



A Presidential Welcome

Simon Stokes from Hawkes Bay Regional Council has been elected as the 2007 NZARM president. He's certainly not shy of this new role, and is already suggesting new ways of taking NZARM forward.

Merry xmas to all members. Hope you're all geared up for some time away from work with mates, family, or even some time alone in some of our beautiful hill country. Myself, I'm taking a well-earned month off this summer to hang out with the kids, tramp a little, and gorge myself on life at the beach at Mahia Peninsula. If you're in the area over late January and have some wine on board call in.

A big thank you to anyone who has had an involvement with NZARM over that last 12 months, the Exec has much appreciated it. Heading that list would have to be Chris Phillips and company from NZARM for the well-crafted 'Stormy skies' conference in Christchurch in November. For those NZARM members who attended it was a very enjoyable trip. There are many benefits from sharing conferences, namely meeting and talking about resource management issues with a swag on new faces and learning new things. I didn't realise how shallow Lake Ellesmere is, or how much fun Bob McDavitt is, and how well Chris's Te Reo Maori has come along.

A new face on the 2007-08 Exec is Shelley Washington from Christchurch. Some of you will know Shelley from her work in the South Island with NZ Landcare Trust. Murray Harris is now also elected as the treasurer.

I'm really looking forward to the next few years with the NZARM exec, as there's plenty to get on with. Some ideas that I would like to put some effort into all focus on ensuring the members are catered for and enjoy belonging to NZARM. We'll get next year's conference organisation underway and I'd like to look at the potential of sharing a conference with the NZ Farm Forestry Association and NZ Landcare Trust into the future. One particular idea is trying to get more tertiary students at our conferences, particularly when we are in their region.

NZARM Administration will also have a minor change with Tabitha maintaining her secretarial role alongside a new secretariat that she has organised. This will ensure the membership process, invoicing, CPRM, and general networking of members is kept at a high professional level. CPRM is here to stay and all members should look at attaining a suitable level. I'm going to approach the Local government industry to inform them of this certificate to encourage their staff to obtain CPRM and to see if we can get more members from this process.

I really encourage all members to look at using the financial support NZARM offers for workshops, seminars, regional meetings etc. This fund was set up to support, not only regional meetings, but to enable members in their work and to encourage more training, learning opportunities for members and others. Please think about using it!

Financially NZARM is strong, although it always hinges on membership and paying your annual fees. We introduced a tougher stance on lapsed membership and fees owing, so please endeavour to pay your fees as promptly. They are still very good value for belonging to a professional organisation at \$50.



I'm also going to get the exec to look at the Broadsheet newsletter and website to see what improvements can be made. Long term our new look publication could fill the old shoes of the Resource Management Update – who knows. One idea we have is to offer advertisement space for members in the new publication to help self fund it. The website could be targeted with similar attention. So watch this space, or slide some feedback or ideas to the Editor or the Exec, particularly if you want Broadsheet to stay the same!

Another topic to look into is getting NZARM's profile more widely publicised and acknowledged. It's a small, tight and difficult market for an organisation like ours, but we really fulfil a role for resource management in NZ, particularly as our members have a wealth of knowledge and experience. So there will be some thought put into how we can do this, to enable members to benefit professionally and potentially commercially, more articles, advertisements, conference requests etc. For instance MfE should be looking to NZARM conferences to send their annual intake of trainee staff so that they can learn some practical resource management as well.

Anyway, lookout new year, here we come.....take care everyone, enjoy xmas, drive safe, and most of all have fun.

A te wa koutou, na
Simon Stokes

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The New Zealand Association of Resource Management (NZARM) is an incorporated society that provides support and focus for people who share an interest in the sustainable management of natural resources. Membership is generally drawn from those engaged in the practice of resource management.

Purpose is to champion the resource management cause, to promote professionalism, and to maintain a strong community spirit of meeting, sharing, and generally having a good time. Members receive benefit through an annual conference, regional workshops, a quarterly Broadsheet publication, and the opportunity to become a recognised professional and accredited practitioner of resource management.

Further information, including membership registration details, can be obtained from the NZARM website (www.nzarm.org.nz) or by contacting the secretary:

The Secretary
C/- NZARM
Private Box 5280
PALMERSTON NORTH.

www.nzarm.org.nz

BROADSHEET

BROADSHEET is the newsletter of the New Zealand Association of Resource Management. It is published quarterly.

The Editor welcomes correspondence, reviews of recent publications, interim reports of current research or resource management issues, news items, other articles, and lighter items about members activities and career movements. An invitation to make submissions to Broadsheet is sent out 2 – 4 weeks prior to the publication date. Generally submissions are sent to NZARM regional coordinators or directly to the Editor. Copy sent by E-mail is preferred, although typed copy is also acceptable. Items can be sent to:

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Advertising policy: Advertisements are welcomed from any person or agency, but priority is given to adverts from NZARM members. We charge a nominal fee to help recover publication costs. Space is limited (this is not a commercial publication). Contact the Editor for further details.

Editorial note

So what do you think? Is the new Broadsheet a welcome change or an unnecessary shift into the realms of pretentious rubbish?

Many apologies for the lateness of this edition of Broadsheet.

It was more-or-less ready to go at the end of last year, but we started experimenting with layout and design to see how Broadsheet could look. And we found that it could look a lot better, while at the same time still retaining the type of content NZARMers are used to.

So why didn't we send out the new version? There's always a degree of caution when 'change' and 'NZARM' are mentioned in the same sentence, so two versions have been produced (apparently I have nothing else better to do). This time around NZARMers are getting the conventional Broadsheet in the post, but also the opportunity to download the proposed new design if you have internet access.

As far as content goes, there's a very brief review of the 2006 NZARM Conference (I had to make it up myself) with photos provided by the photographically-persistent John Whale. Norm Ngapo reports on the Bay of Plenty 'coastal issues' regional meeting, and our new President has provided a few ideas and visions to ponder over the coming year.

Ewan McGregor has submitted a couple of pieces (we'd better say NZARM doesn't necessary agree with everything Ewan has to say, particularly about the NZ Landcare movement), and Chris Perley has allowed us to reprint an interesting paper on farm landscape complementarities (principles will be familiar to many NZARMers, but the underlying method is probably new).

Norm Ngapo gets a comprehensive reply to his questions about the state of NZ's LRI/LUC mapping & resources from Ian Lynn and Allan Hewitt. Lee Whitley also puts in his five cents as a Letter to the Editor. It is also worth noting that an Environmentlink funding application to update the LUC was recently approved, and a few interesting little changes have been proposed for the LUC Classification itself.

For some reason the LRI/LUC brings out certain strong protectionist reactions in some camps; it's something that tends to generate strong opinion and interesting debate (or mild amusement to those on the

sidelines). So if you find yourself looking askance at some of Ian & Allan's writings, or have a viewpoint that runs along a slightly different parallel, then you're more than welcome to reply with a Letter to the Editor.

And there's a rather swiss-cheese-looking Regional Roundup (my fault – the call for contributions was late).

Happy reading

Andrew Manderson

P.S. Some of the information about NZARM contained in the alternative version of Broadsheet is out of date. It got to the point where I just couldn't be bothered.



Under stormy skies conference 2006

The 2006 Annual Conference was a joint affair held in conjunction with the Met. & Hydrological Societies. Despite being quite late in the year, it turned out to be an interesting and diverse get together of similarly-minded resource managers.

You had better look at the pictures below (provided by John Whale) because quite honestly I don't remember much about the conference. But I do remember NZARM stood out from the two societies - Chris Phillips gave a shining and exceptional welcome in Maori, which was apparently quite a challenge to his linguistic skills, but he pulled it off brilliantly. Another former NZARM president - Sue Powell - admirably filled the boots of MfE's CEO during her keynote address, and made NZARM-

ers proud with how well she presented and handled the question session. It's also worth noting that NZARMers dominated the questions being asked.

The other standout feature for me was how relatively relaxed our Association is. The AGM was finished so fast that some NZARMers were on their 3rd beer before the other two societies had finished their AGMs.



