LISTENING TO LANDHOLDERS: APPROACHES TO COMMUNITY NATURE CONSERVATION IN QUEENSLAND

Joanne Millar

Team Leader, Community Nature Conservation
Queensland Parks and Wildlife Service
PO Box 155, Brisbane Qld Australia 4002
ph (07) 3227 7919 fax (07) 3227 7676 Email: joanne.millar@env.qld.gov.au

ABSTRACT

The Queensland Parks and Wildlife Service (QPWS) established the Community Nature Conservation (CNC) Extension Network in 1998 to assist landholders, community groups and local governments with nature conservation planning and management on private and leasehold land in Queensland. The network now includes 17 regional extension officers, six Bushcare facilitators, seven Land for Wildlife coordinators and seven NatureSearch coordinators. CNC staff work across 12 bioregions with diverse ecosystems and varying levels of landholder commitment and capacity to manage and protect areas of habitat.

Nature conservation on private and leasehold land in Queensland (more than 90% of the state) has become critical for the survival of many plant and animal species, and their associated ecosystems. The conservation status of Queensland's bioregional ecosystems currently shows that 32% of the total number of regional ecosystems are either 'endangered' or 'of concern'. The new Vegetation Management Act 1999 protects 'endangered' ecosystems and those vulnerable to land degradation, and seeks to voluntarily protect 'of concern' ecosystems through a regional vegetation planning process. Only by working with landholders to encourage and enable them to retain or sell high conservation value areas, and manage other areas sustainably can Queensland prevent further loss of its natural heritage.

In 1997 the ANZECC Working Group on Nature Conservation on Private Land identified best-practice initiatives and principles for achieving ownership and involvement of landholders in nature conservation on private land. These include building relationships with landholders; incorporating best practice nature conservation into existing extension and planning programs, and focusing on outcomes, monitoring and evaluation. The QPWS Community Nature Conservation extension program has developed an integrated framework for extension delivery based on these principles and meeting a range of client needs.

In working with landholders and the community it is important to recognise the social, historical and financial context in which they live, and factors influencing their willingness and capacity to embrace conservation. Market research was conducted in 1999 using focus groups and a phone survey of 716 landholders across 12 industries to give a statewide, regional and industry perspective on issues affecting landholders in relation to nature conservation on their properties, their information needs and communication preferences.

Findings revealed that landholders require access to practical, locally relevant information using best practice examples as well as financial assistance to carry out integrated nature conservation practices. Threats to production such as weeds, feral animals, tree regrowth and water quality were considered more important than habitat decline or endangered species, although there was considerable interest in wildlife issues. The challenges ahead for Community Nature Conservation in Queensland are to demonstrate the links between biodiversity conservation, threatening processes and farm viability; increase the availability of incentives; and build on existing landholder stewardship and experience.

INTRODUCTION

Biodiversity conservation on private and leasehold land in Queensland has become critical for the survival of many plant and animal species, and their associated ecosystems. Only 4.1% of Queensland's land area is under the protected area estate, leaving 96% of the state (of which 70% is leasehold) managed by private landholders or state forests. The conservation status of Queensland's 13 bioregional ecosystems currently shows that 32% of the total number of regional ecosystems are either 'endangered' or 'of concern' (ie. less than 10% and 30% remains in pre-European condition respectively) (Sattler and Williams, 1999).

The new Vegetation Management Act 1999 protects 'endangered' ecosystems and those vulnerable to land degradation on freehold land, while seeking to voluntarily protect 'of concern' ecosystems through a regional vegetation planning process. Leasehold and other state land is managed under the Land Act 1994. Since the establishment of the Queensland Parks and Wildlife Service (QPWS) in 1975, biodiversity conservation strategies have included land acquisition and planning, regulatory controls through the *Nature Conservation Act 1992*, and voluntary covenants or *Nature Refuge* agreements (Wells et al., 1993). These mechanisms have been largely applied to areas of high conservation significance and involve a very small proportion of highly committed landholders and local councils.

