

# Our Environment

Christchurch City Council's Environmental Newsletter

## THINK FENCING CAMPAIGN AIMS TO LOWER BARRIERS

A forest of mean fences springing up around Christchurch has spurred two community groups into action.

The National Council of Women and Keep Christchurch Beautiful have launched a Think Fencing campaign to encourage residents and developers to build no, low or open fences to maintain open, friendly streetscapes. They are concerned about the number of fortress-like fences creating bleak suburban corridors and fragmented neighbourhoods.

The Thinking about Fencing? information kit contains fact sheets covering a range of fencing issues such as safety, shared fencing, rules for boundary fencing, fencing materials, living fences, fencing close to waterways and fencing in new developments. It also provides details about cheap fencing materials and designs.

"Arming property owners and developers with this information will help them choose a fence design – or no fence at all – that enhances the property, beautifies the street and allows for neighbours to watch out for each other's security and well being," says Peggy Kelly, chairperson of the National Council of Women environment committee.

At the launch of the Think Fencing campaign, local NCW patron and Mayoress Pam Sharpe suggested that an annual fencing award be made to promote good fencing design. A non fencing award was also proposed.

Campaign organisers say they accept that fences are sometimes needed in urban landscapes to act as buffers against noise and traffic fumes, to provide privacy and to protect children and pets.

The folder holding the fact sheets is designed to show people a diverse range of colourful and functional fencing options and combinations. Its message is that clever management of a property boundary can improve the look of the property, adding to its street appeal – and value.

The Think Fencing fact sheets initially focus on purpose and need. They seek to dispel some of the myths associated with high, impenetrable (mean) fences. For instance erecting a high solid fence for security reasons can have the opposite effect, allowing intruders to walk around houses and gardens unobserved.



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The fact sheets also raise questions that property owners may not have considered. For example some fences can create wind shelter or funnelling, shadowing and frost areas, restrict sunlight and put limitations on landscaping.

The Thinking about Fencing? information pack will soon be available from service centres, libraries, the Civic Offices and selected DIY, fencing and nursery outlets. For further information please contact the campaign co-ordinator, phone 371 1832.



## ENERGY SHOW HOME HELPS SAVE MONEY

A special house at 10 Leander Street, Papanui, has holes in its walls, ceiling and floor.

It is the Christchurch City Council's energy-efficiency show home opened last month by Mayor Garry Moore. Within walking distance of Northlands Shopping Centre, the three bedroom energy show home is believed to be the only house of its type in the country.

The Council's energy manager, Leonid Itskovich, says the purpose of the house is to make people more aware of energy efficiency and its health benefits. It will also increase people's understanding of Christchurch's clean air and energy efficiency programme, which is designed to reduce winter smog and provide healthier living conditions.

The show home was built in brick with a tile roof and open fire in the 1960s. Like most Christchurch homes of that period it had no insulation or other energy-saving devices. Council staff have insulated the house and installed non-polluting heating and other energy-efficiency features. Water conservation methods are also included. With cut-outs in ceilings, floors and walls, visitors can see how many of the measures work.

Samples of double-glazing are displayed along with information on heating fuels and systems. Advice will be given on comparative costs. Dr Itskovich says cost savings will result from using any of the measures

demonstrated in the house. The Council has only used energy-saving methods which are affordable for average Christchurch residents.

"We have a team of professional energy advisors who will give independent and competent advice on insulation, heating and related matters, and Council financial incentives available for non-polluting heating and insulation," says Dr Itskovich.

The energy show home is open from 11am to 6pm each day, except Wednesdays when it is used for seminars and group visits. Groups wanting to use the home for seminars or visits on Wednesdays should contact Leonid Itskovich, phone 371 1793.



# GREENAGER AWARDS GO COUNTRYWIDE

Canterbury's Greenager Awards are going nationwide.

The environmental awards have been presented to young people in the region up to the age of 18 five times a year since 1994. Now teens, young environment committees, classes or schools throughout New Zealand can enter the awards recognising outstanding projects that protect, conserve or enhance the environment.

The national awards, sponsored by the Body Shop, will continue to be co-ordinated by environmental education consultant Tanya Jenkins.