Te Waibora field trip - stop at Coopers Knob looking over Lake Ellesmere (Te Waibora)



Jason Arnold, Waibora Ellesmere trust Coordinator, talking at Coes Ford



Howard Williams (Ecan) at same stop as photo 1



Local farmer & poet Colin Patterson talking about restoration at his Hart's Creek farm



Trouble comes in pairs - past presidents Alan Campbell & Chris Phillips



Walking alongside Hart's Creek to the bird hide



Laurie Donald and Barry Fabey enjoying the view



NZARM's current el presidente Simon Stokes listening closely despite a late night



Davis Aires (Ecan) discussing Fisherman's Point engineering feats required to open the lake outlet

Regional meeting: Coastal issues

On Friday 27 October, an NZARM Regional Meeting was held in the Bay of Plenty. The Meeting's theme was coastal issues, something BoP has in abundance. Norm Ngapo reports on how it went.

The morning session at Environment Bay of Plenty (EBoP) Headquarters in Whakatane saw a range of speakers provide a background to the afternoon field trip.

Lawrie Donald (Land Management Officer – EBoP) gave an insight into the historical development of Coastcare in BoP. Commencing with a visit to Australia in 1993, Lawrie and other staff worked closely with the District Council to develop the current Coastcare model for BoP. This has become a model, and the envy, of many other regions in NZ.

Anthony Olsen, a local from Matata, then gave a personal perspective of the Matata Flood of May 2005, which resulted in the devastation of the Matata Township from a series of debris flows following a very intense rainstorm event. Anthony was in Wellington at the time, and arrived home to find his home had been washed away several hundred metres downstream by the debris flow.

Background on the Matata storm was provided by John Douglas (Land Management Officer – EBoP), who also was able to offer personal insights as he was one of the first on the scene to assist with evacuating people from the disaster area. John had photos taken the morning after the event and the devastation left us in wonder as to how there was nobody seriously hurt or even killed.

Andrew Wharton (Resource Planner – EBoP) gave a presentation on the problems of vehicle access to dunes. This is a particular problem in the eastern BoP, where in some areas people in 4WD vehicles like to drive along the top of the foredune to access their favourite fishing spots or just hoon about. EBoP has been working closely with the district councils and the local community (including surfcasters) to try and resolve the problem.

Willie Shaw (Ecologist – Wildland Consultants) then gave a comprehensive coverage of coastal ecology and the unique nature of the beach and estuarine environment in BoP.

At midday, workshop participants traveled by bus to Kohioawa Beach due west of Matata. After a picnic lunch at the small WDC camping area on the beach, Rod Fraser from Whakatane District Council gave a background on some of the Coastcare planting programmes in the area. Andrew Wharton provided further detail on vehicle access problems. This was followed by Anthony Olsen giving an historical account of the area from a Tangata Whenua perspective, and the rich history of the Matata coastal community. Fiona Hennessey from the Department of Conservation rounded off the session in the field before Willie Shaw and Rod Fraser checked out and discussed the plantings in the immediate vicinity.

It was planned to have a local surfcasting fisherman available to discuss the Fishing Club's input to Coastcare and also to give a surfcasting demonstration. Unfortunately, it appeared that he was waiting for us at the wrong area of the beach, so we had to forgo that part of the programme. Norm Ngapo and John Whale suspect that he may have been delayed down the beach at an undisclosed favourite fishing spot, and ended up forgetting that he had taken the day off to talk to our group.

Heading back towards Matata, the party stopped briefly at the Ohinekoao Stream, to look at the severe gully erosion where the stream cascades from the upper plateau down the steep scarp to the fore-shore area west of Matata. This afforded a good insight into the huge amount of debris that can quickly move down these short and steep watercourses during a storm.

The next scheduled stop was at the Matata Lagoon, which suffered from inundation and sedimentation during the Matata Flood. Rainfall intensity recorded at the Awakaponga automatic recorder on 8 May 2005, was 94.5 mm in one hour in the evening of 18 May 2005. Intensity peaked at 30.5 mm in 15 minutes (more than 2 mm per minute). The debris flows from the Matata flood contributed an estimated volume of up to 300,000 cubic metres of material from the two main streams that suffered from debris flows. Much of this material ended up in the Matata lagoon along with vehicles, caravans, houses, garden sheds, domestic material of all types (fridges, garden implements, bicycles, rubbish, contaminated materials such as paint, insecticides etc). The soft nature of the sediment made removal of the rubbish very dangerous, and substantial volume of hazardous material is still in the lagoon.

The group was treated to a very informative discussion session on the future of the Matata lagoon by Haydn Read (Whakatane District Council), Anthony Olsen, and Willie Shaw. The Whakatane District Council in conjunction with the Department of Conservation, Wildlands Consultants, Tangata Whenua and the local community, has embarked on a restoration programme. Initial proposals were shown to the group and the potential problems discussed.

The last stop of the day was at Walkers Beach where remnant coastal kanuka forest on the sand dunes was viewed, and Willie Shaw gave an excellent summing up of the days programme.

The organising crew of John Whale, Glenn Sutton, Norm Ngapo and Shari Kameta extend their appreciation for all of the presenters on the day, as well as to the participants who came from as far afield as Waikato, Taranaki and Hawkes Bay to take part in the programme.

The evening was rounded off by a few of the participants who checked out the local hospitality and cuisine at the Whakatane Sportfishing Club and Wharf Shed.

Norm Ngapo

Norm is a private consultant in BoP (Waiora Soil Conservation Ltd)

NZARMers enjoying the Coastal Issues Workshop, October 2006.



Family forests - a place in NZ?

Ewan McGregor takes an interesting look at the idea of family forestation. Perhaps it's big overseas, but could it work here?

The family farm is the very basis of New Zealand's farming industry. The family unit provides it with its strength, continuity and culture, and rural New Zealand with security and social infrastructure. What we don't have is a tradition in family-owned and worked (silvicultured) forests, such is the case in, say, Central Europe.

Could family forestation have a role in New Zealand? I believe it is worth serious consideration. It could be a solution to converting our fragile and seriously eroding hill-country pasture land into a more sustainable landuse that maintains the social structure that livestock farming provides and – who knows – provide a long-term viable economy for those areas and the nation. Let's not have our vision obscured by the current poor fortunes of the forestry industry. Remember, various farming industries have come through some periods of misfortune too. We have also to consider the industry's contribution to global environmental health, for which, under current government policy, it is not fairly rewarded.

The problem however is the long lead time (in terms of the annual cycle of farming, but not in relation to global forestry) that is involved before returns kick in. This is not such a problem to a large forestry company with a mixed-age estate, but it is unlikely, at least under current wood economics, that they are interested in becoming involved in the kind of land that I have in mind. In any case you have that social cost of rural depopulation, which we want to avoid. To the individual proprie-

tor though there is the problem of surviving through the first thirty years before the initial harvest comes on stream.

Surviving this start-up period provides a major challenge, but is it an insurmountable one? If there's a will there's a way, but it will need to be a national will and therefore a national way. This will involve no simple of cheap answer but I believe it is worth considering - maybe some form of interest-free loan or – the word sticks in the craw – s-s-subsidy. But conversion would take a generation, after which hopefully it would be self-perpetuating.

What I have in mind is not blanket radiata, although realistically this would likely be the mainstay, and of staggered age. Rather it is a range of species targeted to soil type, a variety of markets including high-value niche, and species (perhaps pollarded) allowing for limited livestock production. But this is not farm forestry, but forestry farming.

In Germany it is a source of pride for a forester to boast that he is, say, a fifth generation forester, such as may be the case with a New Zealand farming family. Why, in the course of time, shouldn't we have a similar forestry ethic here?

Ewan McGregor

Ewan is a Hawkes Bay Regional Councillor and an active farm forester.



Commercial forestry woodlots in some South Island location. While still seen as a bit of an oddity by most farmers (we're farmers not foresters!), farm forestry may become more prevalent in the future if ever our Kyoto obligations are taken seriously. Growing trees for carbon sequestration & credits makes forestry that little bit more viable, and given the balance between high land prices and not-so-far off production limits, then we could perhaps see more of the smarter farmers strategically giving their marginal country greater consideration as a forestry producing resource. Photo pinched from Chris Phillips.



REGIONAL MEETINGS

Regional meetings are key elements of NZARM's mission and service to its members. These meetings are usually designed around a particular regional issue and tend to involve members and interested people from both within, and from adjacent regions.

