

# TFBIS

TERRESTRIAL & FRESHWATER BIODIVERSITY INFORMATION SYSTEM

Update

May 2011

data  
information  
collaboration  
accessibility

## INTRODUCTION

Welcome to the fourth TFBIS Programme newsletter. Firstly, the TFBIS team would like to pass on our support to TFBIS researchers based in Christchurch as they enter the rebuilding phase of their city. We wish you the best while things return to something resembling normal. If there are issues arising as a result of the earthquake that impact on your project, please contact us.

Here at TFBIS we are finalising the majority of the contracts approved in the third funding round (since the TFBIS strategy was released). Applications closed last year and 22 applications were received. The Steering Committee made their recommendations in January with 15 of these being approved for funding. We appreciate the high quality of proposals received and look forward to opening the next funding round in the next few months.

As part of our policy of continuous improvement, we requested feedback on the TFBIS application forms. As a result, we will be reviewing the forms to help eliminate questions that cover similar aspects of the project and to better record consultation/preparatory work already undertaken as a precursor to the project application. Thank you to those who responded.

TFBIS aims to support seamless access to essential biodiversity data, information and knowledge to achieve the goals of the New Zealand Biodiversity Strategy 2000. During 2011, TFBIS Programme Manager Alan White will be focusing on promoting inter-sector communication and collaboration, and retaining a focus on NZOR (New Zealand Organisms Register) and strategy implementation. Chanel Partridge, the new TFBIS Programme Advisor (see page 3), will focus on contract reporting and systems improvement.

TFBIS Programme administered by the Department of Conservation

PO Box 10 420, Wellington, 6143

Phone: Alan White (04) 471 3142

Chanel Partridge (04) 471 3136

Email: [tfbis@doc.govt.nz](mailto:tfbis@doc.govt.nz)

[www.biodiversity.govt.nz/land/nzbs/tfbis/tfbis/index.html](http://www.biodiversity.govt.nz/land/nzbs/tfbis/tfbis/index.html)



## TFBIS Steering Committee representatives

The Steering Committee provides recommendations and suggested improvements to the Programme Manager on all TFBIS applications. The committee is made up of representatives from central and local government and Crown Research Institutes. There were a number of changes before the Steering Committee meeting in January; the current members are:

Andrea Brandon	Senior Analyst, Natural Forest and Method Development Ministry for the Environment
Bryce Cooper	General Manager, Strategy NIWA
Dave Choquenot	General Manager, Science Landcare Research
Jim Fretwell	Principle Solutions Architect Environment Bay of Plenty
Lindsay Vaughan	Policy Planner Biosecurity Co-ordinator Tasman District Council
Naomi Parker	Strategic Science Team Leader MAF Biosecurity New Zealand
Olwyn Crutchley	Information Centre Manager Ministry of Fisheries
Peter Furnish	Information Architect Department of Conservation
Tata Lawton	Deputy Director-General, Kaupapa Atawhai Department of Conservation

Thank you to our previous representatives Hugh Davies and Veronica Herrera (MAF), Kim Duckworth (Ministry of Fisheries), Nicola Holmes and Trudy Rankin (Department of Conservation) and Steve Botica (Ministry for the Environment).

### LINKS

**Previous newsletters** [www.biodiversity.govt.nz/land/nzbs/tfbis/tfbis/resources/index.html](http://www.biodiversity.govt.nz/land/nzbs/tfbis/tfbis/resources/index.html)

**New Zealand Lizards Database** <http://nzlizards.landcareresearch.co.nz>

**Dataversity** [www.dataversity.org.nz](http://www.dataversity.org.nz)

**Distributions of freshwater macro-invertebrates**

[www.biodiversity.govt.nz/pdfs/freshwater-macro-invertebrate-distributions.pdf](http://www.biodiversity.govt.nz/pdfs/freshwater-macro-invertebrate-distributions.pdf)

**New Zealand aphids on the web**

[www.landcareresearch.co.nz/research/biosystematics/invertebrates/nzac/tfbis/Aphids.asp](http://www.landcareresearch.co.nz/research/biosystematics/invertebrates/nzac/tfbis/Aphids.asp)

**New Zealand Botanical Societies**

<http://bts.nzpcn.org.nz> and [www.nzbotanicalsociety.org.nz/newsletter/newsletters.html](http://www.nzbotanicalsociety.org.nz/newsletter/newsletters.html)

