MEDIA MONITORS

Fraser Coast Chronicle
23/09/2011
Page: 34
By: Michael Green
Section: Property Week
Region: Hervey Bay QLD Circulation: 9257
Type: Regional
Size: 507.00 sq.cms
Frequency: MTWTFS-

Changing the seasons

MEDIA MONITORS

Fraser Coast Chronicle
23/09/2011
Page: 34
By: Michael Green
Section: Property Week
Region: Hervey Bay QLD Circulation: 9257
Type: Regional
Size: 507.00 sq.cms
Frequency: MTWTFS-

Householders can help scientists understand climate change

By Michael Green

One spring afternoon, take a walk in your street and look around.

Are there any purple flowers on the neighbour's jacaranda tree?

Can you see a welcome swallow – with its distinctive forked tail – perched high on the wires?

These observations might sound idle, but they could help scientists understand the way climate change is influencing our birds and bees.

"Climate change isn't just about hotter weather," says Richard Weatherill, from Earthwatch Institute.

"But so far we don't know much about how changes in temperature, rainfall and more extreme storm events are affecting the behaviour of our plants and animals."

Together with the Bureau of Meteorology and the University of Melbourne, the institute has developed ClimateWatch, a website that aims to fill in some of those gaps, with the help of the public.

More than 2500 people around the country have begun monitoring the behaviour of common species of birds, plants, insects, mammals, frogs, reptiles and spiders – both native and introduced – and recording their observations online.

The study of the timing of natural cycles is known as phenology.

Because of the changing climate, it's expected spring and summer will come earlier.

But what might that mean?

Last year, a study by the University of Melbourne showed that a 1 degree increase in the city's temperature had led to the common brown butterfly emerging from its cocoon 10 days earlier than it did in the mid-20th century.

Mr Weatherill says that while such a change might sound innocuous, it could have far-reaching results – such as those demonstrated by a similar website in Britain, called Nature's Calendar.

"Researchers found that butterflies were emerging and birds were nesting earlier, but there was a mismatch: where the young chicks would have fed on the caterpillars, they were no longer available," he says.

"That kind of impact starts to cascade in the ecosystem."

Lynda Chambers, from the Bureau of Meteorology, says the breadth of the observations by householders in ClimateWatch will reveal some of the cascading effects in Australia for the first time.

"For example, for the pollination process we need to know what is happening both with the plant and with the insects that pollinate it. We'll get an idea of how the ecosystem is changing, rather than just a single species."

She says the fact that the climate acts as a trigger for animal and plant behaviour has long been known.

Indigenous people knew the season was changing and food sources would become available, in large part, because they saw an indicator species – a particular plant would flower and that would be a sign that the fish would start appearing."

"It's not something new, but we've become disconnected from how these things happen in the world," she says.

Now, because of climate change, rediscovering knowledge about the timing of natural cycles has become especially important.

But Dr Chambers says the benefits of all these observations won't only accrue to the scientists.

"It's easy to slip into the city mode of life where we go to the shops to buy our food and goods and we tend to forget that there's a natural system lying behind it all providing these services," she says.

"We forget plants and animals change their behaviour with the seasons. It can be fascinating to observe them."