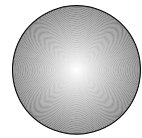


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**FINAL CONSOLIDATED REPORT: 2003 TO 2008**

**INVESTIGATION INTO COMMUNITY AWARENESS  
AND ATTITUDES ABOUT WEEDS AS A  
SIGNIFICANT PROBLEM IN AUSTRALIA IN 2008,  
AND COMPARISON WITH A SIMILAR  
STUDY CONDUCTED IN 2003**

**CONSOLIDATED OUTCOMES OF FOCUS GROUP  
DISCUSSIONS AND NATIONAL TELEPHONE  
SURVEYS IN METROPOLITAN AND REGIONAL  
CITIES – TRENDS 2003 to 2008**

Report prepared for:  
**CRC for Australian Weed Management**

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MARS J781  
23 October 2008

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## EXECUTIVE SUMMARY OF KEY FINDINGS

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### Introduction

Market Attitude Research Services Pty Ltd (MARS) was commissioned by the CRC for Australian Weed Management in 2003 and 2008 to undertake an Australia-wide community research project to provide baseline measurements for the Year 2003 of Australian community awareness and attitudes toward weeds as a significant national environmental problem in Australia, and to identify comparisons and trends in 2008.

The purpose was to assist the CRC for Australian Weed Management to investigate and understand longer term trends (between 2003 to 2008) in public awareness and knowledge of the serious negative impact weeds cause for agricultural enterprises, bushlands and other natural areas, and to the Australian economy.

### Research Methodology

Two research methodologies (using comparable methodologies) were undertaken in both 2003 and 2008, and covered, firstly, a series of focus group discussion conducted in Sydney and Adelaide (in 2008 two (2) focus groups were conducted in Sydney, and two (2) in Adelaide, to give four (4) focus groups discussions in 2008). Secondly, a national telephone survey was conducted randomly with n=750 people aged 18 years and over living in Australian capital cities and major regional cities during 2003 and 2008.

Specifically, the methodologies covered:

- **Qualitative Phase: a series of focus group discussions conducted in Sydney and Adelaide**

....four (4) focus group discussions were conducted covering Sydney (two focus groups) and Adelaide (two focus groups). The focus groups were conducted during August 2008 (Note: in 2003 three (3) focus groups were conducted covering two sessions in Sydney and one in Adelaide). Population segments covered by the focus groups were people employed in professional and managerial occupations, people employed in white collar, technical, trade and blue collar occupations, and persons not in the labour force (such as people in full-time home duties and retired people). In addition to gaining qualitative insights into how Australian people think and talk about weeds, or even see weeds as an issue which should be addressed, the focus group sessions provided opportunity to test possible ideas and language for possible messages which could be used in weeds public information campaigns to explain the seriousness of weeds as a national problem.

- **Quantitative Phase: large scale statistically representative national telephone surveys to obtain benchmark 2003 and tracking 2008 measures to assist the investigation and understanding of community perceptions of weeds as a national problem in Australia**

....this stage was conducted during August and September in both 2003 and 2008 to provide 2003 benchmark baseline measures and 2008 trend tracking measures to understand Australian community awareness and understanding of weeds as a national problem. The 2003 benchmark and 2008 tracking surveys involved n=750 random telephone survey interviews representative of metropolitan and major regional urban areas of Australia.

- Note:
- (1) Percentages in the survey estimates may not add to 100% due to rounding.
  - (2) A change in the percentage estimates of plus or minus 4% between 2003 and 2008 is statistically significant.
  - (3) The CRC for Australian Weed Management has also received a separate report for each of the above phases.

## **Key Findings – Australian Community Awareness and Attitudes Towards Weeds As a Serious National Problem**

Key findings which emerged from the focus group discussions and the national survey conducted for 2008, with comparisons to similar approaches in 2003, are shown below....

### **KEY FINDINGS: INSIGHTS INTO HOW THE AUSTRALIAN COMMUNITY PERCEIVE WEEDS AS A SIGNIFICANT NATIONAL PROBLEM 2008 – WITH COMPARISONS TO 2003**

#### **KEY CONCLUSIONS**

- Overall, the most concerning environmental problems facing Australia, as perceived by the Australian community, are “the need to preserve or restore rivers in Australia” and “the need to address water and groundwater protection”. These outcomes emerged in both 2003 and 2008 (with over 90% concern being expressed for both environmental issues in both periods).
- During the national surveys, the issue of “weeds invading bushland” (84% concern in 2008) and “weeds invading farmlands” (76% concern in 2008) gained lower perceptions as a national environmental problem when compared to a range of other environmental problems.
- However, in 2008 the issues of “weeds invading bushlands” and “weeds invading farmlands” both gained statistically significant increases in perceptions of being national environmental problems, compared to 2003 (rising from 78% and 72% concern respectively in 2003 to achieve 84% and 76% respectively in 2008).
- But, overall, in both 2003 and 2008 there remained stability in Australian community perceptions that the weeds problem facing Australia was “an extremely serious urgent problem, or at least a serious problem” – in both years slightly less than five in ten people (46% of the population in both years) gave such a rating. Generally, most people acknowledged that there may be a problem, but they did not know enough about the seriousness of the weeds problem in Australia to make a judgement.

During the 2008 focus group discussions conducted in Sydney and Adelaide the issue of “weeds invading bushlands and farmlands” were occasionally mentioned, but usually in the category of “second tier” environmental problems. A similar outcome emerged in 2003. Comments expressed on this issue during the 2008 focus group sessions are illustrated below:

*“Most people are unaware of the problem of weeds because when you live in cities you hear very little about it.”*

*“Weeds are a slow impact story and is not a high profile issue. Consequently, you just don’t hear about weeds as a major problem.”*

### **KEY CONCLUSIONS continued**

- Further questioning during the survey interviews found that the issue of weeds as a national problem gained most resonance through definitions such as “weeds are plants that cause problems for farmers and graziers” (93% population support in 2008) and “weeds are plants that invade bushland and other natural areas” (91% support in 2008)
- Finally, following further survey questioning, up to nine in ten (91%) people in 2008 gave support to the view that the Australian public should be told more about the problem of weeds in Australia, and the trends between 2003 to 2008 identified that strongest support was given to messages and public information communication about the serious problem of weeds causing:
  - extra costs of billions of dollars each year for Australian farmers (and for the Australian community in higher grocery bill costs) – over eight in ten (82%) population support emerged in 2008;
  - the impact of weeds in causing a decline in the number and variety of Australia’s native plants and animals – over eight in ten (83%) population support emerged in 2008; and
  - a heavy reliance on agricultural chemicals by farmers – over eight in ten (84%) population support in 2008.

**Comments expressed about the above concerns during the 2008 focus groups conducted in Sydney and Adelaide are illustrated below:**

*“The significant extra costs to farmers is a big story...it is a staggering large cost for farmers...but to get the average person to take notice the message has to show where the costs hit the hip pocket, such as the increased price of bread, then people will take notice...the consumer story is much stronger than the farmers’ story.”*

*“The loss of plants and animals dependent on the native vegetation being invaded by weeds is a very important issue because it raises genuine environment effect from weeds...it is a very focussed message that pulls at the heartstrings. It is a very important message because the extinction of native animals draws you in.”*

*“The reliance on agricultural chemicals by farmers to control weeds is a big issue...it is a serious issue and only solves the short term problem of weeds and not the long term problem.”*

Further key findings are presented overleaf.

**At the end of the survey interview the respondents were allowed to make final qualitative comment about how weeds as a national problem should be addressed. The most significant comments expressed were:**

- **around one in five respondents expressed views that a public information campaign would be worthwhile to undertake through actively promoting weeds as a serious problem for farmlands and natural bushland areas; and**
- **another one in five respondents expressed a range of views giving support for developing and introducing school education campaigns, or for encouraging local Council area-based public education campaigns, and having public education campaigns presenting visual images of weeds and the problems being created.**

**Similar comments emerged at the conclusion of the 2008 focus group sessions conducted in Sydney and Adelaide:**

*“There needs to be a way to give weeds a focus as a national problem...the critical issue is the loss of plants and animals due to the native vegetation they depend on being invaded by weeds. Another important issue is the billions of dollars in agricultural costs spent on controlling weeds, and the heavy reliance on agricultural chemicals and the associated negative food chain effects from such chemicals. The huge costs involved brings out the reality of the weeds issue.”*

**The overall conclusion to draw from the national community survey and focus group discussions conducted in Sydney and Adelaide in 2008, and supported by the earlier 2003 investigations, is that the Australian community living in metropolitan and regional cities would be supportive of a national public information campaign delivering the above messages explaining the impact of weeds as a serious national environmental problem.**

## RECOMMENDATION

Based on the findings from investigations conducted in 2008, and similar baseline investigations conducted in 2003, the focus group discussions and the findings from the national surveys with households living in metropolitan and regional cities of Australia the following recommendations are made for CRC for Australian Weed Management and associated stakeholders consideration....

### RECOMMENDATION

**It is recommended that the three most powerful messages (identified from the focus groups and national surveys) identified as potential “hot button” issues which could be adopted to promote the problem of weeds as a significant national problem are:**

- **firstly, the annual billions of dollars cost expenditure required by farmers to control weeds across Australia, and, secondly, the associated issue of farmer reliance on agricultural chemicals (and the impact this significant agricultural cost may have in raising the cost of household food purchases in Australia); and**
- **thirdly, the significant impact of weeds in causing a decline in the number and variety of Australia’s native plants and animals.**

**It would also be useful to include words such as “invasion” and “aggression” because testing in the focus groups identified that these two words created interest in listening to the messages.**

...this recommendation is made because, if resources exist, it would be worthwhile for relevant agencies addressing the weeds problem facing Australia to initiate a long term public information campaign to explain the serious environmental problem, and huge economic costs, being caused by weeds invading Australian farmlands and native bushlands. Based on the investigations conducted in 2008 and 2003 the research suggests that the Australian community will readily listen and respond to such strong messages.

