



A wrybill on its nest on the Waimakariri River, spotted on September 19 by Environment Canterbury's environmental protection officer Dianne Parker. See inside for the winner of this year's school science Wrybill Trophy.

Keeping the meter running pays off for Ashburton farmer

Ashburton lifestyle farmer and general manager of Rainer Irrigation, Gavin Briggs, says his new water meter has taken much of the guesswork out of farming.

Setting up his 37 hectare block with approved water metering technology has already delivered him major farm efficiencies.

"I'm saving power, labour and it gives me control of the system," he says. "It provides physical information on what I am doing at any time." Mr Briggs's installation includes a magflow, datalogger, manifold, depth transducer and soil moisture and temperature probes. "The probes give me valuable knowledge, and I get details around system performance, soil properties, well health and well depth. It also helps me manage water in accordance with my consent conditions," he says.

The financial outlay for a flow meter was substantial, costing around \$4,500 to set up, but already he's reaping the benefits and recouping costs. "During peak irrigating periods, the meter has a 14 day payback," he says.

Mr Briggs says the technology has also future-proofed his business. "It makes farming a less risky business. It's a management tool helping me to control a precious resource in the best possible way, so I'm able to react quickly to make smart farm-management decisions," he says.

New national environmental standards for water metering are to come into effect later this year. Farmers with water consents will be required to measure the amount of water they take for irrigation. Environment Canterbury and the Rakaia-Selwyn Water Metering Tender Group have investigated the most appropriate and cost-effective water metering systems.

i For a list of preferred service providers for supply and installation of a range of water metering services, visit www.ecan.govt.nz

Cr Angus McKay (left) and Environment Canterbury's Water Metering Manager John Young at Gavin Briggs's water metering installation.



Clear benefits of Canterbury Water Management Strategy

A draft strategy which represents a major step forward towards responsible and effective water management for Canterbury was launched in Christchurch by the Canterbury Mayoral Forum, including Environment Canterbury, on September 3.

The collaboratively-designed draft Canterbury Water Management Strategy, which has had significant Environment Canterbury input and involvement, has won applause from central Government and both farming and environmental sectors and represents a first for New Zealand. Its development involved a diverse cross-section of Canterbury opinion and expertise, and offers a forum for discussion and agreement on the future of our water.

Minister of Agriculture and Forestry, Hon David Carter, Te Runanga o Ngai Tahu Kaiwhakahaere, Mark Solomon, the mayors and chief executives of a number of Canterbury district councils, Environment Canterbury and industry and environmental groups were all represented at a gathering of around 100 people at Mona Vale for the official launch of the Strategy.

During October the draft will be publicly debated and refined into a final strategy to be presented to Canterbury local authorities, Environment Canterbury, Ngai Tahu and Central Government.

i For more information on the draft strategy or to download a copy, visit www.canterburywater.org.nz. To request a copy by post, please e-mail info@canterburywater.org.nz or call 0800 677 748.



When it all turns to custard...

October 11-17 is National Disaster Awareness Week, and the Canterbury Civil Defence Emergency Management Group is encouraging people to use that week to prepare for emergencies.

Among activities planned this year is a Canterbury-wide competition to help one lucky winner to get their house "emergency ready". You can enter the competition at www.cdemcanterbury.govt.nz from 11 October 2009. Entries will close on 21 October 2009.

New World's South Island supermarkets will promote the week via their weekly mailer and in-store.

ARE YOU READY?

Top 3 things to do:

Water – You need 3 litres of stored water, per person, per day for at least 3 days.

Food – You need enough dried or canned goods to feed your household for 3 days.

Lighting and cooking – In the event of power cuts, keep torches and spare batteries to hand, and use a gas stove or a barbeque.



Pictured, left to right: Samantha, Shankari, Emma, Sophie & Emily.



Top of their class

Recent Science Fairs in Timaru and Christchurch brought out the best of New Zealand's future environmentalists to compete for prizes including the prestigious Wrybill Trophy. In Christchurch, top junior Environment Canterbury science fair prize winner **Emma Clucas**, 11, of Cobham Intermediate, worked out a way for top-loading washing machines to re-use rinse water.