Last year's local recipients included Burwood Primary School, which has been a leader in environmental education. Pupils have studied the nearby Travis Wetland, prepared submissions to the City Council and planted their school grounds in native trees and grasses.

Chisnallwood Intermediate was also singled out for its proactive environmental education programme. Visits to Travis Wetland, the estuary, native tree nursery, native bush and the Port Hills allowed students to have a wide range of experiences.

Simon Shikongo, an Aranui High School student, received a Greenager environmental award in July. Fifteen-year-old

Simon is well known to groups such as the Travis Wetland Trust and Trees for Canterbury for his planting of native trees. A member of the Yellow-eyed Penguin Trust and a junior ranger at Orana Wildlife Park for 10 years, Simon is considered a native tree and bird expert by his teachers and school mates.

Kaikoura's tiny Woodbank School, comprising 20 pupils, impressed parents and the community with a play capturing local whaling history. Pupils and parents regularly collect cans, paper, glass and paper for recycling and feed their organic scraps to a worm farm to make compost for the garden.

The final award last year went to Glentunnel School, which also has a thriving worm farm. Liquid is collected in plastic bottles and sold at the school gate. Resulting funds are used to buy library books.

For more information about the Greenager Awards contact Tanya Jenkins, phone (03) 332 0099.



Simon Shikongo with his Greenager award

## PRESTIGIOUS AWARD FOR TRAVIS WETLAND

The Travis Wetland Trust has received one of seven outstanding native wetland restoration projects awards.

The award was announced on World Wetlands Day, 2 February, by Minister of Conservation Sandra Lee. It recognised the Trust's work in establishing the Travis Wetland Nature Heritage Park in Burwood.

"Wetlands are seen as a bit of a poor cousin to our more charismatic native species like the kakapo and kiwi," the Minister said. "However, New Zealand's wetlands are valuable ecosystems that support a multitude of life and are an essential part of our country's unique biodiversity."

Approximately 120 hectares in size, Travis Wetland is the largest freshwater wetland remnant on the Canterbury Plains.

The Trust was formed in 1992 by a group of people to promote restoration and protection of the wetland. Drained and filled for



farming and housing, it had become choked with willow, gorse, broom, lupin and blackberry.

The Trust was the driving force in lobbying the City Council to buy the

wetland. Since the final purchase in 1996 it has contributed to the development of a concept plan and vision for the wetland. Regular work parties now carry out plantings and weed control in the reserve.

The water table has been restored and a central pond built. The wetland is inhabited by increasing numbers of wildlife including pukeko, scaup, pied stilt and paradise duck.

A planned information kiosk and education centre will contain information panels. Environmental education programmes are already operating successfully.

Announcing the seven awards, Sandra Lee said they provided a glimpse of the community commitment to restoring our wetlands and the wildlife they contain. "The people behind these projects are working hard to conserve wetlands so that they are healthy natural areas that will be appreciated by generations to come," she said.

# CONTRACEPTIVE VACCINE FOR POSSUMS

An experimental contraceptive vaccine developed by Landcare Research scientists may provide a long-term solution to New Zealand's possum problem. In trials at Lincoln vaccinated females were five times less likely to produce offspring than untreated females.

This vaccine contained whole sperm but researchers are refining the vaccine by identifying specific proteins from the surface of the sperm critical for fertilisation. Possum eggs are also being investigated as a source of antigens.

The possum egg is surrounded by a protein layer called the Zona Pellucida (ZP), which is made up of three different different proteins ZP1-3. ZP3 has been used to develop effective contraceptive vaccines in species like pigs and horses. It is now being tested in possums where it reduces breeding by 70 per cent. Ideally the chosen proteins should not occur elsewhere in the body (so the vaccine will only work against sperm or eggs) and should only occur in possums.

## Early tests

Although early tests have been successful they are only the beginning of the research programme. Once a vaccine is developed, the means of distributing it throughout the possum population has to be addressed. The contraceptive vaccine could be given to possums in bait as an oral contraceptive. Another possibility is to use a modified organism specific only to possums, which carries an extra gene to produce the specific sperm or egg protein.