**DETAILED FINDINGS –  
2008 with comparison to 2003**

**- OUTCOMES FROM FOCUS GROUP  
DISCUSSIONS AND A NATIONAL  
COMMUNITY SURVEYS CONDUCTED IN  
METROPOLITAN AND REGIONAL CITIES**

Note: Percentages may not add to 100% due to rounding.

## **POSITIONING OF WEEDS AS AN ENVIRONMENTAL PROBLEM**

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### **Perception of Major Environmental Problems in Australia**

It was identified during the focus group discussions conducted in Sydney and Adelaide during 2003 and 2008 that “weeds” as an issue relevant to the environment or as a significant problem in Australia was very low on the horizon in people’s minds. When “weeds” was considered during the focus groups as an environmental problem facing Australia (and this only occurred after prompting by the focus group moderator) the urban participants (living in Sydney and Adelaide) mostly related it to a “plant pest” problem for home gardens, or that weeds were occasionally mentioned as an ongoing problem for farmers or the impacts of weed invasions into bushlands.

This issue was explored further in national telephone surveys conducted across Australian urban areas in 2003 and 2008. The random telephone surveys were conducted with 750 households covering the capital cities of Sydney, Melbourne, Brisbane, Adelaide, Perth, Hobart, Darwin and Canberra and the regional cities of Wollongong, Newcastle, Tamworth, Albury/Wodonga, Geelong, Ballarat/Bendigo, Townsville, Toowoomba, Mackay, Mt Gambier, Port Lincoln, Bunbury, Geraldton, Albany, Launceston and Alice Springs. Different households were interviewed in 2003 and 2008.

The telephone surveys in 2003 and 2008 were introduced to the household respondent (a person aged 18 years or over) as a survey to understand community opinion and awareness of environmental issues in Australia. Respondents were given no advance warning that the subject matter of the survey was “weeds”. Instead the survey was introduced as a national survey about environmental issues.

The findings which emerged from the national surveys show that “weeds” as an environmental problem which may face Australia in the next 25 years ranks well behind other more highly rated perceived environmental problems facing Australia (such as “preserving and restoring rivers”).

Detailed findings from the national surveys in 2003 and 2008 conducted in metropolitan and regional urban areas across Australia are presented overleaf.

## **Positioning of Weeds Within a Range of Environmental Problems**

The initial question asked in the survey questioning explored the extent to which the problem of “weeds” invasion is positioned or perceived as an environmental problem in Australia (Note: the topic of the survey – “weeds” – was unknown to the respondents and instead it was introduced as a survey about “environmental issues”). The following outcomes emerged for 2003, then 2008 (shown overleaf)....

### **POSITIONING OF WEEDS AS A PROBLEM WITHIN A RANGE OF ENVIRONMENTAL PROBLEMS: 2003**

**Q1. Thank you for your time. Firstly, I would like to read out some environmental issues that Australia may face in the next 25 years. How strongly do you agree or disagree that the following environmental issues will be a problem over the next 25 years?**

**SAMPLE BASE: N=750 URBAN HOUSEHOLDS 2003**

|  | Strongly agree<br>% | Agree<br>% | Neither agree or disagree<br>% | Disagree<br>% | Strongly disagree<br>% | Don't know/<br>unsure<br>% |
|--|---------------------|------------|--------------------------------|---------------|------------------------|----------------------------|
| <b>Air pollution .....</b>                                       | 29                  | 59         | 3                              | 7             | -                      | 2                          |
| <b>Preventing the extinction of plants and animals.....</b>      | 31                  | 55         | 3                              | 8             | -                      | 3                          |
| <b>Preserving or restoring rivers.....</b>                       | 43                  | 51         | 1                              | 3             | -                      | 1                          |
| <b>Weeds invading bushland.....</b>                              | 26                  | 52         | 6                              | 8             | 1                      | 8                          |
| <b>Salinity of farmlands.....</b>                                | 37                  | 48         | 2                              | 4             | -                      | 9                          |
| <b>Soil erosion and overdevelopment .....</b>                    | 35                  | 54         | 3                              | 5             | -                      | 4                          |
| <b>Weeds invading farmlands.....</b>                             | 19                  | 53         | 7                              | 10            | -                      | 10                         |
| <b>Urban sprawl in Australian cities.....</b>                    | 23                  | 53         | 7                              | 12            | -                      | 5                          |
| <b>Recycling of products and packaging to reduce waste .....</b> | 33                  | 51         | 3                              | 12            | 1                      | 2                          |
| <b>Water and groundwater protection.....</b>                     | 37                  | 54         | 2                              | 4             | -                      | 4                          |
| <b>Global warming.....</b>                                       | 28                  | 50         | 6                              | 7             | 1                      | 8                          |
| <b>Preserving native bushland .....</b>                          | 32                  | 56         | 4                              | 6             | 1                      | 1                          |

In 2003 the environmental issues perceived to be the greatest problem were:

- preserving or restoring rivers (94% concern); and
- water and ground water protection (91% concern).

Note: Percentages may not add to 100% due to rounding. Outcomes for 2008 are shown overleaf.

**POSITIONING OF WEEDS AS A PROBLEM WITHIN A RANGE OF ENVIRONMENTAL PROBLEMS: 2008**

**Q1. Thank you for your time. Firstly, I would like to read out some environmental issues that Australia may face in the next 25 years. How strongly do you agree or disagree that the following environmental issues will be a problem over the next 25 years?**

| SAMPLE BASE: N=750 URBAN HOUSEHOLDS 2008                         | Strongly agree<br>% | Agree<br>% | Neither agree or disagree<br>% | Disagree<br>% | Strongly disagree<br>% | Don't know/unsure<br>% |
|--|---------------------|------------|--------------------------------|---------------|------------------------|------------------------|
| <b>Air pollution .....</b>                                       | 43                  | 41         | 6                              | 9             | 1                      | -                      |
| <b>Preventing the extinction of plants and animals.....</b>      | 45                  | 41         | 5                              | 7             | -                      | 2                      |
| <b>Preserving or restoring rivers.....</b>                       | 59                  | 36         | 2                              | 2             | -                      | 1                      |
| <b>Weeds invading bushland.....</b>                              | 37                  | 47         | 6                              | 4             | -                      | 5                      |
| <b>Salinity of farmlands.....</b>                                | 48                  | 43         | 2                              | 3             | 1                      | 3                      |
| <b>Soil erosion and overdevelopment .....</b>                    | 45                  | 46         | 4                              | 3             | 1                      | 1                      |
| <b>Weeds invading farmlands.....</b>                             | 25                  | 51         | 7                              | 7             | 1                      | 9                      |
| <b>Urban sprawl in Australian cities.....</b>                    | 30                  | 46         | 10                             | 10            | 1                      | 3                      |
| <b>Recycling of products and packaging to reduce waste .....</b> | 45                  | 42         | 4                              | 8             | 1                      | -                      |
| <b>Water and groundwater protection.....</b>                     | 53                  | 41         | 2                              | 3             | 1                      | -                      |
| <b>Global warming.....</b>                                       | 43                  | 34         | 8                              | 9             | 2                      | 4                      |
| <b>Preserving native bushland .....</b>                          | 47                  | 46         | 3                              | 3             | 1                      | -                      |

In 2008 the environmental issues perceived to be the greatest problem were:

- preserving or restoring rivers (95% concern);
- water and ground water protection (94% concern);
- preserving native bushland (93% concern);
- salinity of farmlands (91% concern); and
- soil erosion and overdevelopment (91% concern).

The findings for 2008 suggest that most of the environmental issues explored with the Australian community gained increases in strength of concern, compared to 2003. Based on “strongly agree” ratings for 2008, the most “intense” problems perceived were “preserving or restoring rivers” (59% strongly agree expressed) and the problem of “water and groundwater protection” (53% strongly agree expressed).

A summary of key trends is shown below:

**OVERVIEW: POSITIONING OF WEEDS AS A PROBLEM WITHIN  
A RANGE OF ENVIRONMENTAL PROBLEMS: TRENDS 2003 to 2008**

|  | <b>Strongly agree/<br/>Agree ratings</b> |                   | <b>Disagree/<br/>Strongly disagree ratings</b> |                   |
|--|--|-------------------|--|-------------------|
|  | <b>2003<br/>%</b>                        | <b>2008<br/>%</b> | <b>2003<br/>%</b>                              | <b>2008<br/>%</b> |
| <b>Air pollution</b> .....                                       | 88                                       | 84                | 7  | 10                |
| <b>Preventing the extinction of plants and animals</b> .....     | 86                                       | 86                | 8  | 7                 |
| <b>Preserving or restoring rivers</b> .....                      | 94                                       | 95                | 3  | 2                 |
| <b>Weeds invading bushland</b> .....                             | 78 →                                     | 84                | 9  | 5                 |
| <b>Salinity of farmlands</b> .....                               | 85 →                                     | 91                | 4  | 4                 |
| <b>Soil erosion and overdevelopment</b> .....                    | 89                                       | 91                | 5  | 4                 |
| <b>Weeds invading farmlands</b> .....                            | 72 →                                     | 76                | 10   | 8                 |
| <b>Urban sprawl in Australian cities</b> .....                   | 76                                       | 76                | 12   | 11                |
| <b>Recycling of products and packaging to reduce waste</b> ..... | 84                                       | 87                | 13   | 9                 |
| <b>Water and groundwater protection</b> .....                    | 91                                       | 94                | 4  | 4                 |
| <b>Global warming</b> .....                                      | 78                                       | 77                | 8  | 11                |
| <b>Preserving native bushland</b> .....                          | 88 →                                     | 93                | 7  | 4                 |

The above trends since 2003 show that in 2008 public concern about weeds as an environmental problem has increased, notably for:

- weeds invading bushland increasing from 78% concern to 84% concern. (Note: this increase in concern is statistically significant); and
- weeds invading farmlands increasing from 72% concern to 76% concern – this increase is also statistically significant.

