

URBANIZATION OF THE MT LOFTY RANGES? Adelaide Hills under pressure

On 25 August the Society hosted a seminar on the planning issues of the Mount Lofty Ranges. The Seminar ran from 1 – 5 pm with a break in the middle and a discussion period at the end. It was held in the Hetzel Theatre in the Institute Building, State Library of South Australia. The Seminar was attended by over 60 people. Following is the list of speakers.

Leigh Radford OAM, President, RGSSA. Welcome and introduction
David Leach, Mayor, Mount Barker Council
Marc Voortman, General Manager Planning and Community, Mount Barker Council
Natalie Armstrong, Director Development & Regulatory Services, Adelaide Hills Council
James Szabo, Senior Strategic and Policy Planner, Adelaide Hills Council
Dr Bingjie Song, The Adelaide Hills as a multi-functional landscape
Dr Andrew Lothian, Scenic Solutions. Looking after the landscape
Sophie Thomson, Natalie Armstrong Horticulturalist and ABC Gardening Australia presenter
Michael Garrod, General Manager, Hills and Fleurieu Landscape Board
Rebecca Pearson, Regenerative horticulture
Professor Guy Robinson, summing up



Speakers at the Seminar. From left: Michael Garrod, Marc Voortman, Bingjie Song, Andrew Lothian, Rebecca Pearson, James Szabo, Natalie Armstrong, Leigh Radford. In front: Sophie Thomson. Absent: David Leach, Guy Robinson.

David Leach, Mayor, Mount Barker Council

The Council's priorities are circular economies, activating tourism, growth of infrastructure, connecting with nature, climate innovation and a healthy community. He gave examples of

each of these. The Cudlee Creek fire on 20 December, 2019 burnt over 23,000 ha including reserves and roadside vegetation and cost the Council over \$1m.

As an example of activating tourism, Mr Leach described Beerenberg which started in 1969 and by 2000 was selling to supermarkets. In 2022 it opened a visitor experience centre and now employs over 100 staff and have over 100 products.

The Heysen Boulevard is a connector road through the growth area but its construction occurred piecemeal with each developer constructing their section. Only half the road was completed. He has gained the Government's agreement to construct the crossing of the railway.

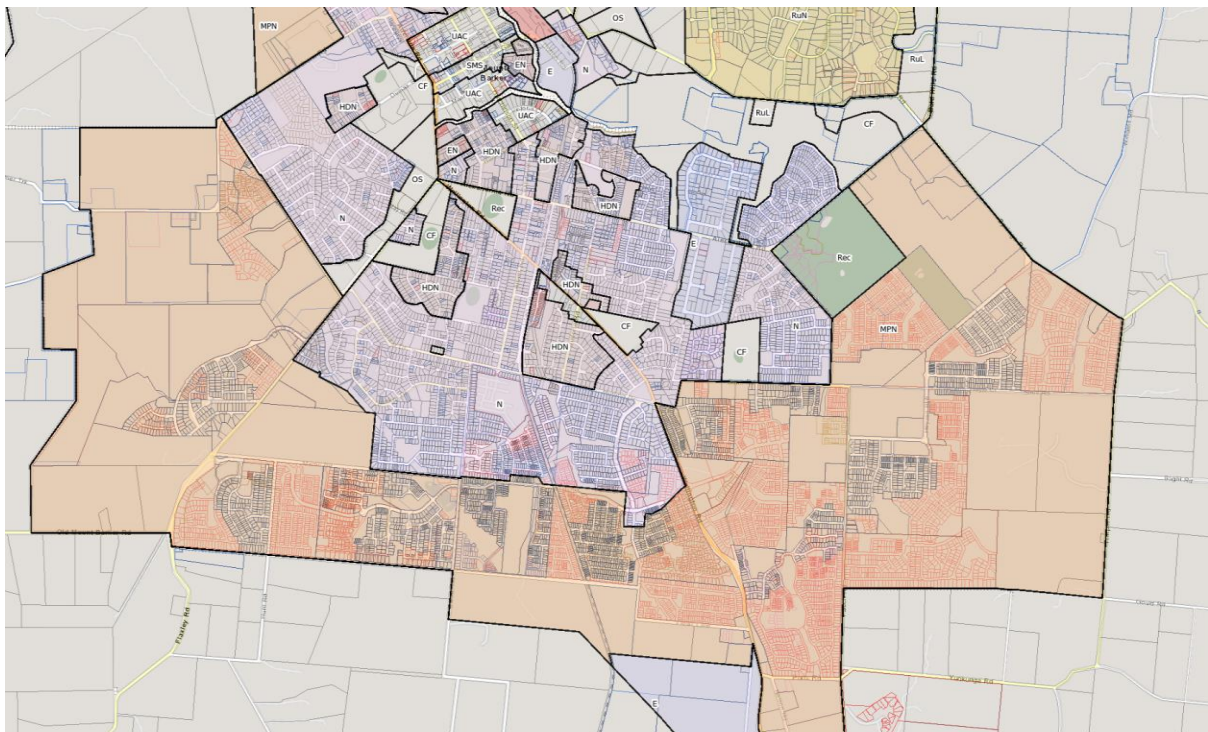
Marc Voortman, General Manager Planning and Community, Mount Barker Council

