

# 1st International Conference of Landcare Studies

Global Resilience Through Local Self-Reliance – The Landcare Model

5-8 November, 2017

Nagoya, Japan

Nanzan University Institute for Social Ethics  
Australian Landcare International

With support from



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Australia-Japan FOUNDATION





## Conference Program

### Sunday 5th November 2017

- 15:30 Registration  
16:30 General presentation on Landcare  
19:00 Welcome party

### Monday 6th November 2017

- 9:00 Warm Up session

9:15-12:30

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#### **Session 1: The Critical Role of Local Self-Reliance in Achieving Global Sustainability**

Curators: Michael Seigel and Allan Dale

- 9:20 Keynote speech: *Landcare: Grassroots participatory governance for the Anthropocene?*  
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- 11:20 Panel discussion
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- 12:30 Lunch Break

13:30 Rapporteurs report: summary of the discussion so far  
(Rapporteurs: Allan Dale, Michael T. Seigel, Pip Job and Narumi Ishihara)

13:45-17:00

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*Human-human and human-nature bonds: The keys to self-reliance and resilience*  
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15:50 Panel discussion

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17:00 Break

18:00 Supper

Evening session

Speaker: Evy Carusos, Project Manager, Landcare Foundation of the Philippines, Inc.,  
Philippines

## Tuesday 7th November 2017

8:45 Warm Up session  
Rapporteurs report: summary of the discussion so far

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Curator: Rob Youl

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13:30 Rapporteurs report: summary of the discussion so far

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Curators: Jen Quealy and Kazuki Kagohashi

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15:50 Panel discussion

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17:00 Break

18:00 Supper

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Rapporteurs report: summary of the discussion so far

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CEO, Little River Landcare, Australia

11:20 Panel discussion

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12:30 Lunch break

13:30 Rapporteurs report: summary of the discussion so far

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Curators: Allan Dale and Michael Seigel

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Kaye Rodden, Deputy Chair, Landcare Victoria Inc., Australia

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Beginning with final report by rapporteurs

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## Session 1

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### The Critical Role of Local Self-Reliance in Achieving Global Sustainability

Keynote Speech

Andrew Campbell CEO, Australian Centre for International Agricultural Research, Australia

#### *Landcare: Grassroots participatory governance for the Anthropocene?*

As the impact of humankind on our finite planet has become ever more profound and inescapable, geologists have officially recognised a new era – the Anthropocene — characterised by its dominant force, humans. As we acknowledge our own responsibility for stewardship of natural resources, and our capacity to affect the Earth fundamentally — for good or for ill — it becomes ever more important to develop better ways of sharing knowledge and making decisions about land use (considering land broadly to include water and biodiversity) and management at all levels. As the vast majority of land use and management decisions happen at the scale of local sites and small farms, governance at that level is crucial.

Landcare has been operating in Australia for over thirty years, and in twenty or so other countries for up to twenty years. In Australia the term is used loosely to refer to voluntary, community-based approaches to natural resource management (NRM), and cooperative activities at a community level directed to more sustainable use of natural resources. In its early years, Landcare in Australia was seen as a new, potentially more effective form of agricultural extension, influencing the behaviour of farmers towards more sustainable practices by changing social norms, encouraging collective activity across farm boundaries, and providing entry points for social groups who had hitherto not been visibly active in NRM, including women, youth, ‘hobby’ or ‘lifestyle’ farmers, conservationists and urban people. Internationally, Landcare approaches have been applied to rebuild social capital in post-conflict situations in The Philippines, in post-cyclone contexts in the Pacific, and to improve smallholder access to food value chains in Africa.

This presentation will explore, using examples from Australia and internationally, the elements of landcare that are worthwhile exploring in the context of the quest for more sustainable and resilient governance models in the Anthropocene.

Lisa Robins Honorary Senior Lecturer, Fenner School of Environment and Society,  
Australian National University, Australia

*More than 30 years of 'Landcare' in Australia: Five phases of development from 'childhood' to 'mid-life' (crisis or renewal?)*

This paper describes the five major development phases of 'Landcare' in Australia – from its 'childhood phase' beginnings in the mid-1980s to its current day 'mid-life phase'. The 'Landcare approach' in its contemporary form is articulated in the 'Australian Framework for Landcare 2010–2020' as comprising the *Landcare ethic* (a philosophy, influencing the way people live in the landscape while caring for the land), the *Landcare movement* founded on stewardship and volunteers (local community action putting the philosophy into practice) and the *Landcare model* (a range of knowledge generation, sharing and support mechanisms including groups, networks from district to national levels, facilitators and coordinators, government and non-government programs and partnerships). Landcare emerged in the mid-80s as a grassroots, community-led approach that was strongly grounded, in the first instance, in farmer-to-farmer knowledge exchange and tackling local-level issues. It evolved into a national movement following the Australian Government's declaration of the 1990s as the 'Decade of Landcare' and announcement of the first National Landcare Program at the behest and with the imprimatur of a hitherto unlikely alliance between the National Farmers' Federation (the 'brownies') and the Australian Conservation Foundation (the 'greenies'). Now, more than 30 years on, there is much evidence to substantiate the pivotal role Landcare has played in stimulating and enabling knowledge sharing, learning and on-ground action across Australia in the arena of natural resource management; and also to conclude that its potential for contributing to broader impacts, especially landscape-scale change, has been seriously hindered by various ill-conceived and/or executed policy settings and related institutional arrangements. Nevertheless, the Landcare approach (with its consistently sound *ethic* and *movement*, but with its *model* imperfections at different times throughout the five development phases) has stood the test of time, and proven itself to be robust.