Advances in vegetation mapping and regional planning strategies have increased awareness of the extent of habitat decline and fragmentation on private land and the need to protect and enhance remnant vegetation across all regional ecosystems. Only by working with landholders to encourage and enable them to retain or sell high conservation value areas and manage other areas sustainably, can Queensland prevent further loss of its natural heritage.

QPWS has for many years been actively involved with landholders and community groups through its Park Neighbours program and the individual efforts of interpretative officers and rangers. However, QPWS lacked the resources to provide a strategic, ongoing regional advisory service across the state (Seipen & Stone, 1997). In 1998, the Service established a Community Nature Conservation extension network and became the lead agency for Bushcare (a major program of the Natural Heritage Trust) to support landholders, community groups, local government and industry to integrate nature conservation with other land uses.

This paper outlines approaches to Community Nature Conservation in Queensland based on market research and extension officer experiences of landholder requirements and some of the challenges that lie ahead.

LISTENING TO LANDHOLDERS

The ANZECC Working Group on Nature Conservation on Private Land identified best practice initiatives and principles for achieving ownership and involvement of landholders in nature conservation on private land (ANZECC, 1997). These include building relationships with landholders; incorporating best practice nature conservation

into existing extension and planning programs, and focusing on outcomes, monitoring and evaluation.

In working with landholders and rural communities to build relationships, we believe it is important to recognise the social, historical and financial context in which they live, and factors influencing their willingness and capacity to embrace conservation. Regional extension staff live and work in rural communities where they gain an intimate understanding of these factors whilst endeavouring to tailor their extension approaches to individuals and groups. From the rangelands of western Queensland to the wet tropics of the north, they work with a huge diversity of landholders, local governments, industries and community groups whose level of awareness and commitment to nature conservation varies, as does their capacity to manage and protect areas of habitat.

Market research was conducted in September 1999 using a statewide phone survey and regional focus groups to gain a perspective on issues affecting landholders in relation to nature conservation on their properties, their preferences for information and communication methods (Millar et al., 2000). The phone survey of 716 rural businesses across Queensland was carried out by the Department of Primary Industries Call Centre, with 12 industries represented. Focus groups and individual interviews with industry representatives were carried out by QPWS and Ice Media Pty Ltd as part of a project to develop a multimedia CD ROM on balancing production and conservation.

The predominant industries were grazing and sugarcane, followed by horticulture and mixed grazing/cropping. Minor industries included cropping only, dairying and alternative enterprises such as aquaculture, organic crops, tea growing, emus, deer, alpaca/llama, coffee, herbs, mushrooms, nuts, teatree oil, vineyards and goats. The majority of landholders managed less than 500 ha of land, followed by those managing between 1,000 and 10,000 ha and more than 10,000 ha.

Threats to nature conservation and productivity

The three most important landholder issues for nature conservation on properties were feral animals, weeds and problems with wildlife. The next most significant issues were soil erosion, tree management and water quality. Issues such as loss of habitat, endangered wildlife species and vegetation communities, lack of fire management, and property planning and management for nature conservation did not rate highly. Threatening processes are of major concern to landholders and need to be addressed in relation to their impact on nature conservation and production. Tree management is a key issue for landholders in Queensland and provides an excellent forum for discussing the links between farm production and conservation.

There were slight variations in the issues raised by producers from different industries which reflected the problems associated with their enterprises (eg crop damage from birds and bats, weeds in grazing areas etc). Despite the lower responses to wildlife conservation issues in the survey questions, many producers expressed their support for looking after wildlife at the end of the survey when making general comments.

"At times wildlife can be destructive but we need to look after it. We are very keen on birds, and we don't have very much trouble with wildlife. I'd hate to see the birds wiped out."

"I think that all wildlife has to be protected. We told our children that if they shoot anything they have to eat it. That soon cures them!"

Balancing conservation and farm viability

Many respondents strongly expressed that striking a balance between farm profitability and nature conservation was important. Nature conservation could not be achieved at the cost of their livelihood. A few producers painted the reality of their struggle to make a living and inability to focus on conservation when they are trying to survive in their industry.

"Just that at the end of the day, everything comes down to the dollar and trying to make a living. In the sugarcane area at the moment we are struggling to stay afloat, so conservation is the last thing on our minds."

