

Therapeutic Landscape Conference

27th November 2015

Lecture One:
Dr. Mardie Townsend, Deakin University
'Therapeutic Benefits of Nature'

- APS Survey of Stress and Wellbeing – there is an increase in stress, depression and anxiety (2011-2015). People have lower wellbeing due to busyness, division and isolation.
- By 2030 cardio-vascular disease and mental illness will be the biggest contributor to Burden of Disease.
- We need an increase of physical activity as it has physical and mental benefits.
- There are many relational health problems (ie. various abuses).
- Overall cost of supporting people with mental illness (excluding lost productivity) = \$28.6 billion (2.2% GDP) Medibank Private and Nous Group.

Wellbeing depends on:

- The natural environment
- Human made environments
- Social Connectedness
- Human Consciousness

Wellbeing includes:

- Satisfactory relationships
- Purpose
- Creativity

The top 5 ways people deal with stress in Australia include:

- TV & media 85%
- Focus on the positives 81%
- Friends & family 81%
- Music 80%
- Reading 75%

Therefore, we are losing contact with nature in the fight against stress.

Diminished contact with nature...we no longer walk places. (For example in 1950s your Great-Grandfather would walk 6 miles to fish, now we may walk to the end of the street).

John Muir 1912 "Everybody needs beauty as well as bread, place to play in and pray in where nature may heal and give strength to body and soul alike".

Biophilia hypothesis: love of nature and living things, we used to evolve alongside natural things, plants and animals.

Nature contributes to intellectual, physical, emotional, spiritual growth/development; the disconnect is recent (150-200 years).

ART (Attention Restorative Therapy)

Facilitates recovery from mental fatigue – a shift of thinking, a shift of perspective from the effortful to effortless – there are 4 aspects

- Being away
- Fascination
- Extent
- Compatibility

See article:

THE RESTORATIVE BENEFITS OF NATURE: TOWARD AN INTEGRATIVE FRAMEWORK

STEPHEN KAPLAN Department of Psychology, University of Michigan, Ann Arbor-, MI 48109-1109, U.S.A.

Abstract: Directed attention plays an important role in human information processing; its fatigue, in turn, has far-reaching consequences. Attention Restoration Theory provides an analysis of the kinds of experiences that lead to recovery from such fatigue. Natural environments turn out to be particularly rich in the characteristics necessary for restorative experiences. An integrative framework is proposed that places both directed attention and stress in the larger context of human-environment relationship

Stress Reduction Therapy

- Lower intensity environments
- Less perceptually jumbled = calming down
- Decreases autonomic arousal
- Inhibits negative thoughts
- Promotes positive feelings

Evidence from Deakin University

“Feel Blue – Touch Green/Beyond Blue to Green” 2006 Parks Victoria, Anglesea & Aireys Inlet Association

Anglesea health engaged a small group with anxiety, depression and social isolation to participate in six-week nature based activities – completed an emotional state scale, face to face interviews. ESScale = all reported positive emotional change (2 exceptions and on one occasion a negative report). The positive impacts = skill development, risk taking, confronting challenges, physical and social connections, confidence and improved: mental health, mood, value and worth. Some went on to become leaders.

“Trust for Nature” (now “Nature Conservancy”)

51 volunteers were matched with 51 non-volunteers for quantitative and qualitative research. They rated their general health as higher with less GP visits, felt safer in the community and utilized their skills in the community.

“Rona Weerasuriya”

A recent study of hospital gardens, 86 interviews, photo illustration techniques, included patients, staff and visitors = rest, relaxation, escape and connection to world, feeling safe and protected at Austin Health. There was also relief in stressful work environment, holistic healing. (A journal article is to be published soon).

“Hepburn Springs” (“Outdoors Inc”)

This is for those marginalized with mental illness and substance abuse (Dr. Claire Henderson-Wilson). Quantitative and qualitative methods – 17 people (only 2 with prior relationships) their involvement reduced stress and depression, built social connections, distracted from harmful activities – this last part is a new research area.

Hints/Help – Where to from here?

The word ‘therapeutic’ in therapeutic landscapes is still required, at present, for engagement with health professionals.

Hospitals have a quick turnaround in patients therefore there is a need to transition out to programs, not just trying to have something in the hospitals only.

The early childhood sector is aware and changing focus – there can be generational change – they are expecting contact with nature.

How do we evaluate the evidence that it is nature that is causing the benefits? Environmental volunteer studies – is it weather, social contact etc? Not sure – compared volunteers in other sectors not in nature and was different, but is its difficult to quantify. Perceptions of people when you talk to them does ‘say’ it makes a difference being in nature...