Session 1-2

**Graham R. Marshall** Associate Professor and Principal Research Fellow, Institute for Rural Futures,  
School of Behavioural, Cognitive and Social Sciences, University of New England,  
Australia

### *Community-based governance for global sustainability*

The scale of collective action required for global sustainability is feasible only to the extent that efforts at this level are able to build on the trust, reciprocity and cooperation already established for sustainability at national and successively lower levels. Such a bottom-up process of building capacities for global sustainability is one of community-based environmental (including natural resources) governance – at least where this governance is understood properly as a nested multi-level system of (private and public) groups and organisations established in accordance with the principle of subsidiarity. The Australian experiment with community engagement in Landcare and regionalised natural resources governance is reviewed to provide insights for ongoing attempts to strengthen voluntary cooperation with governance structures beyond the local level towards the national and global levels. The difficulty of these attempts should not be under-estimated; success will involve nothing short of transformational policy reform. Yet persevering with these attempts is essential; the solution to the global problem of sustainability is ultimately community-based.

Session 1-3

**Paul Martin** Professor and Director, Australian Centre for Agriculture and Law,  
University of New England, Australia

### *Rural Landcare: Creating the missing business model?*

Landcare members around the world do extraordinary work in the public interest. Their voluntary efforts reduce and in many cases reverse harms that are done by others. Those 'others' frequently profit from their harm-doing, and they are not financially accountable for this imbalance. Landcare members also provide substantial public good benefits, relieving the whole population of this burden. However laudable this may be, there are significant problems of fairness and feasibility built into a business model where some people willingly carry a large load that should be the financial responsibility of others. Beyond any issues of fairness, it is clear that Landcare organisations around the world, for all of their heroic intent, are insufficiently resourced to do what is needed.

This paper questions "how might we find a business model for sustainable Landcare, that better addresses the fairness and feasibility problems of rural sustainability?" The paper looks at some of the fundamental feasibility questions for a few countries, and suggests some concepts to begin to find that missing business model.

Session 1-4

**Sonia Williams** State Landcare Coordinator, Landcare NSW, Australia,  
Individual Landcarer Award Winner 1997 (NSW)

*The ability to look after our own backyard – Understanding the critical factors that enable self-reliance in local communities*

Global sustainability cannot occur without local action. The adoption of sustainable practices at the local scale relies upon the willingness to acknowledging that we, as people in the landscape, exert an influence over the state of our ecosystems. However, what is often overlooked by many in policy positions and by many practitioners in the NRM /sustainability sphere is the importance of ‘the people IN the landscape’ and that if we are going to influence environmental outcomes, THE key is to influence and build the self-reliance of the people that manage their own environments.

No amount of science, no amount of legislation, no amount of subsidy will produce lasting change unless it is owned and adaptively managed by those closest to THEIR environment. This building of self-reliance – the capacity to acknowledge, assess, manage and continuously adapt to changing circumstances, can only occur when we ensure that those who are affected by the changes required to move us to a more sustainable future, are part of the process of learning about the causal factors, and are valued as contributors to the design and implementation of that change.

This was and still is the basis of the Landcare model, established around 30 years ago. Internationally recognised as a successful game changer, Landcare supported land managers and communities to contribute their knowledge, learn from others and be empowered to take action to improve the sustainability of their landscapes.

Drawing upon my 30 years of experience as a Landholder and Landcarer, which started (and continues) at the scale of family farm member, through to that of NSW State Landcare Coordinator; this session will explore the factors that enable and support communities to respond to and tackle the challenges we face at a global scale as their own.

## What Makes Local Self-Reliance Deliver on Sustainability?

Keynote Speech

Joseph Runzo-Inada Chief Resilience Officer, Toyama City, Japan

*Human-human and human-nature bonds: The keys to self-reliance and resilience*

Sustainability of human life and land use practices are critical and irrevocably interrelated issues for the 21<sup>st</sup> century. Toyama City is recognized both in Japan and abroad as a model of ecological and resilience planning. The first Japanese city to be chosen for the Rockefeller 100 Resilient Cities initiative, the first non-national entity to sign an MOU with the World Bank, and the only Japanese city in the United Nations SEforALL program, Toyama is a virtual laboratory for sustainability best practices. Created from the coalescing of 7 former municipalities under a Japanese national program to combine rural and urban centers, Toyama's 30 year Resilience Strategy 2050, developed under the auspices of the 100RC initiative, explicitly unifies and harmonizes urban, agricultural and rural areas for long term resilience. Covering the 1,242 sq km of the city from the Sea of Japan to crest of the Northern Japan Alps, Toyama's Resilience Strategy 2050 offers numerous examples of programs for rural sustainability, agricultural protection and ecological preservation. Most importantly, the key lesson from the city's 2-year resilience planning process and its intergenerational agricultural and farming promotion programs, is the essential centrality of communal bonds, other respect, and respect for nature, as the foundation for self-reliance and resilience.

Clinton Muller Senior Consultant, RM Consulting Group, Australia

*Does Landcare in Uganda contribute to improved food security and livelihood outcomes at the household scale?*

Sustainable management of natural resources has been placed on the global development agenda as equal in importance as poverty eradication. The interlinked nature of these global challenges is increasingly apparent, particularly in sub-Saharan Africa where incidences of rural poverty are aligned to degraded landscapes. Solutions for management of land degradation are viewed as requiring collective approaches through engagement of community at the grassroots and actors within the landscape. In Uganda, the Australian inspired Landcare approach has been adopted since 2001 as a means of empowering the community to manage their natural resources through linking land management practices to livelihood outcomes. This study examined the effectiveness of the Landcare approach in Kapchorwa and Kween Districts, Uganda at the household level as a mechanism to contribute to food security and livelihood outcomes. Through the development of binary logistic regression model for food security and Pearson chi-square tests for livelihoods, a comparative analysis of households engaged and not engaged in Landcare was undertaken. The significant variables of household assets, farm assets, livestock and specialization of income generation activities were identified for food security and household education, land ownership, household assets and farm ownership as the variables of significance for livelihoods. The results concluded the higher performance of Landcare member households in these categories, suggesting the positive contribution Landcare has on food security and livelihood measures. Furthermore, the application of the Landcare approach in enabling effective collective action was examined and discussed in the context of the sustainable adoption of positive land management practices to address incidences of household level poverty. It is concluded that the unique nature of the Landcare as a community model to empower communities to address landscape scale land degradation should be further considered as a development approach to address incidences of poverty and landscape degradation.

