Envirosouth

March 2016

Restoring the Mararoa

Celebrating a community's achievement Page 4

Farm plans

Supporting good management practice Page 8

Coastal treasures

Preserving our heritage Page 16



In this issue...

Kew Bush volunteers	3
Restoring the Mararoa	4
Summer students	6
Farm plan success	8
Southern Field Days	10
Life as a biosecurity officer	12
A regional perspective	14
Tackling possums	15
Coastal treasures	16
Updates	18
Time to think about	19
Out in the field	20

Envirosouth

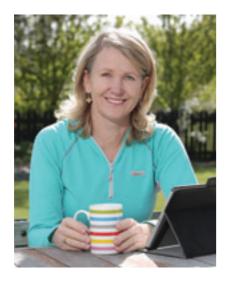
Envirosouth is published four times a year by Environment Southland. It is delivered to every household in the region. We welcome your comments on anything published in this magazine

Contact Us

Cnr North Rd & Price St, Invercargill (03) 211 5115 | 0800 76 88 45 service@es.govt.nz | www.es.govt.nz www.facebook.com/environmentsouthland

Cover

Jeff Farm manager John Chittock is taking a proactive approach to possum control on the training farm. (story – page 15).



The Southern Field Days at Waimumu last month were a great opportunity to talk with rural people.

Right now, revising the draft Water and Land Plan is a top priority, taking into account the valuable community feedback received during engagement last year.

Southland has some declining trends in water quality and with climate change and land use intensification there's increasing pressure on water quantity, which also needs to be managed to ensure fair and equitable resource use for present and future users.

And while a major guiding principle is the widespread adoption of good onfarm management practices, there will still need to be some rules.

But gains from improved practices will put land users in the best possible position for the catchment limit setting process.

Ali Timms. Chairman. Environment Southland



Ensuring Southland continues to prosper for generations to come means we have to manage our natural resources sustainably.

Regulation and rules will always be a part of this, but success won't be achieved by them alone. It requires a commitment from every landowner, business owner and resident to consider their impact with every decision they make.

Collectively, land users are moving towards this. It's an important shift because our local economy is dependent on the rural sector and its interconnection with our urban communities.

Currently, dairying is dominant but only 40 years ago it was sheep. We can't predict what the land use might be in the future, but we can ensure our natural resources are in the best condition they can be to support it.

606

Rob Phillips, Chief Executive, Environment Southland

Environment Southland



Volunteers needed to continue Kew Bush work



▲ Invercargill South Lions Club members Allan McPherson (left) and Ray Watson at work restoring Kew Bush.

For almost 20 years, Allan McPherson and John Tait from the Invercargill South Lions Club have dedicated their spare time to maintaining and improving a special area behind Southland Hospital.

ew Bush is a QEII covenant area owned by the Southern District Health Board and incorporates a walking track through the bush along the Kingswell Creek.

Allan and John, along with other members, have been committed to the project for two decades and are hoping others will carry on their efforts as their age and health restrict what they are now able to do.

Over the years, the dedicated volunteers have spent many hours removing weeds, planting thousands of native plants, managing pests and keeping the track in good order.

As well as winning a number of awards for their efforts, the fruits of their labours are now becoming evident, with the bush largely free from weeds, animal pest numbers reduced and bird populations showing a dramatic increase.

"The birds are so much louder now and more people are using the track, it's a great place for hospital staff and visitors to take a break and have some time out from stressful situations." Allan says.

Summer students from Environment Southland joined the team in December to continue the weed control and plant dozens more plants. Allan says they are keen to get help from people in the community who will ensure their good work continues.

Restoring the Mararoa

On February 17, a brass plaque and project information panel were unveiled to commemorate a unique community and partnership project on the Mararoa River. The restoration project was a collaborative effort between Environment Southland, the Te Anau community, the Department of Conservation, Land Information New Zealand, Meridian Energy and the New Zealand Transport Agency.

▼ Phil Smith (left) from the Mararoa Working Party with Environment Southland chairman Ali Timms and project manager Ken McGraw at the unveiling of a commemorative plaque and information panel.



he Mararoa River is one of the great braided river systems that stretch across the Southland plains, beginning its journey in the Livingstone Mountains, flowing down through the Mavora Lakes into the Waiau River and ending in Foveaux Strait.