Landholders are looking for economic solutions to better integrate production and conservation. Landholders indicated that they wanted best practice examples, including benefits and costs, and information on future trends such as carbon credits. This level of interest demonstrates that landholders are serious about addressing nature conservation if they can see real benefits in terms of profitability. If conserving wildlife and flora could increase or add to their business, they are more likely to be proactive in conserving biodiversity (e.g. eco-tourism, integrated pest management -IPM, bush products).

"In the long-term we need to integrate [nature conservation] with farming activities. Nature conservation must fit in with primary production and vice versa. That's the only way it will work and that's what I try to do."

Economic information on how to profit from nature is desperately needed. There is clearly a role for extension in developing projects and case studies which can demonstrate direct and indirect economic gains to be made from ecologically sensitive production systems and alternative enterprises. Opportunities to take advantage of market niches for environmentally friendly products and accreditation schemes need to be explored and promoted.

Demand for advice, labour and financial assistance

Landholder information requirements for nature conservation rated highly for advice and assistance, and financial incentives. This was followed closely by best practice examples from landholders, future trends (eg carbon credits), regional ecosystems and their conservation status, benefits and costs of nature conservation practices and labour assistance available. About half the landholders interviewed were interested in property management planning for nature conservation, alternative enterprises, and knowing about birds and animals on their properties. How to create and manage wildlife habitat was the least popular topic for information, although it still attracted a 40 percent response.

Interest in nature conservation information and assistance did not vary significantly between industries. The only differences noted were a slightly higher interest in information on alternative enterprises amongst dairy producers. This could be a result of producers considering their options with deregulation of the dairy industry in Queensland.

The significant demand for advice and assistance reinforces the need for nature conservation extension and incentive programs. The request for financial assistance needs to be urgently addressed as it is a major barrier to achieving conservation on private land (Binning and Young, 1997).

"Financial incentives are good. They should be more easy to access than they are at the moment. The system makes it very difficult for those trying to do the right thing."

"We found out that we could get some financial assistance to fence off a sandy ridge area of our property to make it a wildlife reserve. We never knew these services existed."

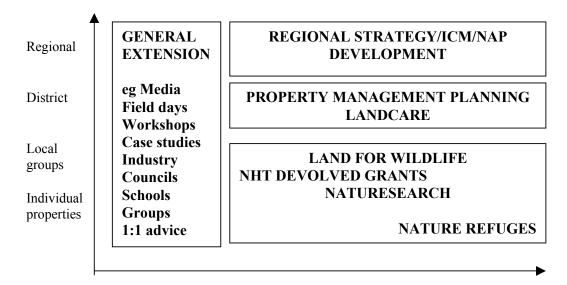
COMMUNITY NATURE CONSERVATION APPROACHES

The establishment of a Community Nature Conservation extension service in Queensland has filled a vital and growing need for landholder education and assistance with biodiversity issues. An integrated framework for the delivery of Community Nature Conservation in Queensland has evolved to provide a range of programs and services to suit different levels of landholder interest in and commitment to nature conservation (see Figure 1).

Extension strategies include:

- General extension to increase landholder and community awareness and understanding of nature conservation and to build their knowledge, skills and capacity to effectively manage wildlife habitat. (e.g. field days, workshops, courses, talks and surveys)
- Integrating extension delivery with other programs to incorporate biodiversity into sustainable land and enterprise management. (e.g. Landcare, Property Management Planning, Vegetation Management, Industry extension)
- Ensuring biodiversity elements are included at district, regional and state planning levels (e.g. regional strategies, local government and catchment plans, establishing links with protected area management).
- Giving recognition and support to landholders and councils who are committed to nature conservation (e.g. Nature Refuges, Land for Wildlife, Case Studies);
- Encouraging community involvement in conservation activities, including fauna/flora monitoring and habitat restoration (e.g. Bushcare, NatureSearch)

Figure 1 Community Nature Conservation Framework



Increasing community and landholder commitment to nature conservation

Some key issues emerged from the market research in relation to improving extension delivery and communicating with landholders about nature conservation on private land.