NZARM supports such events by providing financial support via seed money. Applications can be made to the National Regional Coordinator at any time. Visit the NZARM website for more information (www.nzarm.org.nz), or contact the NZARM secretary.

There were no regional meetings planned at the time writing.

EVENTS

FLRC 2007 Conference DESIGNING SUSTAINABLE FARMS, 8-9th Feb 2007, Massey University. <http://flrc.massey.ac.nz>

CONSERV-VISION 2007 conference to celebrate 20 years of NZ conservation management, 4-7 July 2007, University of Waikato. www.waikato.ac.nz/wfass/Conserv-Vision

NZARM annual conference, 2007 – to be advised. www.nzarm.org.nz

Soil Science Society 2008 conference SOIL – THE LIVING SKIN OF PLANET EARTH, 1-5 Dec 2008, Massey University (joint conference with Australian SSS). <http://conferences.massey.ac.nz>

Contact the editor if you have an event you want added

New biocontrols for Californian Thistle

Californian Thistle is a weed with attitude. It colonises our best pastures, and tends to be a difficult weed to manage. Murray Harris reports on two new biological controls set to be trialled in Otago.

The Clutha Agricultural Board along with a group of farmers and scientists from Landcare Research (group called 'CALTAC') have received funding from the MAF Sustainable Farming Fund to facilitate and implement firstly the importation and release of *Ceratapion onopordi* and *Cassida rubiginosa*, two biological control agents for Californian thistle. The other aspect of this project is to trial the biological agents on farms in NZ.

Good effective pasture management is the main basis to the NZ economy since agriculture contributes over 21 billion or 17% to the NZ gross domestic product. It is vital that farmers continue to achieve high pastoral production and this can only be maintained and increased if we better manage and improve our animal and plant pests. Over the past five years or so it has been clearly evident the increasing occurrence and area affected by Californian thistle invasion as well as other thistle varieties. This is having considerable economic impact on the total pasture dry matter yields available to stock and accordingly numbers of stock units that can be carried.

There is no doubt in many parts of the South Island that this aggressive weed is affecting optimum pasture production

Traditionally reliance has been on "MCPA" agrichemical for control but a range of others are also applied with varying degrees of success such as "Prefix D", "Roundup Dry", "Tag", "Terminator", "Thistle Plus" to name some. More recently "Tropotox Plus" has come onto the market and been used with good success.

MCPA which has been one of the most widely used agrichemicals over time has now been reclassified under the "Hazardous Substances and New Organisms Act 1996" with a rating of 6.1D, 6.9A, 8.3A, 9.1A, 9.2A and 9.3B which overall means that this product is now a "Tracked substance" and must be under the control of "An Approved Handler".



It is important to note that there are other prevention and control methods which have been used with mixed success:

- Use of goats
- Mowing and cutting (required many times but does not remove the weed)
- Bruising and crushing
- Agrichemical sprays and use of prills (however there needs to be a concerted effort to reduce the use of some chemicals especially those which are toxic to animals and eco toxic to the environment)
- Using chemicals on weed wands and wipers
- Other more creative methods.

Nevertheless, if NZ is to compete with Asian countries and move strongly into the EUREPGAP markets then there needs to be an overall reduction in the use of toxic Agrichemicals for thistle and other weed control and more emphasis on "Integrated Pest Management control".

This means that the rural landusers (farmers and horticultural growers) need an additional tool to manage Californian thistle in association with some of the tools mentioned above.

Accordingly, I see the introduction of the two biological control agents described above to be a step in the right direction to allow a better integrated pest management system to be undertaken.

Murray Harris
Dunedin

Murray Harris is the Principal of "Land and Forest Consultants Ltd" specialising in land and forest environmental management, RMA matters, sustainable land use, water quality management including riparian management and monitoring the impacts of agricultural/horticultural and forestry land use.

Note

If you want to make a submission in support or against the introduction of these two biological control agents specifically for Californian Thistle then write to ERMA before the end of January 2007 (check with ERMA on deadline).

This application to ERMA reference is application number NORO600 with the applicant being "CALTAC"

Post to ERMA, Box 131, Wellington

Californian Thistle is one of NZ farmings' more persistent weeds. A SFM funded project is being initiated to trial two new biological controls. Picture from Horizons Regional Council.

Helping self-help in the Landcare movement

The NZ Landcare movement gained momentum in the 1980s, and shifted up a gear when the NZ Landcare Trust was established in 1997. Ewan McGregor takes a hard look at the NZ movement from a perspective of someone who has been involved throughout. Please note that Ewan's views are not necessarily NZARM's views.

The Australian Landcare Movement has just celebrated its 20th anniversary. This Government sponsored organisation was established to meet the developing crisis in the environmental health of rural land in Australia, but particularly privately-owned farm land. Its theme has been good landcare through collective activity. It is a cornerstone of landcare in the challenged environment in that great continent.

Soon after its establishment an attempt to replicate the concept in this country was initiated but, as the then government wasn't interested in funding it, it was done privately. Thus the Landcare Foundation was established with private funding, mostly from Australia. It was essentially a Hawkes Bay initiative, but the words 'Hawkes Bay' were not included as the aspiration was that it would spread nationally. For a variety of reasons it never really took flight, which was a national network of landcare groups. The Foundation still exists (I am its Chairman) and meets irregularly to distribute funds to worthy environmental initiatives in Hawkes Bay.

In 1997 however the Government established the NZ Landcare Trust, also inspired by the Australian model, with modest levels of public funding. Its brief was to assist rural land owners to carry out environmental good practice on their properties. Like the Australians, it regarded landcare groups as the primary vehicle.



Ewan McGregor is a Hawkes Bay Regional Councillor and Chairman of the NZ Landcare Foundation.

To my mind though this model is not valid for this country, and landcare groups will never get the traction here for private landcare initiatives (note the emphasis) as has been the case in Australia. There the environmental problems, especially that of salinity, are more challenging and much of the farming more extensive, limiting the runholders' ability to deal with them. Further, substantial amounts of public funding are available for private landcare, but passing through the conduit of landcare groups. Unsurprisingly, landowners – including lifestylers – belong to landcare groups. The landcare group success there though should not be taken that entrepreneurialship and individual initiative is lacking. It is not, and the Aussies have much to teach us in rural landcare, and no doubt visa-versa.

But there is another difference. The New Zealand farmer is the most independently minded in the developed world. This is largely due to the colonial ethic of private land ownership and self-reliance (as is the case with the Aussies), but reinforced over the last twenty years by the almost total absence of financial assistance from the public purse.

The Landcare Trust has claimed that there are 400 landcare groups in New Zealand, and there may be. But how many are active, what is their membership, and to what extent are they focused on private land? This is a claim warranting independent analysis. Most cockies, I suspect, are unaware that such a body even exists, which is not surprising; it is virtually invisible in the prolific rural publications that enter all rural homes. For instance, to celebrate its 10th birthday it recently held a two-day forum in Wellington which, from accounts, was very successful with a number of heavyweight speakers. This should have been splashed across the rural and even general media; instead there appeared to be nothing. Self-congratulation is fine, but relevance to the practitioner is fundamental.

What we need is a wider study into what the needs are of rural landowners to improve their environmental practice; and what are the motivations and aspirations that drive them, the limitations and frustrations that impede them. To further the landcare cause we must understand the Kiwi cockies psyche.

Group activity has much more relevance where landcare initiatives are directed at public land, for obvious reasons. But the

farmer generally does not need the support – physical, intellectual or psychological – of his neighbours to do good environmental work on his farm. If a farmer (used in the widest sense of the term) wants to carry out soil conservation he will go to the regional council; restore or create a wetland it is likely to be Fish and Game; bush protection the QEII National Trust; spraying gorse, or whatever, his chemical supplier, and so on.

A good example of this was a landcare group we set up in my own district of Omakere, coastwise of Waipawa, CHB. It began in a burst of enthusiasm in the early 1990s, although still only involving a minority of landowners. We established an incorporated society and had committed chairmen and secretary. Like the old soldiers of the ballad, it just faded away. Meanwhile, good landcare in Omakere continues.

So what a nation-wide organization like the Landcare Trust, or perhaps regional councils collectively, do to provide rural landowners and managers with the tools to help in their landcare obligations and aspirations?