Tomomi Maekawa Research Fellow, Graduate School of Engineering, Mie University, Japan

*Key concepts for the autonomy of local community groups and their activities: The structure of support systems in Australian Landcare and a decision making process grounded in East Asian culture*

Japan is facing serious population decline and an ageing society. This makes it difficult to maintain traditional styles of natural resource management such as Satoyama through farming and forestry. In order to find strategies to overcome the challenges raised by population decline and the ageing society, I have been analyzing and theorizing the outcomes of my field research carried out in Australia and Japan.

In this paper, in order to explore possible approaches to these problems, I will discuss the system of Landcare in Australia from the perspective of myself as an outsider to Australia, by pointing out its structural and spiritual features as a widespread movement. The in-field research in Australia was carried out through participatory observation at local events and meetings of Landcare groups, Landcare Facilitators/Coordinators, etc., and interviews with members of Landcare groups, other community groups, government and semi-government bodies, etc. The research was conducted mainly in Victoria, during the period of my stay in Albury, in 2013-2014, with support from Charles Sturt University, Australian Landcare International, and a lot of members and staff members of related community groups and organisations of Landcare.

Also I will suggest skills and a basic philosophy of consensus building, as the other aspect of my research in order to seek a method of sustainability based on voluntary based community groups. This approach may provide new ideas or views to Landcare groups in Australia for conducting activities more smoothly, even though the approach is rooted in East Asian culture and philosophy.

Finally, I will present some brief ideas of what we need to consider for moving forward to the next step in Japan, based on the experience of SPELJ.

Francis Steyn Western Cape Department of Agriculture, South Africa

*Scaling up climate smart agriculture from the pilot project of 80 000ha to 500 000ha doing it the Landcare way*

Introduction

Smart Agriculture for Climate Resilience (SmartAgri) is well presented in the case study of 80 000ha Koup development in the form of a LandCare Area Wide initiative that is increasing to a possible 500 000ha project, doing it the Landcare way.

Purpose of the presentation

This presentation will illustrate the massive gains in working together with partners to create a plan and implement projects according to the plan with will make this area more climate smart than any other initiative presented to farmers.

Conclusions and extension implications

This case study has proven that working in partnership with several organisations is essential for success, but the farmer is the pivoting role in this partnership and according to the Landcare principles an essential leader of the methodology if it is to be successfully implemented. From an extension point of view it is the ultimate test of successful extension to create an enabling environment for this leadership and large Area Wide Projects to take place. From the numerous advantages and impressive results of this Smart Agricultural project, the most impressive is without doubt the development of Human Capital which resulted in the base line studies of ecological infrastructure and effective project implementation.

Session 2-4

**Andrea Mason** Director of Finding North; Chair of Leigh Catchment Group; Board Member of Australian Landcare International, Australia

### *Everyone Everywhere Landcare*

This presentation will cover some elements of the Landcare movement that have contributed to its success in Australia and helped its spread throughout the globe- becoming the foundation for resilient communities.

As a community member, Landcarer and sustainability practitioner with experience in community development, local action, marketing and communications, I will draw on personal and group experience to show how the Landcare model has created a vehicle for the development of personal and community resilience. The paper will discuss the need for a sense of belonging at the personal and group level, the importance of the greater organisation and the ability to adapt to change. It will explore how that sense of belonging manifests itself and builds up trust within communities in times of need.

Conversely, Landcare's diversity is one of its greatest strengths. Landcare uses a multi-disciplinary approach to resolve problems. Its grass roots approach, embedded in communities, encourages diverse and creative approaches to issues pertinent to its own communities. How does this fit with that sense of belonging and how has the movement that is Landcare achieved this?

Landcare does not have a monopoly on community action. I will also explore other community action groups/movements and which of these elements have affected their success. In particular, I will discuss the importance of branding, advocacy and political influence in achieving success for Landcare where others have struggled.

## Landcare Practice Models and Pragmatics

Keynote Speech

Jen Quealy Master of Research Student, Western Sydney University;  
Australian Landcare Volunteer; General Manager, TBL Creative Partners, Australia

### *Landcare praxis - "From little things big things grow"*

*A fascinating 'speed-date' on Landcare origins, practice, fields and futures,  
and the critical elements for a 'Landcare everywhere' model*

The focus of this Keynote presentation is to distil the model of Landcare to share with the world. The process will be an explanatory and exploratory 'speed-date', covering 30 years and the Australian continent. The output: to distil the sharable model from the character and development of Landcare, our much-loved, 30-year old, our young Australian model of grounded, collaborative, local, voluntary action to 'care for the land', within a context of support, innovation, risk-taking, capacity building and knowledge sharing. Our youngster needs to venture more confidently into the world, to be shaped and changed, to allow us to keep adapting and to reach out for new and improved outcomes with our global collaborators.

The presentation will look at how Landcare began and adapted, from the early days in the 1980's, within progressive (but stressed) rural farming communities, growing by an organic process of 'inviting-in' and 'reaching-out' into other communities and landscapes. The session will present Landcare as a transferable model of self-reliance at the community scale, bringing local farm-based knowledge and learning together with science, innovative (government-community) extension, the enabling influence of indigenous need and knowledge, young and older knowledge and developing interactions with unlikely, unusual but transformative 'partners' and collaborators.

November 2017 is a great time for this gathering; Landcare has reached early maturity; with much sharable content and advocates, that enables us to analyse the Landcare 'model'. The Keynote will help reflect and 'distil' the essence of Landcare, so we can state the sharable model. We will consider an 'elevator pitch' for a 'Landcare everywhere' model for the world as an aid to knowledge transfer. This is not just for Australia's own reflection, but to define Landcare as a legitimate and important world model of local and empowered self-reliance, to ground Landcare as a continuously adaptive model within a context of climate impacts on agriculture, food security and ecology, and the important shared process of Landcare as discovery and co-development.

**Rob Youl** Chair, Australian Landcare International, Australia

*Behind Landcare's success: Sound management at state and national levels*

Landcare started in Australia 31 years ago, when a group was launched at Winjallock in Victoria on 25 November 1986. Today 5-6000 groups operate nationwide, often formed into networks to better utilise regional resources.