Top senior winner at the Christchurch fair was **Shankari Ganeshan**, 17, in her final year at Lincoln High School. Her project isolated a black bacterial substance from sewage samples to power a circuit and potentially create a clean, renewable source of power.

In Timaru, an inspirational idea to help supermarket shoppers remember their reusable bags won first prize for 12-year-old **Sophie Chambers** and **Emily Davies-Martin** of Gleniti School, whose idea of a brightly coloured "Got Me" key ring and a sticker has also attracted the interest of a major supermarket chain.

The senior first prize in Timaru went to 14-year-old **Samantha Olley**, a Year 10 Craighead Diocesan School student, whose project "Green Roofs are Good" was inspired by finding out that her aunt in the Danish Faroe Islands has a house with a turf roof. "Green roofs are quite traditional there and I was curious to find out why. "I discovered that some of the benefits are better heat and sound insulation and stormwater retention. I'd like to see more people here thinking about using them."

Samantha was also winner of the prestigious Wrybill Trophy, awarded to the overall winner from all this year's Science Fairs. The judge, Dr Grant McKenzie, of Lincoln University, says he was impressed at the science excellence shown by Samantha, who explored an environmental issue and came up with a workable solution.

The fairs were sponsored by Sanford in Timaru and by Lincoln University in Christchurch.

Greater Christchurch Exhibition - There's a plan, we're on our way

Visit Our City O-Tautahi on the corner of Worcester Boulevard and Oxford Terrace, Christchurch, to see the new Urban Development Strategy brought to life through an exciting and inventive exhibition. The multimedia display walks you through Greater Christchurch, past, present and into the future, and tells its story through the eyes of its people.

The Urban Development Strategy is a bold and ambitious 35-year plan for managing urban growth and land use in Greater Christchurch. It aims to protect water, enhance open spaces, improve transport links, create more liveable centres and manage the distribution and location of new housing in a sustainable way.

The Strategy was created through a partnership between Environment Canterbury, the Christchurch City Council, Waimakariri District Council, Selwyn District Council, and the New Zealand Transport Agency.

The exhibition runs until 24 October. It's open from 10 am to 4 pm, Monday to Saturday.



Green light for major flood protection project

The Waimakariri Flood Protection Project, worth an estimated \$34 million, has now got the green light to proceed.

Environment Canterbury Project Leader, Ian Heslop, says granting consents for the Waimakariri Flood Protection Project allows Environment Canterbury to provide additional flood protection to residents of Waimakariri, Selwyn and Christchurch City.

It's a large project which will take 10 years to complete. Designed to protect land and households from a large flood (a river flow of 6,500 cubic metres of water per second, compared with a normal flow of 120), existing primary stopbanks will be made higher and strengthened, and new secondary stopbanks will be built.

"The secondary stopbanks will provide another line of defence for Selwyn District and Christchurch City should the primary banks fail, directing the flow along the old Waimakariri South Branch (Otukaikino River) before returning it to the Waimakariri River. The project includes upgrading and rock armouring



Flooding in Kaiapoi, February 1945

of the primary stopbanks along the northern river bank to improve protection for Kaiapoi and Waimakariri District," says Mr Heslop.

i If you would like to join a mailing list for six-monthly newsletters, please contact Ian Heslop on 03 372 7201 or e-mail wfpp@ecan.govt.nz

Better science helps to safeguard Canterbury's water

Two science reports have been released by the National Institute of Water and Atmospheric Research (NIWA) to help Environment Canterbury develop plans to manage the region's ground and surface water.

The first report models how Lake Benmore and its associated lakes would respond to increased nutrients in the water following changes in land-use. The second is a review of how nitrate in water affects freshwater fish and other species. Environment Canterbury's Ken Taylor says the work was commissioned to make sure the best and latest available science is applied to environmental management issues facing Canterbury.