Mount Barker is the fastest growing LGA in the state and the 8th fastest in Australia with 1,000 additional people per year and 12 new homes every week. The Council has 16 townships including Hahndorf.

In 2010 the Government converted 1,300 ha from rural zoning to residential. However, no provision for infrastructure was included. Master planning by Council included infrastructure guidance and a strategic plan, recreation and community needs analysis, and a rate contribution to infrastructure. To provide for recreation required an additional 22 tennis courts, 7 ovals, walking/cycling tracks and skate parks, libraries and community centres. Additional infrastructure was required to deal with sewerage, road upgrades, electricity distribution and emergency services.

Only 20% of the growth area has been developed to date with another 20 in active development. One feature is linked reserves following creek lines with lakes and walking trails. Water will be harvested from roads and allotments.

Key developments include a regional sports hub, an aquatic facility, two major shopping centres and two hospitals.



Mount Barker growth area

Natalie Armstrong – Director Development & Regulatory Services, Adelaide Hills Council

James Szabo – Senior Strategic and Policy Planner, Adelaide Hills Council

The Adelaide Hills Council includes 57 towns and settlements with a population of over 41,000. The area provides water, food and wine, diverse living options, and it conserves native biodiversity and natural landscapes. The Mt Lofty Watershed area covers 89% of the council and provides 60% of Adelaide's water. Agricultural areas are protected from residential development by the Environment, Food and Production Areas (EFPA). Most of the area is high bushfire risk with steep topography, difficult access and high flammability. Infrastructure to support further development is limited, most of the district lack mains water, sewer or stormwater connections.

85% of SA's apple and pear crop come from the area worth \$114 (incl cherries) plus \$16 m of nurseries and flowers, and \$18 m grapes. Council has sought to increase housing diversity, to provide better choice for various household lifecycle stages (i.e. downsizers, first home buyers etc.). The demand for rural living residential development which has continued to grow.

Key challenges include farmland fragmentation caused by rural living encroachment, land use conflicts with housing & rural diversification (e.g. bird scaring devices, chemical spray drift, smells, noises from farm machinery, late night harvesting), impacts of hobby farming (e.g. biosecurity), and protective tree netting over orchards and vines provides multiple benefits for producers but can impact scenic landscapes.

In summary, urbanisation in the Adelaide Hills Council is limited by State significant assets, natural hazards, infrastructure impediments and community expectations. It remains a highly contested space with the responsibility for water protection, biodiversity conservation, food production and security, land use conflict and rural character preservation creating a challenging planning environment and requires strong strategic intent and a need for a more whole of government integrated approach.

Dr Bingjie Song, University of Adelaide Exploring Multifunctional Agriculture in the Adelaide Hills

Multifunctional agriculture is farms producing more than just traditional crops and livestock. This occurs through farm-based processing, tourism and recreational activities, direct sales, environmental outputs, and contributions to the rural community. This generates multifunctional landscapes.

Dr Song carried out interviews with landowners. She found that full-time farmers are engaged in wine grapes, apples and cherries, while part-time farmers grow cherries. Hobbyists pursue a wide range of horticulture with environmental management the main focus. Hobbyists provide habitat and landscape. Horse owners can cause proliferation of invasive weeds. 40% of hobbyists derive no income from their farm. Many commercial full-time farms have diversified into tourism and on-farm processing. Orchards are largely long-established family businesses whilst some viticulture is more recent. Growth of hobby farming can lead to high-quality farmland being replaced by non-economically productive activities (horses, fragmented environment).

Risks include ageing of farmers with many over 65, succession of the farm, fragmentation of farms, and lack of government support to protect and manage farming landscape. Climate change poses risks of drought, heat, storm, hail, and bushfires. Pests and diseases can result in a decline in the quality and quantity of produce. Risks also include rising costs of labour inputs, economic downturn, oversupply and other market risks.

Apart from intensive farming, other activities including farm-based tourism, processing, alternative food networks and amenity lifestyles become the main features of the

multifunctional landscape.

