology, Conservation and Regeneration of the British Uplands*, with Preface by Lady Eve Balfour, Stuart & Watkins, London, 1968.**

© J. Sholto Douglas, 1976, 1980, 1984

All rights reserved. No reproduction in whole or part
without the written permission of the Publishers,
Intermediate Technology Publications
9 King Street, London WC2

ISBN 0 946688 30 3

First published 1976
Revised Edition 1980
New Edition 1984
Reprinted 1985

Printed in Great Britain by
A. Wheaton & Co. Ltd., Exeter

4

Contents

Foreword by E. F. Schumacher	ix
Introduction	xiii
Introduction to New Edition	xv
1 Re-vitalising the Rural Areas	1
2 Trees and Man	10
3 Ecological Cultivation	17
4 The Background of Forest Farming	25
5 What is Forest Farming?	35
6 Designing a Forest Farm	47
7 Planting and Cropping	63
8 The Choice of Trees: Leguminous	86
9 The Choice of Trees: Nuts	100
10 The Choice of Trees: Fruit, Oil and Fodder	120
11 Fields for Expansion: Temperate Uplands	136
12 Fields for Expansion: Deserts	150
APPENDICES	
I Ancillary Species for Fodder, Conservation and Other Purposes	163
II Grasses and Herbage	171
III Oil-Producing Eucalypts	179
IV Measuring Devices	187
V Seed Supplies	190
VI List of Institutions and Organisations	197
Bibliography	199
Acknowledgements	202
Addenda	204
Index	205

5

List of Figures

1	Changes in land usage brought about by the introduction of forest farming	44
2	Section of Forest Farm Layout	49
3	Trench or <i>banquette</i> system	50
4	Quincunx pattern of planting	53
5	Contour alignment on hills	54
6	Tilted pattern of forest farm blocks	55
7	Alternate pattern of forest farm blocks	55
8	Fan pattern of forest farm blocks	56
9	Typical layout for a tree nursery	58
10	Making grass baskets for a tree nursery	67
11	Planting container for trees with long delicate tap roots	68
12	Planting holes	75
13	Layering or method of planting mixed species	78
14	Example of placement of guard trees to provide protection from prevailing wind	81
15	A typical layout with supporting facilities	84
16	<i>Potet Masqué</i> system of tree planting – reproduced by courtesy of Bou Saada Trust	152