Other increases in “concern” (which are statistically significant) emerged for:

- salinity of farmlands (increasing from 85% concern to 91% concern); and
- preserving native bushland (increasing from 88% concern to 93% concern).

In addition to the above statistically significant increases in public concern, the strongest environmental issues of concern in both 2003 and 2008 were – “preserving or restoring rivers” (94% and 95% concern perceptions) and “water and groundwater protection” (91% and 94%).

Based on the survey outcomes for 2003 and 2008 shown on the previous pages the most serious environmental problems perceived to be facing Australia over the next 25 years were:

- Preserving and restoring rivers;
- Water and groundwater protection;
- Soil erosion and overdevelopment;
- Salinity of farmlands; and
- Preserving native bushland.

The problem of “weeds invading bushland” and “weeds invading farmland” ranked lower as significant environmental issues.

Key findings which emerged from the 2008 focus groups (and the earlier 2003 focus groups) are presented below.

At the start of the focus group discussions the participants were asked to initially write down their thoughts about environmental issues or concerns which worry them the most, and then to complete a private questionnaire listing a range of environmental issues (within this list “weeds invading bushlands” and “weeds invading farmlands” were included).

It should be noted as part of this process during participant recruitment and at the start of the focus group discussion sessions the issue of “weeds as a national problem” was kept “blind” to the participants, and the topic of the research was kept at a broader issue of discussion about “environmental problems”.

At this early stage in the focus group discussions during 2008 the private assessments made by the participants highlighted the following issues as the most concerning and worrying environmental problems (listed in order of strength of initial concern as expressed by the participants):

- Most concerning issue – preserving and restoring rivers;
- Second most concerning issue – water and groundwater protection;
- Third most concerning issue – air pollution;
- Fourth most concerning issue – global warming.

More detailed findings are presented overleaf.

Discussion with the participants in the 2008 focus group sessions identified the following detailed assessments of perceived major environmental problems facing Australia:

### **PERCEPTIONS OF MAJOR ENVIRONMENTAL PROBLEMS: 2008**

#### **SYDNEY**

##### **Key Problems Perceived**

###### **1<sup>st</sup> Session**

- Air pollution
- Extinction of plants and animals
- Global warming

###### **2<sup>nd</sup> Session**

- Global warming
- Restoring rivers and waterways
- Air pollution

##### **Other (less important) problems mentioned**

###### **1<sup>st</sup> Session**

- weeds invading bushlands and farmlands
- preserving rivers
- addressing rising salinity
- recycling waste
- impacts from the spread of specific species (such as cane toads)
- disposal of radioactive waste
- threats to the Murray/Darling River system

###### **2<sup>nd</sup> Session**

- damage to ocean biospheres
- impacts to health from manufacturing and agricultural chemicals
- reducing fossil fuel consumption and developing alternative energy fuels

#### **ADELAIDE**

##### **Key Problems Perceived**

###### **1<sup>st</sup> Session**

- Murray/Darling River water supply loss and salinity
- Air and water pollution
- Global warming

###### **2<sup>nd</sup> Session**

- Lack of water sustainability in Murray/Darling River system
- Air pollution
- Climate change and global warming

##### **Other (less important) problems mentioned**

###### **1<sup>st</sup> Session**

- ozone layer damage
- fossil fuel consumption and the need to develop alternative energy fuels
- extinction of native plants and animals
- urban sprawl
- increasing salinity of farmlands
- urban landfill waste caused by overpackaging
- weeds invading farmlands and the increasing need to use agricultural chemicals

###### **2<sup>nd</sup> Session**

- water recycling
- over reliance on urban landfill
- ocean pollution
- loss of farmland due to drought and overdevelopment

The above outcomes identify that in 2008 covering the major cities of Sydney and Adelaide three key important environmental problems were usually presented during discussion as participants considered their private questionnaire assessments – “global warming”, “air pollution”, and “the need to restore Australia’s rivers and waterways (particularly the Murray/Darling River system)”. The issue of “weeds invading bushlands and farmlands” was occasionally mentioned, but usually in the category of “second tier” environmental problems.

During discussion the following comments were expressed during the 2008 focus groups about perceptions held about major environmental problems facing Australia:

**HOW PEOPLE TALK ABOUT MAJOR ENVIRONMENTAL PROBLEMS FACING AUSTRALIA: 2008**

*“Soil overuse and water overuse are the most important environmental issues I see because after many years these resources available will become less and less.”*

(Male, 28 years, storeperson, Chinese non-English speaking background, Sydney)

*“Air pollution is the most important environmental problem for me, followed by the need to deal with river restoration.”*

(Male, 51 years, courier driver, Sydney)

*“Preventing the extinction of plants and animals and preserving native bushland are the most important environmental issues. Australia needs to accept that it cannot prevent global warming by itself, and instead should focus on adapting its economy to cope, rather than trying to prevent the inevitable.”*

(Male, 42 years, engineer, Sydney)

*“Global warming and related issues are the most concerning. But more information and discussions are needed to evaluate the problem.”*

(Female, 56 years, clinical hypnotherapist, Sydney)

*“I think global warming is a major issue.”*

(Female, 47 years, clerical worker, Lebanese non-English speaking background, Sydney)

*“I think all of the environmental issues are a real concern and I do worry for the future of my children and their families in years to come.”*

(Female, 49 years, home duties, Sydney)

*“I think water is the most important environmental issue.”*

(Female, 47 years, health and safety consultant, Sydney)

*“I am concerned about all environmental issues because we have to do something to protect what we have for future generations.”*

(Female, 36 years, business owner, Sydney)

*“Air pollution, over packaging, global warming and water protection are all big issues and it is important to take steps now to help the environment, otherwise it will get more difficult and harder everyday.”*

(Male, 38 years, accountant, Sydney)

*“Water shortages due to drought concern me. I am also concerned about the ozone layer and carbon emissions.”*

(Female, 29 years, secretary, Lebanese non-English speaking background, Adelaide)

*“My main environmental concern is water – the lack of water and the cost of finding a solution.”*

(Female, 52 years, office assistant, Adelaide)

**HOW PEOPLE TALK ABOUT MAJOR ENVIRONMENTAL PROBLEMS FACING  
AUSTRALIA: 2008 continued**

*“Water supply and fuel costs because of reliance on carbon fuel are my main environmental worries.”*

(Female, 31 years, has young children and employed part-time, Adelaide)

*“Global warming and water issues are my major environmental concerns.”*

(Male, 30 years, council worker, Adelaide)

*“Water, clean energy, and air pollution are the key environmental issues.”*

(Female, 32 years, has young children and employed part-time, Adelaide)

*“Water and the ozone layer, for me, are the most important environmental problems.”*

(Female, 29 years, secretary, Adelaide)

*“Air quality, water quality, transport and noise pollution are key issues. But there is a lot of talk about these issues by government, but no action seems to be happening.”*

(Male, 42 years, engineer, Adelaide)

*“Global warming, air pollution, and recycling issues are the major environmental issues which concern me.”*

(Male, 32 years, business executive, Adelaide)

*“Landfill waste such as plastic bags and nappies, water wastage, pollution, and oil spills in oceans worry me.”*

(Female, 35 years, home duties, Adelaide)

*“Economic issues relating to the loss of Australia to overseas competitors if we adopt carbon trading worry me, as well as current Murray Darling River system water problems and air quality concern me.”*

(Male, 45 years, manager, Adelaide)

*“I am concerned about lies being made by government about global warming, and using our concern to raise taxes. But I am concerned seriously about water availability in the Murray Darling system and the overallocation of water. I feel concerned that we will drive our farmers out of business due to lack of water.”*

(Female, 60 years, house cleaner, Adelaide)

*“Water conservation use, greenhouse gas emissions, and the need for recycling are the most important environmental issues.”*

(Female, 28 years, home duties, Adelaide)

*“Water waste and storage issues, air pollution, and climate change concern me.”*

(Male, 35 years, naval officer, Adelaide)

*“Global warming and the associated world food shortage are the main environmental concerns I have.”*

(Female, 49 years, home duties, Adelaide)

Overall, during these initial expressions of concern during 2008 the issue of weeds as a potential national environmental problem did not receive significant mentions. However, in Sydney, “weeds” as an environmental issue problem gained a level of minority agreement as a “problem”, but more significantly the perceived “problems” of “global warming”, “air pollution”, “waterway and river protection issues”, and “extinction of plants and animals” dominated as the major issues.

In Adelaide the key outcomes were global warming and loss of water flows and retention in the lower Murray/Darling River system being perceived as the main environmental problems. However, one or two Adelaide participants who came from rural families did initially mention weeds as a serious problem for farmlands during early discussion.

When asked to discuss why weeds (invading farmlands or bushlands) is perceived to be ranked lower as an environmental threat, the following comments were expressed by participants during the 2008 focus groups:

### **REASONS WHY WEEDS AS A MAJOR ENVIRONMENTAL PROBLEM RANKS LOW: 2008**

#### **SYDNEY**

##### **1<sup>st</sup> Session**

*“Most people are unaware of the problem because when you live in cities you hear very little about it.”*

*“Weeds is not seen as a big issue because you only hear about the drought. Most city people are ignorant about weeds as a problem, because you don’t hear of the economic imperative to get rid of weeds.”*

##### **2<sup>nd</sup> Session**

*“You don’t see weed issues as a major problem although weeds are difficult to control, spread quickly, and are a big problem for farmers.”*

*“I only have low awareness of weeds as a problem. There are more critical issues such as air pollution and global warming.”*

#### **ADELAIDE**

##### **1<sup>st</sup> Session**

*“Weeds can be a visible problem when you travel around the State, but other issues are more important to you personally.”*

*“Most people have experienced weeds in their garden. It doesn’t seem to be a big issue, and also some weeds can be good to add flavour when cooking meals or use as a health supplement.”*

##### **2<sup>nd</sup> Session**

*“You don’t hear much about weeds in the media, and when you do it can be a mixed story because some weeds such as Salvation Jane can be beneficial to farmers in a drought.”*

*“Weeds are a slow impact story and is not a high profile issue. Consequently, you just don’t hear about weeds as a major problem.”*

Outcomes from the earlier 2003 focus group sessions are presented overleaf.