Dr Andrew Lothian, Scenic Solutions. Looking after the landscape

Qualities of landscapes include their aesthetic quality, cultural or historical landscapes, a sense of place, Dreamtime and an emotional response (e.g. familiarity).

The significance of the landscape is embodied in various quotes including from Sir Mark Oliphant in 1969:

“The beauty of the Inman Valley, and the country between Cape Jervis and Yankalilla, with its heat-haze of eucalypts on a summer’s day, and glimpses of a cool sea, the road lined with dusty Christmas bush in flower are memories of a wonderful boyhood. It seems terrible to me that this country has been utterly devastated so that it might support a few sheep. The trees which Hans Heysen immortalized have almost all been destroyed. They are irreplaceable and for what paltry gain!”

George French Angas (1847) proclaimed that the sound of the woodman’s axe echoing through the solitude of the Mount Lofty Ranges represented the “dawn of civilisation and industry.”

During the late 1960s through to the 1980s, the Mount Lofty Ranges Association was active in promoting the conservation and protection of the Ranges. The University of Adelaide’s Adult Education Department sponsored a number of seminars on the future of the Ranges. The State Planning Authority conducted a study of the Mt Lofty Ranges in 1972-3 and in its report (SPA, 1974) recommended: “The protection of natural beauty should be the overriding policy governing all decisions relating to the development and use of land in the Mount Lofty Ranges.”

The Hills landscape has changed significantly through the clearance of half the native vegetation since WW2 and growth of towns.

In 2015, Dr Lothian conducted a community-based survey of landscape quality which found 70% rated 6 (1 – 10 scale) due to the hilly terrain with many large trees and water in dams. The central Hills Face Zone overlooking Adelaide, and Deep Creek rated 7. The cliffs & waterfalls in Waterfall Gully and Morialta rated 8. Barren areas (e.g. Palmer scarp) rated 5 and pine forests rated 4.

Some interesting findings from the survey:

- Powerlines through Cleland National Park lowered rating 9% from 6.51 (without) to 5.92 (with lines).
- Land cover had a stronger positive influence on ratings than land form.
- Autumn yellow colour of vines and pastures rated lower than green colour.
- Vines actually decreased ratings, not enhanced them. This is because the trees have been cleared from vineyards.
- Covered orchards and vines lowered ratings by half a unit or 9%. Fires lowered ratings by two units or 40%.

The Planning Code issued in 2021 replace Council development plans and speaks of maintaining a pleasant rural character and amenity. The new Landscape Act Act enables the aesthetic component of the landscape to be recognised, protected and managed. However, landscape amenity is not included in the State Landscape Strategy.

In the UK, Protected Landscape areas grants are available to protect or improve the quality and character of the landscape and can cover 100% of the cost. In the EU, Good Agriculture + Environmental Conditions (GAEC) provides funds for biodiversity conservation, pollution

control, organic farming, climate resilience as well as the retention of landscape features.

Compared with the State Planning Authority objective, current planning policies provide lip service but they do not carry the imperative thought vital in 1974. The Landscape Boards are involved in landscapes but landscape quality has yet to figure prominently in its programs and grants.

Sophie Thomson, Hills girl, Horticulturalist and ABC Gardening Australia presenter

Challenges in the Hills include: climate change, urban heat island effect, lack of urban habitat, unsustainable development – urban sprawl and urban infill, food insecurity and lack of community and social connections.

The solution: 5-star garden rating: cool, liveable, habitat haven, sustainable, productive.



Typical zero star rated house in Mount Barker. Hot pavements. Vegetation of zero habitat value. Synthetic turf.



Mount Barker subdivision. Black roofs everywhere. Zero rating. No space for trees.

Need: Shade, shelter, reduce unnecessary hot reflective surfaces, reduce radiant heat.

On a 35 degree day, the temperature over hard dark surfaces was 55 - 60°. Radiant heat from an unshaded galvanised iron fence was 45° compared with 14° for shaded fence. The temperature off synthetic turf was 65° compared with 21° off grass.

Need public gardens such as the Mt Lofty Botanic Garden, community gardens such as the Duck Flat garden with vegetables, and urban farms.

Michael Garrod, General Manager, Hills and Fleurieu Landscape Board

The new Landscape South Australia Act took effect on 1 July 2020. It identified soil health, pest plant and animal control and water management as major priorities of natural resource management in the state. A proposed Biodiversity Act will place biodiversity at the centre.

The Landscape Boards undertake, promote and integrate the management of natural resources within its region, with particular reference to: land management, water resource management, and pest animal and plant control, to build resilience in the face of change and to facilitate integrated landscape management and biodiversity conservation.

