

Citizen science – understanding, participating, legitimating

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Unpublished presentation to Festival of Education, 23rd March 2014,
Wigram Air Force Museum

What is citizen science?

One definition:

- “projects in which volunteers partner with scientists to answer real-world questions” (source: Citizen Science Central: <http://www.birds.cornell.edu/citscitoolkit/about/definition>)
- This could be rewritten, at least for today, to be:
 - Projects in which people (including students, the general public, others) partner with scientists to answer real-world questions
 - And as result this implies a strong degree of collaboration and integration, alongside innovation to make it work

Citizen science: environmental monitoring and education - applications

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WATERWATCH

Kaitiaki Wai

A water monitoring programme especially for schools and community groups

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What is WATERWATCH?

WATERWATCH is an interactive programme that involves school students and university groups in monitoring the 'health' of their local rivers or streams in a safe and ecologically friendly way. WATERWATCH is an outreach programme of [Lincoln University](#).

Our Vision

To promote healthy waterways through outdoor educational experiences.

Related Links

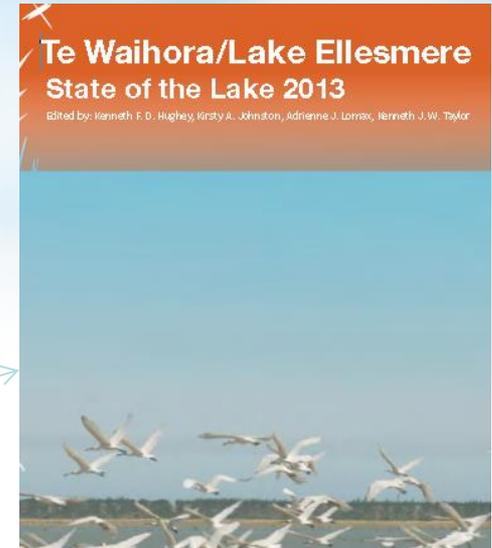
- ▶ [Request a field trip](#)

Waterwatch is free thanks to our sponsors

The Canterbury Community Trust
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Citizen science: contributions to state of environment reporting

- Wetland bird monitoring at Te Waihora/Lake Ellesmere
- Annual February bird count links volunteers with managers with scientists – 40 people involved
- Contributes directly, by counting wrybills, to state of the lake report, links to Selwyn-Waihora Water Mgt Zone reporting, links to MfE national State of the Environment reporting, links to world wide Birdlife International monitoring



The screenshot shows the BirdLife International website interface. At the top left is the BirdLife International logo. A navigation menu on the left includes links for Home, Search, Programme of work, Download maps, Taxonomy, References, Publications, Terms and definitions, and Climate Change. Below this is a 'Data zone' section with links for Home and Species. The main content area is titled 'Species' and includes an 'email a friend' button. The featured species is the Wrybill (*Anarhynchus frontalis*), which is listed as Vulnerable (VU). A photograph of the bird is shown, along with its justification for being vulnerable, its taxonomic sources (Sibley & Monroe 1990, Turbott 1990), and its identification characteristics (20 cm, stocky, pale grey plover, black bill tip). The distribution and population section notes that it breeds in Canterbury and Otago, South Island, New Zealand.

Education potential of citizen science

- Enormous and relatively little tapped, at least in my view
- All levels of formal education, from kindergarten through primary, secondary and tertiary levels, to University(s) of the 3rd Age
- The populace at large – lay, business (including of course agriculture), government of all types and at all levels (local, regional, national)
- Some key question(s) for discussion:
 - How do we link CZ more fully into the education system and make it work for everyone's benefit (e.g., Hurunui College kiwi programme in the Nina Valley)
 - How do we inspire our students to play leadership roles?
 - How do we get agencies to be really collaborative and link with educators when they are so busy just doing their jobs?