As explained above, it should primarily exploit individual initiative, because initiatives and action will be made inside the farm gate. It must be built around the Kiwi rural ethic of self-reliance. Indeed, it should celebrate it!

It should also recognise that the primary relationship is with regional councils, who have the expertise, resources, and (hopefully to be cited as a last resort) the rules to influence on-farm landcare. But there are other institutions that can be seen as allies. Some of these have already been mentioned, but research institutions and the Farm Forestry Association can be added. And yes, where they have a place and are wanted, landcare groups.

But individual initiative does not mean lack of coherence or coordination (which is not to disparage the eccentric, and certainly not the unconventional – today's ridicule often is tomorrow's esteem). There is a fundamental role in encouraging raising farm environmental standards here for the farm product processors who have a stake in the market-place image of our product. This especially applies to the dairy industry.

A pressing need, in my view, is a first-port-of-call website: dynamic, interactive,

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Farming for Patterns in the Farmscape

It wasn't so long ago that the Parliamentary Commissioner for the Environment was calling for research into the redesign of NZ farming systems. The following is a reprint of a field day presentation given at the NZ Grasslands Association Conference.

There is the potential to introduce and design elements, structures, policies and practices into a farm system that provides multi-beneficial returns among and within the economic, environmental and social domains. That potential can lead to better economic and environmental and social values. There need not be a win-lose trade-off as often presumed using solely analytical approaches.

Achieving the potential requires an understanding of patterns and processes in the farm system. These potentials are harder, or impossible, to understand or realise when the focus of research, policy and practice is on differentiation, analysis, specialist treatment away from a particular and broad farm context, and a focus on mechanical production alone. Effective science, policy and practice requires the ability to integrate and synthesis broader aspects affecting land management within the system, as well as analysis within particular contexts.



Southwest bank – a problem area for stock management & complementary soil, water & biodiversity values

These patterns are obvious within hill country farming systems. Even a cursory view of the patterns across a farmscape such as Traquair Station reveals:

- Areas where Pareto 80:20 rules apply – disproportionate association with costs, risks, stock losses, stock management problems, water quality reduction, soil erosion
- Areas that are easier to keep in high producing/high quality/highly-utilised pasture with low costs
- Areas that are harder to keep in low producing/low quality/lowly-utilised pasture with high costs
- Areas that are more – or less – exposed,
- Elements in the farmscape that are vital to farm management practices, options, and long-term financial – water supply, areas for access & distribution, shelter, revenue contingency, and
- Areas and other elements in the farmscape that are disproportionately important for soil conservation, water quality and biodiversity.

Appreciating the pattern and associations across farm landscapes, and over time, is one prerequisite for making the most of a farming system. There are many particular areas on a farm that represent a net cost to maintain in pasture: where pasture production is low; costs are high (especially when all costs and farm risks such as stock losses are directed to site); they may have a disproportionate share of farm risks, stock losses and hassles such as fence repairs and soil erosion.

A second prerequisite is appreciating how the addition of particular 'elements' (specimens, species, landcover types, structures) within a farm system can lead to complementarity with more traditional agricultural production elements such as pasture and stock. Complementarity particularly occurs when elements are introduced into a farmscape whose contribution to system function is disproportionately large given their representation or structural size (Keystone elements).

Such elements are likely to be a strongly interacting among and within many domains; that is, through multi-functional linkages to farm economics, environmental and social values. For example, a particular element may play a key role in a number of functions, such as pest control, fertility, drought resilience, water cleansing, soil conservation, aesthetics, stock health, farm production, farm costs, farm returns, and farm risk. Many of the associations of particular elements such as trees, woodlands, wetlands, and herbaceous species are highly complementary to pastoral land covers, provide multiple functions with benefits to traditional farming values, as well as to social and environmental values.

The same principle applies to what could be considered 'keystone' farming policies and processes, with residual grazing levels perhaps one example (through multiple associations to soil organic matter, soil physics, pasture growth, pasture composition, overland flow, soil erosion, water quality and in-stream values).

Trees in Dissected Gullies Example

One of the more obvious elements in the hill country landscape that provides multiple benefits to a farming system is properly-located trees. They can be highly complementary when placed in areas of the farm that have:

- High pastoral farm cost associated (such as weed control, etc.)
- Low pastoral farm returns associated with the same particular areas – too steep, cold, infertile, weed-prone, erodible, attractive to

lambling ewes

- Better tree growth associated with both i) lower soil fertility, ii) deeper soils & iii) sheltered sites



Pond in an ephemeral water course. Multi-functions – stock water, down-stream water quality, biodiversity, recreation, aesthetics.

Such areas are very evident in many gully situations. The multi-functional farm management benefits provided by structures such as trees placed in such areas can include:

- Clean water for stock resulting in better stock health and performance
- Soil conservation, thereby reducing the loss of 'natural capital'
- Shelter, shade & associated stock/crop risk reduction and production gain
- An optional crop with complementary cash-flows benefiting the financial resilience of the farm business
- Beneficial flora & fauna associated with woodlands, and
- Aesthetics

In such situations, the elements introduced into the farm system provide net positive returns, which can be appreciated when people look for integration and synthesis of those elements, relationships and properties that make up a particular farm.

Our farming future does not have to be about compromise between environmental, social and economic values. We can theoretically maintain and enhance a wide range of values within and across these domains: a win-win-win. But it may require a fundamental change in the way we think and see a farm – not as a producing machine, but as a system.

Chris Perley

Chris Perley is a forestry, land policy, and land use consultant as well as a researcher with the University of Otago's Centre for the Study of Agriculture, Food, and Environment (www.csafe.org.nz).

State of LUC and LRI in NZ

The following is a response to Norm Ngapo's letter in the July 2006 issue of Broadsheet enquiring into the 'health' of land use capability assessment (LUC) and the New Zealand Land Resource Inventory (NZLRI). Norm raises some very pertinent questions with respect to the number and age structure of experienced staff with land resource mapping skills, the current fate of the NZLRI, and the apparent lack of support and training available in this area.

Land use capability and the preparation of farm plans got underway in New Zealand with the passing of the Soil Conservation and Rivers Control Act (1941) and the establishment of catchment boards in the 1940's.

As with much of our early soil conservation programmes these plans were strongly entrenched in the US Soil Conservation Authority experience (Norton 1939; United States Department of Agriculture 1954; Klingebiel and Montgomery 1961).

From the start land use capability assessment was matched with land inventory information. This important concept has not always been followed in other countries where the land use capability system of land classification has been used.

The system and methodology was well established by the time conservation farm planning was formally adopted by the Soil Conservation and Rivers Control Council (SCRCC) in 1954, (Roche 1994). It was used for both farm-scale (Greenall & Hamilton 1954) and catchment surveys, for example in the Awheha catchment (Kellman & Kelly 1954), and the Shotover catchment (Miller et al. 1956). The inventory factors, geology or rock type (not always specifically shown on some of the earlier inventory maps), soil, slope, erosion, and vegetation cover, and an 8-class land use capability classification was adopted.

Land use capability classification is 'the systematic arrangement of different kinds of land according to those properties that determine its capacity for permanent sustained production'. The word "capability" being used in the sense of "suitability for productive use" after taking into account the lands physical limitations.

It took until 1969 before the methodology followed in New Zealand was finally formally published, (SCRCC 1969). The current methodology and criteria employed are outlined in SCRCC (1971) and National Water and Soil Conservation Organisation (1975-79, 1979). This simple and robust system has served New Zealand extremely well over the last 65 years, and continues to have currency in many regions as Norm points out.

Advantages and disadvantages of land capability classification can be summarised in Table 1. The lack of detailed soil information is widely acknowledged as the greatest factor inhibiting land capability evaluation.

The system used in New Zealand has remained

essentially unchanged to the present. One major point of difference to the USDA system is the concept of class 5. In New Zealand class 5 has been extended [from the original USDA concept] to include hill country with no erosion hazard under pastoral or forestry use, cultivable for development, but not cropping, as well as stable fertile land too steep for cultivation in addition to the USDA concept of wet soils on level sites, poorly adapted for arable crops.