In Australia, Landcare's major functions are community action on environmental restoration - with a multi-disciplinary approach; sustainability projects, especially amongst farmers; advice to all tiers of government; training at many levels covering co-ordinators and community; on-ground management of numerous public reserves; citizen science, such as Waterwatch programs; environmental education for schools and the public; and, increasingly, post-disaster rehabilitation within communities affected by cyclones, floods and wildfire. Not unexpectedly, this broad charter requires much effort behind the scenes. This paper lists the many infrastructural elements that have evolved in Australia. Other countries initiating Landcare will probably need similar provisions.

They include publicity; non-government (corporate, philanthropic and community, including 'crowd') fund-raising; political lobbying; liaison and direct collaboration with all tiers of government; insurance; legal support for incorporation; signage and logos, including usage for commercial purposes; appointing official patrons; supporting revegetation contractors and revegetation nurseries; co-ordinating volunteers; spreading the word overseas; ensuring involvement of ethnic and indigenous communities; awards and honours; and forging links with artists, musicians, writers and poets. Not yet achieved, but highly desirable, would be systems of environmental payments to landowners helping broader communities by protecting biodiversity, sequestering carbon, restoring landscapes and maintaining catchment values.

All this needs excellent internal communications, readily achieved today via the internet. It also demands specialised support from government departments, budget allocations covering community projects and contributions towards group and network overheads, and possibly formal advisory committees.

Involved in Landcare since its inception, the author briefly discusses these managerial elements from the Australian standpoint. He is particularly interested in online training and, as a forester for fifty-five years, promoting major multi-network revegetation projects, especially across state boundaries, which sadly, in Australia, often hamper concerted action.

## Session 3-2

Beatrice Dossah was a late but welcome addition to the speaker's list and was unable to supply her abstract for this publication.

Nick Edgar Chief Executive, NZ Landcare Trust, New Zealand

### *Predicting the success of community-led resource management initiatives*

The resource management framework in New Zealand places considerable emphasis on engaging communities to address water quality problems. This has resulted in a resurgence in community-led approaches to catchment management. The NZ Landcare Trust has lead and delivered a number of successful catchment management projects in recent years. Collaborative efforts between the NZ Landcare Trust, local farmers and the wider catchment community to improve river and coastal water quality resulted in the Aorere River being awarded the inaugural Morgan Foundation NZ River Prize in September 2015 by the International River Foundation.

Key aspects of the Aorere River initiative have been integral to the success of this community-led approach. These have included the initiative's focus on "farmers as leaders" of water quality improvement, using science to model catchment cause and effect dynamics, developing farm plans that promote good management practices to reduce agricultural runoff into waterways, and a variety of engagement practices aimed at enhancing community ownership of water quality issues and solutions.

The NZ Landcare Trust has been supporting a number of other community-led catchment management projects in New Zealand. These include the Kakanui Community Catchment Project (Kakanui River, Otago Region), the North Canterbury Sustainable Farming Systems Project (Canterbury Region), and the Upper Buller Enhancement Group Project (Buller River, Tasman District). Implementation of these catchment management initiatives has included research to identify predictors of successful community-led water quality management.

Six key predictors of success or determinants of effective community engagement were identified. The identification of key determinants of successful community-led catchment management will allow the transfer and application of this knowledge to other catchments in New Zealand, and potentially, to other countries.

Megan Rowlett Co-founder and Chair, Intrepid Landcare, Australia

*Intrepid Way: An adventurous way forward towards a happier, connected, sustainable world*

Since its inception thirty years ago, Landcare in Australia has grown to be one of the largest grassroots environmental movements which is actively addressing some of Australia's greatest environmental and sustainability issues.

But what has been missing, is an effective community engagement strategy targeting young people, and the development of young people to be strong, resilient, compassionate leaders for the issues we face locally and globally.

Intrepid Landcare is a refreshing, innovative way forward that engages and empowers youth and young adults across Australia to lead and take action on stuff that matters. From marine debris, species decline, and habitat loss to reversing climate change, Intrepid Landcare supports young people to develop skills, confidence, connection and knowledge to tackle these matters.

In less than 2 years, Intrepid Landcare has become a highly recognised organisation and brand, and has inspired and supported the establishment of new youth-lead networks and projects being delivered by young people for young people across Australia.

Over 75% of young people involved in Intrepid Landcare programs say that our leadership training changed their Landcare experience - and their life, and over 80% of all people who attended Intrepid Landcare training say that it has impacted their engagement and leadership practice.

Regional and metropolitan communities that we have worked with say Intrepid Landcare programs encourage cross-sectoral, regional, intergenerational and cultural collaborations, which brings purposeful support for youth through mentorship, sponsorship and personal relationships. And young people are constantly sharing how happy they feel having being involved in Intrepid Landcare.

This presentation will explore and share the evolution of Intrepid Landcare, and how taking risks and having fun has lead to the establishment of a successful youth engagement initiative that is inspiring and supporting the development of happier, healthier, connected communities taking action on stuff that matters.

## Landcare as a Transformative Agent in Crises (Including Natural Disasters and Emergencies)

Keynote Speech

Stewart Lockie Distinguished Professor and Director, The Cairns Institute,  
James Cook University, Australia

### *Community as transformation agent and the temporality of disaster*

The importance of altruistic social relationships, and the limitations of state capacity, in helping people cope with natural and technological disasters is reflected in a variety of approaches to community-based planning, resource management, risk reduction, emergency relief etc. The very importance of community begs questions, however, two of which will be explored in this presentation. First, just how much can be expected of community when disasters are, by definition, events that exceed our ability to cope? While the answer to this question will, of course, be context specific, it is important to consider whether lessons can be drawn from disaster research for the design and support of community-based programs that do make a genuine difference to risk reduction, post-disaster recovery, etc. Second, just how much can be expected when inequalities within and between communities are major determinants of vulnerability and conflict? Again, it is important to consider whether lessons can be drawn for the design of programs that deal constructively with competing interests, values and aspirations – with tension between the resilience of communities 'as they are' and the desirability of pre- or post-disaster social transformation. A key theme running through exploration of both questions will be time. More specifically, the presentation will consider how the temporality of disaster events (their frequency, tempo, duration etc.) shape experiences of trauma and response.