When the organism infects the possum the extra gene would cause it to produce copies of the sperm or egg proteins. The possum's immune system would then produce antibodies against this foreign protein, sperm and eggs would be attacked in the reproductive tract and

the ovaries, and infected female possums would become infertile. A sperm-based contraceptive vaccine could also make male possums infertile.

The vaccine makes the possum infertile by tricking its immune system into treating the sperm or egg as a foreign body. Antibodies attack the sperm and eggs and prevent fertilisation. Possums sterilised by this modified organism could eventually regain their fertility as the immune reaction declined, but possums would be susceptible to reinfection and consequent reimmunisation.

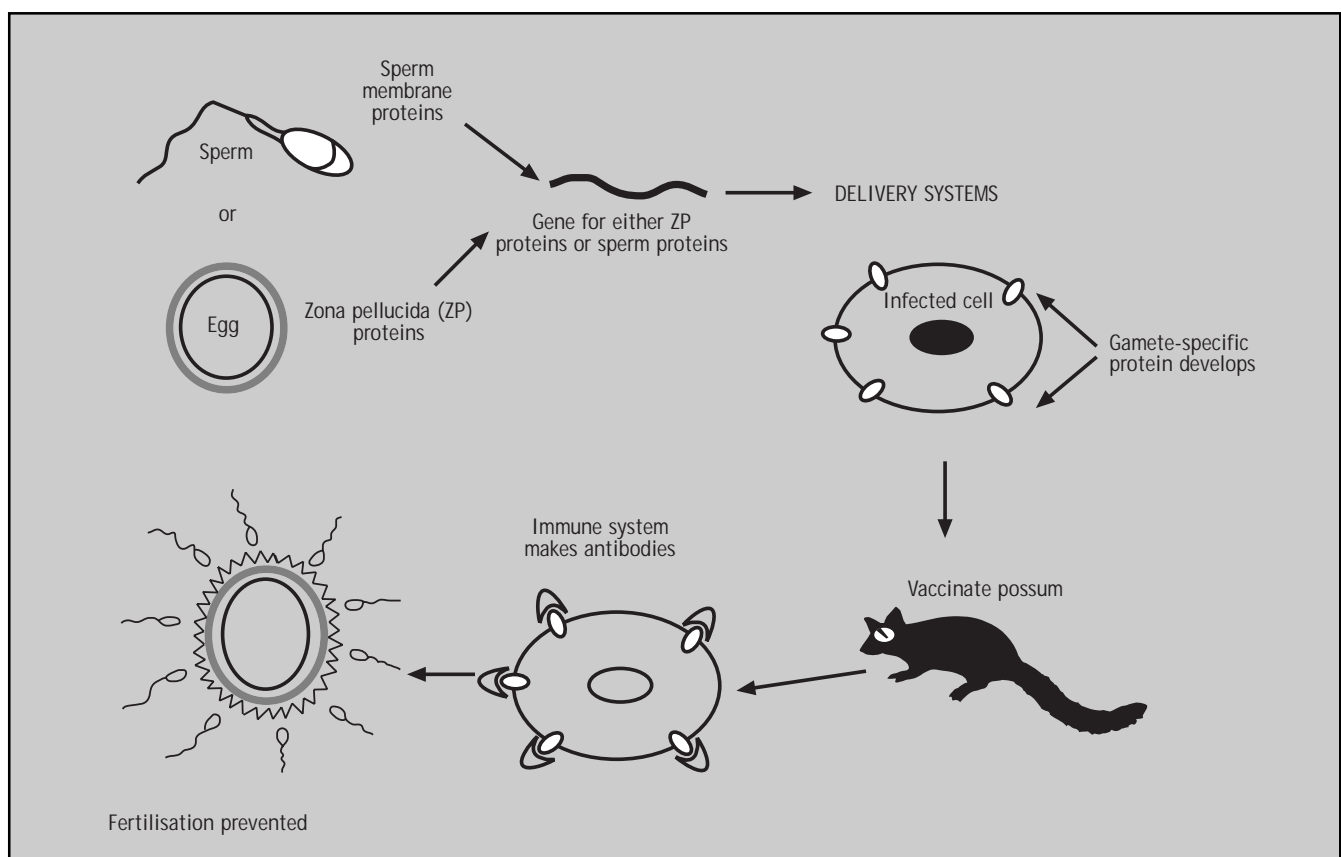
## Contraceptive effect

The contraceptive effect could be longer lasting in females as each new mating would act as a booster vaccination with a new dose of sperm or egg proteins. Ideally the organism chosen to transmit the vaccine would be humane, possum specific and spread by close contact between possums. It would also be one that would not survive long in the environment (to avoid spread of the vaccine across the Tasman).

