



Establishing pastures - Readers' Note

This document is part of a larger publication. The remaining parts and full version of the publication can be found at:

<http://www.dpi.nsw.gov.au/agriculture/livestock/dairy-cattle/feed/publications/establishing-pastures>

Updated versions of this document can also be found at the above web address.

This document is subject to the disclaimers and copyright of the full version from which it is extracted. These disclaimers and copyright statements are available in the appropriate document at the above web address.

Establishing Pastures

Hugh Allan, NSW Agriculture, Tamworth

Euie Havilah, NSW Agriculture, Berry

Harry Kemp, NSW Agriculture, Bega



Acknowledgments

NSW Agriculture gratefully acknowledges the contributions of Paul Patten (Wrightson Seeds), Peter Neilson and Andrew Torrens (Heritage Seeds), Colin Karlson (Incitec), David Bailey (Hi-Fert), Terry Lauanders, Martin Blumenthal, Mike Keys and Jim Dellow (NSW Agriculture), and Neil Nelson (formerly of NSW Agriculture).

Edited, designed and desktop published by Matthew Stevens, ScienceScape Editing, Sydney, and Ann Munroe, Sydney
Beetle photographs by Graham Goodyer; beetle illustrations by Alan Westcott

Series coordinator Alex Ashwood, NSW Agriculture, Wollongbar

© NSW Agriculture 1997

This publication is copyright. Except as permitted under the Copyright Act 1968 (Cth), no part of this publication may be produced by any process, electronic or otherwise, without the specific written permission of the copyright owner. Neither may information be stored electronically in any form whatever without such permission.

NSW Agriculture does not accept any form of liability, be it contractual, tortious or otherwise, for the contents of this publication or for any consequences arising from its use or any reliance placed upon it. The information, opinions and advice contained in this publication are of a general nature only and may not relate or be relevant to your particular circumstances. Information in this manual is provided in good faith as the best knowledge available at the time of publication.

Pesticides Act 1978

Under the Pesticides Act you must use only a registered chemical. It must not be used for any purpose or in any way contrary to the directions on the label unless a permit has been obtained under the Act.

ISBN 0 7310 9816 1 (Dairylink monographic series)

ISBN 0 7310 9817 X (*Establishing Pastures*)

Agdex 410/62

Foreword



*John Craven, Program
Manager, Farm
Production, DRDC*

Dairying is one of the most progressive rural industries in NSW. This is evidenced by substantial changes in herd sizes and increases in production by cows and from farms.

An outcome of these increases is that management has become more complex, requiring greater knowledge and technical skills.

As farmers become more competitive through increases in both production and productivity, they will require even better technical information and management skills. Most important, they will need to know how to use the information in improving whole-farm performance and profits. This statement is supported by results of various Dairy Research and Development Corporation workshops and NSW Dairy Farmers' Association surveys, which have clearly indicated that farmers require technical packages that are current and relevant.



*Kevin Sheridan,
Director-General,
NSW Agriculture*

DairyLink is a series of integrated information packages that look at aspects of pasture, herd and feed management, and suggest practical ways of getting the best from your cows and pastures. The DairyLink series is a result of collaboration between NSW Agriculture officers, agribusiness and farmers.

The packages will be the basis of workshops and meetings for NSW dairy farmers.

DairyLink has much to offer the NSW dairy industry in helping improve farm productivity and profitability. We encourage farmers to attend and participate in the DairyLink workshops and meetings.



*Reg Smith, President,
NSW Dairy Farmers'
Association*

Preface



DairyLink is an innovative concept that introduces you to some important technical areas to help improve farm productivity and profits.

The modules in the series are of value to farmers, students, consultants and extension service providers.

DairyLink consists of the following information packages:

Establishing Pastures

Managing Pastures

Growing Heifers

Realistic Rations

Conserving Feed

The modules have been developed as technical manuals and farmer-friendly booklets, and are linked to the Tocal Dairy Home Study course.

I acknowledge and thank the various technical teams for doing an excellent job. I also appreciate the funding and support provided by the Dairy Research and Development Corporation.

Alex Ashwood
DairyLink Series Coordinator

Contents

Introduction

Prime Pasture Check

1. Before sowing

- 1.1 Plan your pasture
- 1.2 Pasture budgets
- 1.3 Soil testing
- 1.4 Soil acidity and liming
- 1.5 Pasture species
 - Annual grass crops
 - Perennial grasses
 - Annual legumes
 - Perennial legumes
 - Other pasture species
- 1.6 Weed control before sowing
- 1.7 Pest control before sowing
- 1.8 Disease control before sowing
- 1.9 Conventional seedbed preparation
- 1.10 Machinery

2. At sowing

- 2.1 Fertilisers for sowing pastures
- 2.2 Weed control at sowing
- 2.3 Pest control at sowing
- 2.4 Disease control at sowing
- 2.5 Inoculation of legumes
- 2.6 Sowing

3. After sowing

- 3.1 Plant populations
- 3.2 Fertilisers
- 3.3 Weed control after sowing
- 3.4 Pest control after sowing
- 3.5 Beetle identification
- 3.6 Disease control after sowing
- 3.7 First-year management of newly sown pasture
- 3.8 Irrigation

4.1 Common pasture problems

Further reading

Pest control chemicals

Introduction



This package has been written to help dairy farmers choose and establish pastures and forage crops for milk production.

Successful pasture establishment requires careful planning, a detailed understanding of the factors that affect establishment, and attention to detail for each operation, including correct timing. Planning requires predicting the feed requirements for the herd, and choosing the pasture or forage crop type and the area to be sown to supply the feed. Establishment and survival depend on what happens before, at and after sowing, including pasture management in the first year.

For further information, speak to your local advisory officer.

Hugh Allan