



# *Friends of Grasslands*

*supporting native grassy ecosystems*

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Meredith Hunter MLA

Chair

Standing Committee on Climate Change, Environment and Water

Legislative Assembly for the ACT

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Canberra ACT 2601

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Dear Ms Hunter

## **Inquiry into the ecological carrying capacity of the ACT and region Discussion Paper, October 2010**

FOG is a community group dedicated to the conservation of natural temperate grassy ecosystems in south-eastern Australia. FOG advocates, educates and advises on matters to do with the conservation of grassy ecosystems, and carries out surveys and other on-ground work. FOG is based in Canberra and its more than 200 members include professional scientists, landowners, land managers and interested members of the public.

FOG welcomes the Inquiry which could provide an opportunity for the people in the ACT and region to contemplate the broad issues associated with the ecological footprint and carrying capacity of the ACT region.

In FOG's view the ACT and the region clearly have an oversized ecological footprint and the ACT region clearly exceeds its carrying capacity. In the case of the ecological footprint, there seems to be a reasonable consensus about the concept and measurement of it and the Commissioner for Sustainability and Environment has provided a measure of the ACT and region's footprint. Australia has a very high footprint compared to the global average, and the the ACT region's is higher than the national average. The issue then becomes what is appropriate government policy not only to contain the increase in footprint but in fact to reduce it.

Regarding carrying capacity, the measurement here seems less clear. Clearly the region is exceeding its capacity, as it would appear to be abundantly clear that there is large scale land clearing for urban development and infrastructure, intensification of agriculture, replacement of natural vegetation with plantation forests, increasing areas of land dominated by weeds owing to poor management. The opposite side of the coin is the reduction of biodiversity and natural landscape function. The discussion paper only refers in passing to biodiversity and

ignores landscape function. Regarding biodiversity, it is clear that all vegetation formations are continuing to be cleared. In particular, despite commitment given to threatened ecological communities, our grasslands and woodlands are continuing to be cleared. There is widespread and rapid decline in many species. The ACT government has been tardy to develop legislation on offsets to ensure that there is not net loss of native vegetation and habitat. FOG considers that discussion ought to focus on biodiversity and landscape function services and develop aggregate and indicative measures of these services. Again, the issue how do we set benchmarks for biodiversity and obtain them - the report should seek to make recommendations on.

Many of the questions in the report are methodological, statistical, and require consensus of the concepts and measurements proposed. Here, FOG considers that an expert panel of statisticians, natural resource managers, ecologists, demographers, economists, and social scientists, with some inclusion of public sector, industry and community representatives should be formed to consider what are appropriate concepts and measurements. Appropriate measurements should also provide us an analysis of who has the bigger footprints and what are the main threats to biodiversity and landscape function.

To emphasise the point in the previous paragraph, FOG believes that the concepts and measures used need to be clearly defined and to be scientifically rigorous. In this type of debate, there ought to be avoidance of analysis based on ideology or unsubstantiated assumptions.

The discussion of the growth of human population is obviously relevant, but here there needs to be some modelling of different scenarios. One could imagine that the region could support a much higher human population which actually has a much reduced ecological footprint and lives without encroaching on non-human life forms. On the other hand, the current population with its existing patterns of consumption is clearly not sustainable and its footprint outrageous.

FOG considers that the proper development of concepts and measurement of ecological footprint and carrying capacity would lead to better identification, protection, management and restoration of our threatened and other ecosystems, cessation of clearing, better use of energy and water, increased investment in landscape and vegetation management and restoration, use of indigenous vegetation in our gardens and open areas, and better investment in human knowledge and capital.

FOG has been advocating two key concepts and steps that government should take. First, it is opposed to clearing of native vegetation and native animal habitat in general. Where clearing is considered to be essential, it is vital that suitable offsets which deter and compensate for vegetation loss are mandated. Second, we need to be smarter about the management of our reserves and open spaces. In this regard, we have been advocating investment in the establishment of a bush management team.