The completed contraceptive vaccine may take 10 to 15 years to develop as it is essential that such a vaccine will only affect possums. A bait delivery system may be available within five to seven years.

The research is part of a long-term collaborative research project between scientists at Landcare Research, AgResearch and the Co-operative Research Centre for the Conservation and Management of Marsupials. It is supported by the Foundation for Research, Science and Technology, the New Zealand Lotteries Grants Board, Animal Health Board, the Marsupial CRC and MAF Policy.

## Landcare Research



# BALANCE OF NATIVES AND EXOTICS WANTED IN CITY

Many Christchurch residents want to see a balance between native and exotic vegetation in the City, according to a Landcare Research study. However they had no clear view what this "balance" might look like, Margaret Kilvington and Roger Wilkinson said in their report *Community Attitudes to Vegetation in the Urban Environment: A Christchurch Case Study*.

Discussions with eight City focus groups revealed wide ranging and often conflicting views. One reason for this was that people considered plantings in social and cultural terms at least as much as in ecological terms, said the researchers. Barriers to restoration initiatives were largely ones of awareness, understanding and cultural identity.

The study explored potential social issues likely to be confronted by those wanting to increase native planting in urban areas to enhance biodiversity. Kilvington and Wilkinson noted that local authorities, including Christchurch, were changing landscapes on the basis of their legal responsibilities and their understanding of functional and ecological benefits. "Difficulties can arise, as has been evident in Christchurch, where this action moves ahead of the general understanding and consequently the support of local residents."

This resistance was evident in focus groups where a number of people opposed the idea that new vegetation planted in Christchurch should be predominantly native. Negative comments were largely based on aesthetics – "natives lack colour" and they are "ugly brown and fluffy". Others accused the Council of "political correctness" and "we shouldn't allow natives as the in thing".

Other participants made positive comments on the recent replanting of natives on river margins throughout the City – "the river banks that have been planted with natives still look tidy but more natural than mown grass". One member said "we need native plants – we are the only ones that have them". Another with similar sentiments added "people plant for prettiness instead of history or meaningfulness".

The researchers concluded that more knowledge of the ecological significance of restoration might win some converts but it was unlikely to affect entrenched issues of cultural identity. This highlighted the importance of drawing restoration projects into general City design, which avoided emphasising the debate regarding natives and exotics."

Local authorities clearly needed to be proactive in seeking public involvement, said Kilvington and Wilkinson. This could be achieved through harnessing:

- people's heritage values;
- personal identification with key vegetation types and localities;

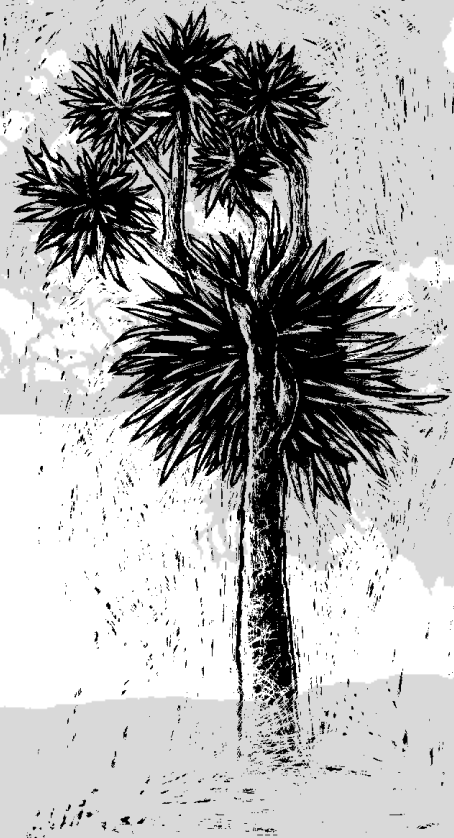
- desire for ownership and control of local environments; and
- concern for the future.