Since 2006, a project to restore a section choked by pest plants has been the focus of Environment Southland project manager Ken McGraw's attention. What started as a small scale standard flood protection and erosion control project turned into something even more rewarding.

"It started with concern from the Te Anau community about a section of the river that was flooding farmland. Since the 1950s, agricultural activity has helped pest plant species like crack willow, broom and gorse establish in the river system and this alters the form and layout of the riverbed, causing it to creep onto farmland," Ken says.

The project attracted support and input from a range of organisations. This collaboration led to the formation of a more restoration-focused project, to improve the health of the river system and recreation opportunities, alongside the erosion and flood prevention goals.

The aim was simple: clear the Mararoa of invasive woody species that had totally colonised the river system downstream of The Key Bridge on the Te Anau-Mossburn Highway, promoting a return of the river to its former natural braided state.

Between 2006 and 2011, an area of the river's gravel flats 20km long and 350 metres wide was reclaimed. Smaller woody vegetation and small trees were cleared by cutting and spraying, and the large crack willows were dealt with using hydraulic scissors.

Ken says the collective input involving the Te Anau community earned the project recognition from the Parliamentary Commissioner for the Environment, as it not only addressed the agricultural needs of surrounding farmers, but incorporated values based on community concerns for the ecological needs of the Mararoa River itself.

"It was unique because while it had flood protection benefits, it grew into a restoration project with the outcomes addressing water quality improvement,



▲ The Mararoa River before restoration, filled with willow, broom and gorse.



▲ The Mararoa River returned to its braided glory after major work was completed.

habitat restoration for aquatic life and riverine birds, and recreational value for the river," Ken says.

They did however face some challenges.

"Aside from the physical nature of the job, care had to be taken to judge the flow of water into the Waiau as we cleared. We had to be careful the work didn't affect the flow through the Manapouri Lake Control weir through willow debris blockages. The weir controls the level of Lake Manapouri for hydro-electric generation through the West Arm power station.

"We could also only work from April to September in the winter months when the river flow was lowest and the risk of a high flood event was minimal."

Ken says the physical clearing of the Mararoa River was a huge success, delivering all the community and organisational expected outcomes and restoration has since entered the "maintenance phase".

"Since 2011 we've been focusing on maintaining water flow within the river's original bed and keeping on top of pest species' seedlings," he says.

The focus is now shifting towards ecological restoration.

"DOC wants to see the return of endangered riverine black billed gulls to the area, as clear braided rivers are crucial to their breeding cycle. Fish and Game is also conducting dive studies for trout."

Environment Southland chairman Ali Timms says the project was a success due to the hard work of all involved.

"This was a difficult project with many hurdles along the way. It was only possible because everybody worked together. It's a good example of local and central government working with the community to improve flood prevention and woody weed control to regain access to this lovely river."

Quick facts

- The Mararoa River, and other systems like it, are the resting place for gravel outwash torn from the surrounding mountains by the formation of glaciers in the last major ice age.
- ▶ The natural pebble plain of the riverbeds form a critical habitat for Southland's unique freshwater life, including fish, insects and several species of endangered birds.
- ▶ Between 2006 and 2011, an area of the river's gravel flats 20km long and 350 metres wide was reclaimed.

Summer students gain valuable experience



▲ Environment Southland biosecurity officer Shaun Cunningham (left) and summer student Kieran O'Connor help out with a planting day

Summer students are a common sight around Environment Southland during the warmer months, there to lend a hand with ongoing projects and gain work experience in their field of study.

nvironment Southland human resources coordinator Auriette Gilmour has headed the student induction programme for three-and-ahalf years and says it's a win-win situation for everyone involved.

While most of the students are from tertiary institutions in Southland and Otago, Auriette says it is exciting to have attracted students from Massey and Auckland Universities as well. The relationship between council and summer students is mutually beneficial, but also provides students with a vital 'foot in the door'.

"It's great for council because students are able to fill roles for ongoing projects, but it also provides them with the chance to talk with people relevant to their field of study, and exposes them to employment prospects. It's an opportunity to help them further their qualification journey."