Session 4-1

Mary Johnson Royal Melbourne Institute of Technology, Australia

Evy Carusos Project Manager, Landcare Foundation of the Philippines, Inc., Philippines

*Lessons from the field: Mitigation and vulnerable communities*

The Philippines is identified as one of the most disaster-prone countries in the world. Moreover, for over four decades the Mindanao region of the Philippines has experienced another form of disaster - armed conflict - which sometimes turns violent.

A significant outcome of the Mindanao conflict is income deprivation, along with social dislocation and isolation from services. Successful mitigation, recovery or rebuilding is highly contingent on community capacity. Since 2013 Australian and Philippine research teams have been jointly working with conflict vulnerable Mindanao communities on community-based livelihood improvement activities.

Lessons from the field feature social organisation examples such as networks, trust and reciprocity, that improve the ability of community to engage in coordinated endeavours including mitigation and recovery.

Ashley Bland Sustainability Manager, Skillset Environment, Bathurst, Australia

*Green Buildings and market drivers – A case study analogy for Landcare and sustainability*

The desire to improve environmental performance has not just been limited to farms and landscapes in Australia. Activists of the 60's and beyond frequently promoted an image of sustainable living that included environmentally friendly housing with design and material choices to limit social and ecological harm. This movement ultimately led to upgrading the Building Code of Australia in 2003 to include energy efficiency and, soon after, various State-based home star rating schemes. Every home built now needs to meet minimum star ratings out of a maximum 10 stars to be approved for construction. Homes with more stars are worth more in the market. The results are sustainability impacts that are clear and measurable, and that drive behaviours and resilience thinking.

Imagine a similar system for landholders. What would be the indicators of higher performing, better properties and how would they be measured? What market mechanism could be harnessed to drive behaviour change by making people want higher star ratings? What legislative framework might be considered to set minimum standards?

In this session I will describe how Skillset has worked with Green Homes Australia since 2008 with the aim of further transforming the housing sector by both increasing the demand for energy efficient, environmentally friendly, affordable homes and training builders to be competent in delivery. For Landcare, there are many parallels and lessons to be taken regarding: the implementation of scientific and evidence-based knowledge in an accessible way, properly understanding the target audience, critically analysing the true role and capacity of various stakeholders, understanding the effectiveness of top-down versus bottom up drivers, and, accounting for the importance of external social factors and timing.

This paper/presentation reflects on lessons through the Green Homes journey and points to a possible model that could increase the uptake of Landcare and create a robust framework for funding.

Kazuki Kagohashi Senior Research Fellow, Nanzan University Institute for Social Ethics, Japan;  
Vice-chair, Secretariat to Promote the Establishment of Landcare in Japan

*What determines the resilience of local communities? A comparative analysis  
between Landcare and a pond irrigation system in Japan*

This presentation focuses on a case of drought adaptation in a pond irrigation system in the Sanuki Plain in Japan and examines the resilience thereof in light of the underlying principles of Landcare – i.e., autonomy of local groups, a practical and holistic approach to local issues and partnership and networking among the various actors (including not only other Landcare groups but governments, academics, specialists, business corporations, NGOs, etc.). The Sanuki Plain is located in Kagawa Prefecture on the Island of Shikoku in Japan and is known as one of the most drought-prone areas of Japan. To cope with serious droughts, more than 14,000 ponds have been constructed over the centuries and farmers have developed various local traditions for water management. The Kagawa Canal, which delivers water from outside the Sanuki Plain, was constructed in the 1970s to mitigate droughts. The combination of the traditional knowledge by which farmers effectively adapt to drought situations and the modern infrastructure of the Kagawa Canal have contributed to augmenting the resilience of the pond irrigation system in the Sanuki Plain. I will argue that we can find a commonality between Landcare and the pond irrigation system in the Sanuki Plain in the autonomy of local groups, the practical viewpoints (focusing a specific objective) and in networking. Specifically, “the principle of subsidiarity” would be a key to effective adaption to the crises that local communities face.

Session 4-4

**Jen Quealy** Master of Research Student, Western Sydney University; Australian Landcare Volunteer;  
General Manager, TBL Creative Partnerships, Australia

### *Landcare in post-disaster recovery practice and social sector partnerships*

The Community Landcare model, which includes the knowledge and values held by Landcare networks, makes Landcare an ideal partner of broader communities and agencies, for both the thinking and preparation for, and the responses and recovery from natural disasters and emergencies. Landcare helps build resilience. But Landcare hasn't been a formal emergencies partner, except in a few cases, and is sometimes left out of such structures and resources. Research is needed to understand the experience of Landcare in disasters, and that where and when Landcare is involved, recovery can be more successful and sustainable, can build resilience in both landscape and community, and can extend the Landcare model's relevance to the world. I will look at the emerging Landcare role in such events, through three case studies, (cyclone, fire and pest animals) to focus attention on describing an active community Landcare role, in partnership with the 'usual' emergency and disaster agencies. I aim to raise discussion around the critical role of Landcare (and resourcing this) in pre-building both community and landscape resilience, with Landcare being the ultimate 'green infrastructure' that any community, anywhere, needs and can develop to assist them through such challenges.

