

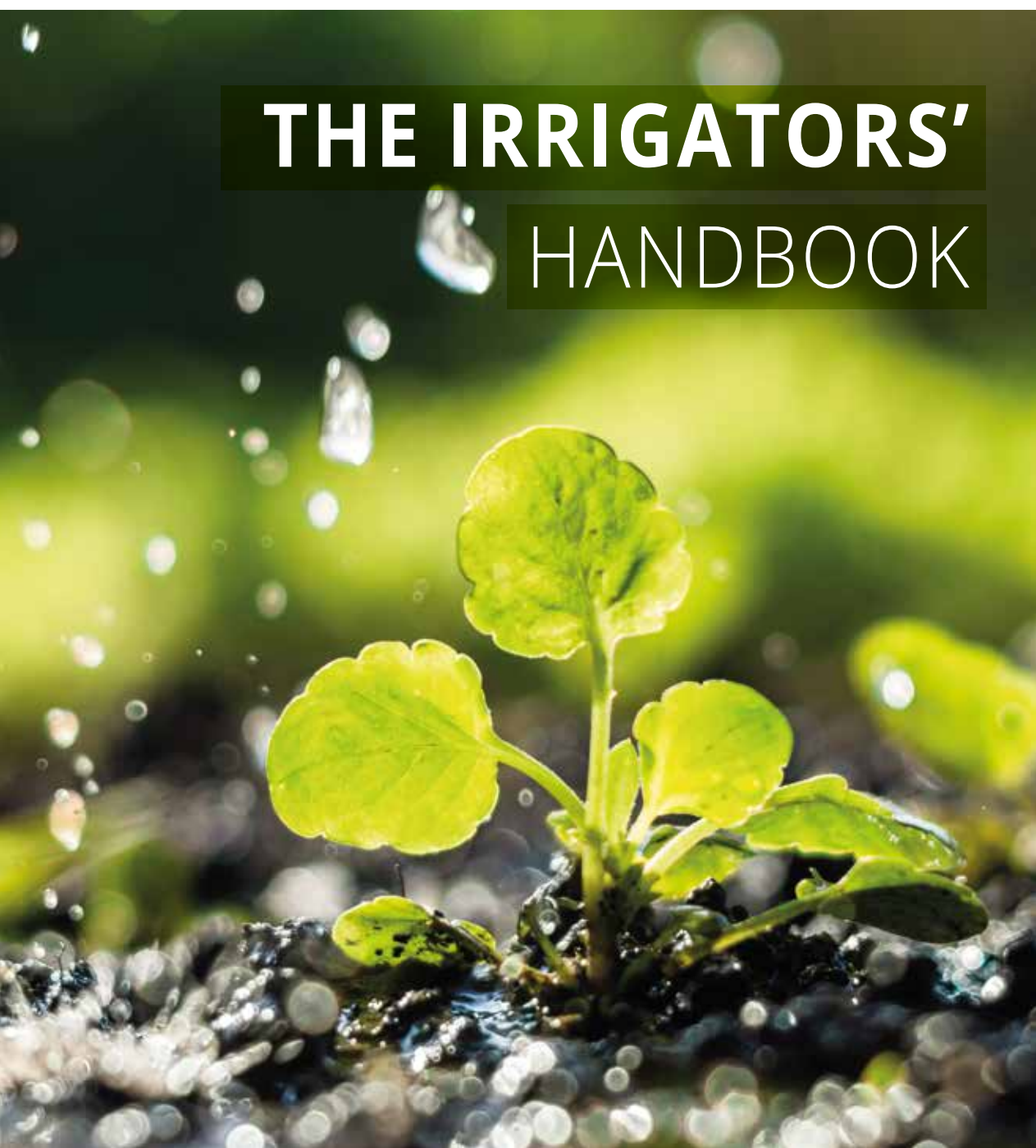
# UK Irrigation Association

An independent organisation promoting  
the wise use of water for irrigation



The Irrigators Handbook

## THE IRRIGATORS' HANDBOOK



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# Foreword

For some time, we have been concerned about the lack of information available for irrigators, particularly for younger farmers and growers coming into the business. More mature members will remember the MAFF Bulletin 138 published in 1974 and Roger Bailey's excellent book on *Irrigated crops and their management* published by Farming Press in 1990. They are still available on Amazon and much is still relevant today as the basic physics of irrigation, how crops use water, and how we apply water to crops has not changed much over the years. But growth in irrigated agriculture, new research, changes in legislation, and irrigation practices have brought about significant changes to the way we now think about and practise irrigation.