A summary of the main environmental problems which emerged in the 2003 focus groups is presented below....

**PERCEIVED MAJOR ENVIRONMENTAL PROBLEMS: 2003**

| <b>Professional, Managerial or Salaried Executive Level People (Sydney focus group)</b>   | <b>Home Duties and Retired People (Sydney focus group)</b>   | <b>White Collar, Blue Collar and Trades Qualified People (Adelaide focus group)</b>  |
|---|--|--|
| <ul style="list-style-type: none"> <li>• Air pollution</li> <li>• Water pollution and water quality</li> <li>• Drought</li> <li>• Ozone layer damage</li> <li>• Urban development and noise pollution</li> <li>• Nuclear issues and proliferation</li> <li>• Loss of forests</li> <li>• Litter (and storm water pollution)</li> <li>• Overfishing</li> <li>• Coastal development</li> </ul> | <ul style="list-style-type: none"> <li>• Ozone damage and Greenhouse effect</li> <li>• Noise pollution</li> <li>• Destruction of forests</li> <li>• Chemicals in food</li> <li>• Air pollution</li> <li>• Water pollution and water quality</li> <li>• Genetically modified foods</li> <li>• Urban over-development and noise pollution</li> <li>• Nuclear issues and proliferation</li> </ul> | <ul style="list-style-type: none"> <li>• Nuclear waste and storage</li> <li>• Water pollution and water quality</li> <li>• Air pollution</li> <li>• Urban over-development and noise pollution</li> <li>• Plastics and rubbish pollution and the need for recycling</li> </ul> |

Discussion with the focus group participants in 2003 was also undertaken to identify which of the environmental problems perceived rated above were rated as the most important problems. The following outcomes emerged:

**MOST IMPORTANT ENVIRONMENTAL PROBLEMS: 2003**

| <b>Professional, Managerial or Salaried Executive Level People (Sydney focus group)</b> | <b>Home Duties and Retired People (Sydney focus group)</b> | <b>White Collar, Blue Collar and Trades Qualified People (Adelaide focus group)</b> |
|---|--|---|
| 1 <sup>st</sup> Water and air pollution   | 1 <sup>st</sup> Urban development and noise pollution      | 1 <sup>st</sup> Water pollution and water quality                                   |
| 2 <sup>nd</sup> Drought   |  |   |
| 3 <sup>rd</sup> Waterway and water quality pollution                                    | 2 <sup>nd</sup> Nuclear issues and proliferation           | 2 <sup>nd</sup> Nuclear waste and storage   |
| 4 <sup>th</sup> Urban development and noise pollution                                   | 3 <sup>rd</sup> Air pollution                              | 3 <sup>rd</sup> Plastics and rubbish pollution and the need for recycling           |
| 5 <sup>th</sup> Nuclear issues and proliferation  |  |   |
| 6 <sup>th</sup> Loss of forests   |  |   |

For residents of a large metropolitan city in 2003 (particularly for Sydney residents and Adelaide residents) water and air pollution were rated as one of the most significant problems because it was believed to be an ongoing problem, which affected health. Over-development of urban areas and noise pollution were also important environmental concerns. Illustrative comment is shown below....

**REASONS WHY SOME ENVIRONMENTAL PROBLEMS ARE  
REGARDED AS SERIOUS: 2003**

*"Water and air pollution affects us daily. It can cause disease. It is a health and wellbeing issue. It is an environmental problem which impacts on the elements of life. I mean you can see the effect of air pollution in causing asthma."*

(A comment supported by most participants in the professional, managerial, and salaried executive person focus group in Sydney – 2003)

*"Over-development in Sydney is also an important issue because it mushrooms the amount of traffic on roads, and increases noise and air pollution."*

(A comment supported by most participants in the home duties and retired persons focus group in Sydney – 2003)

*"Water quality both in rivers and everyday drinking water quality are an ongoing important issue in Adelaide."*

(A comment supported by most participants in the white collar, trades and blue collar focus group in Adelaide – 2003)

The conclusion to draw from the focus groups in 2003 is that in 2003 weeds were also not seen as an important environmental problem in Australia.

**Conclusion**

At this initial stage in the focus group sessions during 2008 (and also 2003) the issues of "weeds invading bushlands" and "weeds invading farmlands", whilst recognised as important environmental issues by some people, did not overall gain significant concern compared to issues such as preserving and restoring rivers, water protection, air pollution, and global warming.

The national community surveys conducted in 2003 and 2008 identified a similar lower position held for weeds as a serious environmental problem.

However, in 2008, the national survey identified increasing concern about "weeds invading bushland" and "weeds invading farmlands" as a serious emerging national environmental problem.

## PERCEPTION OF WEEDS AS A MAJOR ENVIRONMENTAL PROBLEM

Without knowing “weeds as a national problem” was going to be the focus of discussion in the private questionnaires completed initially by the participants the issues of “weeds invading bushlands” and “weeds invading farmlands”, although not being rejected as an important issue, gained the lowest “important” ratings from the participants overall (following examination of the private questionnaires completed).

A small number of participants, did however, highlight privately in these initial assessments that weeds invading bushlands and weeds invading farmlands were a most important, serious problem, and during discussion they linked such concerns to their farming backgrounds.

When “weeds as a national problem” was introduced as the focus of the research discussion the private assessments made by the participants in their private questionnaires indicated that around a third of the participants nominated “weeds as a serious problem”. Most others, however, ranked the problem of weeds at a lower level to be “a significant issue but not a major problem”, and a minority of participants ranked weeds as not a significant problem at all or they just didn’t know enough to make a judgement.

When asked to “rank” weeds as to the extent it is a national environmental problem for Australia the following discussion and outcomes emerged in each of the focus groups conducted in 2008:

### RANKING OF WEEDS AS AN URGENT OR SERIOUS NATIONAL PROBLEM: 2008

#### SYDNEY

##### 1<sup>st</sup> Session

- “Urgent problem” – nil
- “Serious but not urgent problem” – majority of participants: *“There are bigger issues we need to face such as air pollution, lack of water, and life threatening issues such as global warming. Weeds do invade bushland and this is important because it reduces clean air, but it is not a major issue.”*
- “Important, but not a major problem” – minority of participants: *“Water and drought dominate as the issue. Weeds as a national problem doesn’t get raised much as an issue.”*
- “Don’t know or weeds not seen as a problem” – very small minority of participants: *“I don’t know much about it.”*

#### ADELAIDE

##### 1<sup>st</sup> Session

- “Urgent problem” – minority of participants: *“I come from a farming background and I often hear about how much farmers are spending on pesticides, up to \$60,000 to \$70,000 a year. Otherwise they lose their crops.”*
- “Serious but not urgent problem” – minority of participants: *“You see programs on TV about weeds, but you normally don’t think of it as a problem.”*
- “Important but not a major problem” – majority of participants: *“There are bigger issues in the environment, and as a city resident you don’t think about weeds as a major problem.”*
- “Didn’t know or weeds not seen as a problem” – minority of participants: *“I never hear or see the media raising the problem of weeds as an issue.”*

## RANKING OF WEEDS AS AN URGENT OR SERIOUS NATIONAL PROBLEM: 2008 continued

### SYDNEY

#### 2<sup>nd</sup> Session

- “Urgent problem” – nil
- “Serious but not urgent problem” – small majority of participants: *“I see it as a serious problem for farmers, and even in national parks it can be a big problem, especially near urban areas. Weeds take away soil nutrients and this leads to loss of crops and native plants.”*
- “Important, but not a major problem” – large minority of participants: *“You don’t see weeds as an issue in the media or in the news. You don’t lose sleep over it. Therefore, you feel that if there is a weeds problem then it is being managed quite well, it is not in your face like air pollution or global warming which have “drama” attached.”*
- “Didn’t know or weeds not seen as a problem” – nil

### ADELAIDE

#### 2<sup>nd</sup> Session

- “Urgent problem” – nil
- “Serious but not urgent problem” – minority of participants: *“We are talking about it now and it sounds like a problem. But otherwise, you don’t hear much about weeds as a national problem.”*
- “Important but not a major problem” – minority of participants: *“Weeds are always a problem for farmers, but there are specific weed chemicals farmers can use to address the problem and you don’t hear of weeds as a major issue. Therefore, we are not frightened by it because it seems a less serious issue.”*
- “Didn’t know or weeds not seen as a problem” – minority of participants: *“You don’t hear of weeds as a major problem or the problem is not made exciting enough.”*

Note: In this focus group session no majority ranking for weeds as a major issue emerged.

The above range of outcomes suggest that weeds invading farmlands and bushlands is not seen as a major environmental problem by most people, particularly city residents.