Kate Dunlevey, an environmental management student from the Southern Institute of Technology, says the opportunity to learn from those working in her chosen field was one reason she was enjoying her time with Environment Southland.



▲ Southern Waterways contractor Chris Owen (left) and environmental scientist James Dare supervise summer students Morgan Shepherd, Kieran O'Connor, Stephanie Dwyer and Jaever Santos in constructing an anti-pukeko cover.

the science division took five summer students under their wing this season, involving them in a range of projects from electric fishing and wetland planting, to stream flow interactions. She says the programme is a great two-way relationship and hopes it will continue indefinitely.

"Summer is traditionally the busiest period for science and environmental data staff, with summer monitoring programmes underway, so the students help relieve the workload pressure. In return, they get work experience, exposure to regional council processes and a chance to make contact in the science community, which can help them with future employment," Rachael says.

While Kate still has the final year of her degree to complete, she sees herself pursuing a career in Southland.

"I definitely see myself staying down here, either at Environment Southland or in a similar role. I love the fieldwork involved with this kind of job. I've worked with some incredible people and seen some awesome parts of Southland."



top of the plants to prevent them ending up a tasty

Students get their feet wet

The construction of a scientific treatment wetland on Inglenook Farms' property in the Waituna catchment was one project undertaken by summer students. Environmental scientist James Dare says it will be used for monitoring the uptake of nitrates from the water by a wetland environment.

The bamboo spiked sedge (*Eleocharis* sphacelata) planted by students, is ideal for treating waterways he says, as its honeycombed cell matrix effectively uptakes excess nutrients. The students also helped assemble an anti-pukeko net to stop the juvenile sedges becoming a tasty snack. Without the help, James says the project would have taken much longer.

"The help of the students meant that we could construct the net and plant 700 plants in just over a day."



▲ Biosecurity summer students (from left) Kieran O'Connor, Morgan Shepherd, Stephanie Dwyer and Kate Dunlevey put in many hours removing pest weeds in Te Anau and Manapouri.

Kate says working in the biosecurity division provided an opportunity to get out in the field, as well as learning new skills, such as attending a course in

"You'll have lunch and people from all

different divisions will be sitting together

and talking about what they do. For me

it's been a way to gain experience and

"Summer is traditionally

science and environmental

data staff, with summer

monitoring programmes

underway, so the students

help relieve the workload

exposure to regional council

pressure. In return, they

processes and a chance

science community, which

can help them with future

Rachael Millar

to make contact in the

employment."

driving on gravel roads.

get work experience,

the busiest period for

skills."

Senior biosecurity officer Randall Milne says the students' contribution is beneficial for many divisions.

"The best part about summer students is they have more time to dedicate to projects without being bogged down by the paperwork side of things. They're helping with projects that have been up and running for some time and are able to continue on some good work that otherwise may not have been able to be a priority."

Science manager Rachael Millar says

Farm plan, fencing, funding – fantastic first steps

One of Selwyn Earwaker's (pronounced Erica) biggest concerns used to be stock losses to waterways on his 227 hectare Tokanui sheep farm.

he Tokanui River forms one of the farm's boundaries, which meant sheep could cross on to neighbouring property in summer, and in winter, with higher water levels, stock were becoming trapped. Fencing was the obvious solution.

"I had been working at it myself and called Environment Southland about possible funding to help," Selwyn says.

He spoke to land sustainability officer Sam Dixon who explained that if he completed a Focus Activity Farm Plan he could then apply for funding to assist with the cost of implementing the recommendations in the plan.

The plan that Sam developed, at no direct cost to Selwyn, provides recommendations that are focused on

good management practices for winter grazing, riparian management and nutrient management.

The recommendations aim to keep sediment and nutrients on-farm and out of waterways – providing benefits for farm sustainability and efficiency, while also improving water quality.

As part of the plan, Sam walked and drove all the waterways with GPS mapping on the Collector app.

Sam says there are approximately 10km of waterways on the Earwaker property. "Selwyn had already completed over 7km of fencing which is fantastic."

Recommendations in the plan included completing the fencing, as well as some riparian planting suggestions, implementing strategic winter grazing, fencing and planting around a sediment pond, and getting underway with a nutrient budget.