Landholder stewardship and experience

A major theme to emerge from the market research was that landholders have a very strong sense of stewardship and pride for the land and resources they manage. Extension approaches need to acknowledge landholder stewardship and experience in both individual and group extension. The success of the Landcare and Land for Wildlife programs have largely been due to recognition of the strength of landholder stewardship in Australia and support for on-ground activities, education and group formation (Campbell, 1994; Platt and Ahern, 1995; Curtis and DeLacy, 1996; Petrie, 1999). Landholders are interested in wildlife, whether it is problems caused by wildlife or observing wildlife around the farm. It is important to capitalise on landholder interest in wildlife and ecological processes by working closely with other extension programs and park plans where opportunities can arise to discuss wildlife issues in the context of enterprise management or natural resource management.

Wildlife monitoring programs such as NatureSearch can involve landholders and volunteers in discovering wildlife on their properties and in their district. Nature Refuges (see Box 1), Bushcare projects, Land for Wildlife and species recovery programs also create opportunities to bring landholders, scientists and local naturalists together to share knowledge and experiences with wildlife.

Box 1 Nature Refuges

Nature Refuges are areas of high conservation value protected under the Nature Conservation Act 1992. Nature Refuges are voluntary conservation agreements negotiated between a landholder and QPWS to protect significant natural areas while allowing sustainable use. The agreements are generally binding in perpetuity, and are registered on title. Regional extension officers carry out property assessments and develop management agreements with landholders. Most new agreements have been a result of the work of regional extension officers in approaching landholders and/or responding to landholder interest. There are currently 55 declared Nature Refuges, 11 awaiting declaration and 19 agreements under negotiation bringing the total area to approximately 98,600 ha.

Preferred communication methods

In terms of communication methods, the market research results and extension experience show that landholders prefer locally relevant and available information. Best practice examples using case studies (see Box 2), on-farm visits and success stories in local papers or industry journals are the most popular ways to learn about nature conservation and how it relates to farm production (Dorricott et al., 1997; Millar et al., 2000). Discussion groups can be effective in drawing out landholder_experiences and values, and building on current practices and knowledge of their natural environment (Woods et al., 1993; Millar and Curtis, 1999; Seipen and Stone, 1997).

Box 2 Habitat Case Studies

The Habitat Case Studies project funded by the Natural Heritage Trust employed QPWS officers in Roma to demonstrate how landholders in western Queensland are maintaining wildlife in conjunction with different enterprises on their properties. Ten properties were selected for the project. Fauna surveys were conducted in conjunction with family members and field days were held for district producers to attend. Landholders shared their local knowledge of vegetation and wildlife and many discovered species they never knew existed on their farms. For example, the first case study looked at the values of retained brigalow shadelines on a wheat farm. Another case study examined fauna and vegetation management issues on the Mitchell Grass Downs on a sheep property.

Although less popular in the survey, the use of computers, videos and training courses may become more widely used in the future, as more producers embrace information technology and training opportunities through programs such as Farmbis (ABS, 1999). It will be important for landholders to access up to date and useful information from websites. CNC has established information on the Qld EPA website and has sold 185 copies of a multimedia CD ROM in five months to landholders, libraries, councils, landcare groups, environmenal education centres and schools.

Developing partnerships

Developing partnerships with other agencies and non-government organisations has enabled nature conservation extension to become integrated with other land use issues and for extension staff to work collaboratively together. Extension services in Queensland, like the rest of Australia, have historically been associated with agricultural production or soil conservation agencies (Millar, 1999). It is important to establish links with traditional extension services so that nature conservation principles and practices can be incorporated into enterprise management, financial planning, natural resource management and family succession issues.

Opportunities arise to collaborate with producing extension materials, running joint field events and training workshops. Examples include delivering workshops with Property Management Planning (*Future*profit) groups and DNR vegetation management officers, conducting field days with Landcare groups, local government and industry extension representatives and joining Greening Australia Bushcare support staff in assessing properties for devolved grants or Land for Wildlife registration. In some regions, extension staff are involved with Indigenous Land Management officers and projects or World Wildlife Fund projects.