During discussion on the issue of weeds as a potential major environmental problem the following comments and “positioning” of weeds as a national environmental problem emerged:

### POSITIONING OF WEEDS AS A MAJOR NATIONAL PROBLEM: 2008

#### Extremely serious and urgent problem

*“Weeds are an ‘extremely serious and urgent problem’. I come from a farming background and my brother has a large farm on the Eyre Peninsula and he writes research papers about the problem of weeds. A big problem involves chemical sprays to control weeds, and the resilience of those sprays.”*

(Female, 29 years, secretary, Adelaide)

**versus**

#### A serious problem

*“I regard weeds as a serious problem because of the problems caused in the agricultural sector and the invasion of weeds into natural bushland. By comparison, weeds growing in gardens, or along roadways or being a plant out of place are too weak in defining the weeds problem.”*

(Male, 42 years, engineer, Sydney)

**POSITIONING OF WEEDS AS A MAJOR NATIONAL PROBLEM: 2008 continued**

**A serious problem, continued**

*"Weeds are a serious problem. But probably there is a need to raise awareness to the general public."*

(Female, 49 years, home duties, Sydney)

*"Weeds are a serious problem for native natural plants, animals and fish, and another issue is the need for chemicals to try and control them. Chemicals are hazardous for people and the environment."*

(Female, 47 years, health and safety consultant, Sydney)

*"I am aware of serious weed infestations in national parks. Weeds are a serious problem."*

(Male, 50 years, property developer, Sydney)

*"I see weeds as a serious problem because I saw a program about 'woody weeds' in bushland, and this was causing deprivation of the natural bush."*

(Female, 52 years, office assistant, Adelaide)

*"I see the weed problem as serious. But how do you make people realise introduced species can be bad, and require control by chemicals. But you do hear about the problem in local Council brochures and news about farms on TV, in papers, and in journals."*

(Female, 32 years, has young children and employed part-time, Adelaide)

**versus**

**A significant issue but not a major problem**

*"Weeds are a significant issue but not a major problem because governments or farmers can control the problem, and I haven't heard much about it."*

(Male, 28 years, storeperson, Chinese non-English speaking background, Sydney)

*"While I believe weeds are a problem and effect native animals and farms, I feel that other environmental issues are more important."*

(Female, 36 years, business owner, Sydney)

*"I don't see weeds as a major problem because I feel that there is the means and knowledge already available to control weeds, compared to other more major environmental problems."*

(Female, 31 years, has young children and employed part-time, Adelaide)

*"Weeds are an issue of concern, but are not a major problem because now there are many kinds of weedicides available that are species specific. My only concern is that the weedicides may be toxic or build up in the soil."*

(Female, 60 years, house cleaner, Adelaide)

**versus**

**Not significant at all as a problem or unsure/don't know**

*"I don't know. Weeds could be a serious issue, but I am not really sure. I lack knowledge about it! You only hear of global warming and water issues dominating the media."*

(Female, 43 years, clerical worker, Sydney)

## POSITIONING OF WEEDS AS A MAJOR NATIONAL PROBLEM: 2008 continued

### Not significant at all as a problem or unsure/don't know, continued

*"Weeds are not a major problem, nor a significant issue. Although weeds are recognised as a concern."*

(Male, 42 years, engineer, Adelaide)

*"I don't know much about weeds as a problem. I only see weeds as something I have planted in my garden that steals water and nutrients."*

(Female, 28 years, home duties, Adelaide)

*"I really don't know. I have not had sufficient information to make an informed decision. Weed issues don't seem to be rated highly in mainstream media."*

(Male, 35 years, naval officer, Adelaide)

*"I have never thought of weeds being a major problem."*

(Female, 35 years, home duties, Adelaide)

Generally, the range of comments expressed during the 2008 focus group sessions indicate a view that "weeds are a serious problem (but not extremely serious or urgent)" to a lower level position that "weeds are a significant issue, but not a major problem". There is also a high level of uncertainty or lack of knowledge about the problem of weeds invading bushlands and farmlands.

Illustrative comments which emerged in the 2003 focus groups are shown below....

## PERCEPTION OF WEEDS AS AN ENVIRONMENTAL PROBLEM: 2003

**Professional,  
Managerial  
and Executive  
Salaried Level  
(Sydney focus  
group)**

*"Yes! Weeds can be a problem. You do hear about weeds in waterways, or weeds on farms, or ornamental plants escaping from gardens as a problem."*

(A minority comment expressed by several participants – 2003)

**versus**

*"Weeds are not a major issue. Even as a problem for farmers you don't hear much about weeds. It is not front page news. It is not something you hear about as a major issue."*

(A majority comment expressed – 2003)

**Home duties  
and retired  
people  
(Sydney focus  
group)**

*"You hear of weeds damaging national parks and coastal areas, and of weeds effecting farmers. Farmers have to use chemicals to destroy weeds, and this causes further problems."*

(A minority comment expressed by some participants – 2003)

**versus**

*"It is a big problem for farmers because most weeds have been introduced into Australia. But otherwise you don't worry about weeds unless you are a gardener. The home garden is where most people see weeds. You only see weeds as a pest, and not a dangerous threat."*

(A majority comment expressed – 2003)

**PERCEPTION OF WEEDS AS AN ENVIRONMENTAL PROBLEM: 2003 continued**

**White collar,  
blue collar  
and trades  
qualified  
people  
(Adelaide  
focus group)**

*"Weeds can be linked to problems in waterways and on farms. Weeds can be a major environmental problem if not kept under control."*

(A minority comment expressed by some participants – 2003)

**versus**

*"The problem of weeds depends on your circumstances and how you define weeds. Some weeds can look beautiful, and can be edible and look like a flower. But weeds are really no more than a pest, and an annoyance in your garden. Weeds are low on the list of environmental issues."*

(A majority comment expressed – 2003)

The general conclusion to draw from the above outcomes is that weeds as a major environmental problem facing Australia is generally low on the horizon as an issue in the minds of most Australians. Illustrative comments expressed on this issue by the focus group participants in 2003 are shown below....

**REASONS WHY WEEDS ARE NOT SEEN AS A SIGNIFICANT ENVIRONMENTAL PROBLEM: 2003**

**Professional,  
Managerial  
and Executive  
Salaried Level  
(Sydney focus  
group)**

*"Weeds as an issue is not on my horizon. I never hear about it."*

(Young female, early 30s, tertiary degree – 2003)

*"Weeds are an issue but they only affect small areas."*

(Middle aged male, engineer – 2003)

*"Honestly, weeds are not something I have consciously thought about."*

(Young male, late 20s, editor – 2003)

**Home duties  
and retired  
people  
(Sydney focus  
group)**

*"Only farmers are concerned about weeds. But most people don't see weeds as a priority."*

(Male, early 50s, semi-retired – 2003)

*"The problem is that you only pick up snippets of information about weeds. Weeds don't really relate to your day to day life."*

(Male, retired – 2003)

*"The problem of weeds is not publicised. I really don't know anything about weeds being a problem."*

(Female, late 30s, home duties – 2003)

**REASONS WHY WEEDS ARE NOT SEEN AS A SIGNIFICANT ENVIRONMENTAL PROBLEM: 2003 continued**

**White collar,  
blue collar  
and trades  
qualified  
people  
(Adelaide  
focus group)**

*"Weeds for most people are not seen as an environmental problem. Weeds are just a control issue to use pesticides to control weeds in your garden".*

(Male, mid 30s, mechanic – 2003)

*"You mostly experience weeds in your garden. It is not a major issue. But you assume that farmers would have a larger problem with weeds and this impacts on their livelihood and income".*

(Female, mid 40s, photographic technician – 2003)

*"It is hard to define a plant as being a weed. Some look quite attractive. Weeds are really more of a pest than an environmental issue. It is just an annoyance you have in your garden".*

(Female, mid 40s, dental therapist – 2003)

The conclusion to emerge from the focus groups conducted in 2003 was that even if weeds are seen as a problem it is generally **not** seen as a major significant problem by many urban people except as a problem for farmers who live in rural areas.

More findings are shown overleaf.

In the national surveys (conducted for 2003 and 2008) a specific focus was also placed on perception of weeds as a serious and urgent problem. The following outcomes emerged....

**PERCEPTIONS OF WEEDS AS A SERIOUS AND URGENT PROBLEM:  
TRENDS 2003 to 2008**

**Q2. I would now like to focus on weeds as a problem. In your view how bad is the weeds problem facing Australia? Would it be...?**

|   | 2003<br>Total<br>N=750<br>% |       | 2008<br>Total<br>N=750<br>% |
|---|-----------------------------|-------|-----------------------------|
| Extremely serious and urgent problem        | 10                          | → 46% | 9                           |
| A serious problem                           | 36                          |       | 37                          |
| A significant issue but not a major problem | 34                          | →     | 39                          |
| Not significant at all as a problem         | 5                           |       | 5                           |
| Unsure/Don't know                           | 14                          | → 19% | 10                          |
|   |                             |       | 15%                         |

These above findings show that as at August 2003 only one in ten (10%) people living in metropolitan and urban areas of Australia perceived weeds as an “extremely serious and urgent problem” facing Australia, and a similar outcome (9%) emerged in 2008. In 2008, less than four in ten (36%) perceived weeds as a “serious problem”, and in 2008 a similar measure (37% concern) emerged. In total, less than five in ten (46%) metropolitan and regional city residents regard the issue of weeds as an important serious urgent problem facing Australia during 2003. A similar result outcome (46%) has also emerged in 2008.

However, despite the stability in the Australian urban community perceptions of weeds as a serious or urgent problem, there has been an increase in 2008 in perceptions of weeds as a “significant issue but not a major problem” (increasing from 34% perception to 39% perception) between 2003 and 2008.

Detailed socio-demographic and urban area geographic analysis are presented overleaf.

Specific findings amongst socio-demographic and geographic areas of Australia identifying **perceptions of weeds as a problem** are shown below...

