# Managing biodiversity in agricultural landscapes

Conservation, restoration and rewilding

Edited by Emeritus Professor Nick Reid and Dr Rhiannon Smith University of New England, Australia



#### Publication date 16 Jul 2024

#### Price

£160/\$210/C\$270/€190/A\$290

#### ISBN

Hardback: 978-1-80146-454-3 PDF: 978-1-80146-456-7 ePub: 978-1-80146-455-0

#### **Format**

 $152 \times 229 \,\text{mm} / 6 \times 9 \,\text{in}$ , 500 pages

#### Illustrations

Color tables, photos and figures

#### Series

Burleigh Dodds Series in Agricultural Science: no. 149

#### **BIC/THEMA** classification

RNCB - Biodiversity, RNK -Conservation of the environment, TVF -Sustainable agriculture

# Distributors INGRAM Publisher Services IIK

Print books (exc. US and Canada)



eBooks (worldwide)

Updated 23/04/24

### New title information

# Managing biodiversity in agricultural landscapes

## Conservation, restoration and rewilding

Edited by: Emeritus Professor Nick Reid and Dr Rhiannon Smith, University of New England, Australia

#### **Description:**

Despite recent efforts, agricultural production continues to threaten biodiversity, disrupt delivery of key ecosystem services and contribute to climate change. A more regenerative approach is required to enable farmers to restore and work with the ecosystem services that underpin sustainable farming and food production. Biodiversity lies at the heart of this process.

Managing biodiversity in agricultural landscapes: Conservation, restoration and rewilding considers the range of techniques that can be implemented to improve biodiversity in farmland. It synthesises current research on the best ways to plan, implement and monitor ecological restoration projects as well the role of government agri-environment schemes. The book also assesses what we know about the use and impact of individual conservation practices, such as field margins and hedgerows, and ways of successfully rewilding farmland.

#### **Key features:**

- Provides a comprehensive overview of the key concepts in biodiversity management within agricultural landscapes
- Considers the role of farmers and rural communities in implementing ecological restoration practices
- Reviews the importance of habitat and animal rewilding in promoting biodiversity and other key ecosystem services

#### Audience:

Researchers in agroecology, conservation and environmental science, farmers, agronomists and consultants, as well as government and other agencies supporting farmland conservation and restoration projects

#### Editors' details:

**Dr Nick Reid** is Emeritus Professor in Ecosystem Management and former Head of the School of Environmental and Rural Science at the University of New England, Australia. He is internationally renowned for his research on landscape revegetation, ecosystem restoration and management of biodiversity in production landscapes.

**Dr Rhiannon Smith** is a Senior Lecturer in Environmental Management in the School of Environmental and Rural Science at the University of New England. Her research focuses particularly on the measurement and management of biodiversity and ecosystem services in the Australian agricultural sector.



## New title information

#### Table of contents:

#### Part 1 Principles

- 1.Key concepts in biodiversity management within agricultural landscapes: Andrew Bennett, La Trobe University, Australia
- 2.Integrated farm management (IFM) plans to promote biodiversity and other environmental benefits on individual farms: Geoff Squire, James Hutton Institute, UK
- 3.Understanding and improving the involvement of farmers and rural communities in implementing ecological restoration projects: Theodore Alter, Penn State University, USA
- 4.Implementing sustainable land use change programmes: Liz Lewis-Reddy, ADAS, UK

#### Part 2 Farmland and conservation practices

- 5.Soil health and ecological restoration: David Johnson, University of Manchester, UK
- 6.The design and impact of field margins/flower strips in promoting biodiversity in agricultural landscapes: *Jane Morrison*, *Bishop's University, Canada*
- 7.The design and impact of hedgerows in promoting biodiversity in agricultural landscapes: lan Montgomery, Queen's University of Belfast, UK
- 8.The design and role of silvopastoral systems in promoting biodiversity and other benefits in agricultural landscapes: *Sara Burbi*, *Coventry University*, UK

#### Part 3 The role of government and the private sector in promoting on-farm conservation practices

- 9.Developing the Environmental Land Management Scheme (ELMS) for English agriculture: Ruth Little, Defra, UK
- 10.Developments in agri-environment schemes (AES): North America: Gordon Rausser, University of California-Berkeley, USA
- 11.Developments in agri-environment schemes (AES): Australia: Dean Ansell, Australian National University (ANU), Australia

#### Part 4 Habitat rewilding

- 12.Restoring wetlands in agricultural landscapes: Ruurd van Diggelen, University of Antwerp, Belgium
- 13.Rewilding grasslands/rangelands: Thomas Jones, REE-ARS, USA
- 14.Reforestation of agricultural landscapes: David Lindenmayer, Australian National University (ANU), Australia
- 15.Key issues in animal rewilding: Adrian Manning, Australian National University (ANU), Australia
- 16.Animal rewilding in theory and practice: Australia and New Zealand: Chris Dickman, University of Sydney, Australia

#### Part 5 Conclusions

• 17.Challenges and opportunities for enhancing biodiversity conservation in agricultural systems worldwide: Nick Reid, University of New England, Australia

#### **Related products:**

Advances in Conservation Agriculture Volume 1, 978-1-78676-264-1, 21 Jan 2020, AUD 270.00, CAD 255.00, EUR 180.00, GBP 150.00, and USD 195.00

Advances in Conservation Agriculture Volume 2, 978-1-78676-268-9, 21 Jan 2020, AUD 270.00, CAD 255.00, EUR 180.00, GBP 150.00, and USD 195.00

Advances in Conservation Agriculture Volume 3, 978-1-78676-475-1, 08 Feb 2022, AUD 270.00, CAD 255.00, EUR 180.00, GBP 150.00, and USD 195.00

Improving soil health, 978-1-78676-670-0, 11 Oct 2022, AUD 270.00, CAD 255.00, EUR 180.00, GBP 150.00, and USD 195.00 Promoting pollination and pollinators in farming, 978-1-80146-098-9, 20 Dec 2022, AUD 260.00, CAD 245.00, EUR 175.00, GBP 145.00, and USD 190.00

Protecting natural capital and biodiversity in the agri-food sector, 978-1-80146-351-5, 30 Jan 2024, AUD 270.00, CAD 255.00, EUR 180.00, GBP 150.00, and USD 195.00

Reconciling agricultural production with biodiversity conservation, 978-1-78676-348-8, 22 Sep 2020, AUD 270.00, CAD 255.00, EUR 180.00, GBP 150.00, and USD 195.00

 $Understanding and fostering soil carbon sequestration, 978-1-78676-969-5, 08\ Nov\ 2022, AUD\ 305.00, CAD\ 290.00, EUR\ 205.00, GBP\ 170.00, and\ USD\ 220.00$ 