We have attempted below to answer the questions posed in the discussion paper:

- (a) It should be a relatively easy matter, using economic modelling techniques, to quantify what resources (in terms of water, energy, and food) are produced within the ACT and region. It should also be possible using economic modelling techniques to measure the consumption of those resources and hence the difference, the net imports of resources. Some further analysis should provide sufficient answers on where those imports come

from. Obviously there is scope to produce more of those resources locally. Here, however, the relative cost of region-produced versus import-produced resources would need to be assessed carefully. This type of analysis, however, would leave out other goods and services produced and used in the ACT and region – these should be included in any complete analysis.

- a. Other non energy goods and services, normally measured in economic statistics accounts, should also be considered in any accounting process. The ACT and region would be a net exporter of fibre and wood products, and public service, education, tourism and a host of other services. These goods and services generate income and employment for the region and also use natural physical resources.
  - b. Biodiversity and ecological services should also be included in any analysis. These services are not normally measured in economic accounts but are essential elements in any consideration of carrying capacity and ecological footprint.
- (b) Regarding measures of ecological footprint and carrying capacity
- a. There seem to be standardised and accepted measures of ecological footprint and it is useful to have measures such as those produced by the Commissioner for Sustainability and the Environment. This would provide a basis for a policy and community commitment to reduce what is obviously for Australia, and the ACT and region in particular, too high a level of ecological footprint. There are obviously parallels here to the reduction of greenhouse emissions – we need to set targets to reduce consumption of natural resources to an appropriate level.
  - b. It is less clear what would be a regional measure of carrying capacity. Clearly, we are exceeding our capacity to keep, say, biodiversity and ecological services at 1990 or 2000 levels.
  - c. In using measures of both ecological footprint and carrying capacity we need benchmarks of what is an acceptable level. This would need to include measures of biodiversity and ecological services and to state at what levels they need to be sustained.
- (c) The initial questions in section (c) are technical statistical questions which should be answered by a panel of expert statisticians, economists and natural resource managers. The factors that drive the use of resources may be determined by an analysis of what sectors of the community (households, government and industries) are the big users of resources and, within each sector, what entities are high resource users. Information on use of resources should obviously assist to identify ways to manage resources more effectively.
- (d) The chief factors that should be taken into account are what resources are being used. Here more weight ought to be given to the running down of our landscape function/ecological assets and biodiversity resources. Obviously greater destruction of the natural environment through land clearing for urban development, more intensive agriculture, planting of forests are among the factors that ought to be considered.
- (e) There is clearly a high correlation between income and high natural resource use. However, cultural change is possible if social perceptions and rewards can be changed. Interventions and better planning processes could greatly assist. Stopping further Greenfield development, i.e., confining our city to its current boundary and stopping development of new suburbs should be seriously considered.
- (f) Effective measures would be to stop further urban sprawl, introduce environment taxes and use such funds to manage our natural areas. The major barrier to slowing the growing of the ecological footprint is poor planning (that increasing encroaches on native vegetation and habitat) and poor infrastructure decisions such as spending huge monies on roads and little on public transport and human capital.

- (g) Individuals can reduce consumption of resources in many ways. For example, many FOG members would happily make suitable tradeoffs (if they haven't already done so), by actively reducing their ecological footprint, and generously giving their time, resources and finance to assist the environment. Sustainable consumption means setting benchmarks aspirations of what is achievable and then working to achieve them. Obvious social, economic and taxation policy have a role to play in helping people make the shift and facilitating the less economically well off to change resource use.
- (h) The ACT can have a huge impact on the region. ACT governments have been somewhat remiss in not always thinking in a regional context and should do so as a matter of course. The ACT Government obviously influences the size, demographic and location of the region's population. All government policy should consider impact on the region as a whole.
- (i) Infrastructure needs include investment in better natural resource management, public transport, education, health and the like. We should be switching infrastructure investment to get better bang for our dollar in areas such as reducing the footprint.

Sincerely yours

A handwritten signature in black ink, appearing to read 'Geoff Robertson', written over a light grey rectangular background.

Geoff Robertson  
President

5 November 2010