What does all this mean for therapeutic landscapes?

- There is a great need for more to be created
- It is not recognized as having therapeutic benefits, yet...
- Therapeutic landscapes offer
 - ❖ Enhanced health and wellbeing outcomes
 - ❖ Potentially reduces suffering and economic burdens in society

Key = belonging & connection through volunteerism...

*“All scars nature heals, whether in rocks or water or sky or hearts...”
(John Muir, ‘Sierra Club’)*

Lecture Two:
Dr. Curtis Reed
‘Horticulture based Therapy: what’s happening in Australia’

Schools, prison, aged-care, rehabilitation centres, etc. all are involved in Horticultural Therapy, but it is not widely recognized. Gardening reduces social isolation, etc.

See Roger Ulrich – *Professor, Department of Architecture and Centre for Healthcare Architecture, Chalmers University of Technology*: Dr. Ulrich is Professor of Architecture at the Center for Healthcare Building Research at Chalmers University of Technology in Sweden, and is adjunct professor of architecture at Aalborg University in Denmark. He is the most frequently cited researcher internationally in evidence-based healthcare design.

Those with a scene of nature needed less medication and recovered quicker.

(Attention = being absorbed in the moment)

Horticultural Therapy split from Occupational Therapy – in Australia most horticultural therapy is unstructured and unrecognized, (it is recognized in other parts of the

world) we have no accreditation, training, standards or research. We have dedicated, informal practitioner groups...”a bit casual, no real model, fragmented and everyone doing it their own way”. There is little collegial support – if you want to set one up it’s usually DIY. Some successes/failures.

Sustainability is often a problem when the key person leaves. On the positive side you are not restricted and there are diverse ways of practicing.

Outcomes are mostly not assessed/measured very often. Need a systematic recorded evidence based practice to help health practitioners see measurable outcomes. Would be useful to be able to prove to the health and government sectors the benefits of HT (more participants = more money). Assists health and recovery. Expresses personality. Helps return/reconnect people to their life prior to trauma/illness. Creates diversion from addiction (rumination). Increases calmness, confidence, connectedness, etc. In aged-care increases physical and mental wellbeing, sneaky-therapy (OT). Can think they have lost their ability to be active but can complete tasks and engage with life. Trauma recovery (PTSD), military, conflict, etc. relaxation, social interaction (refugees/violence) in these groups they find a sanctuary...going there to escape, a retreat from something stressful...

Building natural environments, growing vegies...in schools...increases sense of community. Engages disruptive children, improvement in social and emotional states of children. Disability Children’s Programs – engage in a positive environment, allow them to contribute to the school. Can it be used for Autism? Kevin Heinze programs says yes...positive. Don’t forget you can utilize retirees...

Disappointed that the work is not recognized as therapeutic – it is seen as a distraction activity. People want to be recognized as professionals. We need more entry points, education, training, research, promotion of successful programs, sustainability. Reduce GDP costs of health burden. Needs to increase in status as in other parts of the world.

Where to from here?

- Standards need to be set
- Evidence needs to be evaluated

How to find funding? Profit vs Not For Profit = Diversity

- Apply to foundations,
- Corporations
- Councils, etc.
- Crowd sourcing/funding.

Some states have Therapeutic Horticulture organizations eg. Australian Association for Bush Adventure Therapy www.aabat.org.au **Bush Adventure Therapy** is a diverse field of practice combining adventure and outdoor environments with the intention to achieve therapeutic outcomes for those involved. The **Australian Association for Bush Adventure Therapy Inc.** is a professional body for practitioners who have an interest in supporting, developing and promoting the field of Bush Adventure Therapy in Australia. The breadth of our work is guided by our **intended actions**. We encourage interested persons to connect with the association and get involved in the many areas of work the association is engaged with.

Lecture Three:
Mel Holmes, Kevin Heinze GROW & Austin Hospital
'Horticulture Therapy & Occupational Therapy'

Key concepts of Occupational Therapy:

- Individual goal focus
- Meaningful activity or potential for meaning
- Engagement

Individual adaptations to programs to fulfil goals, fluid/flexibility in goals as work progresses. At Kevin Heinze Grow – needs are addressed individually – head injuries, disabilities, stroke, major trauma, young and aged care (300+). Engagement is key so need to focus on individual interests. You can address different things, but need good planning and skill to set it up:

Physical

- Fine and gross motor skills
- Manual dexterity
- Sitting tolerance
- Standing tolerance
- Praxis
- Proprioceptive understanding
- Balance
- Wheelchair mobility
- Reach
- Stamina