**Bird banding database**

[www.doc.govt.nz/conservation/native-animals/birds/bird-banding](http://www.doc.govt.nz/conservation/native-animals/birds/bird-banding)

**Interactive key to weed species of New Zealand**

[www.landcareresearch.co.nz/research/biosystematics/plants/weedskey/index.asp](http://www.landcareresearch.co.nz/research/biosystematics/plants/weedskey/index.asp)



Chanel Partridge  
TFBIS Programme Advisor

## New Programme Advisor

Chanel Partridge joined TFBIS as the Programme Advisor in January this year. Chanel has a contract management background—her last role involved managing a small research programme for Beef + Lamb New Zealand Ltd. She has a B.Sc in Plant & Microbial Sciences from the University of Canterbury and has worked in laboratories here and in the UK.

“I’m looking forward to learning more about biodiversity and am enjoying working with the TFBIS project managers—they’re enthusiastic and keen to discuss their projects, which is teaching me so much,” says Chanel.

In her spare time, Chanel enjoys spending time with her husband and their two-year-old daughter.

The TFBIS team would like to acknowledge Siobain Browning’s significant contribution over the last 2 years and wish her well in her new part-time role within the Department of Conservation’s Marine Conservation Team. In the role, she continues to contribute to conservation sciences while achieving her desired work/life balance.

## Projects approved this year

The TFBIS Programme continues to work towards increasing awareness of, and access to, fundamental data and information about terrestrial and freshwater biodiversity through funding specific projects. The last funding round closed on 30 November 2010—a total of \$1,252,868 was committed to over the next 3 years.

A description of the 15 approved projects are below.

### **Scoping report—Digitising the diversity of New Zealand’s freshwater invertebrates using DNA barcoding: the case of the caddisfly**

*TFBIS 246*

This project will sequence and upload New Zealand Caddisfly data into the Barcode of Life Data System (BOLD) as well as collate information and caddisfly images.

Ian Hogg, [hogg@waikato.ac.nz](mailto:hogg@waikato.ac.nz)

### **Scoping report—Strategic visioning project for NZPCN**

*TFBIS 247*

The New Zealand Plant Conservation Network (NZPCN) will determine how its website will be developed over the next 5 years.

John Sawyer, [jsawyer@doc.govt.nz](mailto:jsawyer@doc.govt.nz)

### **Biodata Management Framework**

*TFBIS 248*

This project will assist the Dataversity Steering team to identify what kind of guidance is needed to best support biodiversity data managers in New Zealand.

James Lambie, [james.lambie@horizons.govt.nz](mailto:james.lambie@horizons.govt.nz)

**Improving the Freshwater Biodiversity Information System (FBIS): making freshwater data more accessible and interoperable**

*TFBIS 249*

A review of the FBIS database and web interface was undertaken last year. This project allows the identified improvement to be carried out.

Alastair Suren, [a.suren@niwa.co.nz](mailto:a.suren@niwa.co.nz)

**Supporting evaluation of the conservation status of the New Zealand flora**

*TFBIS 250*

This project will enter data from approximately 4000 Allan Herbarium specimens of threatened, uncommon and data-deficient taxa into the Allan Herbarium Specimen Database.

Ines Schoenberger, [schonbergeri@landcareresearch.co.nz](mailto:schonbergeri@landcareresearch.co.nz)

**Online encyclopaedia of New Zealand birds**

*TFBIS 251*

The website developed from this project will provide comprehensive data on New Zealand bird identification, distribution, history, ecology and conservation.

Colin Miskelly, [colin.miskelly@tepapa.govt.nz](mailto:colin.miskelly@tepapa.govt.nz)

**PDF maker for species factsheets**

*TFBIS 252*

A PDF maker will be added to the NZPCN website.

John Sawyer, [jsawyer@doc.govt.nz](mailto:jsawyer@doc.govt.nz)

**An atlas of adult Trichoptera (caddisflies) from New Zealand**

*TFBIS 253*

Accurate species identification is critical for conservation risk assessment and for assessing water quality. The information will be published in hardcopy and will also be available through electronic factsheets.

Brian Smith, [b.smith@niwa.co.nz](mailto:b.smith@niwa.co.nz)

**The 'Nature Recorder' for all New Zealanders: catalysing citizen science with the next generation NZ Biodiversity Recording Network web system**

*TFBIS 254*

The NZBRN database format and user interface will be updated.