## Innovation and Risk Taking through Landcare Approaches

### Keynote Speech

**Ross Colliver** Director, The Training and Development Group;

Victorian Landcare Council Committee of Management, Australia

### *Learning like crazy: Prototypes, heuristics and emergent practices*

Three passions drive Landcare at local level -love of the land, mutual responsibility and learning with peers. This keynote takes up the third of these, and asks how learning with peers can be extended beyond the local sphere, to strengthen the place and contribution of Landcare, and improve public governance. In the Australian context, organising in community continues to be marginalised by top-down scientific management; with collaboration and advocacy, Landcare continues to maintain its influence. But what can we do to move learning from the many isolated local social networks in which it first arises and connect this into a wider network at regional and State scale? I describe CLEA (Community Learning for Environmental Action), a three year project researching ways to strengthen peer-to-peer learning in the Landcare community in Victoria. The three strategies of this project constitute a prototype for scaling up and scaling out social learning in Landcare. A second challenge in moving learning beyond the local is how to improve the practices and institutional relationships of public governance. Approached as co-design, this is an undertaking premised on equality between practitioners, paid and unpaid, at local, regional and state level, and on social learning between those practitioners. Here, I describe five years of the *Systemic Inquiry into NRM Governance*, a project bringing systems thinking and practice into co-design, a task in which Landcare staff and volunteers have been major contributors. For both projects, the aspiration is that learning between peers can widen beyond tacit and localised knowledge to explicit practice that influences how we organise local action *and* our governance systems. I describe some models of learning that have informed both projects, treating these as heuristics that guide action. I then discuss seven practices of design for social learning that have emerged from the projects.

Session 5-1

Liddy Nevile Computer Scientist; Member, Bellarine Landcare Group, Australia

### *Landcare as 'Caring for Country'*

In this talk, Liddy has taken note of the Australian Aboriginal community's expression 'caring for country'. It refers to the many practices that have operated in Australia for thousands of years.

Australia is an old country and its environment is fragile. Aboriginal practices have supported inhabitants without destruction of the environment but in the last two hundred years the land has changed. This talk will draw attention to the differences between the old and new practices and ask if the immigrants of the last 200 years might be able to learn from their predecessors, and if the volunteering enterprise Landcare itself might also benefit from studying the older practices.

In particular, Liddy contrasts the role fires can play in the environment and associated practices as a way of drawing attention to and interpreting land care and caring for country. The social practices that support the differences are also considered.

Joseph Tanui Landcare Coordinator and Co-chair, African Landcare Network, Kenya

*Strengthening rural institutions in Sub-Saharan Africa: Strategies for effective capacity building of grassroots communities through the Landcare approach*

A Critical perspective in addressing emerging global challenges of food insecurity, poverty, climate change, ecosystem degradation and biodiversity loss is understanding their high interlinkages. These interconnections are increasingly apparent in Africa's growing economies and threaten the development gains achieved painstakingly over the last three or four decades. Further, African farming systems are highly heterogeneous: between agro ecological and socioeconomic environments, in the wide variability in farmers' resource endowments and in farm management. Smallholder farmers in rural landscapes continue to dominate agriculture in the developing regions of the world. In Africa, smallholder farmers are experiencing formidable challenges, rapid population growth, intensified pressure on natural resources and intensive farming on small plots. This notwithstanding, smallholder farmers have increasingly sought solutions beyond traditional agricultural approaches. Though advances in science and technology offer opportunities for more rewarding and efficient use of resources, however, adoption rates remain low. Poor investment in sustainable solutions by smallholder farmers can be attributed to weak institutional support, shortfalls in extension service models, weak and inappropriate governance and regulatory processes and low market integration. The paper highlights lessons and insights from the adoption of the Landcare approach in the region where building blocks for a social infrastructure, a pathway for successful strengthening of grassroots institutions hitherto a missing link for large-scale rural development.

Tokihiko Fujimoto Associate Professor, Faculty of Agriculture, Shizuoka University, Japan

*Renewable energy and small society : Case studies of community practice in Japanese mountainous villages*

In this presentation, we are going to talking about kinds of renewable energies (natural resources) for community development. We will focus on community based action toward sustainable community by appropriate management of natural resources and energies. Renewable energies are essentially local commons. So, in case of installing and managing renewable energy resources by community powers, renewable energies contribute to energy independence and regional sustainability.

We want to insist on that we pay attention to Small Hydropower (=SHP) toward community sustainability. Hydropower energies are highly public from the beginning of developing nation-state in the last of 19th century. Until the middle of 20 century, almost mega hydropower which provided with big dam were already developed in developed countries. But, there are still existing small-scale hydropower potentials in the mountainous and remote area.

In the aspect of community development, “Landcare” approach for consensus building about focusing, installing and managing SHP will raise not nation-state’s benefits but awareness of local people by proposing various problems and introducing knowledge and appropriate technologies. Therefore, local people can make democratic dialogues about managing local resources with future vision and future design of their communities, based on the land based environmental capacity.

The purpose of this presentation will discuss with practical methodology and compute possibility of “Landcare” approach for installing new SHP, for the purpose of making communities sustainable, based on our case studies and practical experiences in Japanese mountainous villages.

Session 5-4

**Pip Job** Senior Project Manager, New South Wales Department of Primary Industries; CEO, Little River Landcare, Australia, 2014 National Rural Woman of the Year

### *Landcare – Leveraging the opaque to build resilience*

Landcare provides so much more than planting trees. Yes, Landcare does make a significant contribution towards the betterment of our landscape, improvement in ecosystem function and increased sustainable agricultural practice adoption, but it adds value in areas that are less tangible and often, a little more difficult to evaluate from a quantitative perspective. Landcare in Australia isn't just 'green' (enviro) or 'brown' (agriculture), it's a beautiful shade of 'khaki' with a lot of opaque elements too.

After working for the Little River Landcare Group in the Central West of NSW in Australia for 12 years I will reflect on those opaque areas of value and what that means to the Little River community and more broadly. Some of the key opaque elements are the role Landcare plays in being an important part of the social fabric of a community, its ability to be inclusive and provide a sense of connectedness, problems solving of localised issues and strong leadership in the face of adversity and its holistic approach and ability to soften red-tape to achieve outputs and outcomes for investors and stakeholders.

Landcare drives community resilience and in some cases, helps to build individual and family resilience. Landcare gives so much more than what is perceived. It is a powerful vehicle to leverage given its strong level of trust and respect at a localised level.

This presentation will focus on key reflections and observations during my time as a Landcare employee and the work I do today and draw on personal experiences across the key 'opaque' areas in which Landcare thrives.