Psycho-Social (caution – the number of items you provide provokes or prevents discussion)

- Practice being sociable
- Speaking
- Self-esteem issues
- How to develop key communication skills
- Non-confrontational situations
- Co-operative working
- Appropriate modelling
- Combat social isolation
- Levels of interaction
- Developing friendships

Cognitive (this can be challenging or reassuring depending on how much content)

- Learning skills and strategies
- Problem solving
- Memory
- Planning
- Attention – persisting & splitting
- Processing different levels of instruction
- Decision making

Psychological

- Reduces anxiety
- Reduces depression
- Learn appropriate behaviours
- Relaxation
- Explore and express feelings through the “work”
- Reduce feelings of alienation
- Increases engagement
- Learning to deal with death and change, life cycles (in the miniature)
- Encourages choices
- Taking control
- Ownership/care of plants is a ‘light’ burden
- Satisfaction

Two-Way Community Interactions

- Fairs and sales to community
- Status as a ‘working person’ for disabled and disadvantaged
- Work experience for school placements
- Life experience

Non-Visual Benefits (excludes flowers, seeds, fruits)

- Satisfaction
- Pride, etc.

<p>Lecture Four: Stephen Wells, Gardens & Grounds Project Officer & Nurse ‘Therapeutic Gardens Case Study: Talbot Rehabilitation Hospital, Kew’</p>
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“Dream Big...Start Small”

This is a sensory and healing garden, (12 years old now), which offers respite, relaxation and recovery for patients and family. Children with depression/anxiety and their families often respond well to a different setting as it improves connection and communication.

The Austin, Repat & Royal Talbot have 980 beds & 8,000 staff, in 2013-2014 they tended to:

- 95,142 inpatient admissions
- 177,027 outpatient clinics, and
- 75,366 emergency department cases

The garden is for rest, relaxation, reflection and regeneration (note the Biblical language).

Always remember - it’s about the people – not the garden!

His philosophy “...it could be me who is ill, traumatized, etc.” this makes a difference.

- Need a multi-disciplinary approach.

- Need a referral-based system.
- Need individual and group sessions.
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Need to incorporate rehabilitation and recreational goals (and research) ie. include physical, emotional and psychological.

This garden is mostly funded through philanthropic grants and fundraising.

Some people move from patient to volunteer.

Families are impacted too when someone they love is suffering and the garden helps them as well.

Issues:

- Management – low water usage at Talbot
- Maintenance – how to input
- Plant selection – choose high impact

There is a “Friends Sensory Garden” which includes gathering spaces for groups as well as “Private Spaces” for individual reflection.

The sensory garden uses colour in the hard landscaping ie. rainbow wall...Include ‘discovery’ aspects...we have a hidden giant birds nest...have fun and quirky areas, garden rooms, commemorative pavers, prayer areas...all of this at Talbot and it is not watered!

How to Facilitate Community Engagement

- Open gardens
- Garden tours
- Horticulture industry sponsors
- Service group involvement (Rotary, Lions, etc.) for working bees
- Speaking engagements
- Media – print, radio, TV

Qualitative Research

- Deakin University and Austin Health – PhD, Roma Weersuriya

(steven.wells@austin.org.au)

Lecture Five:
Dr. Jonathon Kingsley
‘The Natural Environment and why it’s central to Health’

Health: Holistic

Nature: Different viewpoints – malleable, sovereign or interactive (incl. indigenous)

What are the health benefits of contact with nature?

- Wellbeing as spiritual elation
- Reductions in stress and crime

Engagement with nature can be on different levels

- Local
- Regional
- National/Global

See Journal Article: **Dig into Social Capital: Community Gardens as Mechanisms for Growing Urban Social Connectedness**, *Urban Policy & Research*, Vol. 24, Issue 4, 2006 (Jonathan Kingsley & Mardie Townsend)

This article reports on research undertaken with members of a Melbourne urban community garden to explore the extent to which such a natural amenity provides opportunities for enhancing social capital. It is apparent even from this small qualitative study that membership of 'Dig In' community garden offers many benefits to its members. These benefits include increased social cohesion (the sharing of values enabling identification of common aims and the sharing of codes of behaviour governing relationships), social support (having people to turn to in times of crisis) and social connections (the development of social bonds and networks). However, the study indicates that, at least in the early stages of development, such benefits do not necessarily extend beyond the garden setting. This raises a question about the time required to develop high levels of social capital, and points to the need for further research into 'time' and 'space' aspects of community gardens.

Environmental Psychologists & Landscape Architects – act together...