Colin Meurk, [meurkc@landcareresearch.co.nz](mailto:meurkc@landcareresearch.co.nz)

**Virtual identification of true bug families and genera**

*TFBIS 255*

A Hemiptera Lucid™ key will be developed.

Marie-Claude Larivière, [larivierem@landcareresearch.co.nz](mailto:larivierem@landcareresearch.co.nz)

**Virtual guide to the parasitoid wasps of New Zealand**

*TFBIS 256*

An Ichneumonidae Lucid™ key will be developed.

Darren Ward, [wardda@landcareresearch.co.nz](mailto:wardda@landcareresearch.co.nz)

**Interactive key to New Zealand native orchids**

*TFBIS 257*

A native orchid Lucid™ key will be developed.

Murray Dawson, [dawsonm@landcareresearch.co.nz](mailto:dawsonm@landcareresearch.co.nz)

## Interactive key to terrestrial Isopoda of New Zealand

TFBIS 258

A terrestrial slaters Lucid™ key will be developed.

Maria Minor, [m.a.minor@massey.ac.nz](mailto:m.a.minor@massey.ac.nz)

## Filling critical knowledge gaps in freshwater biodiversity

TFBIS 259

A georeferenced database of micro-invertebrate and fish communities will be created to fill the knowledge gap in 7 of the 20 stream groups recently classified by the Department of Conservation.

Richard Storey, [r.storey@niwa.co.nz](mailto:r.storey@niwa.co.nz)

## Freshwater biodiversity information management and publishing application

TFBIS 260

This will be developed to better enable up-to-date data collation into electronic factsheets.

Brent Wood, [b.wood@niwa.co.nz](mailto:b.wood@niwa.co.nz)

## Next TFBIS funding round

The next funding round will open in the next few months. Those on the TFBIS mailing list will be sent further information closer to the time. If you received this newsletter directly you are already on the TFBIS mailing list. The dates will also be posted on the TFBIS website.

➔ [www.biodiversity.govt.nz/land/nzbs/tfbis/tfbis/](http://www.biodiversity.govt.nz/land/nzbs/tfbis/tfbis/)

## Completed projects

### Lizards are go!—New Zealand Lizards Database

TFBIS 199

The New Zealand Lizards Database provides biodiversity managers, scientists, students and the public with a comprehensive searchable online resource that brings together a huge array of previously fragmented information.

The species synopses in the database describe the taxonomy; conservation status; distribution; conservation requirements; and factors such as ecology, behaviour and population dynamics of over 100 species of New Zealand lizard. An annotated bibliography of New Zealand lizard literature is also accessible. The original bibliography was compiled by Tony Whitaker and Bruce Thomas in 1990 and, together with new material, the online version now contains a list of over 3000 published and unpublished articles.

Project co-ordinator Trent Bell says, “The database will improve understanding of New Zealand’s diversity of lizards and have tangible conservation outcomes for this fauna, particularly through informed decision-making and management”.

➔ <http://nzlizards.landcareresearch.co.nz>



Te Kakahu skink  
(*Oligosoma tekakahu*)  
Photo: Trent Bell



Dan Randow  
Dataversity Project Manager

## Dataversity—engaging people in a vision

TFBIS 209

Dataversity is the online community focused on improving New Zealand terrestrial and freshwater biodiversity data management. Dataversity has around 160 members who participate in an online forum and at regional and national meetings.

This project was the first online community of practice funded by the TFBIS Programme. The project highlights the need for enthusiastic, persuasive and dedicated project managers. Dan Randow (pictured), the project manager from Local Government Online, now calls himself ‘Chief Wrangler’, an appropriate name for his role in the group. Dan sums up the job as ‘engaging people in a vision’. Dataversity continues to function and grow after the completion of the TFBIS-funded project.

Dataversity provides an opportunity for biodata managers to share ideas and discuss how we can improve biodiversity data management from local to national level. Chairman James Lambie says, “The ease to which members of Dataversity are able to access and leverage the expertise within the Dataversity community will be one of the key essentials to fully integrated biodata management in New Zealand”.

In line with our policy of continuous improvement, we asked Dan what knowledge he could pass on when establishing an online community. Of particular note was allowing plenty of time to find the right person within an organisation; engaging participants early on with lots of questions; ensuring the group has a name that the community can identify with; understanding that there are a lot more people reading and discussing the ‘posts’ in private than there are posting comments; and allowing generous breaks at meetings for valuable discussions and networking to occur.