The UKIA has always tried to keep members abreast of new developments and holds a set of booklets on specific aspects of irrigation that we have collected together over the past decade and which are available for download from the UKIA website [www.ukia.org](http://www.ukia.org). But we think it is timely to produce an Irrigators' Handbook for members which can bring together basic information on irrigation from the past with current practices in mind. It provides information on, soil-plant-water relationships, crop water requirements, irrigation systems, abstraction licencing, dealing with drought, and the like, all in one place. It also brings together lots of information about the UKIA, its membership and activities, plus information about other related organisations, particularly Water Abstractor Groups.

But why a handbook? Of course, there is the internet as a source of information today. But the internet is passive, and information is scattered and often difficult to find and interpret. You also need to know what you are searching for, and there is the question of accuracy and trust. Books are a much more 'active' way of providing information and, contrary to common belief, are coming back into fashion. Just go into your local bookshop. Books are easy to access anytime anywhere, at home, in the office, in the car. No need for wifi or batteries, no waiting for information to upload, you can flick pages easily and instantly, and an index is an excellent search engine!

We hope that you find this handbook a useful addition to your office. This is the first edition. It will be an 'on-going' project, developed year on year as we gather more information and resources to support the handbook.

I would like to thank Melvyn Kay, UKIA Executive Secretary for producing this handbook and our thanks also to the many authors who have contributed articles.

**Anthony Hopkins**  
UKIA Chairman

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# one

About the UK Irrigation  
Association

# Irrigation Association

## Who we are

UKIA is the only independent organisation representing irrigators in the UK

In our varying climate, particularly in eastern, central and southern England, irrigation has become essential for producing our nation's high quality fresh fruit and vegetables. It is a thriving industry involving more than 1,000 agri-businesses, large and small, and employs over 50,000 people.

**We advocate** wise use of water for agriculture

**We are a voice** for irrigation at the top decision-making tables – Environment Agency, Defra and at myriad meetings on the future of UK water resources.

**We want to see** water for food as an essential water user like water supply and the environment.

**We want** an integrated approach to water resources management (IWRM) as the best means of making use of our limited water resources.

## What we do

**We turn research into practice** we produce practical information on water, irrigation, drought, and climate change based on evidence from sound research.

**We keep you up-to-date** through conferences, meetings, newsletters, and emails on national and international irrigation matters. We organise irrigation visits both in UK and internationally (recently in France, Italy, Israel, Morocco, Spain).

**We are founder members** of the Water for Food Group - the 'one-voice' for water for food comprising UKIA, NFU, CLA, AHDB, and other organisations working in the agri-food sector.

## Membership

We are not a traditional trade association

**Over 50% of members are farmers and growers** plus consultants, researchers, suppliers, manufacturers, and government professionals **Individual membership** is only £50 annually, more for group membership.

For more information and becoming a member of UKIA contact:

**Ruth Gage**

T: 01427 717627 E: [r.gage@ukia.org](mailto:r.gage@ukia.org)

[www.ukia.org](http://www.ukia.org)

## Key people



**Anthony Hopkins**  
Chairman

Anthony is Managing Director of Wroot Water, an irrigation equipment supplier in South Yorkshire specialising in trickle and sprinkler irrigation. Anthony is a Nuffield Scholar and actively involved in applied field irrigation research.



**Bill Basford**  
Treasurer

Bill is well known to most people in the irrigation world for his work as a mechanisation consultant, initially with ADAS and more recently as an independent consultant. He regularly provides training courses for farm managers and operators on a range of irrigation equipment.



**Jerry Knox**  
Hon Secretary

Jerry is a Professor of Agricultural Water Management at the Centre for Water Science, Cranfield University. His research interests include crop modelling, agricultural water management, water efficiency, and climate change impacts assessments in agricultural production.



**Melvyn Kay**  
Exec Secretary

Melvyn is an independent consultant with over 40 years international experience in agricultural water management. He organises and runs the Association on behalf of the Executive Council.



**Ruth Gage**  
UKIA Administrator  
Exec Secretary

Ruth supports the Exec Secretary and is responsible for membership renewal and event bookings.