"In the case of the Lake Benmore water quality report, we're interested in maintaining the environmental values of Lake Benmore and its downstream lakes," says Mr Taylor. "Water quality is a key concern as land-use intensifies.

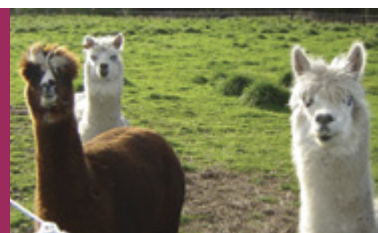
"In the case of the nitrate report, we're interested in the impact nitrate has on the health of our lowland streams and what limits we need to set to achieve our environmental objectives. The reports will help us work with communities and resource users to ensure sound environmental practices and regulation. They give us the information we need to help us develop and implement plans to set limits for key contaminants as part of our role to safeguard the region's ground and surface water."

i Both reports are available at www.ecan.govt.nz/publications



New Chairman of Environment Canterbury

Alec Neill, former MP for Waitaki and a Canterbury regional councillor since 2003, has been elected as the new chair of Environment Canterbury. Jo Kane retains her position as deputy chair. Councillor Neill is a lawyer by background and has strong connections with Canterbury's farming community.



Catch up with Environment Canterbury at:

Rangiora A&P Show
on Saturday 24 October.

Ashburton A&P Show
on Friday 30th & Saturday 31st October.



Waimakariri River Regional Park celebrates its third birthday

"My family have visited the track several times and love it. My wife feels safe enough to cycle there by herself during the week. We live in Cashmere and we're regular visitors to Bottle Lake but will now also be using McLeans Forest."

"What a wonderful job - well done! I went out on Saturday to try your new mountain bike track and was so impressed, I went out again the next day. I am a beginner and it was great to practice. Congratulations for a great track and keep up the good work."

Responses to customer satisfaction survey, June 2009.

Increasing numbers of Cantabrians are now using the Waimakariri River Regional Park, thanks to Environment Canterbury developing the area as a multi-purpose recreational resource over the past three years.

"By putting the park in place, and giving the land a new status, we've helped the community to recognise the area as valuable," says Environment Canterbury Parks and Reserves Officer Greg Byrnes.

"Three years ago, the area was receiving 70 dumped or burnt out cars each month. Today, we have a widely enjoyed park that caters for multiple uses and users," he says. "Anglers, nature walkers, whitebaiters and mountain bikers are now successfully sharing the park with jet boaters, all terrain vehicles and trail bikers.

"McLeans Island alone has 21 recreational or commercial providers, two more in the lower reaches (jetboat and horse treks) and another 12 groups who have a permanent arrangement with Environment Canterbury to use the area, including malamute dog sledgers and orienteers," says Mr Byrnes.

And the park is also a boost for biodiversity, with regenerating kowhai trees and rare braided river bird species including the black billed gull, black fronted tern and the iconic wrybill.

A customer satisfaction survey in June 2009 showed that visitors really like what Environment Canterbury has provided so far. Ninety four percent of those surveyed were satisfied with their visit.

Without a doubt, Mr Byrnes says, the 10 km mountain bike track (pictured) is the most popular development within the park. "Not only did the customer satisfaction survey tell us that, it also told us people wanted more technical tracks, which is why a further 5 km has since been opened."

And there's a lot more to come. The park has been divided into eight development stages, with stage three already underway at McLeans, Templars and Kaiapoi Islands.

Community views sought on regional transport

Community input is being sought on a new plan for managing the region's transport system over the next 30 years. This new plan is called the Canterbury Regional Land Transport Strategy 2011-2041.

During October a report identifying the key challenges facing the region's transport system is being released for public consultation and this presents an opportunity for people to present their perspective.

Every region in New Zealand is required to produce a transport strategy every six years. The strategy is important because it influences how our region's transport funding is used and it provides direction to organisations, such as city and district councils, as they develop and implement their local transport projects.