**SOCIO-DEMOGRAPHIC AND GEOGRAPHIC AREAS: PERCEPTION OF WEEDS AS A SERIOUS PROBLEM IN AUSTRALIA – 2003 to 2008**

|  | 2003               |                   | 2008               |                   | TREND OUTCOME   |   |
|--|--------------------|-------------------|--------------------|-------------------|---|---|
|  | Serious and urgent | A serious problem | Serious and urgent | A serious problem |   |   |
| <b>Gender</b>                                      |                    |                   |                    |                   |   |   |
| Male .....   | 8%                 | 33%               | 9%                 | 35%               | Male and female gender perceptions of weeds as a serious national problem have generally remained stable between 2003 to 2008.  |   |
| Female .....                                       | 11%                | 38%               | 9%                 | 39%               |   |   |
| <b>Age</b>   |                    |                   |                    |                   |   |   |
| 18-19 years .....                                  | -                  | 27%               | 5%                 | 21%               | Generally, in most age segments between 2003 to 2008 there has been an unchanged outcome in public perception held about weeds as a serious national problem, although people aged 55-59 years were showing increasing concern. |   |
| 20-24 years .....                                  | 8%                 | 27%               | -%                 | 20%               |   |   |
| 25-29 years .....                                  | 9%                 | 29%               | -%                 | 38%               |   |   |
| 30-34 years .....                                  | 9%                 | 38%               | 5%                 | 46%               |   |   |
| 35-39 years .....                                  | 16%                | 35%               | 6%                 | 38%               |   |   |
| 40-44 years .....                                  | 8%                 | 41%               | 10%                | 35%               |   |   |
| 45-49 years .....                                  | 5%                 | 39%               | 5%                 | 34%               |   |   |
| 50-54 years .....                                  | 19%                | 32%               | 9%                 | 43%               |   |   |
| 55-59 years .....                                  | 11%                | 35%               | 16%                | 37%               |   |   |
| 60+ years .....                                    | 10%                | 39%               | 19%                | 39%               |   |   |
| <b>Households with children in their household</b> |                    |                   |                    |                   |   |   |
| Children aged under 10 years.....                  | 12%                | 36%               | 5%                 | 50%               |   | Although people with older children in their household or households without children showed no change, households with younger children present showed increasing concern about weeds as a serious national problem. |
| Children aged 11-17 years.....                     | 6%                 | 36%               | 10%                | 34%               |   |   |
| No dependent children .....                        | 11%                | 37%               | 10%                | 36%               |   |   |

**SOCIO-DEMOGRAPHIC AND GEOGRAPHIC AREAS: PERCEPTION OF WEEDS  
AS A SERIOUS PROBLEM IN AUSTRALIA – 2003 to 2008 continued**

|   | 2003                     | 2008                    |  |
|---|--------------------------|-------------------------|--|
|   | Serious<br>and<br>urgent | A<br>serious<br>problem |  |
| <b><u>People with a non-English Speaking Background</u></b> |                          |                         |  |
| Yes .....   | 5%                       | 32%                     | No changes occurred between 2003 to 2008 in relation to non-English background impacts.  |
| No.....   | 11%                      | 37%                     |  |
| <b><u>Employment Status</u></b>                             |                          |                         | Between 2003 and 2008 a mixed result emerged with full-time employed people showing increasing concern about weeds as a serious national problem, to stable or declining outcomes for other population segments. |
| Employed full-time.....                                     | 12%                      | 29%                     |  |
| Employed part-time ....                                     | 9%                       | 47%                     |  |
| Retired.....  | 11%                      | 39%                     |  |
| University/TAFE student .....                               | 11%                      | 33%                     |  |
| Home duties .....   | 9%                       | 40%                     |  |
| Unemployed .....  | 14%                      | 28%                     |  |
| <b><u>Level of Employment</u></b>                           |                          |                         | Amongst employed people, people in “management and administrative” positions and “white collar” workers there were increases in concern about weeds as a serious national problem between 2003 to 2008.          |
| Business Owner .....  | 15%                      | 33%                     |  |
| Professional Occupation.....                                | 13%                      | 40%                     |  |
| Management and Administrative.....                          | 6%                       | 27%                     |  |
| White Collar .....  | 5%                       | 27%                     |  |
| Blue Collar .....   | 15%                      | 32%                     |  |
| Job not requiring any qualifications.....                   | 5%                       | 50%                     |  |

**SOCIO-DEMOGRAPHIC AND GEOGRAPHIC AREAS: PERCEPTION OF WEEDS AS A SERIOUS PROBLEM IN AUSTRALIA – 2003 to 2008 continued**

|  | 2003               |                   | 2008               |                   | TREND OUTCOME   |
|--|--------------------|-------------------|--------------------|-------------------|---|
|  | Serious and urgent | A serious problem | Serious and urgent | A serious problem |   |
| <b><u>Type of City</u></b>   |                    |                   |                    |                   |   |
| Capital City.....  | 9%                 | 34%               | 9%                 | 35%               | Between 2003 to 2008 no significant change occurred in public perceptions of weeds as a serious national problem in either capital city or regional city residents.                       |
| Regional City .....  | 12%                | 39%               | 9%                 | 41%               |   |
| <b><u>Climatic Location of City</u></b>                              |                    |                   |                    |                   |   |
| Northern Tropics.....  | 13%                | 39%               | 9%                 | 35%               | Although declines occurred in the northern tropic cities, in the temperate and southern cooler climate cities there emerged increasing concern about weeds as a serious national problem. |
| Temperate Zone below Tropic of Capricorn and above Murray River..... | 11%                | 36%               | 21%                | 34%               |   |
| Southern Cooler Climate .....  | 7%                 | 40%               | 18%                | 35%               |   |

**Conclusion**

Overall, between 2003 to 2008 there has been stability in Australian community perceptions of weeds as a serious and urgent national problem, but generally there was a perception (from a large minority of the Australian population) that weeds invading farmlands and native bushland could be a serious national environmental problem facing Australia. However, most people acknowledged that they didn't know enough about the problem.

## HOW THE AUSTRALIAN COMMUNITY DEFINE “WEEDS”

### Words or Definitions Urban People Would Use to Describe a “Weed”

When participants themselves were asked to describe or define a “weed” the following outcomes emerged during the 2008 focus group discussions in Sydney and Adelaide:

#### HOW PEOPLE DEFINE OR DESCRIBE “WEEDS”: 2008

*“Weeds are plants or grass imports made by humans for some commercial reason.”*  
(Male, 28 years, storeperson, Chinese non-English speaking background, Sydney)

*“Weeds are unwanted plant growths that multiply and drain out nutrients for more important plants.”*  
(Male, 51 years, courier driver, Sydney)

*“I define weeds as an obnoxious plant which overtakes other vegetation, and reducing wanted vegetation or destroying it.”*  
(Female, 43 years, clerical worker, Sydney)

*“A weed is an unwanted plant which invades an area with adverse consequences to the economic or environmental value of the invaded area.”*  
(Male, 42 years, engineer, Sydney)

*“A weed is a plant that takes over the natural plants which grow in that area.”*  
(Female, 62 years, home duties, Sydney)

*“A weed may be defined as a plant that restricts growth of essential plants such as food crops. They may also be noxious but not commonly acknowledged as being so.”*  
(Female, 56 years, clinical hypnotherapist, Sydney)

*“Weeds are thick shrubs where too many plants are being grown.”*  
(Female, 47 years, clerical worker, Lebanese non-English speaking background, Sydney)

*“A weed is something that takes over and strangles trees and grasses. Also there are poisonous plants such as blackberry and wandering dew that affect animals.”*  
(Female, 49 years, home duties, Sydney)

*“Weeds are unwanted plants which are non-native.”*  
(Female, 47 years, health and safety consultant, Sydney)

*“A weed is a plant growing in a place where it interferes with the growth of both native species and cultivated plants.”*  
(Female, 36 years, business owner, Sydney)

*“Weeds are plants that overtake their immediate environment.”*  
(Female, 57 years, business consultant, Sydney)

**HOW PEOPLE DEFINE OR DESCRIBE “WEEDS”: 2008 continued**

*“Weeds are unwanted plants, from small size to the size of trees such as Camphor Laurel.”*

(Male, 72 years, retired, Sydney)

*“A weed is an irritable, obnoxious plant.”*

(Male, 56 years, engineer, Sydney)

*“Weeds are plants that grow and thrive in minimalist conditions and survive.”*

(Female, 31 years, home duties, Sydney)

*“Weeds are unwarranted plant growth.”*

(Male, 50 years, property developer, Sydney)

*“Weeds are undesirable plants competing in an area with desirable plants.”*

(Female, 45 years, teachers aide, Sydney)

*“A weed is an unwanted plant which uses up water and nutrients in the soil, and taking away from other plants and which makes these plants weaker.”*

(Female, 29 years, secretary, Lebanese non-English speaking background, Adelaide)

*“A weed is a plant that does not need cultivation to propagate, and as a result makes gardening and farming difficult because the weeds take over.”*

(Female, 52 years, office assistant, Adelaide)

*“Weeds are any plant that threatens the balance of an ecosystem, and is detrimental.”*

(Female, 31 years, has young children and employed part-time, Adelaide)

*“Weeds are pests that can overgrow over plants and kill them.”*

(Male, 30 years, council worker, Adelaide)

*“Weeds are introduced species that thrive and choke out native plants to the area, and often it is hard to get rid of these species because there is no natural diseases or animals to control it.”*

(Female, 32 years, has young children and employed part-time, Adelaide)

*“A weed is a plant which invades space and prevents other plants growing. It is a plant which is not useful.”*

(Female, 29 years, secretary, Adelaide)

*“A weed is like a poison and if allowed to grow will gradually take over, and will cause major problems.”*

(Male, 42 years, engineer, Adelaide)

*“A weed is a shrub that invades other plants’ nutrients.”*

(Male, 32 years, business executive, Adelaide)

*“Weeds are unwanted plants that don’t have any function, and are just a nuisance.”*

(Female, 35 years, home duties, Adelaide)

### HOW PEOPLE DEFINE OR DESCRIBE "WEEDS": 2008 continued

*"Weeds are plants not natural for an area, and which kill off native plants and trees. As an example I have recently heard about rivers being invaded by weeds."*

(Male, 45 years, manager, Adelaide)

*"Weeds are non-useable and poisonous plants."*

(Male, 55 years, truck driver, Adelaide)

*"A weed is an unwanted plant that is usually hard to remove permanently."*

(Female, 60 years, house cleaner, Adelaide)

*"A weed is an unwanted plant which is alien to the ecology of the local conditions where they are thriving."*

(Male, 35 years, naval officer, Adelaide)

*"Weeds are an unwanted plant that grows in harsh conditions and spreads to kill and invade other plants and trees."*

(Female, 49 years, home duties, Adelaide)

The above range of unprompted definitions expressed for a "weed" indicate that most city people can correctly describe the characteristics and attributes of weeds and the problems created.