Understanding biodiversity in the context of farming systems and how different people value biodiversity is a major challenge to extension officers across all agencies and non-government organisations. Only by working together towards a common understanding of biodiversity will changes in cultural attitudes and on-ground practices occur. A Biodiversity in PMP project is aiming to do this through training and the use of industry case studies (see box 3).

Box 3 Profit with Nature

A survey of *Future*profit facilitators was conducted to determine the extent biodiversity elements were being included in PMP workshops ways to improve delivery and training. A training program was developed by Jane Blackwood, Biodiversity for PMP officer to bring together QPWS extension staff and *Future*profit facilitators in a series of workshops held at Bundaberg, Dalby, Charleville, Charters Towers and Rockhampton. Future *profit* staff gained knowledge of bioregional planning and how to integrate biodiversity issues into all aspects of property management planning. CNC extension staff gained a broader perspective of the PMP program and how they could contribute to better integration. Profit with Nature case studies funded by the Natural Heritage Trust have been developed with dairy, beef, banana and cane producers which demonstrate how biodiversity and sensitive management practices play a role in their farming systems.

Local government is playing an increasing role in natural resource planning and management. Extension staff give technical advice to local councils and assist with planning and extension. Land for Wildlife in Queensland is delivered as a partnership between QPWS, local governments and community organisations with assistance from the Natural Heritage Trust. As such it is a unique model in Australia (see Box 4).

Box 4 Land for Wildlife

Land for Wildlife is a voluntary property registration program to recognise and support landholders who provide habitat for wildlife on their property in conjunction with other land uses. Local government in southeast Queensland led the way by adopting the Land for Wildlife program in 1998. The program has expanded to seven additional regions involving 57 local councils from Cooktown to the Gold Coast. At February 2001, there were 1,300 property registrations including 240 landholders working towards registration. Total area of terrestrial habitat is 50,000ha, of which 13% or 6,500 hectares of retained habitat has been identified as either 'Endangered' or 'Of concern'. Expansion is being planned for Lake Eyre Basin, Northern Gulf, Desert Uplands, Central Highlands and South West Queensland.

It is also important to establish good links between off-park nature conservation programs and with park management and planning. Some examples are NatureSearch surveys conducted on Land for Wildlife properties and Nature Refuges; devolved grant recipients joining Land for Wildlife; regional biodiversity planning with EPA and field days on national parks to demonstrate best practice management practices.

CHALLENGES AHEAD

By listening to landholder concerns, and regularly reviewing our extension strategies we have been able to make significant gains for Community Nature Conservation in Queensland. However, landholder attitudes to government in Queensland and a general fear of politics surrounding environmental issues present challenges for agency conservation extension programs. Community Nature Conservation needs to be promoted as a voluntary, non-threatening, educational service. Developing partnerships with rural community groups, industries and local government builds trust at the local level and facilitates landholder involvement in conservation initiatives.

It will be important to maintain extension staff in the field who can continue to foster these relationships and assist landholders with property planning and management. It will also be necessary to explore and promote opportunities for landholders to access ongoing financial and labour assistance for nature conservation management, particularly where agreements are involved. In Queensland, financial and management assistance given to landholders entering management agreements (binding or non-binding) has been delivered through short term NHT funded devolved grants or council rate rebates. Extension officers have reported that financial assistance with fencing materials, labour, stock watering points and weed control often plays a significant role in achieving successful negotiations for nature refuges.

Not all landholders may wish to receive financial or management assistance. However, by offering landholders some assistance it demonstrates government commitment to protecting areas as partners in management agreements and public recognition of the service being provided. All levels of government and private industry need to provide a comprehensive range of incentive options to relieve the financial burden for farmers. The proposed Queensland Trust for Nature may play an important role in generating philanthropic support for conservation on private land.

The scope of management agreements and incentive mechanisms in Queensland needs further investigation. A strategy for a comprehensive range of management agreements is to be developed with appropriate criteria/benchmarks and incentives to encourage landholders to protect areas for nature conservation and sustainable land use. An understanding of landholder motivations for entering into different types of management agreements and the influence of direct financial incentives, tax incentives, valuation, and land tenure issues will be necessary. The capacity of landholders and rural communities to embrace long-term change also needs to be considered.