The Council needed to build successful partnerships with the community in the planning and undertaking of restoration initiatives, and to lead by example.

Many comments about liking both native and exotic plants, and not wanting all natives or all exotics came from the Nottingham Stream Group, which has been involved in a Council-sponsored restoration project.

Most focus groups saw restoration projects as being of less value than the existing vegetation of Riccarton Bush. Many people did not like a native garden photograph, seeing it as being constructed, but not with "garden types" of vegetation. According to the researchers, this suggested that people may see native vegetation as more suitable for wild areas around the City, rather than formal plantings.

**Jennie Hamilton**



# WHITE-FLIPPERED PENGUIN CHICKS ON THE MOVE

Moves to establish a safe haven on Banks Peninsula for Canterbury's unique but endangered white-flipped penguin population got off to a flying start in January.

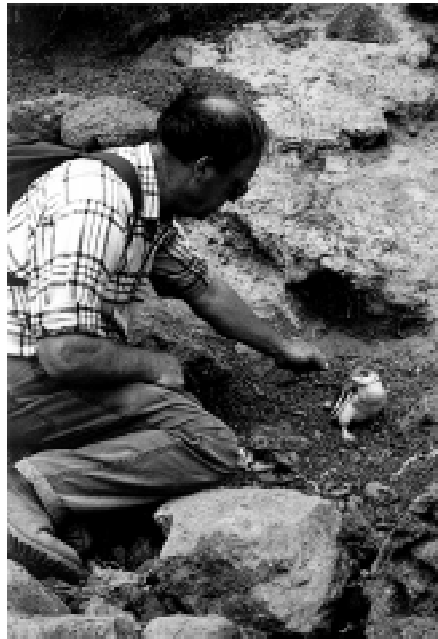
Forty six white-flipped penguin chicks were transferred by helicopter from Motunau Island to a new home at Harris Bay, Godley Head. The chicks joined an existing colony in Harris Bay, which is protected by steep cliffs and predator-proof fencing.

It is hoped the transfer will be the catalyst for establishing a large colony, resulting in greater protection for the species. The project is also likely to lead to educational possibilities, research and, ultimately, visitor viewing of a penguin parade.

The Port Hills 2000 penguin project, funded principally by The Community Trust and The Pacific Development and Conservation Trust, has a long-term proposal to extend the Harris Bay breeding area to Boulder Bay, which would also be protected by a predator-proof fence.

Development of the colony is the culmination of Dr Chris Challies' 29-

year interest in the white-flipped penguin (*eudyptula albosignata*). A Christchurch ecologist and world authority on small penguins, Dr Challies' monitoring of the penguins was responsible for detecting the rapid decrease in numbers.



Dr Chris Challies with white-flipped penguin chick

During January Dr Challies and two other members of the penguin task group spent a weekend on Motunau Island selecting and banding suitable penguin chicks ready for the transfer. The chicks were placed in purpose-made carriers divided into two compartments, with each compartment holding a pair of chicks.

The penguin chicks from Motunau Island (60km offshore) were airlifted to the ridge above Harris Bay. Volunteers unloaded the helicopter, fixing the penguin carriers to specially modified backpack frames, one carrier per backpack, for the steep climb down to the bay.

Rick Tau from Tuahiwi, representing Te Runanga o Ngai Tahu, blessed the penguins before their departure from Motunau Island and again on their arrival at Godley Head.

The chicks were placed in nest boxes until the following day when Dr Challies released them. Within several days the chicks headed out to sea at night. They are expected to return to Harris Bay in October 2000.

# SOUNDING OUT THE GREAT SPOTTED KIWI

A team of kiwi listening volunteers led by the Department of Conservation went into the Lewis Pass in January to listen for the haunting night calls of the threatened great spotted kiwi (roroa).

The trampers spent two hours each night in pairs on the hillside above the valley, listening for the birds, recording the direction the kiwi calls came from, and the sex of the birds.