Selwyn says it's still early days for getting into the recommendations of the plan, but he's already done one season of strategic winter grazing and has similar plans for this year.

He's no longer concerned about losing stock to waterways or to his neighbours either, now that fencing along his Tokanui River boundary is complete. As well, he's fenced a small wetland area, all with the help of a successful funding application to Environment Southland.

In the future, Selwyn plans to fence a stunning 20ha patch of native forest on his property and apply for a QEII covenant to protect it.

A Focus Activity Farm Plans is an environmental plan that provides farm-specific good management practice advice and recommendations for an individual property.

The plan contains several colour aerial photo maps detailing soil types, waterway locations and winter grazing paddocks, along with factsheets and recommended actions for your farm.

Farmers who have had a Focus Activity Farm Plan compiled for their property are eligible to apply for funding to assist with the implementation of the recommendations.

Book a visit today

Talk to a land sustainability officer about getting a Focus Activity Farm Plan done for your property. They will arrange a time to visit, undertake a survey and prepare a plan from the information gathered.

Call 0800 76 88 45 or email service@es.govt.nz



Southern Field Days Waimumu-Gore

More than 40,000 people attended the Southern Field Days at Waimumu in February. Our councillors and staff were kept busy talking with visitors to our site, with the biosecurity team's stuffed pest animals a favourite with the youngsters. Clover root weevils were given away and landowners were encouraged to find out which physiographic zone their property was in and what this might mean for them.













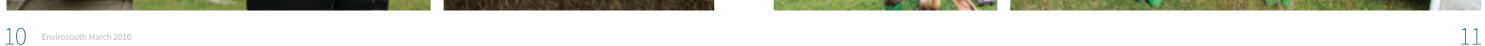














If you're interested in possum control in Southland, Dave Burgess is your man. If you can't find him however, he's probably gone fishing.

childhood spent camping with his family produced a love of hunting, fishing and a soft spot for Southland's wild places. Consequently, the 'townie from Gore' decided to pursue a vocation into 'something outdoorsy' and a 30-year career in pest control was

The Environment Southland senior biosecurity officer says he's been involved in possum control for "too long" and remembers the days when Environment Southland was called the Southland Regional Council, and possum control was carried out primarily for agricultural benefit.

"When the council took over pest control in the early nineties, I had been involved with control for about 10 years through pest boards and under the umbrella of the Southland District Council. Back then it was about controlling possum numbers for bovine tuberculosis (TB)."

The first few years of Dave's career were spent working on various pest boards around Southland, initially liaising with farmers to control rabbits and eventually managing pest control operations from a managerial position.

"I moved to Winton in 1991 and the pest boards were amalgamated into seven pest areas to manage the Central Southland TB possum control programme. In the early 2000s I was responsible for implementing and reporting pest control field operations throughout Central and Western

These days he's using his management nous to oversee pest animal control programmes, budgets and staff for Environment Southland.

He says while the essentials of the job have remained the same, he's seen a shift in the desired outcomes of pest control.



"I think the biggest changes have been in the objectives of the job. These days we see more of a focus on possum control for biodiversity of flora and fauna in Southland rather than the TB component."

This coincides with Dave's involvement in the Environment Southland Possum Control Areas (PCA) Programme, introduced in 2009 to support landowners with possum control on their property and to encourage their collective participation in improving biodiversity.

"As the TB programme achieved its aim, Environment Southland and farmers didn't want to see possum numbers increase, so we developed our PCAs based largely on the Hawkes Bay Regional Council model, who were controlling possums for biodiversity reasons."

"All of New Zealand benefits from this work to some degree. There are many losses to biodiversity occurring and it's important to protect what we can for future generations." Dave Burgess

The rapport Dave forms from these interactions with members of the Southland community is one of the most rewarding parts of his job.

He's found a good yarn to be his best weapon in explaining possum control for the benefit of biodiversity, as being personable trumps "having rules thrown at you".

"For me it's not really about the rules and the rates, it's about the relationships you can build with the people you're working with. What drives me is doing something worthwhile for the environment, meeting lots of people and getting to see parts of Southland that your average Joe may

"All of New Zealand benefits from this work to some degree. There are many losses to biodiversity occurring and it's important to protect what we can for future generations".