The Hills and Fleurieu Landscape Plan was launched in 2021 after deep community consultation. It has 5 priorities: Land, Water, Nature, Climate and Community with 55 strategies listed under these. The priorities are interconnected and interdependent.



Hills and Fleurieu Landscape Board Region

The Hills and Fleurieu region contains 660,000 ha (440,000 ha land), 130,000 people, is one of Australia's 15 biodiversity hot spot with three quarters of South Australia's birds and half of its native plants, a highly productive landscape, and Country of the Kaurna, Ngarrindjeri and Peramangk First nations.

There 68,400 land titles. 14,000 land owners have more than 1 ha and 6,000 landowners have more than 10 ha. There is a high turn-over of landholders between every 7 and 10 years.

Current vegetation cover 15-25%. Remnant vegetation occurs as fragmented patches or linear strips, but scattered 'paddock' trees provide important habitat and connection. Small patches are vulnerable to other threats (pest and weed invasion, climate change).

Rainfall is declining with a hotter, drier future, and more extreme weather – heatwaves, storms, severe fire danger. By 2030, the time spent in drought will nearly double in the Hills and Fleurieu.

Many bird species are in decline as habitat changes. With urbanisation there is a loss of mature trees and hollows, increased stormwater runoff, impacts of cats on wildlife, aggressive, common bird species push out other species (e.g. noisy miner). At the urban interface there is increased fire risk to people and increased threat to biodiversity from asset protection zones (i.e. clearance around houses). Protecting what is left is not enough!

Rebecca Pearson, Regenerative horticulture

For her PhD, Rebecca Pearson compared the McLaren Vale area with Margaret River in Western Australia, shifting from sustainability to regenerating tourism in the regions.

From interviews she found in McLaren Vale, the most common comments related to more urban sprawl and housing development, and the loss of open space and agricultural land to

urban growth.

McLaren Vale founded sustainable Winegrowing Australia with a recycled irrigation scheme. It has the highest % organic & biodynamic vineyards nationally. The following comments reflect a shift to regenerative thinking: 'I prefer to use the word regenerative rather than sustainable.', 'What is already happening, which is a shift from exploitative tourism... to regenerative tourism.' 'I see myself as a custodian of this land and this business. I want to pass it on in better condition than what it was passed to me in. So, it's ensuring that generations will continue to benefit from the practices that we're using now, and the land is regenerating. It's not taking. It's also putting back, giving something back'. 'I'm a farmer. I did a science degree and now I'm having to learn all about tourism'

Locals rank environmental management outcomes from tourism higher than visitors. Developing more experiences that highlight the work vignerons are doing to support landscape regeneration at individual business and regional levels is also important for normalising forms of tourism linked to strong sustainability. Storytelling for sustainability through tourism experiences could be improved to enhance visitor willingness to invest in supporting place management.

Symbiotic/Regenerative relationships: Benefits for both agriculture, rural life, rural landscapes and tourism. enhanced systemic resilience, opportunity for supporting sustainable management of landscape through tourism, good policymaking is key.

Professor Guy Robinson, University of Adelaide

Guy Robinson provided an overview of the various presentations in a short conclusion to the event. He highlighted the loss of top-quality agricultural land to urban sprawl in the Greater Adelaide region in the last forty years, with over one-third of new urban developments being on the best land, which includes the current and planned new development at Mount Barker. He observed that it was the scale of this particular development that was highly problematic, especially as there had been inadequate investment in the requisite infrastructure needed in the thirty years since this 'overspill' was first proposed. Although Mount Barker Council would undoubtedly do its best to provide accompanying green space and sensitive landscaping, this type of development is destructive of farmland, flora and fauna, can put people in greater danger of bushfire risk, and fails to meet most of the criteria needed for sustainable development.

Guy pointed out that Adelaide is one of the world's lowest density cities, so there is plenty of scope for sustainable, climate-change friendly development on the Adelaide Plain. This does not have to be high-rise, but can meet the needs of catering for first-time home owners, single-person households, non-car dependent lifestyles, housing diversity and with blue-green space to help offset urban heat island effects. He pointed to examples of creative, best-practice design already in Adelaide, such as Bowden, Tonsley Park and Lochiel Park, that are far better 'solutions' than consigning people to unsustainable new developments far removed from the city. He also reiterated points made by the earlier speakers about the need for greater protection to be given to the prime farmland and attractive landscapes in the Adelaide Hills, with more stringent controls placed on new house builds and sub-division. He asserted that some of the lessons learned from European and North American experience needed to be applied in the South Australian context if we wish to maintain Greater Adelaide as a desirable and very liveable city and region.

Summary by Andrew Lothian