Development of the strategy is being led by Environment Canterbury, bringing together representatives from all of the local councils in the region, several community appointees, and the New Zealand Transport Agency, to form the Canterbury Regional Transport Committee.

i If you would like to be kept informed on the development of the Regional Land Transport Strategy 2011-2041, visit our website www.ecan.govt.nz or send an e-mail to transport@ecan.govt.nz



Canterbury Restoration Field-days a success

Environment Canterbury joined forces with key partner organisations to stage the first ever Canterbury Restoration Field-days on Saturday 19 and Sunday 20 September.

A karakia and speeches from Selwyn mayor, Kelvin Coe, and Environment Canterbury Biodiversity Chair, Jane Demeter, welcomed around 200 people to the event on a beautiful spring morning in Motukarara.

Mid Canterbury's 'paddock poet' Colin Patterson (pictured above) gave a verse recital, and later spoke about his work in restoring Harts Creek. As a mid-Canterbury farmer who began to see things differently just a few short years ago, he has become one of Canterbury's strongest advocates for biodiversity through sustainable farming.

"It was great to see so many committed people and to hear about their challenges, successes and hopes for the future," says Wayne McCallum, regional biodiversity co-ordinator. "I'd like to thank our partners for their support and hard work in making the weekend possible and creating a real buzz in Canterbury's biodiversity community."



Restoration Field-days CANTERBURY

Air quality on the rise for 2009

Air quality in Christchurch and the Canterbury towns monitored by Environment Canterbury showed improvements this winter, with some having the lowest number of high pollution days of any time in the past five years. In Christchurch, Rangiora and Ashburton the highest daily amounts of air pollutants were also down on the previous five-year average.

Environment Canterbury air portfolio chair Jo Kane says Christchurch people in particular should have noticed a difference this year. "There really does seem to be a downward trend in air pollution for some of our urban areas, and with new air quality rules coming into force next winter this should keep getting better.

"One thing's for sure, people changing to cleaner forms of heating or burning smarter does make a real difference. What we can't do is ignore the problem and hope it'll go away.

"We all deserve clean air and can look forward to the health benefits for our children and our older citizens. That's why I think the Clean Heat Project and the help it offers is so important.

"If you haven't made the switch yet, there's no time like the present - so register with Clean Heat now and be ready for next winter."

i For more information on Clean Heat, phone 0800 32 92 76 or visit www.cleanheat.co.nz

Data for winter 2009 (May 1 to September 13) showing which towns had better air quality this winter than in previous winters.

Place	Number of high pollution days in winter 2009	Number of high pollution days in winter 2004-2008	Was winter 2009 better than 2004-2008?	Highest daily amount of PM ₁₀ measured in winter 2009*	Range of highest daily PM ₁₀ measured in 2004-2008	Was winter 2009 better than 2004-2008?
Christchurch	12	14-36	Yes	86	87-184	Yes
Timaru	34	36-46	Yes	135	109-190	No
Ashburton	8	13-25	Yes	76	89-136	Yes
Kaiapoi	23	17-28	No	86	86-161	No
Rangiora	2	4-15	Yes	54	61-138	Yes

*(in microgrammes per m³ of air)

PM₁₀ = air pollutants smaller than 10 microns in diameter. Too small to be seen with the naked eye, PM₁₀ pollution is associated with serious respiratory health issues such as asthma.

High pollution = a whole day with an average of more than 50 microgrammes of PM₁₀ per cubic metre of air.



Clean Heat's on the streets

From October 2009 our Clean Heat team will be knocking on doors in Timaru, Rangiora and Kaiapoi to offer you assistance with the costs of converting to cleaner forms of home heating.



International Day of Climate Action October 24, 2009

350 is an international day of climate action aimed at raising awareness of the need to tackle climate change. To find out more, visit www.350.org and "find an action" near you.



Having a field day with the Ballance Farm Environment Awards



Topics including minimum tillage, managing farm finances, water use, new crop development and soil structure management are up for discussion at a 16 October field day at the property of the Supreme Winners of the Ballance Farm Environment Awards 2009, Nick and Michelle Ward. They run Rhys Farm, a 224 ha irrigated intensive crop and lamb fattening property, and the public is welcome to attend. Rhys Farm is at 693 Milford Clandeboye Road, Milford, Temuka.