Dave lives in Winton with his wife and two teenage daughters Hannah and Claudia because "the weather is better than in Invercargill".

While his girls don't share the same passion for the outdoors as he does, he's sometimes able to persuade them to go fishing with him.

Progress

October 2015: Tom Campbell appointed SoRDS chairman

December 2015: Team leaders announced

- ▶ Vibrant Urban Centres Team Joc O'Donnell, director of HW Richardson Group
- ▶ Ease of Doing Business Team Steve Ruru, chief executive of the Southland District Council
- ▶ Welcome to Southland Team -Penny Simmonds, chief executive of the Southern Institute of Technology
- ▶ Business Extension Team Peter Gow, sheep and beef farmer, and former director of CRT
- ▶ New Industries and Innovation Team - Mark O'Connor, chief executive of Southport; with Paul Adams, managing director of Stabicraft Marine
- ▶ Inclusive Communities Team Anna Stevens, associate with law firm Cruickshank Pryde.

February 2015: Sarah Hannan takes up the position of programme director, based at Environment Southland, leaving her role as the CE of the Southland Chamber of Commerce

February 2015: Solicitor Sarah Brown takes up the position of project manager, based at Environment Southland.

Taking a regional perspective

Environment Southland brings a distinctively regionwide standpoint to the Southland Regional **Development Strategy** (SoRDS) project.

he Council's chief executive Rob Phillips is on the SoRDS governance group.

"From an Environment Southland perspective, it's important that we look at this through a sustainable development lens as we have a responsibility for the region's natural resources; it's also about enabling prosperity and building greater partnerships between council, business and community," he says.

For Rob, the push to see the region prosper is a chance to showcase its many qualities. Development, growth and innovation are imperative he says, but they have to be sustainable economically, socially and environmentally.

"We're a large region geographically, but small in other ways. No matter where you go there's always that unshakeable sense of the Southland lifestyle. We have a responsibility to ensure it's there for our children and grandchildren.

"SoRDS represents Southland's proactive attitude in tackling challenges and 2016 will be about getting it up and running and encouraging more people to call the region home so that Southland has a vibrant and exciting future."



▲ Environment Southland chief executive

The Southland Regional Development Strategy (SoRDS) was launched in October 2015 as a joint initiative between councils, iwi, business and community organisations.

It is an economic and social development strategy and action plan with the primary aim of increasing Southland's population to 105,000 by 2025 (about 10,000 more people); 110,000 by 2030.

Southland Regional Development Strategy TE IWI ME ORANGA RAUEMI



▲ Jeff Farm manager John Chittock (left) and Environment Southland biosecurity officer Craig Smith discuss plans for possum control on the training farm

A proactive approach to possum control

Tackling possum control head-on is the only option according to Jeff Farm manager John Chittock.

s the manager of one of the south's most well-known training Ifarms, John is a strong believer in teaching good practice to the cadets who work and live on the property. Pest control is one area where he is keen to educate them about the value of having a plan in place.

The 2,424 hectare property owned by The Salvation Army Trust Board and located on the back road between Mataura and Clinton, comes with many challenges,

but keeping on top of possums is one which can be easily managed with good

John says the property is one of many in the area which has been under the TBfree animal control programme for several years and they rarely see signs of possums these days.

"We seem to have very minimal possum numbers now, we do a wee bit of trapping around the houses, but there aren't many around."

With TBfree now stepping back from possum control in many areas, John has already taken the initiative to chat with neighbouring landowners about how they can work together as part of an Environment Southland Possum Control Area (PCA).

"I got a newsletter from the PCA team and it just seemed like a good idea to get on board. We would be letting ourselves down if we weren't proactive about getting involved and maintaining the low possum numbers."

"We seem to have very minimal possum numbers now, we do a wee bit of trapping around the houses, but there aren't many around." **John Chittock**

John says as a training farm, it's also important to demonstrate good practice to his young cadets and teach them the value of working with others.