The NZ Land Resource Inventory (Jessen & Harmsworth 1997) had its beginnings in the earlier land use capability surveys of both farm and catchment scales (eg. Greenall & Hamilton 1954, Ramsay 1961, Dunbar 1962, Prickett 1966; Dunbar et al 1966, Prickett & Williams 1971, Prickett & O'Byrne 1972, Williams & Harvey 1973, Nairn 1975). With the passing of the 1967 Water and Soil Conservation Act and the need to study current land use, land use capability and water management throughout complete catchments, the SCRCC decided to complete the survey for the whole country.

The initial concept was to develop a national 1:250 000 map series coverage of; Land Use Capability, Erosion, and Recommended Land Use. These map coverage's were to be based on the reduction of 1:63 360 'land resource inventory worksheets'. In the early 1970's a decision was made to also publish the land resource inventory worksheets at their compilation scale (1:63 360). This crash programme completed the 1st Edition national coverage of the NZLRI worksheets by 1979, - excluding Stewart Island and the Chatham Islands. During the 4-5 year period (1974-79) some 30 field staff contributed over 100 person years to this initial mapping and data capture phase working, from Palmerston North and Christchurch.

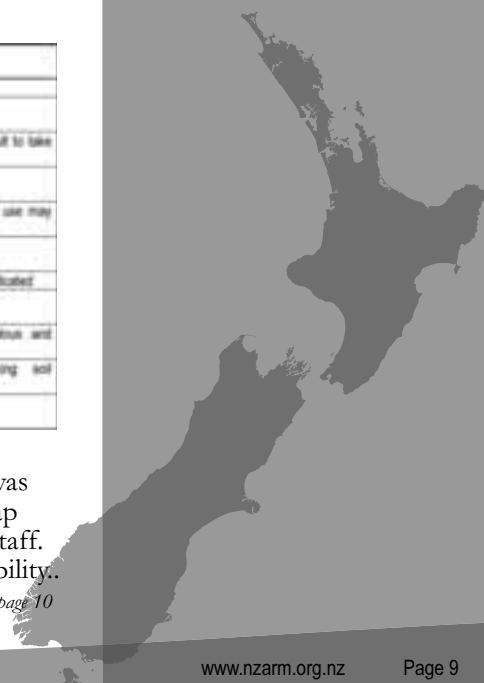
	Advantages	Disadvantages
1	Small number of ranked categories, easily understood	Subjective
2	Qualitative rather than quantitative, allows rapid assessment	Limiting factor interactions are difficult to take into account
3	Versatile, easily modified to meet local conditions	Few categories, often too coarse
4	Easy to apply	Implied rank order of potential land use may disguise true value for a specific use
5	General purpose classification, separates arable from arable	Lacks suitability for a specific crop
6	Encourages soil conservation	Lands relative monetary value not indicated
7	Reflects current suitability at existing management levels	Negative, emphasizes limitations
8	Hierarchical structure allows display at a range of levels	Original USDA class 5 is anomalous and difficult to apply
9	Widely used internationally	Assessment difficult when lacking soil information
10	Gives reasonable and acceptable results that match local opinion	

In the North Island a regional approach was adopted in order to attain the required map output rate with the limited experienced staff. This resulted in 10 regional land use capability.

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...extended legends. As a consequence there has been much confusion at the land use capability unit level, even after a correlation of the North Island land use capability units was prepared (Page 1985). In contrast, having senior staff with island wide experience in a coordinating role, resulted in a single South Island wide land use capability extended legend being compiled. Both Rod Prickett and George Goodyear had been active in soil conservation since the 1950's, and the latter had worked on and compiled parts of the lower Shotover Catchment survey report, (Otago Catchment Board 1966).

The NZLRI programme also developed New Zealand's first computer-based land resource data storage and retrieval system, LADEDA [LAnd DEpendent DATa], which was quite an achievement for the time and a precursor to the modern GIS now seen as common place.

The NZLRI provided a good example of an integrated mapping programme and it was said to be one of the first national Land Use Capability surveys at this scale in the world. It provided a unique national and regional perspective on the distribution of land use capability classes, erosion types and severity, and provided the basis of the first national vegetation map (Newsome 1987). It undoubtedly helped install a more nationally consistent approach to farm and catchment scale mapping undertaken by catchment authorities, and supported ongoing training of soil conservators and land management officers at that time.

Of the proposed 1:250 000 map series only the Erosion map of New Zealand was completed.

Post 1979 and 2nd Edition NZLRI map coverage: The 1st Edition NZLRI data was converted to 1:50 000 and the New Zealand Map Grid projection in the 1980's, and transferred to the commercial GIS package ArcInfo to operate primarily as a computer spatial database. Since that time NO systematic remapping programme has been successfully resourced through the current science funding system or any other funding system.

Limited regional remapping was undertaken in the 1980's and 1990's focused on those areas where the 1st Edition coverage's were considered to be below standard.

Second edition coverage is available for;

- North Waikato, field worked during 1980–1984, hard copy 1:63 360 worksheets available;
- Northland, field worked during 1985–1990, hard-copy 1:50 000 worksheets and an upgraded regional extended legend (Harmsworth 1996);
- Wellington, field worked during 1987–1992, mapped at 1:50 000 with an upgraded regional extended legend (Page 1995). For the Wellington region no traditional hard copy worksheets were published but the coverage is available as a GIS database.

- Marlborough, field worked during 1989–1993, mapped at 1:50 000 utilizing a newly established regional extended legend (Lynn 1996). No traditional hard copy worksheets were published but the coverage is available as a GIS database.
- Gisborne – East Coast, field worked during 1995–1998 with an upgraded regional extended legend (Jessen et al. 1999). No traditional hard copy worksheets were published, the coverage is available as a GIS database with an independent vegetation coverage.

Improvements to the land resource information with the 2nd Edition coverage include;

- More detailed land use capability classifications specifically tailored to the region.
- More detailed mapping at an enlarged scale with a consistent application of a more detailed mapping style (that is delineating smaller map polygons).
- Incorporation of newly available and upgraded soil information.
- Incorporation of new geological information and an upgraded NZLRI rock type classification (Lynn & Crippen 1991).
- Upgraded regional assessment of present erosion type and severity.
- Upgraded regional assessments of vegetation cover using a revised vegetation classification, and the identification of 'clumped' or 'scattered' distributions.

Establishment of the Land Resource Information System (LRIS): The LRIS, defined as the NZLRI, the National Soils Database, (NSD), and the digital soil surveys, was recognised as a nationally significant database by the Foundation for Research Science and Technology (FRST) in the mid 1990's. As a consequence Landcare Research as custodian of the LRIS database receives a small annual amount of FRST funding (approx. \$100k) for it's' maintenance. This funding is only enough to keep the databases available on a 'current' platform. To date no further funding has been secured for any systematic remapping programme involving the NZLRI or individual soil surveys, or to add 'new data' to the NSD.

The Land Resources programme that supported development of the LRI/LUC was reviewed by FRST in 1995/96. This review recommended that the individual themes of the LRI be separated and developed independently. FRST was and is driven by research and innovation, and wanted to see new products. This directive was implemented by development of the national digital elevation model for slope and landform modelling, LCBM (Land Cover Data Base) and EcoSat for vegetation classes, Q-map for rock type, digital soil maps and S-map for soils, and erosion carbon programme outputs for erosion. These individual layers are widely used but the original LRI and LUC have remained as mainstay data sets for a very wide range of applications.

Future developments and updating the Editors July 2006 comments

The February 2004 storm event which hit the Manawatu-Wanganui region caused significant erosion, flooding and sedimentation. Unsustainable land use of hill country was identified as a major factor contributing to this damage. Attention has now focused on the identification of highly erodible land and the application of appropriate mitigation measures. The lack of suitably skilled staff has been identified as a potential impediment to such a program. As a first step Horizons Regional Council and other lower North Island regional councils have lead an Environlink tools application, involving AgResearch, Landcare Research, and Geological and Nuclear Sciences to update the LUC handbook (Douglas et al. 2006). This application has progressed through the Environlink Governance Committee and onto FRST for 'review'. A contract is apparently on its way with work likely to start in early 2007. The possibility of a return to university-delivered courses on land resource identification and mapping is also likely to happen in 2007.