Similar outcomes emerged in 2003. Examples of the types of definitions presented by the focus group participants in 2003 are shown below...

### DEFINITIONS PRESENTED TO DESCRIBE A WEED: 2003

**Professional,  
Managerial  
and Executive  
Salaried Level  
(Sydney focus  
group)**

*"Weeds are a potentially undesirable organism, potentially damaging, toxic or a dangerous plant which thrives."*

*"Weeds are obnoxious, unwanted plants which take over gardens."*

*"Weeds can be both attractive and unattractive plants. Most weeds look good and you have to check before you pull it out of your garden."*

**Home duties  
and retired  
people  
(Sydney focus  
group)**

*"Weeds, to me, are a plant which is a pest."*

*"Weeds are a nuisance. But they can be green and look good in a garden. Sometimes it is hard to know if a plant is a weed."*

*"For me, a weed is a plant which you cannot eat, and it has no value."*

**DEFINITIONS PRESENTED TO DESCRIBE A WEED: 2003 continued**

**White collar,  
blue collar  
and trades  
qualified  
people  
(Adelaide  
focus group)**

*"Weeds are plants which encroach into your sphere and which are hard and time consuming to eradicate."*

*"Weeds are plants which are aggressive, strong and feral."*

*"Weeds are plants which are aggressive and take over in areas where they are not desired."*

Discussion with the participants in 2003 identified that a common element in the average person's perception of a definition of a weed were the concepts of:

- an "unwanted" plant;
- a "hardy, tough" plant;
- a "potentially harmful or destructive plant";
- a plant which was regarded as a pest; and
- an aggressive, feral plant.

Generally, during the 2008 focus groups conducted in Sydney and Adelaide the issues of unwanted invasion and negative impacts on productive plants, bushland and crops emerged within the community's definition or description of a weed.

More findings are shown overleaf.

### Reaction to Possible Definitions or Words Describing “Weeds”

Next, in the 2008 focus groups a series of possible definitions of “weeds” were presented for evaluation. The following outcomes emerged covering Sydney and Adelaide residents:

| POSSIBLE DEFINITIONS – “WEEDS”   | GENERAL OUTCOME DURING DISCUSSION 2008    | EXAMPLES OF COMMENT EXPRESSED 2008   |
|--|---|--|
| <ul style="list-style-type: none"> <li>Plants that are not wanted coming up in gardens</li> </ul>  | Lukewarm acceptance and general rejection | <i>“This is OK because it can affect you personally.”</i>  |
| <ul style="list-style-type: none"> <li>Plants that are not wanted coming up in parks, along roadsides, or other public places</li> </ul> | Lukewarm acceptance and general rejection | Nil comments expressed, and this definition was <u>not</u> supported.  |
| <ul style="list-style-type: none"> <li>Plants that cause problems for farmers and graziers</li> </ul>                                    | <u>Strong acceptance</u>                  | <i>“I have experienced the problem of weeds on farms, and it is a serious impact on farm costs.”</i>   |
| <ul style="list-style-type: none"> <li>Plants that invade bushland and other natural areas</li> </ul>                                    | <u>Very strong acceptance</u>             | <i>“It is an important issue for people living in cities. We don’t want to lose our bushland.”</i>   |
| <ul style="list-style-type: none"> <li>Weeds are plants that are out of place</li> </ul>   | Satisfactory acceptance                   | <i>“I like this definition because it seems to cover farms and bushlands.”</i><br>versus<br><i>“This definition of weeds is just not strong enough.”</i> |

Detailed analysis of private questionnaires completed by the participants on their assessments of the range of possible definitions of weeds as a national problem presented to the focus group participants identified two definitions gaining most support in 2008:

- most support – “Plants that invade bushland and other natural areas”
- second most support – “Plants that cause problems for farmers and graziers”

Other words were also explored and covered:

#### OTHER WORDS BEING ASSOCIATED WITH “WEEDS”

#### 2008 OUTCOME

|                    |   |  |
|--------------------|---|--|
| “Invasive plant”   | → | <i>“This term is most preferred because it implies native areas being invaded, and control is needed and you need to do something about it.”</i> |
| “Plant invader”    | → | <i>“This is OK because it suggests the taking of soil nutrients.”</i>  |
| “Invasive species” | → | <i>“The word “species” is more definitive in suggesting a problem.”</i>  |
| “Pest plant”       | → | <i>“It is a good term because it suggests “harm” to the areas being invaded and overtaken.”</i>  |
| “Exotic plant”     | → | Nil comments expressed, and this definition was <u>not</u> supported.  |

Outcomes from the national surveys are shown overleaf.

The national surveys also explored several definitions of weeds to assess their impact with Australian urban households. Outcomes which emerged are presented below together with trend results for 2003 to 2008....

### URBAN HOUSEHOLD RESPONSE TO POSSIBLE DEFINITION OF WEEDS: 2003

**Q3. There are several possible definitions of weeds. How strongly do you agree or disagree with the following definitions of weeds?**

| SAMPLE BASE: N=750 URBAN HOUSEHOLDS 2003  | Strongly agree |    | Neither agree or disagree | Disagree |    | Strongly disagree | Don't know/unsure |
|---|----------------|----|---------------------------|----------|----|-------------------|-------------------|
|   | %              | %  |                           | %        | %  |                   |                   |
| Plants that are not wanted coming up in gardens.....  | 11             | 75 | 6                         | 17       | 18 | 1                 |                   |
| Plants that are not wanted coming up in parks, along roadsides, or in other public places ..... | 9              | 77 | 7                         | 13       | 14 | 1                 | 2                 |
| Plants that cause problems for farmers and graziers.....  | 19             | 87 | 3                         | 6        | 6  | -                 | 4                 |
| Plants that invade bushland and other natural areas.....  | 22             | 90 | 4                         | 4        | 4  | -                 | 2                 |
| Weeds are plants that are out of place ...  | 13             | 75 | 8                         | 13       | 14 | 1                 | 4                 |

### URBAN HOUSEHOLD RESPONSE TO POSSIBLE DEFINITION OF WEEDS: 2008

| SAMPLE BASE: N=750 URBAN HOUSEHOLDS 2008  | Strongly agree |    | Neither agree or disagree | Disagree |    | Strongly disagree | Don't know/unsure |
|---|----------------|----|---------------------------|----------|----|-------------------|-------------------|
|   | %              | %  |                           | %        | %  |                   |                   |
| Plants that are not wanted coming up in gardens.....  | 6              | 70 | 6                         | 24       | 25 | 1                 | -                 |
| Plants that are not wanted coming up in parks, along roadsides, or in other public places ..... | 9              | 79 | 5                         | 14       | 15 | 1                 | 1                 |
| Plants that cause problems for farmers and graziers.....  | 24             | 93 | 1                         | 5        | 5  | -                 | 1                 |
| Plants that invade bushland and other natural areas.....  | 25             | 91 | 3                         | 5        | 6  | 1                 | -                 |
| Weeds are plants that are out of place ...  | 7              | 65 | 6                         | 25       | 26 | 1                 | 3                 |

The above outcomes show that in 2003 the strongest level of agreement was given to "weeds are plants that invade bushland and other natural areas" (90% agreement). By 2008 there continued a similar level of agreement that "weeds are plants that invade bushland and other natural areas" (91% agreement in 2008) and stronger agreement that "weeds are plants that cause problems for farmers and graziers" (93% agreement in 2008).

A summary of key trends is shown below...

**OVERVIEW: URBAN HOUSEHOLD RESPONSE TO POSSIBLE  
DEFINITION OF WEEDS: TRENDS 2003 to 2008**

|   | <b>Strongly agree/<br/>Agree ratings</b> |                   | <b>Disagree/<br/>Strongly disagree ratings</b> |                   |
|---|--|-------------------|--|-------------------|
|   | <b>2003<br/>%</b>                        | <b>2008<br/>%</b> | <b>2003<br/>%</b>                              | <b>2008<br/>%</b> |
| <b>Plants that are not wanted coming up in gardens .....</b>  | 75                                       | 70                | 18   | 25                |
| <b>Plants that are not wanted coming up in parks, along roadsides, or in other public places.....</b> | 77                                       | 79                | 14   | 15                |
| <b>Plants that cause problems for farmers and graziers .....</b>                                      | 87                                       | 93                | 6  | 5                 |
| <b>Plants that invade bushland and other natural areas .....</b>                                      | 90                                       | 91                | 4  | 6                 |
| <b>Weeds are plants that are out of place.....</b>  | 75                                       | 65                | 14   | 26                |

These findings show that the definitions of weeds which had most agreement and impact with urban households were “plants that cause problems for farmers and graziers” (87% agreement in 2003 and increasing to 93% in 2008) and “plants that invade bushland and other natural areas” (90% agreement in 2003 and 91% in 2008). The definitions which used statements about “unwanted plants” or “plants that are out of place” proved less effective, and in fact, showed less support since 2003.

### **Conclusion**

The general conclusion to draw is that descriptions or words describing “weeds as a national problem” gained most community acceptance if they related to “plants that invade bushland and other natural areas” or “plants that cause problems for farmers and graziers”.