It is widely recognised that changing attitudes and behaviour in favour of nature conservation on private land will take a long time, particularly when many landholders remain to be convinced of the economic benefits of nature conservation practices.

Landholder and industry interest in environmental accreditation schemes and alternative enterprises provides opportunities to demonstrate economic benefits from market opportunities. There is also potential to incorporate biodiversity indicators into environment management systems. Nature conservation extension can play a role in assisting industry to address biodiversity issues in their auditing processes. Closer links need to be forged with industry organisations so that nature conservation advice can be tailored to each industry.

Community Nature Conservation will be increasingly involved in vegetation management extension and conservation planning at a regional and state level since the introduction of the Vegetation Management Act 1999. The National Action Plan for Salinity and Water Quality will also present challenges for biodiversity extension in relation to impacts of salinity on biodiversity, particularly in targeted catchments. Regional planning and implementation organisations will need technical advice and support. Community Nature Conservation will play a pivotal role in facilitating community involvement in these initiatives and linking new and existing programs for mutual benefit.

REFERENCES

- Australian Bureau of Statistics (1999). *Use of information technology on farms 1998-1999*. Canberra.
- ANZECC (1997). Best practice initiatives for nature conservation on private land. A report prepared for ANZECC Standing Committee on Conservation by the working group on nature conservation on private land.
- Binning, C. & Young, M. (1997). *Motivating People: Using management agreements to conserve remnant vegetation*. Paper 1/97. National R&D Program on Rehabilitation, Management and Conservation of Remnant Vegetation.
- Campbell, A. (1994). *Landcare: Communities shaping the land and the future*. Allen & Unwin: Sydney.
- Curtis, A. & De Lacy, T. (1996). Landcare in Australia: beyond the expert farmer. *Agriculture and Human Values*, **13**(1), pp. 20-31.

- Dorricott, K., Lawrie, B. & Voller, P. (1997). Balancing productivity and conservation in southern inland Queensland: a case study approach at the grass-roots level. In *Conservation outside Nature Reserves* (eds) P. Hale & D. Lamb. Centre for Conservation Biology, University of Qld. pp.233-240
- Millar, J. (1999). The role of extension in biodiversity conservation in Queensland. Paper presented at the *International Symposium on Society and Resource Management*, Brisbane. July 7-10.
- Millar, J., Chew, C., Tarrant. P. and Walsh, D. (2000). *Listening to landholders:* Community Nature Conservation Market Research 2000. Queensland Parks and Wildlife Service, Brisbane.
- Millar, J & Curtis, A. (1999). Challenging the boundaries of local and scientific knowledge in Australia: Opportunities for social learning in managing temperate upland pastures. *Agriculture and Human Values* 16: pp389-399.
- Petrie, M. (1999). Land for Wildlife. A local government initiative in south-east Queensland. Paper presented to the *1999 International Symposium on Society and Resource Management*, Brisbane 7-10 July 1999.
- Platt, S.J. & Ahern, L.D. (1995). Nature Conservation on private land in Victoria: the role of Land for Wildlife. *In Nature Conservation 4: The Role of Networks*. Surrey Beatty & Sons, Sydney. pp. 300-311.
- Sattler, P. & Williams, R.D.(eds) (1999). *The conservation status of Queensland's bioregional ecosystems*. Environment Protection Agency and National Parks Association of Queensland Inc, Brisbane.
- Seipen, G. & Stone, G. (1997). Identification of rural landholders' requirements for nature conservation information in Queensland. In *Conservation outside Nature Reserves* (eds) P. Hale & D. Lamb. Centre for Conservation Biology, University of Qld. pp. 226-232.
- Wells, G.D., Williams, R.D. & Taylor, P.M. (1993). Queensland's 'off-park' nature conservation scheme. In *People and Nature Conservation*. (eds) A. Bennet, G. Backhouse, T. Clark. Surrey, Beatty & Sons, Sydney.
- Woods, E., Moll, G., Coutts, J., Clark, R., & Ivin, C. (eds.) (1993). *Information Exchange*. A report commissioned by Australia's Rural Research and Development Corporations. Rural Extension Centre: Gatton, Qld.