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In response to Norm's specific questions;

Q. *'Can anyone enlighten me on whether anyone is learning how to carry out land use capability (LUC) surveys any more?'*

A. Evidently very few! Garth E informs me that HBRC has run 'on the job training' for new staff. Has any other Regional Council done the same? Landcare Research has not run land use capability training courses or workshops since the early 1990's due to a lack of demand and resourcing from regional councils and industry. We have continued to provide such training to land resource officers from PNG, Indonesia and Fiji as part of our International Business Group activities.

Q. *'Is LUC used much by Regional Councils any more? If not, why not? What has replaced it, or is it not considered necessary any more?'*

A. Ok you Regional Council folk know best on how to provide answers for these three questions and forward to regional correspondents. Please fill in the attached table and forward it to the Editor (see page 15)

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Q. *'... should we be updating the NZLRI and re-instating LUC training?'*

A. Make your feelings known to the Regional Council research advisory group to hammer home your wishes to FRST. The future and well being of land use capability and the NZLRI is in your hands. The training facilities and staff are available at Landcare Research but this experience is rapidly diminishing.

Ian Lynn & Allan Hewitt
Landcare Research
PO Box 40
LINCOLN

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Regional roundup

TARANAKI

Four keen men from Taranaki ventured down to the resource management under stormy skies conference in Christchurch recently. Everyone had a jolly good time and thanks to Chris Phillips for his part in the organisation. We could have taken \$5 off Bob McDavitt at the conference dinner but none of us were game enough to challenge the weather guru's forecast. That is, that the wind would drop by sunset and a flag we could see out the window would stop waving in the wind. Still we always thought weather forecasting was an art and not a science!

STOP PRESS

Dex Knowles officially retires on the 5th of February 2007. This will mark 51 years in the public service and 16 years at Taranaki Regional Council. We welcome Rob Phillips from Environment Canterbury who will become Director of Operations. Dex will continue on as Special Projects Manager (part time).

Darren Scown has been busy commissioning new riparian plans through targeting catchments. Having done this task before, it can be draining discussing/debating with farmers the merits of having a plan. In the end, over 95% usually agree – sometimes just to stop the flow of information (nagging). Otherwise, Darren is getting geared up for his annual pilgrimage to the Cemetery Circuit race in Wanganui on Boxing Day.

Kevin Cash has been learning the ropes about poplar and willow nursery production from Darren Scown. Unfortunately, just when we were about to sign the nursery lease for a new term, the property is now for sale so we are looking for a new site. This means we won't have our own supply for a couple of years. He is also getting into building mode this summer when he starts on his new house in February.

Jason Loveridge will be taking a 5 month break in May to spend time in Switzerland with family. Jason has been busy with hill-country farm plans, discussion groups and everything else.

Don Shearman has been busy putting a plan together to upgrade our early farmplans into the current GIS format. He still manages to remove the fur off the odd jumbuck or two just to remind him not to give up his day job. Golf is definitely the preferred option although this is not happening much either. Former Land Management Officer and now master's student, Kara Pranker is also an active member of the Rotokare Trust. Funding has been finalised to build a predator-proof fence around the perimeter of

Lake Rotokare to protect native flora and fauna (separate report in next issue). This 15ha lake is a natural beauty set in a 226 ha, natural amphitheatre of native bush. Kara will also be doing some part time work for us updating some of our early farmplans into the current GIS format.

Flood relief package: Taranaki is over the flooding season for awhile we hope. After the main event from July 5-7, farmers in the upper Moumahaki Catchment were unlucky enough to cop 2 more events in August and October, resulting in more silt deposition on their flats. After the July event, government officials examined the damage and provided assistance through Enhanced Taskforce Green labour. Labour was for the construction of boundary fences only. This is significantly less than the Government-sponsored Agricultural Relief Programme after the 2004 event which provided financial assistance for all fence repairs, track clearance and bridge and culvert repair. A request was made to Council on behalf of 23 landholders in the Moumahaki Catchment, seeking assistance for relief. On the 9th August 2006, Council approved a relief package consisting of up to \$8000 for the supply of land stability planting material and up to \$10,000 for a 50% grant towards the cost of grass seed. Land stability planting material consists predominantly of 3m poplar and willow poles and grass seed for revegetation of slip erosion debris trails - not for the re-sowing of flats covered in silt. Land Management Officers have been working closely with affected farmers in organizing the acquisition and distribution of poles and grass seed. Assistance with correct pole planting techniques and siting has also been provided.

Pasture recovery discussion day: Hillcountry officers organised a pasture recovery field day in the Moumahaki area recently which was well received. A group of 10 farmers in the catchment affected by 3 major rainfall events over 2006, July, August and October attended a field day on flood recovery Murphy's on Omahina Road, Waverley. This property had received over 200mm of rain in 48hrs in July and 180mm of rainfall in October in 48hrs. Damage to the property included soil slips, major track damage and silted river flats. Land Management Officers lead discussion on options and methods for clean up and re-establishing production on affected land and also some ideas for reducing the risk initially. The local farmers contributed with valuable experience from past events and Grant Payton from Agri-seeds had some technical advice on re-grassing slips and flats from experience after the 2004 storm.

Don Shearman

OTAGO

Well, it's been fairly interesting being on the coast of Otago this last month – watching ice bergs go by. Several have been visible from the Otago Peninsula as well as other coastal spots. Quite an eerie feeling to see such majestic lumps of shinny white ice sitting so close to land. It's also turned the skies into a major highway with a constant stream of planes and helicopters heading out the "bergs". Rest assured, we are not totally surrounded by ice, and we still see the sun!



In terms of our members in Otago, here's a bit of a catch up from some of our members (and my apologies to those members I did not catch up with – I will look forward to catching up with you next time).....

For the last couple of months Rachel Ozanne has been working on the State of Environment report for regional water quality - to include both spatial and temporal variations in water quality and macro invertebrate data. This is now in draft form - so Rachel reckons she deserves a Christmas break! The other major achievement for Rachel has been getting the Council's contact recreation monitoring results up on the website - as of this week. Other than that it's the usual responses to data requests from the general public, technical comments for consents and a myriad of other essential, yet unsung, jobs!

Nicola McGrouther has been busy working on the deer focus farm in South Otago with farmer Grant Cochrane, AgResearch, Wrightsons and the deer industry. The latest Otago-Southland deer focus farm newsletter (and parasite supplement) came out in October and can be downloaded at www.deerresearch.org.nz

Bruce Monaghan has been doing a lot of work with low rate k-line effluent systems. Dairy units on pallic soils in South & West Otago with mole and tile drain systems are gradually changing over to low rate K line systems from traditional travelling irrigators. The productive benefits of effluent applied through K line, due to less bypass, is the signal for this change. Most systems will need to be built as retrofits of the existing set up but the system has been included on new dairy conversions as well. Furthermore farmers are now able to access online soil moisture reading from an aquaflex unit that has been set up with cash and kind support from Dairy Insight and AgResearch. The information is displayed on a colour coded chart which provides guidance on the BMP according to soil moisture reading. This allows dairy units to delay application when soil moisture are at or near field capacity and recommence when soil moistures have dropped sufficiently to provide the required deficit in the top 200mls. To view the site Google "Clydevale soil moisture" and you will go straight to the graph.

Have a 'cool' summer!
Nic McGrouther

NORTHLAND

The Land Management Team at the Council has been expanded over the last six months to cope with the demands of the Clean Streams Accord. Debbie Johnson and Kelly Fogden, two of the new members, as well as being involved in general land management extension work are concentrating on promoting the Clean Streams Accord. Kate Banbury is concentrating on assisting farmers within the catchment of Lake Omapere to develop environmental farm plans and works closely with the managers of Meat and Wool NZ Monitor Farms to implement and promote their plans. She is also educating agricultural consultants of various forms on the advantages and limitations of nutrient budgets. Vincent Lane, who has now been with the Council for twelve months, is networking with farmers and land managers within the catchments of estuaries and harbours where oyster farms are at risk from land-based activities. He and other staff are finding that most farmers are willing to take action; they just need advice on what action and how best to go about it. Lisa Forster has also been with us for a year and is making great inroads into recording the biodiversity of Northland. I am not sure how Team Leader Bruce Griffin keeps up with all these women in his Team.