Questions:

- What do you need that connects you to nature?
- How do you 'trickle down' journal articles to general public?

Lecture Six:
Tara Graham-Cochrane
'Building Therapeutic Outcomes through Landscape Design'

(www.designwell.net.au)

- Helps recover from illness quicker
- Reduces stress/blood pressure
- Maintains sleep rhythms
- Vitamin D absorption
- Changes in behaviour
- Changes in emotional expression
- Changes in self-esteem
- Changes in independence
- Good for Occupational Therapy and Physiotherapy, etc.
- Improves communication
- Increases perspective/hope
- Increased decision making
- Team work

Healing Landscapes – need to appreciate healing activities

- Sights
- Sounds
- Senses
- Gardening
- Schools
- Community

Subconscious changes take place in mind, body and soul.

Know Your Purpose – Horticultural Therapy has formal, goal driven outcomes

- Who is the user group
- What Health, Social Determinants, etc. needed
- What other complimentary therapies could help
- Define your success/failure

Barriers

- Locked doors
- Glare
- Lack of shade/shelter
- Uneven paths
- Steps
- Model of Care
- Staff culture
- Staff training/understanding
- Wind
- Water

Therapeutic Gardens - create the space – facilitate the healing

- What do they observe?
- How is it to be interpreted?

Meditate or chat? Healing in passive forms...

HT is *active* healing used by therapists to facilitate healing – examples include:

Dementia enabling landscapes: active, engaged gardens, remove barriers, manage anxiety about the space, add music, old cars, etc. to evoke memories through old objects.

Reflection landscapes: commemorate, regenerate, be at peace

Children's landscapes: communication tools, stress anxiety in family or educational, unstructured environment

Understand your user group and their needs – complete Client Profiles

What is your culture, goals, values, etc.

- Families
- People
- Partnership
- Customer Service
- Integrity
- Accountability
- Innovation
- Achievement

Understand the intended program – what do you want to offer?

- Morning tea

- Exercise
- Art/Music

What is your geographical context?

- Location/history
- Surroundings
- View

Private/Social Interactions – have a balance between passive and active. People prefer ‘closed areas’ for groups (encourages concentration) and ‘open areas’ for individuals (space facilitates perspective).

Restorative Effect of Various Gardens

- Serene/peace/silence/tidy
- Wild/seems self-sown, moss
- Rich in species – plants, animals, birds
- Space, feeling of entering another world
- Vista – open settings with views
- Pleasure – a refuge, safety, be yourself, play
- Festive – a social place
- Culture – historical place, time, story
- Sensory stimulation – sight, smell, taste,
- Vestibular (gravity, movement, balance)
- Proprioception (movement)
- Touch, hearing

Mary Potter Hospice, Calvary Hospital, South Australian Rest Haven Paradise
Dementia Enabling Garden...they move through one place to the next so they feel they've had a 'good day'

Manly Vale Community Garden

'Social engagement garden' with various age groups, on council land but run by surrounding neighbourhood

Nature Play, Eden Hills Primary School

Unstructured play, hide, climb, create, natural materials ie. use branches to form tent like structures and grow creepers over to create natural cubby hiding place

Children's Garden – Legacy Good Samaritan Hospital, Portland, USA

Follow the yellow brick road...Oregon Burns Centre, Portland

Remember to put in staff retreat spots in workplaces that deal with patients...

Remember you can stage your project and the funding

Maintenance and Budget is crucial when planning a program

<p>Lecture Seven: John Rayner & Claire Hetzel 'Education & Training Possibilities'</p>

Australian

- Range of introductory programs
- Accredited training – vocational and research
- Professional Development and Continuing Professional Development
- Seminars
- Workshops 1-2 days eg. Holmesglen TAFE
- Short Courses Introduction to HT

European

- Farming for Health
- Green Care
- Nature Assisted Therapy
- HORTIS Project (European funding)
- Scandinavian Forest Schools Movement
- Italian Care Farm & Social Enterprise

American

- Human Dimensions of Natural Interactions, Austin State University
- Environmental Psychology
- American Horticultural Therapy Association

HT – programming/tech people; program management; people/plant connections

Human Sciences

- Psychology
- Counselling
- Human Growth/Development
- Disability
- Illness
- Principles of Therapy

Horticulture

- Horticultural Science
- Plant Propagation
- Pest & Disease Management
- Plant Materials, Pathology

Related Therapies

- Australian Music Therapy
- Art Therapy (ANZATA)

Grow a Network

- Define & Scope
- Support Practitioners
- Learn from each other
- Take time and consultation to develop

jrayner@unimelb.edu.au