▲ Rewiti Bull (Ōraka-Aparima Rūnaka) (left), Dean Whaanga and Ailsa Cain (Te Ao Marama) taking a rest during the intensive searching of the Mason Bay sand dunes.

Southland's unique coastal archaeological taonga are under threat and beachcombers have a part to play in helping preserve them.

with a coastline 3,400 km long, early Maori settlement made use of rich ocean resources, hardy whalers and sealers plied their trade from the beaches, and European settlement fledged along the banks of tributaries as the hunt for gold moved south.

This inheritance is however at risk. Archaeological sites and artefacts are being unearthed by erosion and human development; the retreating shorelines leaving archaeological treasures like pre-European tools and ovens exposed to the elements, development and curious beach combers.

Environment Southland has statutory responsibilities for heritage and has been a partner in the Southland Coastal Heritage Inventory Project (SCHIP) since its inception more than 10 years ago. Designed to provide an up-to-date

record of archaeological sites along the Southland coast, the inventory is the largest continuous coastal survey ever carried out in New Zealand.

Department of Conservation technical advisor for heritage Rachael Egerton says while the project has added 109 new archaeological sites between Waiparau Head and Rowallan Burn, just as many sites have also been lost.





"Only about half of the 317 sites we knew about from historic records were

For 2016, Rachael says the project will continue current monitoring programmes, but will also encourage the public to follow Heritage New Zealand (HNZ) protocols should they encounter any artefacts or sites. Essentially the protocols are to leave your discoveries where you find them and quickly report them to HNZ.

"Archaeological sites and artefacts are protected by law, under the Heritage New Zealand Act and Protected Objects Act, but it's about more than following the rules, says Rachael.

"Everyone gains from knowledge that can be learnt through our heritage, but if those moa bones sitting on your mantelpiece are forgotten and not shared with the whole community, and the next generation don't know where they came from, they become meaningless.

"Through this project the archaeological sites along the Southland coast are revealing all sorts of previously unknown information about our past. Everyone can play a part in that by reporting discoveries."

Coastal Heritage

In 2004, an interagency partnership was formed between organisations with responsibilities for Southland's coastal heritage: Environment Southland, the Department of Conservation (DOC), Te Ao Marama Incorporated (TAMI), the New Zealand Historic Places Trust, the Southland District Council, the Invercargill City Council and the New Zealand Archaeological

The partnership led to the development of the Southland Coastal Heritage Inventory Project (SCHIP) in response to an Environment Southland State of the Environment report highlighting a lack of information on Southland's coastal heritage sites and the threats they face.

Environment Southland policy planner Erin Hawke says the responsibility to future generations is reflected in both Environment Southland's support of SCHIP and the interagency collaboration that made it a reality.

"As a regional council, we have an obligation to heritage under the Resource Management Act, but we also have an obligation to improving our knowledge and understanding of Southland's cultural past. Working together with councils and iwi to achieve this shows commitment to what is essentially a matter of national importance."

▲ These two flakes of stone were found in one of the sites recorded at Mason Bay, and were brought back for identification. They are what was left behind by someone who was flaking stone to make tools. The flake on the right is called procellanite and probably comes from Otago. The one on the left is a stone called silcrete and the source has not yet been identified. They provide insight into the movement of people and their use of different stone resources.

Updates



Time to talk about pests

Southlanders have just a few more weeks to tell Environment Southland what they think about rats, possums, gorse, broom and other pests.

A new Regional Pest Management
Plan is being developed and
feedback from the community is
needed by 31 March. We want to
know what people think about
pest management – which pests
should be included, how new pests
can be prevented from coming in
and when is pest management
a community or landowner
responsibility?

Biosecurity manager Richard Bowman says the new plan will set the scene for pest management in Southland for the next 10 years and it's important to get it right.

An engagement document *Getting* the best from pest management is available on our website or by giving us a call, and you can provide feedback online or in writing.

Home heating loans

People living within the Invercargill airshed may be eligible for a low interest loan to help them upgrade their open fire or burner to an approved form of heating.

The Regional Air Plan requires residents in the Invercargill and Gore airsheds to replace non-compliant forms of home heating over an 18-year phase out period.