Doug Foster and Peter Wiessing in our Kaitiāia Office have a much more varied workload. Doug is assisting with the river management schemes the Council has inherited over the last couple of years, advising on weed control methods and organising contractors to undertake the work. Peter covers the full gambit of Council work but is well respected for his advice on land development and forestry management. Kathy Mortimer is semi-retired, working only three days each week, although

she always manages to squeeze a bit more in. She has tidied up the Environment Fund procedures and she and her team have managed to allocate the over \$500,000 budget for biodiversity protection and enhancement work for this financial year. For the balance of the week Kathy is doing and selling her art work.

Bob Cathcart, a member of the NZ Society of Soil Science for over 40 years, managed to attend his first NZSSS Conference in Rotorua at the end of November. It was a very well planned and presented conference; well done SLURI, Rotorua Energy Charitable Trust, EBoP, EW, ENSIS, MfE, Ballance, Agrissentials, and Massey. What was so amazing was the recognition of the need for a whole-farm and whole-catchment approach to erosion and sediment control and to nutrient contamination of rivers and lakes. Why hadn't someone thought of this earlier?

Bob Cathcart

WELLINGTON

WE SURVIVED, in fact we did exceptionally well getting through what turned out to be a very difficult winter weather wise. Whilst the wet conditions meant easy planting, access to planting sites was hindered by constantly moving hillsides. The upside is that with all the rainfall the plantings are looking very good at this stage despite the NW wind runs we have had.

It really is paradise here in the Wairarapa though!!

Things in the GWRC Catchment Management Division are starting to heel in. We have a new manager in Dave Cameron and Land Management is now its own department – we are on the way to the top! The new structure is almost complete, a 4th hill country LMO has been approved – all we need now is some more funding.

Stan Braaksma had 4weeks in Kenya mountain biking and as a general tourist, it was the most expensive training regime yet for Taupo, but knowing you have a lion behind you does wonders for the speed training, you will have to ask him how he went in Taupo.

Don Bell continues to mentor the Papawai Stream Care Group who are making steady progress in their second year of their restoration programme. The intention is to pilot an ICM approach to restoring the mauri of the stream, initially as a jointly sponsored programme by the Papawai marae and Greater Wellington but steadily involving other funding providers. In recent weeks the group has registered the Papawai Community Trust to enable this process to commence. The Trust will have a governance role over projects within the catchment associated with the bigger sustainability picture - social, economic and cultural, as well as the present focus on the riparian environment

Don Bell continues to mentor the Papawai-

Continued over the page...

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NZARM is chaired by an Executive Committee elected each year ('the Exec').

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Secretary: Tabitha Manderson, C/- NZARM, Private Box 5280, PALMERSTON NORTH. Ph. (06) 952 2976 Email: tabitha.anthony@horizons.govt.nz

Elected Committee: Glen Sutton, 82 Hallet Road, RD 2, WHAKATANE. Ph (07) 304 8457 Email: glenn.sutton@clear.net.nz

Co-opted Committee: Murray Harris, Land & Forest Consultants Ltd, PO Box 5990, Moray Place, DUNEDIN. Ph. (03) 476-6251 or cell 021 616-605 Email: landfors@ihug.co.nz

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CANTERBURY
 (no representative)

NELSON
 (no representative)

WESTCOAST
 (no representative)

CONFERENCE 07

NZARM holds an annual conference to promote new learning, information sharing, networking, and a sense of community in the field of resource management. Venues alternate between the North and South Islands, and one of NZ's 16 regional authorities will usually host the conference itself. November is most favoured as the time to hold the conference.

This year's conference will be held in the Manawatu/Wanganui. It is likely at least the first day or two will be based in Palmerston North. Dates are yet to be finalized, but the exec expressed a desire to have it in late September. Watch this space and more details will follow. In the meantime, if you have any ideas or particular interests you would like to see a focus on, the organizing committee will happily consider them. The exec would like to see our own members doing many of the presentations. For any ideas or comments please email Tabitha Manderson using TabithaA@xtra.co.nz

MEMBERSHIP

Anyone is welcome to join NZARM, particularly if you have an interest in sustainable resource management. Prospective members can apply anytime, by obtaining a registration form from the website (www.nzarm.org.nz) or the NZARM secretary. Candidates are nominated by two existing members (contact the secretary if this is a problem).

Annual subscription is \$40 if paid before the 10th July. Late payments incur a strictly enforced penalty fee of an extra \$20 (late payments extend administration requirements and end up costing the Association money). All membership enquires to:

The Secretary
C/- NZARM
Private Box 5280
PALMERSTON NORTH.

As a member of a registered association, members must inform the secretary in writing when they cancel or let their membership lapse. Otherwise you will continue to be billed for the annual membership subscription.

CPRM

NZARM offers the Certificated Practicing Resource Manager (CPRM) accreditation to members. This is a graduated certification system based on three levels, with each level recognising current degree of professional development according to experience & qualifications. Continuing professional development is accredited through an annual practicing certificate. CPRM is one of the few ways resource managers can get their experience recognised as an endorsed qualification (according to Professional Standards laid down by AIAST & NZIAS).

Full details including registration forms available from the secretary or the NZARM website (www.nzarm.org.nz).

Stream Care Group who are making steady progress in their second year of their restoration programme. The intention is to pilot an ICM approach to restoring the mauri of the stream, initially as a jointly sponsored programme by the Papawai marae and Greater Wellington but steadily involving other funding providers. In recent weeks the group has registered the Papawai Community Trust to enable this process to commence. The Trust will have a governance role over projects within the catchment associated with the bigger sustainability picture - social, economic and cultural, as well as the present focus on the riparian environment

Rob Harrison has had another 2 week stint back in the mighty Wairarapa to help get some more sustainability plans completed. I think he must miss us?

Faith Barber has decided to leave us for EW in Taupo, she has taken the position of Agricultural Advisor and will begin the task of implementing the changes to the way farming systems will operate around the lake catchment. She also got engaged to a forest manager with PF Olsens in the Wairarapa. A replacement for Faith has almost been made and hopefully they will start early in the New Year.

Chris Ladd is 6 months into parenthood and can see the light at the end of the tunnel - it's called the Christmas holidays.

Doug Hicks has been back doing more LUC mapping for us.

Our works unit made up of Kevin Burdan, Phil Cooper and Nick Pratt (who is now on a permanent contract), are working flat out with silviculture and river works. There has not been much respite for them since winter and they all seem to be looking forward to the holidays.

Peter Cameron has his retirement looming and they seem to have finally decided on a date which is the 30th May. The process of finding his replacement begins in the early New Year. We are all praying that this is a quick process.

Michelle Bird has a baby on the way and a fixed termed replacement is required from April.

As you can see things are constantly changing but at least the hills will always be there.

To everyone have a happy and safe Christmas and we will see you in the New Year.

I have a message for the other NZARM members in our area, can you please drop me an email with the latest contact details I have had returned emails when trying to contact them. Contact: chris.ladd@gw.govt.nz

Chris Ladd

BAY OF PLENTY

Ross and Dell Bawden have, with the help of Willy Shaw's team, replaced 900 pine trees at Tauriko (Tauranga) with 5,500 natives. It is a very expensive exercise which is no doubt a significant reason why there are not more private plantings - more the pity.

John Whale

Secretary's desk

Happy New Year all NZAMers. Not much to report from the secretaries desk at this point, the exec had a brief phone conference late last year where last year's conference was debriefed and this year's conference was discussed (more on that shortly). As discussed at the AGM the organization continues to be in a healthy state financially. Building on the success of last year's regional meetings, expect to see more regional meetings in the coming year. We will be having a face to face meeting in February where the potential new look Broadsheet, this year's conference and the website will be up for discussion.

New members include Annie Perkins, Haydn Read, and Geoff Smith.

Just a couple of points, those of you who have your employer pay your membership fee, please, please ensure that the remittance slip or correct invoice number is included with payment.

