

## **IN PRAISE OF OUR RICH DIVERSITY**

by Steve Wratten (Professor of Ecology at Lincoln University).

It's autumn in the vege garden, but there's still plenty to see, harvest, cook and eat.

In fact, if you like Mediterranean cuisine, it's possibly the best time of the year. The vege diversity can provide peppers for Spanish rice-dish paella, ripe tomatoes for a French ratatouille (slow-cooked, garlicky vegetable stew) and fennel for a frittata, the Italian omelette.

All this richness is provided by biodiversity. Most of us know what that is - the variety of living things. Trouble is, the activities of mankind are destroying this diversity at the greatest rate since the last Ice Age. If we lose bees from our garden, what will pollinate the apples and raspberries next summer? I suppose we could emulate the Chinese, some of whom are forced to pollinate apple flowers by hand because of the paucity of bees.

What about biological control? You may have perforations in cauliflower leaves, caused by caterpillars, but without the harvestmen, centipedes, ladybirds, lacewings and their kin, you would have no holes because there would be no cauliflowers.

What about your garden soil? It would still be pure clay, chalk or sand if it wasn't for the living things that make topsoil and provide routes for roots. Earthworms, springtails, millipedes, fungi, bacteria - they all turn plant material into humus. You could use bought compost or peat for the garden, but the bags should come with a biodiversity label, and the compost could not be made without the action of living things.

So how much biodiversity does your garden have, from birds to bacteria?

Well, it would take a team of dedicated experts to blitz it. To get them to your plot would be tricky, but the keen organisers of Bioblitz on April 3 and 4 have managed just that. A team of biodiversity experts will biologically blitz the Liffey Domain at Lincoln, with the church hall in James St as base camp, for this delving into biodiversity.

The hunt will be on to find and identify as many different living things as possible over a 24-hour period - from mudfish to mallards and mosses to Muehlenbeckia. Bug man Ruud Kleinpaste will lead insect investigations and you can join other scientists to find, identify and count toadstools, lizards and maybe even owls.

What's all this got to do with gardening? A great deal, because all the animals and plants in the Liffey Domain - and in our paddocks and gardens - keep us alive.

Without useful biodiversity, we'd be growing strawberries hydroponically in sand, whacking on oil-based fertilisers and pesticides and paying someone to get out a tiny paint brush and pollinate our flowers by hand.

I don't fancy living in that brave new world. I'd rather visit [landcareresearch.co.nz/research/biosystematics/bioblitz](http://landcareresearch.co.nz/research/biosystematics/bioblitz) and then count moths and magpies from 3.15pm on April 3.