

Ensuring New Zealand Retains Critical Weed Species Information: A Collaborative Research Effort

The preservation of vital information on weed species in New Zealand is a key objective of a recent research initiative, partially funded by the Ministry of Business, Innovation & Employment Envirolink Grant and the T.R. Ellett Agricultural Research Trust. Leading the project are senior scientists Trevor James and Paul Champion, both of whom are dedicated to enhancing public understanding of the weed species present in New Zealand.

Their widely used reference book, *Common Weeds of New Zealand*, first published in 1998, has undergone two updates and sold over 15,000 copies. The book serves as an essential resource for farmers, agronomists, seed importers, students, and the general public. With funding from MBIE Envirolink and the Ellett Trust, work is now underway on a fourth edition. Given that the last update was published 15 years ago, this revision is critical to incorporating recent research, updating species identification, and expanding the photographic documentation of newly introduced and spreading weed species.

The Need for an Updated Edition

Changes in weed distribution across New Zealand have necessitated an updated edition. Over the past decade, at least 20 newly identifiable weed species have entered the country, and some established species have expanded into previously unaffected regions. As a result, the book will act as an early warning system for farmers and land managers, helping them recognize and respond to emerging weed threats.

This project is a collaborative effort involving local councils, independent specialists, research organizations, and public contributors. Platforms such as *iNaturalist* enable enthusiasts to upload photographs of potential new weed species, which the research team reviews to determine inclusion in the new edition.

Trevor James, Principal Scientist of the Forage Science Team at AgResearch, based at the Ruakura Research Centre near Hamilton, emphasizes the collaborative nature of the project. “We are not producing this book in isolation. We are working with numerous contributors, including those using digital platforms,” he explains. “We also direct readers to online resources such as *Weedbusters*, which provide the latest weed management strategies.”

Knowledge Transfer and Future Research

A significant aspect of the project is ensuring that expertise in weed science is passed on to future generations. With over 90 years of combined experience, Trevor and Paul—who recently retired from his role as Principal Scientist in Freshwater Ecology at NIWA—are acutely aware of the need to train and mentor new researchers in this field.

“Weed scientists are becoming increasingly rare, and we want to ensure that knowledge is preserved for future generations,” says Trevor.

Supporting this work are Zachary Ngow, a research associate at AgResearch specializing in ferns and bamboo, and Murray Dawson, a botanist at Landcare Research with expertise in weed identification keys. Their contributions are helping to refine and expand the book’s content.

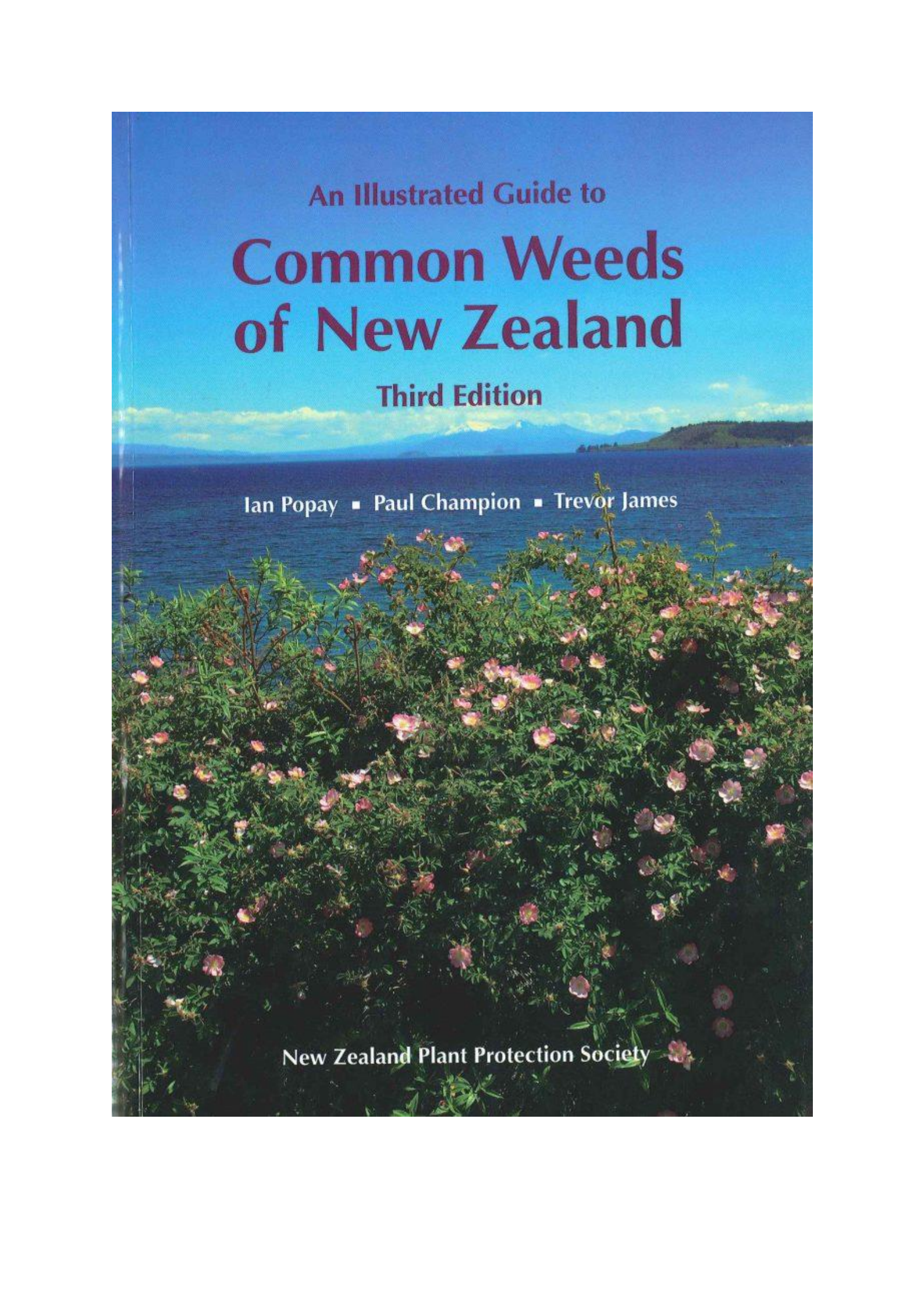
Wider Impact and Future Publications

The funding from MBIE Envirolink and the Ellett Trust has provided the necessary resources to engage with a broader network of experts and conduct thorough research.

The updated publication will have far-reaching benefits beyond the agricultural sector. It will support the Ministry for Primary Industries' *National Plant Pest Accord* and inform Regional Pest Management Plans developed by local councils. Additionally, the research includes environmental weed species relevant to parks and reserves, further aiding land management efforts across New Zealand.

This comprehensive research initiative ensures that critical information on New Zealand's weed species remains accessible, supporting effective land management and environmental conservation efforts well into the future.





An Illustrated Guide to
**Common Weeds
of New Zealand**

Third Edition

Ian Popay ■ Paul Champion ■ Trevor James

New Zealand Plant Protection Society



Murray Dawson with Kanieri school students