## Systemic Change, and Merging Discourses

Keynote Speech

Yvonne Everett Professor, Department of Environmental Science and Management,  
Humboldt State University, USA

*Cross scale stewardship capacity of community based organizations from northern California across the American west to Washington DC: Will it work for cannabis?*

Community based organizations (CBO), what might be called Landcare groups, have long been involved in natural resource management and conservation on private and public land in the United States. The approaches CBOs have used have ranged from cooperation and partnership among private landowners, with the public sector, and with private industry to active protest and legal challenges against perceived public and private sector failures (Speece 2016). In the 1990's new CBOs emerged in the Western United States that have developed their communities' capacity to respond creatively and effectively to a wide range of natural resource management challenges locally, while networking with CBOs at regional and national levels to affect policy shifts at broader scales (Abrams, Davis and Moseley 2015; Baker and Kusel 2003; Charnley et al. 2014). These groups have made rural community voices heard, influencing policy decisions by state and federal government in a new twist on polycentric governance (Anderson and Ostrom 2008). Their growing organizational capacity has led some CBO to develop strong networks and partnerships for implementing environmental stewardship across jurisdictional boundaries. These activities take place in relatively remote rural areas that experience a vacuum of national, state and local

governance capacity on federal and private lands. This presentation will illuminate these processes for the case of far Northern California. Local forest, range and watershed restoration work by a number of CBO there has included fuels reduction and prescribed fire management, invasive species removal, fisheries habitat and oak woodlands restoration and community capacity building along with regional and national collaborative networking to effect policy change at the state and federal levels. Currently, these organizations are responding to the relatively recent challenge of newly semi-legal cannabis cultivation that threatens much of the restoration and governance work CBO have been involved in, and promises to be a test of governance and of all of the cross scale and cross boundary stewardship capacity CBO have mustered to date.

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Session 6-1

Andres Arnalds Project Manager, Soil Conservation Service of Iceland

Brian Slater Ohio State University, USA

Jonina S. Thorlaksdottir Rif Field Station, Iceland

Fred Yikii Makerere University, Uganda

### *Knowledge and progress - Building the bridges*

Experiences from community-based approaches in caring for the land indicate a need to build a stronger bridge between the generation of knowledge and action for progress. Such a paradigm shift has the potential to generate knowledge across unprecedented scales and at lower cost than through conventional approaches.

This means that research and other relevant institutions need to be stakeholders in the change, and actively forming a community with land managers. This extends to research initiation, defining the key questions of why and for whom, setting the research questions, planning (the how), funding, operation, and assessment. Common failures of past approaches are partly from lack of respect for the principle that knowledge is most useful and used when it is jointly produced by participants in decision and action for progress, such as by land users, and experts with technical and domain knowledge.

The presentation will examine the concept of participatory knowledge management approaches, such as in research, planning, monitoring and evaluation with a view of improving progress in caring for the land. What conditions need to be in place, how do we foster co-production of knowledge and form bonds between groups like researchers, professionals and farmers? How can participation aid in learning, developing awareness and skills, increasing capacity, reducing costs, and strengthening policy formation? What is the role of such approaches in advancing understanding of the needs of the land, fostering awareness, land literacy and ethic? Can the process of capturing data in a collaborative environment be as important as the actual data itself?

**Kaye Rodden** Deputy Chair, Landcare Victoria Inc., Australia

**Terry Hubbard** Chair, National Landcare Network and Landcare Victoria Inc., Australia

### *The Meaning of Support!*

The history of Landcare's formation and expansion in Victoria, Australia and overseas, is well documented elsewhere. It commenced as a willing and respectful partnership between organisations, who had a vision of a community led approach to sustainable private land management, with a supporting government policy framework that smoothed the way and provide foundational resourcing to enable the process.

Whilst many associate Landcare with action to build a sustainable and productive natural environment, what sets Landcare apart is its focus on building resilient and sustainable communities that have the capacity to act to repair, enhance and maintain the natural assets in their landscape.

These communities in effect actually become a valuable asset themselves and their ability to add value to investments from elsewhere means that their economic value to governments of all persuasion is significant.

The question is what does it take to provide an environment where this community asset, like other assets within our landscape, can thrive to a point where it is self-reliant and regenerative?

Self-reliance evolves from a confidence in being able to make decisions as a community, which are respected, acknowledged and included in those government and non-government policies which will have an immediate impact on that community. Policy settings, at whatever level of government, and subsequent resourcing need to develop a framework that enables this process to occur.

This presentation will discuss some of our experiences in what helps to make a strong resilient Landcare community, and how government can help.

Lisa Robins Honorary Senior Lecturer, Fenner School of Environment and Society,  
Australian National University, Australia

*What might Australia's 'Landcare' contribute to achieving the Sustainable Development Goals (SDGs)? : A local self-reliance approach to global sustainability*

This paper maps the Australian experience of Landcare against the United Nations' framework of Sustainable Development Goals (SDGs). The 'Landcare approach' in its contemporary form is articulated in the 'Australian Framework for Landcare 2010–2020' as comprising the Landcare ethic (a philosophy, influencing the way people live in the landscape while caring for the land), the Landcare movement founded on stewardship and volunteers (local community action putting the philosophy into practice) and the Landcare model (a range of knowledge generation, sharing and support mechanisms including groups, networks from district to national levels, facilitators and coordinators, government and non-government programs and partnerships). Landcare is an example of a long-lasting local self-reliance approach that has been flexible, innovative and dynamic enough to survive for over 30 years and, mostly, thrive in an ever-changing, and occasionally even hostile, policy environment. The analysis presented in this paper suggests that the Landcare approach has much to contribute beyond Australia to achieving the SDGs in both developed and developing country contexts.

**Michael T. Seigel** Visiting Research Fellow, Nanzan University Institute for Social Ethics, Japan;  
Chair, Secretariat to Promote the Establishment of Landcare in Japan

### *Landcare as an exploration of means of implementing the Principle of Subsidiarity*

Many interpretations of the principle of subsidiarity treat it merely as a principle dealing with appropriate levels for decision-making, arguing that decision-making should be at the lowest, smallest scale, most local level possible for the particular decision. The principle is reduced to something similar to the devolution of power or decentralisation.