The survey was part of the Kiwi Recovery programme sponsored by the Bank of New Zealand. It repeated the survey carried out in beech forest in the upper Nina Valley near Lewis Pass in 1994-95.

Volunteer co-ordinator Lesley Shand says enough kiwi calls were heard to assume there was the basis of a viable population. It was difficult to determine the age structure of the population or if they were having breeding success.

There are three discrete populations of roroa. The largest extends from Kahurangi National Park to the Buller River. The second population is in the Paparoa Ranges, and the smallest population is in the Southern Alps between Arthur's



Pass and Lewis Pass. As part of the Kiwi Recovery Programme permanent count stations have been set up in the south and north branch of the Hurunui River and Arthur's Pass.

The current population estimate for the roroa is about 20,000 birds. The only place in Canterbury where the roroa is actively protected is in the Hurunui Mainland Island in Lake Sumner Forest Park. Intensive predator control of stoats and ferrets, as well

as removal of possum (which disturb nesting kiwi and damage vegetation), is part of the project's integrated management approach.

DOC ornithologist John Kearvell says juvenile kiwi up to nine months old are unable to defend themselves. It is therefore essential to get rid of predators as well as restore the forest home of roroa.

**Janine Gray**  
Department of Conservation

# CHOKEBORE LODGE WINS RACE AGAINST TIME

One of the City's oldest domestic buildings, Chokebore Lodge, was for the greater part of its life associated with the racing industry in Canterbury. Originally constructed of earth and timber, this City Council-owned landmark in Racecourse Road will soon undergo a staged conservation programme.

Chokebore was built by John Willis, a farmer who came to Canterbury with his wife Charlotte in 1852 from Buckinghamshire, England. In 1856 John purchased 20 acres of land from his older brother George, an early colonist who had arrived in Canterbury in 1851 on the *Cressy*, one of the first four Canterbury Association ships. On this land John Willis constructed the two storey cob cottage which today comprises the principal section of Chokebore Lodge. He also built stables that he leased in c1868 to Henry Redwood of Nelson.

Since Buckinghamshire was a major cob building area it was not surprising that Willis should use familiar materials to construct his home in Canterbury. Also, cob construction was widely used in the Canterbury rural area as an early building method. (Cob buildings remaining today include Cracroft House in Cashmere, Tiptree Cottage and the Cob Cottage at Mount Pleasant.)

Chokebore Lodge's original cob section features a verandah and timber dormers set within a pitched shingled roof now covered with corrugated iron. The barge boards of each cable have been drilled at regular intervals to create a decorative effect offset by the simple verandah posts. Plaster over the cob section of the cottage has been incised to imitate stone construction. Two chimney stacks break through the roof ridge and enhance the symmetry of the cob or principal portion.

In 1874 John sold the entire property to Redwood and so began the long association of Chokebore with the racing fraternity. Redwood, often cited as the "Father of New Zealand Racing", had arrived in New Zealand in 1842 and settled in the Nelson area where he subsequently established himself as a noted importer, trainer and breeder

of race horses. Attracted to the Canterbury property because of its proximity to Riccarton Racecourse, Redwood named it Chokebore after a type of shotgun. He was noted as "an excellent shot". However Redwood remained in the Nelson area, sending horses to Chokebore where they were trained by Edward Cutts, Redwood's jockey and trainer. After a sizeable win at the races in 1880, Cutts purchased the property from Redwood. He continued to train horses there, becoming the private trainer for Sir George Clifford, President of the New Zealand Racing Conference.

Cutts added two rooms to the rear of the original portion around 1890. This single storey elevation features a steeply pitched gable roof that complements the pitch and scale of the original cottage. The larger of the two rooms features a fireplace set in a timbered alcove. The design of this alcove suggests that interior renovations were also made to the original portion about this date as the panelling is repeated in the cob section. To the rear lies a utilitarian brick structure – or possible service wing – that is connected to the main buildings by a curious long corridor pierced by narrow windows. In its heyday Chokebore also sported carefully laid out gardens that included a small whare.