Dan also believes having key advocates for the project was invaluable. Dataversity is advised by Steering Team members James Lambie (Horizons and Biodiversity Forum chair), Jim Fretwell (Environment Bay of Plenty), Pedro Jenson (Greater Wellington Regional Council), Paul Fisher (Nelson City Council), Liz Garson (Christchurch City Council) Peter Furnish (Department of Conservation), Shona Myers (Wildlands) and Jerry Cooper (Landcare Research).

➔ [www.dataversity.org.nz](http://www.dataversity.org.nz)

## Distributions of freshwater macro-invertebrates

TFBIS 210

NIWA staff have significantly improved our understanding of the distributions of a large number of the macro-invertebrate species that occur in our rivers and streams. Using data collected at macro-invertebrate monitoring sites, mostly by Regional Council staff nationwide, NIWA staff have built models that describe relationships between the occurrence of each species and environmental conditions at each sample site. These models have then been used to predict the distribution of each taxa across all rivers and streams, including those for which no sample data are available. These are now available in the Freshwater Ecosystems of New Zealand (FENZ) database.

➔ [www.doc.govt.nz/conservation/land-and-freshwater/freshwater/freshwater-ecosystems-of-new-zealand/](http://www.doc.govt.nz/conservation/land-and-freshwater/freshwater/freshwater-ecosystems-of-new-zealand/)



Predicted distribution of  
*Coloburiscus*, a freshwater  
macro-invertebrate



A recently found native aphid and its eggs on Hebe  
Photo: Roberts Lamberts  
Plant & Food Research

## New Zealand aphids take over the web

TFBIS 211

Data from 5970 previously unavailable samples have been collated and are now presented online, through links to nine collections. TFBIS provided funding for Plant & Food Research and its collaborators at Landcare Research, MAF and AgCanada to collate New Zealand aphid specimen data from around the world, including Canada, London, and Australia.

Aphids are important pests of agriculture, horticulture and forestry, and native aphids are a significant component of the New Zealand insect fauna and world aphid fauna. This database provides the only location for records of aphids found in New Zealand in one place and is especially important as it provides detailed information on New Zealand native aphid collections for the first time—information that could be very important to ensure their survival.

➔ <http://www.landcareresearch.co.nz/research/biosystematics/invertebrates/nzac/tfbis/Aphids.asp>

## Online botanical journals and newsletters

TFBIS 212 & 216

Botanical enthusiasts now have a treasure trove of information on New Zealand plant life at their fingertips, thanks to the New Zealand Plant Conservation Network (NZPCN). The journals of the Auckland, Wellington and Canterbury Botanical Societies are now freely available online.

“People will be able to make use of the knowledge gained over years of field work by some of our most experienced botanical experts”, says Network President Philippa Crisp.

The online searchable resource includes papers from legendary field botanist A.P. (Tony) Druce, as well as articles and observations from many other professional and amateur botanists.

➔ <http://bts.nzpcn.org.nz>

The Newsletters of the New Zealand Botanical Society have also been digitised—currently more than 100 issues dating back to 1985 are now online. The newsletters contain records of meetings, news, reports, field trip observations, events, bibliographies, book reviews, publications, desiderata, and announcements as well as retirements and obituaries.

➔ [www.nzbotanicalsociety.org.nz/newsletter/newsletters.html](http://www.nzbotanicalsociety.org.nz/newsletter/newsletters.html)

## Your banded bird questions answered

TFBIS 224

The Department of Conservation can now use an effective and comprehensive bird banding database to answer queries such as the number of banded species in a location, the proportion of banded birds that have been recovered, or even the oldest banded bird for a species.

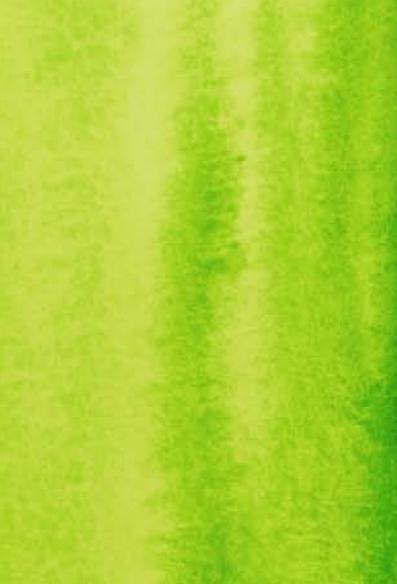
In 2005, TFBIS funded the collation of 90 years of bird banding data. The original paper records from the Ornithological Society of New Zealand Bird Banding Scheme and the National Bird Banding Scheme were entered into Excel spreadsheets. At the end of the 3-year project, 1.3 millions records had been entered, which equates to around 33 million cells of data. These data sheets were then transferred into the DOC Bioweb database.