#### The Principle of Subsidiarity

1. The word “subsidiarity” is derived from the Latin “subsidium” (help, relief; reinforcement). It is not just the devolution of decision-making authority but a positive role of strengthening and empowering.
2. The principle does not simply point to a kind of inverted hierarchy in which decision-making is devolved from central government to regional governments, regional governments to local governments, and local governments to individuals or small groups. It is about optimal support for each level of society from each level of society.

No manual exists for the implementation of the principle of subsidiarity and many factors in governance work against it. The experience of Landcare may help identify strategies for implementation.

#### Lessons from Landcare

1. Networking and partnership are an effective means to supporting and empowering local autonomous groups.
2. The experience that some governments may be less aware and less attentive to Landcare has demonstrated the need for a system in which the voices of the smallest scale and most local levels of society can be made to be heard at every level of decision-making. A systematic feedback loop bringing the voices of grassroots individuals and groups to all decision-making levels of society is essential for the implementation of the principle of subsidiarity. Such a system may help in getting democracy beyond the stultified state that it is in.

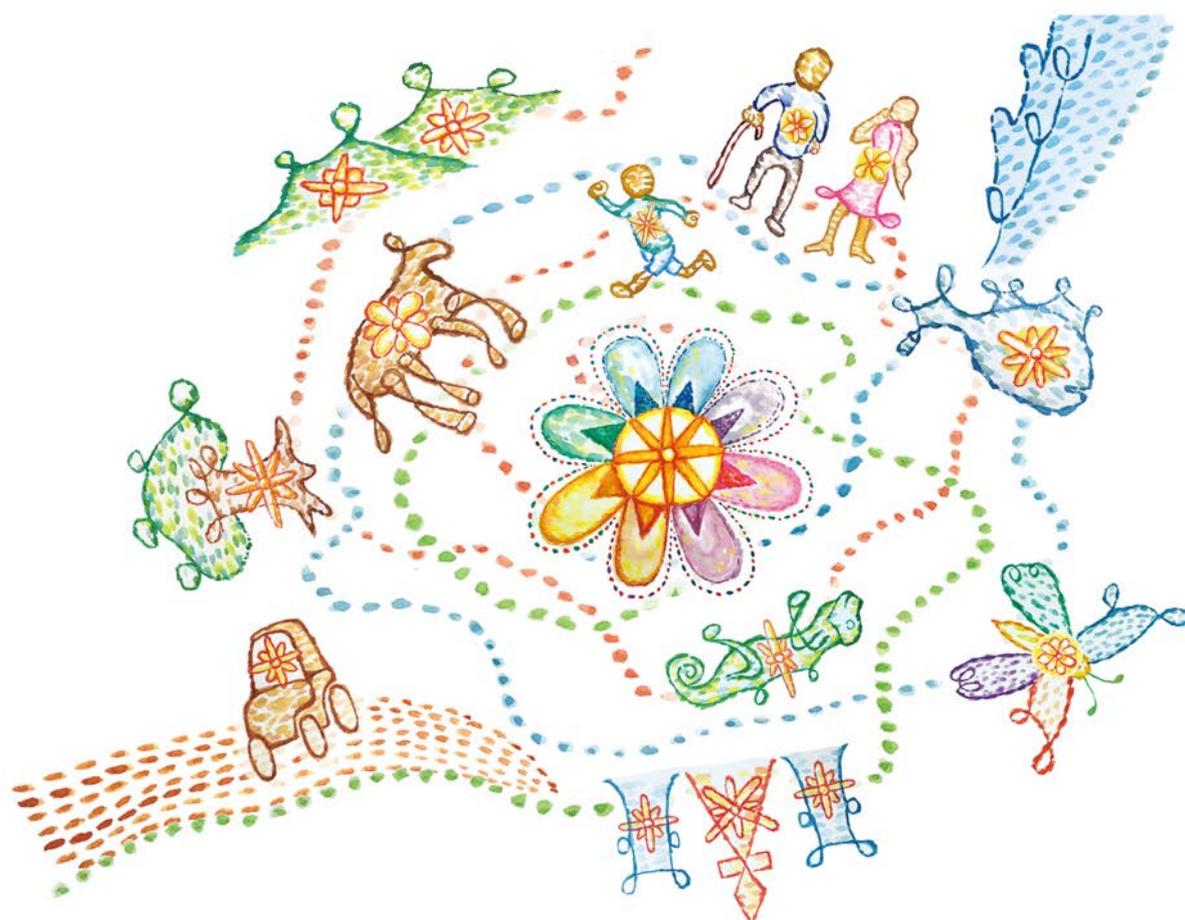
Session 6-5

Allan Dale Professor, Tropical Regional Development, The Cairns Institute, James Cook University,  
Australia

### *Strengthening national governance systems to support self-reliance*

The Australian and increasingly international Landcare movement reflects the re-emergence of recognition of the concept of personal and local self-reliance within our national, provincial and local governance systems. While the word is seldom used to describe Landcare, the concept deeply espouses and reflects the key governance principle of subsidiarity; the making of decisions at the most appropriate scale to effect positive outcomes for society. In many of our nations, the emergence of more centralized forms of governance have tended to eschew the subsidiarity principle, implicitly (and often explicitly) diminishing the importance and profile of local self-reliance. This ongoing trend in governance systems across the world brings significant risk to policy domains that fundamentally rely on the behavior of individuals, property owners and local communities as the first line of action. This paper explores why local self-reliance is so critical in so many policy domains, ranging from environmental management to health and social welfare, law and order, counter-terrorism and even economic development. It then explores several common trends in governance that weaken self-reliance. Finally, the paper explores what governments can do (from national to local levels) to revisit subsidiarity. In doing so, I celebrate the concept of Landcare as a grass-roots movement of extremely wide importance.





# **1st International Conference of Landcare Studies**

**Global Resilience Through  
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