For many generations Chokebore continued to be associated with the Cutts family and the racing industry. In 1985, when the property was sold and subdivided, Chokebore was retained by the Pararua County as a reserve contribution. At this time the Cutts family removed the Maori whare and the Cliffords dismantled the brick stables, intending to re-erect them at their Nelson stud. After the amalgamation of local councils in 1989 the lodge's title passed to the expanded City Council.

A rare colonial survivor, Chokebore remains not only as a significant part of our colonial architectural heritage but as a reminder of the long-standing interest and passion Canterbury has had for horses and racing.

**Jenny May**  
Architectural Historian



Chokebore in its heyday featuring the stables, gardens and ornamental whare. Photograph courtesy of the Canterbury Museum.

# CANTERBURY'S RED AND BLACKS ON THE DECLINE!

The infamous red and black spider, the katipo, is becoming a rarer inhabitant on our beaches.

The katipo spider is endemic to New Zealand. They have a large shiny black globular abdomen, with an orange or red strip down the centre. They span little more than 25 mm. The female body length is about 6mm, while the male is smaller, usually about 4mm long. The male spider has white marks on his sides in addition to the red strip. Live katipo spiders are on display at the Discovery Centre in the Canterbury Museum.



A female katipo spider *Latrodectus katipo*.  
Photo: James Griffith

Katipo spiders are found mostly north of Banks Peninsula. They have a preference for sandy, sloping coastal habitats with sparse marram or pingao grass in which they weave small tangled webs to catch insects. Although they also like to live in driftwood, little driftwood remains undisturbed on our beaches for long enough.

James Griffiths, a student at Lincoln University, is studying the lives and habitats of the katipo spider. Studies show a decline in numbers over much of New Zealand. The reason for this decline is probably due to the katipo spiders' slow ability to recover from a loss or disturbance of their habitat. An

introduced South African spider, *Steatoda capensis*, may be displacing the katipo spider, as it is better at recolonising newly vacant sites. Compared with *S. capensis*, the katipo is not such a fast reproducer, and it is only available for recolonisation from a small habitat area. It is likely that the katipo will continue to decrease in numbers as their habitat is continually disturbed by human interference along coastal areas, and from storm events. So help keep the red and blacks on the Christchurch coast line! It is important to not disturb them.

To achieve this, we can do the following:

- keep to the marked tracks through the sand dunes
- protect our native dune vegetation
- encourage the growth of pingao
- leave driftwood undisturbed

Are you a spidery type of person or want to become one? You can help James with his study to keep the red and blacks on our shores! Email James: [griffith@tui.lincoln.ac.nz](mailto:griffith@tui.lincoln.ac.nz), or contact Coast Care.

If you can help us grow pingao grass, contact Coast Care for a pingao growing kit, phone (03) 382 1678.



Jason Roberts and Kay Holder from Coast Care search for katipo with James Griffiths.  
Photo: Kirk Hargraves

## A GREEN LIST

Christchurch is famous for its green spaces, both public and private, and they make an important contribution to our environment. Over the years many of our citizens have devoted both their working lives and spare time to creating and improving these oases of green for the enjoyment of us all. Find out more about these environmental pioneers, ordinary citizens who continue to make their contribution, and the green spaces they have created, in these books available at the Canterbury Public Library.

**The Christchurch Botanic Gardens : a guide** (712.5 CHR)

**Walk Christchurch : 69 short walks that explore your city** (993.83WAL)

**Christchurch changing: an illustrated history** by Geoffrey Rice (993.83 RIC)

**Fifty years along the road : a history of the Summit Road Society** by Jennifer Loughton (993.83 LOU)

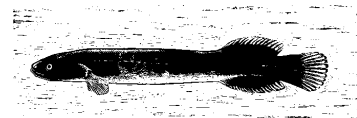
**City beautiful : the first 100 years of the Christchurch Beautifying Association** by Thelma Strongman (711.40993 STR)

**Private views: conversations with New Zealand gardeners** by Adrienne Rewi (635.092 REW)

**Private gardens of New Zealand: Christchurch** by Steve Parker (712.60993 PAR)

**The Estuary: where our rivers meet the sea** by S J Owen (editor) (577.78 EST)

**River walks of Christchurch** by Graeme Stanley (z993.83 STA, New Zealand Collection only)



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