New Zealand Botanical Society  
Newsletter, March 2011



Banded takahē on Mana Island  
Photo: Department of Conservation



*Ulex europaeus* (gorse)  
Photo: Trevor James



In 2008, a second project was undertaken to improve the usability of this information by developing a new Sequel (SQL) Server reporting model and cleaning up the banding recovery records that had already been digitised.

Digitising these banding records has greatly improved access and use of these records by researchers and managers. All banding schedule records are public records, however, there are restrictions on the use of some of these datasets. If you are interested in retrieving bird banding information please contact Graeme Taylor on [bandingoffice@doc.govt.nz](mailto:bandingoffice@doc.govt.nz) or phone 04 4713294.

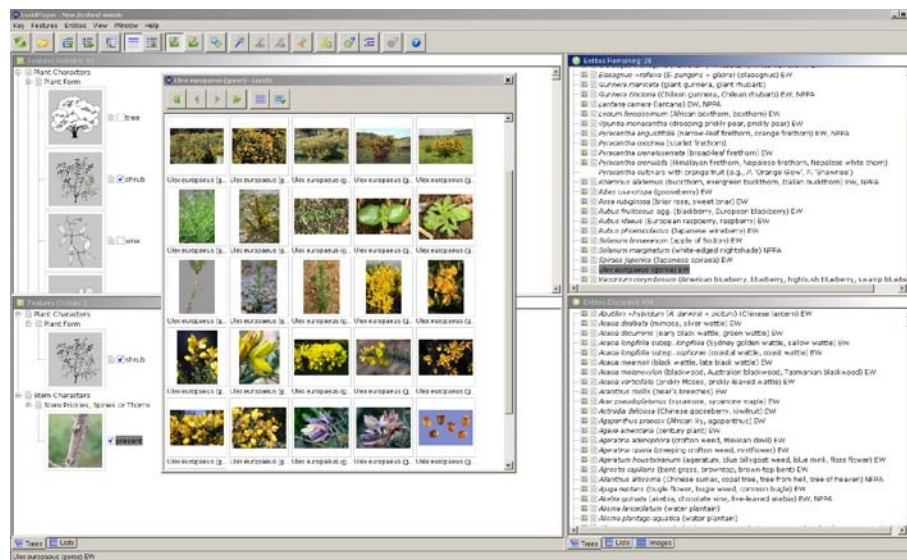
➔ [www.doc.govt.nz/conservation/native-animals/birds/bird-banding](http://www.doc.govt.nz/conservation/native-animals/birds/bird-banding)

### The interactive key to weed species of New Zealand goes live

TFBIS 228

A recently developed interactive key to weed species of New Zealand can be found online. The Lucid™ key includes more than 500 weed taxa including the Department of Conservation consolidated list of environmental weeds in New Zealand and the National Pest Plant Accord (NPPA) list of species banned from sale, distribution, and propagation in New Zealand. There are more than 8500 images in the identification key and the taxonomic names have all been assessed to ensure they are the most up to date available. Landcare Research project manager Murray Dawson says the project has been very successful, and that a well-polished, information-rich identification tool has been delivered.

➔ [www.landcareresearch.co.nz/research/biosystematics/plants/weedkey/index.asp](http://www.landcareresearch.co.nz/research/biosystematics/plants/weedkey/index.asp) or <http://tinyurl.com/weedkey>



### PASS IT ON

If you know someone who would like to receive this newsletter, or you have been forwarded this and would like to receive the newsletter directly and be added to the TFBIS mailing list for Funding Round notifications, please email [tfbis@doc.govt.nz](mailto:tfbis@doc.govt.nz).

If you no longer wish to receive this newsletter email [tfbis@doc.govt.nz](mailto:tfbis@doc.govt.nz) with 'unsubscribe' in the subject line.