Entries for the 2010 awards close on 23 October 2009, and if you're a Canterbury farmer it's not too late to enter or to nominate someone you think should enter. There are plenty of benefits in entering – the awards are a great opportunity for you to discuss practical farm information and business with a team of expert judges, to gain new ideas and constructive feedback about how to improve your farm operations, and to link innovative sustainable farming practices to improvements in long-term profitability. They're also great PR for you and for the farming industry as a whole.

I For more information and an entry form, visit www.bfea.org.nz or contact Nicola Hunt, Canterbury Regional Co-ordinator, on 03 353 9711, e-mail bfea@ecan.govt.nz



Team effort planned to tackle alders

The spread of alder, an invasive introduced tree, is threatening the natural environment of the Orari Gorge and local people are teaming up with Environment Canterbury for an alder control day on Sunday, October 18, from 9 am.

Bruce Allan, local landowner and member of the Orari River integrated catchment management group, says the spread of the tree threatens the biodiversity of the area and its scenic beauty, and is beginning to pose a flood hazard because they are spreading into the braided river channels. They are also a nuisance for recreational users.

"Not only will the day help us achieve our aim of eradicating the alders completely from the catchment, but it will be a great day out in a wonderful area," says Mr Allan.

I For further information contact Julia Crossman, Environment Canterbury Senior Resource Care Co-ordinator, 03 687 7810.

NEWS IN BRIEF...

Bylaws on the beaches

The Northern Pegasus Bay Management Plan continues to take shape, with the Waimakariri and Hurunui Councils releasing draft bylaws to control the use of vehicles and horses and the use of land for camping on the foreshore, beaches and adjacent areas of Northern Pegasus Bay. Hurunui proposals are currently open for submissions until October 30, and Waimakariri submissions are open until October 27. Contact the appropriate district council to find out how to make a submission on this Plan.



Sustainable living this spring

If you're interested in finding out more about sustainable living, there are several courses on offer in and around Christchurch this year.

A one-day intensive course in Sustainable Living at Home, in Lyttelton on Sunday 1 Nov 2009, is open for bookings. Cost \$30. Contact Roz Jenkins on 03 328 8552.

A six-session Sustainable Living course is being run in New Brighton. Proposed dates are Saturdays 11 am to 1.30 pm including a lunchbreak, on 17 Oct, 7 Nov, 14 Nov, 21 Nov, 28 Nov and 5 Dec 2009. Contact George Aorangi, coordinator, at the Community Garden on 03 388 6506, e-mail: nbgardens@xtra.co.nz.

A daytime Sustainable Living series of five sessions starts on Thursday 29 Oct at Canterbury WEA, Gloucester Street. Call 03 366 0285 between 10 am and 3 pm for booking details or pick up their Term 4 programme from the box at the door.

Leave the car behind...

Tuesday 22 September was World Carfree Day. Why not show your support for more sustainable travel on the other 364? From November 2 we are introducing improvements to Metro bus services in Christchurch, including more frequent buses, route extensions, more direct routes and new services. We'll be updating you soon via an information campaign and the Metro website www.metroinfo.co.nz

...it could be just the ticket!

Taking an interest in Timaru's bus services has paid off for regular passenger Steina McKirdy. She's pictured above being presented with a double movie pass by Environment Canterbury's Timaru Southern Area Transport Officer Tony Henderson. Steina took part in a survey of the bus services and was one of 10 contributors to win a pass. She plans to contribute to the next round of public consultation too, and says the buses are a convenient way to travel and much cheaper than using a car!

New website for Environment Canterbury

We've revised and upgraded the Environment Canterbury website to make it easier for you to find the information you need. From advice on resource consents to directions on where to go whitebaiting this season, log on to www.ecan.govt.nz and see our new site for yourself. You can also view Environment Canterbury's latest Annual Report and Summary online, or phone Customer Services on 03 353 9007 and ask for a copy to be posted out to you.



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