Trying to keep even a small database up to date is an ongoing job, and a few members have not updated their address and are now MIA! If you know any of the following people, maybe ask them to send me an email if they want to remain an NZARM member -

WAYNE BETTJEMAN
JONATHAN FINDON
VANCE FULTON
SIMON PARK
BOB ZURR
GRANT BURKE
NICOLA CLARK
ALLAN HUGHES
EMILY O'DONNELL
STEVEN VEIX

Continued from page 7

easily followed, with relevant linkages, citing good practice (and bad), and most of all, instructive. It should be aimed at all forms of rural land use. But it should be of interest equally to women as to men, as women today are at least as powerful a force in landcare as men. The difference – and it's a complimentary one – is that they are more biased towards the emotions; biodiversity, amenity, and – the neglected aspect of landcare – landscape.

Essentially then, it is up to the land owner/manager to get on with it. This they will do.

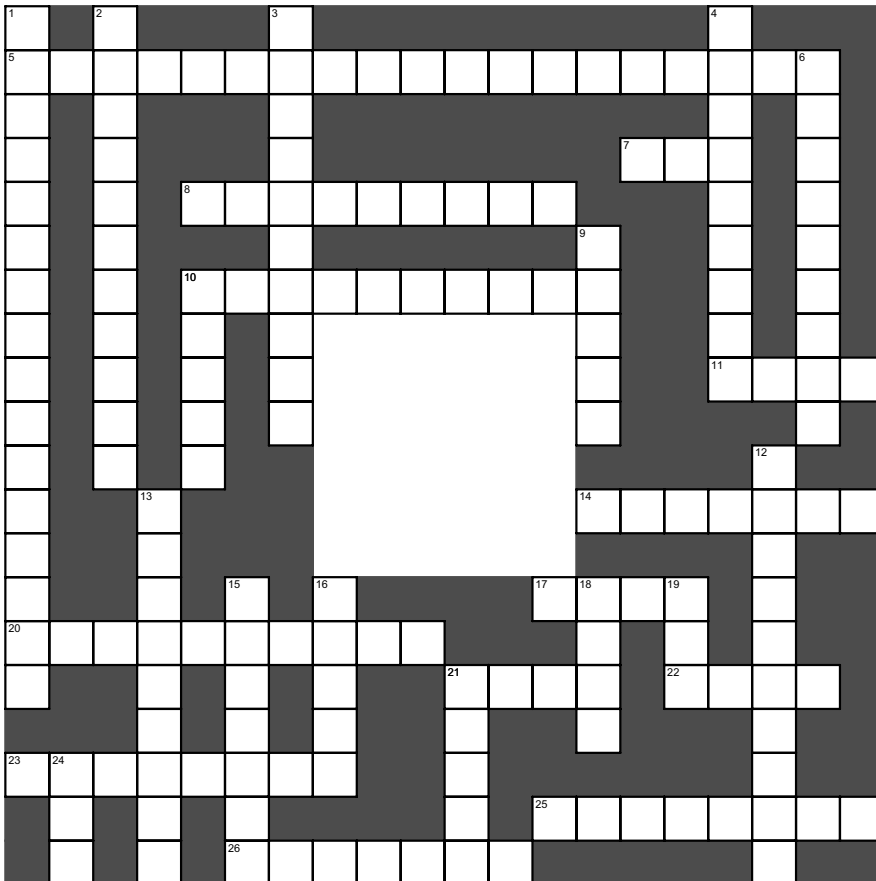
The environmental challenges that confront us over the next generation will be far greater than those which we have striven, with mixed success, to meet over the last. To do so we will need to be motivated by our imagination and vision, and to harness the force of ideas and imagination. This is unlikely to come from the Landcare Trust where, at least in my three-year (1997-2000) experience with it, had caution as its watchword. Indeed, to some extent this has been my experience with the Hawkes Bay Regional Council (which I am sure is not untypical of other councils, and certainly of central government.) Instead we must give free rein to the enthusiasm and energies of the private practitioner. Just give him/her the intellectual tools to do the job.

Ewan McGregor, 2006

Continued from page 11

Regional authority	Is LUC used much by Regional Councils any more?	If not, why not?	What has replaced it, or is it not considered necessary any more?
Northland RC			
Auckland RC			
Environment Waikato			
Environment BoP			
Gisborne RC			
Taranaki RC			
Horizons			
Hawkes Bay RC			
Greater Wellington RC			
Tasman DC			
Nelson CC			
Marlborough DC			
West Coast RC			
Environment Canterbury			
Otago RC			
Environment Southland			

Sponsor's Crossword



Across

5. Al Gore's latest media offering (3 words)
7. Persistent soil contaminant originally mixed with fertiliser to control grass grub & porina
8. NZ's very first regional council (1988!)
10. NZ's smallest regional authority by area (incl. unitaries, 2 words)
11. Horizons regional council's latest soil conservation initiative
14. Hugh Hammond _____ (grand daddy of soil conservation)
17. NZ's 'wealthiest' regional council (abbreviated)
20. HH Bennet's dictum that every acre should be used within its _____
21. Stuff that falls off hills when it rains
22. PCE publication - GROWING FOR _____
23. Material filling up Bay of Plenty estuaries
25. NZ's first Chief Soil Conservator
26. Highly mobile nutrient lost by leaching

Down

1. NZ's premier soils research organisation (2 words)
2. NZARM president (two words)
3. Funding available to regional authorities for getting CRIs to do research for them
4. Stoats, weasels & ferrets
6. Aggressive high country weed
9. Plastic sleeve put around poplar poles for protection against stock
10. NZ's very first nationwide digital mapping database (abbreviation)
12. NZARMer recently awarded the NZ Order of Merit medal (2 words)
13. HOLD THIS LAND author
15. Number of regional authorities (incl. unitaries) in NZ
16. Number of CLASSES in the LUC classification
18. Famous 1988 storm
19. What cattle do to wet soils
21. Type of surface erosion
24. Place in the Hawkes Bay hit hard by 1938 flood, considered to have started the NZ soil conservation movement

Letters

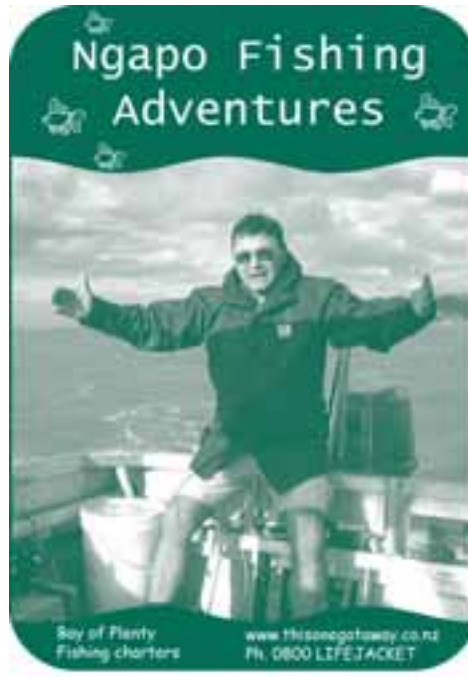
LRI & LUC mapping

Dear Mr Editor

I see that Norm Ngapo is bemoaning the fact that NZ Land resource Inventory and Land Use Capability maps are not being updated any more. On ya Norm. I sweated blood producing them for Gisborn East Coast and Northland as part of Charlie Harris's team back in the 70s and would love to see them kept up to date. The simple fact is that they were considered not to be cool any more by top level govt official dudes. Problem is they never got around to replacing them with alternative systems! So people in the know keep going back to them. I see them to be just as relevant or even more so than ever.

I am just about old and decrepit enough, (as you put it), to get back into it myself again. I am particularly proficient on detailed coastal surveys, (ref Bob Cathcart). Payment may not be necessary, your hospitality and access to your best fishing spots should be sufficient reward Norm. What do you say?

Cheers,
Dodgy Lee Wha lee



Sponsors

Newsletters are a time consuming and expensive to produce. NZARM welcomes expressions of interest regarding sponsorship of this publication. Contributions need only be small, and possibly on an annual basis to minimize administration costs. For further information please contact the Editor.

Next issue...

Next issue is for March 2007. At this stage it is likely to have a strong Land Use Capability Classification theme.

Letters to the editor policy

We encourage reader participation and welcome diverse or varied opinion, but reserve the right to decline inappropriate material. Because of space limitations, all letters should be no more than 300-500 words in length. Letters become the property of NZARM on publication. We will not knowingly publish information that is factually incorrect. You can send us letters via email or regular mail to the editor:

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