Environment Southland and the Invercargill City Council have allocated \$500,000 each per year for the next three years towards a loan scheme. Five-year, low interest loans are now available to residents in the Invercargill airshed and discussions are ongoing

about establishing a scheme for the Gore community.

The team at Awarua Synergy (as service providers for Southland Warm Homes Trust) can talk you through the process and assess what is needed for your home. Call them now to see how they can help.



Contact 0800 WARMSOUTH (0800 927 676)

River Awards 2015

Environment Southland's work to improve water quality around the region was recognised at the 2015 New Zealand River Awards, with the Mimihau Stream receiving the 'Most Improved Award' for Southland.

The stream runs through land repeatedly used for exotic forestry, which was harvested and immediately replanted a decade ago. The rapidly growing young trees have since absorbed increasing amounts of nitrogen from the soil surrounding the stream, reducing the nitrogen leaching into the waterway.

The awards are an initiative of the Morgan Foundation and first began in 2013. They aim to improve the health of New Zealand's rivers and streams by encouraging



▲ Environment Southland chairman Ali Timms receives the award from Morgan Foundation economist Geoff Simmons.

greater community participation in measuring and reporting water quality and by raising the profile of actions being taken to restore river health.

Time to think about...

MARCH 2016

▶ Firewood

If you haven't got your firewood supplies sorted yet, you need to give it some thought. Dry firewood is difficult to source once winter hits.

▶ Potato wart

Keep an eye out when digging your Easter potato crop for this unsightly fungus. If you suspect your potatoes are infected, don't move them, simply give us a call.

▶ Mustelids (ferrets and stoats)

Now's a good time to start trapping mustelids to ensure they don't eat your chickens, ducklings or native birds.

▶ Ragwort

Ensure all ragwort (within 50 metres of boundaries with neighbours) is destroyed on your land, prior to seeding.

APRIL 2016

▶ Environment Awards

Nominations for the 2016 Environment Awards open on 4 April, so think about who might be a deserving nominee. The Environment Awards are organised and held every year by Environment Southland to acknowledge the huge amount of good work being done, often behind the scenes and voluntarily, to safeguard and enhance Southland's environment.

▶ Rabbits

Winter is the most effective time for rabbit control before they start breeding again in spring.

▶ Outdoor burning

Outdoor burning is prohibited in the Invercargill and Gore airsheds from 1 May until 31 August. Leisure activities like barbecues, braziers, hangi and fireworks are exempt from this rule.

Down on the farm



By GARY MORGAN Environment Southland principal land sustainability officer

Have you contacted the land sustainability team to prepare a Focus Activity Farm Plan for your property?

A Focus Activity Farm Plan is an environmental plan that provides farm-specific good management practice advice and recommendations for your property, with a focus on nutrient management, winter grazing and riparian management.

Meanwhile, with the start of autumn, there are a few things worth thinking about before winter hits.

- ➤ Consider your proposed shelter/ riparian planting for the coming season. Order plants and get the fencing up.
- ▶ Set out baleage in your winter crop paddocks before it gets too wet.
- ▶ Prepare a strategic grazing plan for your winter crop. Identify the critical source areas and graze towards them. These areas should be the "last bite".
- Maintain a dense pasture sward during autumn to help control ragwort, nodding thistle and other pasture weeds which germinate in early winter.

Contact the land sustainability team for on-farm advice on any of the above.

For further advice and information:

Pest plants or animals - www.es.govt.nz
Air Plan rules - www.BreatheEasySouthland.co.nz

Out in the field

Our people are no strangers to extraordinary situations as they go about looking after the region's natural resources.



▲ Biosecurity officer Tom Harding installs a Goodnature rat trap as part of a trial in an area protected by a QEII covenant in the Lower Mataura catchment.



▲ Biocontrol contractor Jesse Bythell releases Darwin's barberry seed weevils on a property at Waimumu. The adult weevils feed on new growth of Darwin's barberry, but the larvae have the biggest impact by feeding on the seeds. If successful, the weevils will help reduce the spread of this pest plant.



▲ Environmental technical officer Phillip McCartney tests out the remote controlled Q-boat. The high-tech piece of equipment is being used to gather information about the volume and velocity of Southland's rivers to assist with flood forecasting and water quality measurements.