## **POSSIBLE MESSAGES TO PROMOTE “WEEDS” AS A NATIONAL ENVIRONMENTAL PROBLEM**

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### **Testing of Possible Messages to Increase Australian Community Interest in Weeds as A Serious National Problem**

To help develop public interest in weeds as a national problem the focus group participants during the 2008 sessions in Adelaide and Sydney made the following suggestions:

|  |
|--|
| <p><b>WAYS SUGGESTED TO INCREASE AUSTRALIAN COMMUNITY AWARENESS OF WEEDS AS A NATIONAL PROBLEM: 2008</b></p> |
|--|

#### **SYDNEY – 1<sup>st</sup> Session**

*“There needs to be a way to give weeds a focus as a national problem. For example, if weeds are such a big problem then politicians and scientists need to take the lead. There needs to be shock value and a focus to make people take notice. For example, the invasion of weeds into natural bushlands could be linked to global warming if attention is drawn to the bushlands being destroyed.”*

*“Yes! I agree! Weeds as a problem doesn’t scare you like other environmental problems, and to make weeds important it needs to be linked to the loss of bilbies and other important animals if bushland degradation is occurring. Another dramatic story could be consequences on farms if fruit and vegetable costs are increasing by \$2 to \$5 for each grocery purchase because of the weed problem.”*

#### **SYDNEY – 2<sup>nd</sup> Session**

*“Weeds as a national problem has a low profile, and is not a topical issue. Therefore, if weeds are a problem then politicians and environmentalists should create the issue and raise its profile. In other words, weeds as a national problem needs to be raised as a serious issue, otherwise you assume weeds is not a major problem if other issues are getting more attention.”*

#### **ADELAIDE – 1<sup>st</sup> Session**

*“I am interested in hearing about weeds as a problem, but I don’t think it sounds as significant as global warming.”*

*“At the moment you don’t take enough notice of weeds as a major problem. But if you were shown the costs to the consumer hip pocket this would be a major story, rather than hearing farmers complaining about weeds.”*

#### **ADELAIDE – 2<sup>nd</sup> Session**

*“Hearing about all issues associated with weeds is the important thing, and especially the negative impacts on farmlands and the cost to consumers.”*

At the end of the focus groups conducted in 2003 the participants were also asked to assess whether or not it was worthwhile to have a campaign to raise public awareness of the problem of weeds in Australia. The following outcomes emerged in 2003...

**URBAN METROPOLITAN RESIDENT LEVEL OF  
SUPPORT FOR A “WEEDS” PUBLIC AWARENESS CAMPAIGN: 2003**

**2003**

*“Yes! Such a campaign would be worthwhile. I was generally aware of the problem of weeds but the \$4 billion cost to Australia created by weeds is an important issue. I was shocked to hear this. In the cities you only hear about the problem of salinity, not weeds. The problems caused by weeds needs to be compared to other environmental problems and show how serious the weed problem is to Australia”.*

(Typical comment expressed by male and female participants in professional and managerial occupations, Sydney focus group – 2003)

*“This problem of weeds looks serious. I didn’t know this before and it has raised my awareness and interest in the problem of weeds”.*

(Young women, aged under 30, professional occupation – psychologist, Sydney – 2003)

*“Weeds have been a large, long term problem. But until now I didn’t realise how serious it was. Why haven’t politicians raised the weed problem as an issue, or have they felt it was better for farmers to keep spraying the weeds? The campaign will need to have a strong, high profile impact and with a lead media person fronting the story across all media such as television, radio and newspapers, and then to have it adopted into the school curriculum”.*

(Professional/managerial focus group, Sydney – 2003)

*“The serious problems being caused by weeds needs to be a big issue in the media. Currently, at the present time it is low on our horizon. Most people don’t know enough about it”.*

(White collar/trades sector focus group, Adelaide – 2003)

*“The weeds story is a surprising story and should have impact. But to be successful the “weeds” story needs to both shock people and be interesting to urban, city people. The media needs to raise the issue of the ongoing \$4 billion problem, and let people know it is a large, long term problem as distinct from ‘drought’ which is really a short term problem. The weeds story needs to hinge on a controversy and show that ‘we have a problem”.*

(Retired/home duties person focus group, Sydney – 2003)

Discussion with the Sydney and Adelaide focus group participants in 2008, and their answers completed in private evaluation questionnaires, identified that around a third of participants could recall hearing, seeing or reading about weeds as a major problem in Australia over the last 12 months. Although most of these participants could not recall specifically the weed problem being presented, generally local Council information and brochures about weeds were mostly recalled.

A series of significant weeds issues relating to weeds as a major problem were next presented to the participants for assessment to identify the most significant messages about “weeds as a national problem” which could be “hot buttons” in attracting strong interest from the Australian community. After choice games, discussion, and consideration of the range of “hot button” issues the following outcomes emerged during the 2008 focus groups held in Sydney and Adelaide:

**(1) Loss Of Natural Heritage and Future Generations Not Being Able To Experience The Current Landscape**

This potential “hot button” issue in 2008 gained a reasonably strong level of interest, but it was not as strong as some of the other potential hot button issues shown below. For some participants there was a sense of “guilt” about the current generation being responsible for degrading the landscape. But, overall, in 2008 most participants believed that the current generations’ negative impact in causing global warming or damage or loss to rivers and waterways were much more significant problems where “guilt” could be associated.

Comments expressed in 2008 included:

**2008**

*“No! This issue is too remote. It is a concern, but our guilt for future generations is larger than the weed problem. There are bigger impacts for future generations to worry about such as air pollution and global warming.”*

(Comment expressed and supported in 1<sup>st</sup> session, Sydney)

*“It might be an important issue, but it doesn’t greatly concern me because it is not as great a problem as burning coal and global warming. But I guess if you can do something for future generations then maybe you should try.”*

(Comment expressed and supported in 2<sup>nd</sup> session, Sydney)

*“Weeds just doesn’t seem to be a big enough issue, compared to drying up of waterways. Most people don’t know enough about weeds to see it as a problem or the effects on society. But most people have a sense of responsibility and would feel guilty if there is loss for future generations.”*

(Comment expressed and supported in 1<sup>st</sup> session, Adelaide)

*“There is a little bit of guilt involved, and it is a shame about the loss, but we are not the fault causing the impact from weeds.”*

(Comment expressed and supported in 2<sup>nd</sup> session, Adelaide)

**(2) Loss Of Beauty And Natural Landscape In Icon Areas (Such as Kakadu)**

Concern was expressed about this issue in the 2008 sessions, but also around a third of participants expressed no concern. Recognition was expressed *“that it is an issue, but it is not a powerful issue which worries you”* and *“it is sad, but it is not as important as the issue of loss of plants and animals because of loss of the native vegetation they depend on due to invasion by weeds”*. Participants recognised that such icon areas projected Australia’s values and had international significance, but comment was also expressed that because such “icon areas” were attractive tourist areas it would be unlikely that governments would allow weed invasion to become such a major problem.

Comments expressed during 2008 included:

### **2008**

*“No! It is a little superficial. It is an issue and the tourism sector will be concerned. But it is not a hot button because a lot of Australian landscape will still be present.”*

(Comment expressed and supported in 1<sup>st</sup> session, Sydney)

*“It is probably an important issue and you would be concerned if our national heritage is lost because of weeds taking over and causing a terrible loss. It is an important issue, but losing native animals and species is more important.”*

(Comment expressed and supported 2<sup>nd</sup> session, Sydney)

*“Weeds could destroy these icon areas and it would be important, but it is more a loss to tourism than loss of Australian values.”*

(Comment expressed and supported in 1<sup>st</sup> session, Adelaide)

*“The Australian public relates to these areas and there would be loss of the tourism market. But I don’t think the loss to icon areas would occur because tourist lobby groups and governments won’t let it happen.”*

(Comment expressed and supported 2<sup>nd</sup> session, Adelaide)

### **(3) Loss Of Plants And Animals Dependent On The Native Vegetation Being Invaded By Weeds**

This potential “hot button” gained very strong levels of significant concern. Many comments were expressed that this issue *“is a genuine environmental problem”, “it is something which strongly concerns you because weeds are affecting animals which can become extinct and you cannot bring them back”, and “it is a very attractive message because the extinction of plants and animals is serious, and you wonder how you can personally help”.* Views were also expressed that such “quiet deaths” will *“scare a lot of people if they realise animals are being lost”* and *“such losses will touch a lot of people”.* Overall, this potential “hot button” was perceived as a powerful message to explain the impact of weeds.

Comments expressed during 2008 included:

### **2008**

*“This is a very important issue because it raises genuine environment effects from weeds. People will become strongly concerned because they will now understand the impact of weeds causing the extinction of animals.”*

(Comment expressed and supported 1<sup>st</sup> session, Sydney)

*“This is a very focussed message that pulls at the heartstrings. It is a very important message because the extinction of native animals draws you in.”*

(Comment expressed and supported 2<sup>nd</sup> session, Sydney)

*“This is a very important issue because the loss of native flora and fauna will affect all of us. It is a powerful issue because it suggests an economic loss from loss of potential food sources. But this issue has to have emotion and show a real animal species, such as frogs, being put to a slow death because of weeds. This will increase peoples’ emotions about weeds as a major problem.”*

(Comment expressed and supported 1<sup>st</sup> session, Adelaide)

*“It pulls your heartstrings when you hear about animals in distress. But to build a good story you need to show an attractive animal being destroyed by weeds. It needs drama.”*

(Comment expressed and supported 2<sup>nd</sup> session, Adelaide)

**(4) The Annual Cost Of Weeds To Our Farmers And Pastoralists Is Several Billion Dollars and This Is Much More Than The Cost Of Salinity To Farmers and This Cost of Weeds to Pastoralists and Farmers is \$1 In \$7 Of Their Income.**

This potential “hot button” also gained very strong levels of significant concern. A range of comments were expressed that “it is a big economic cost, and when it is put in dollar terms it makes a big impact”, “it is a major hot button, and when you realise that this will increase food costs, the costs to consumers become a real concern”, and “the resulting monetary cost is a big story to tell consumers and it should be told as a consumer problem, and not just a farmer problem”. Overall many comments were expressed that if this potential “hot button” issue was adjusted to focus on the household costs to consumers it would become a very strong story.

Comments expressed during 2008 included:

**2008**

*“This is a very important concern. It is a big economic real cost and costs farmers many dollars to control weeds. The bigger hot button is the increase in food prices, and increasing costs to consumers is a big concern.”*

(Comment expressed and supported 1<sup>st</sup> session, Sydney)

*“This is staggering! I didn’t realise the cost of getting rid of weeds was greater than the cost of salinity. This is a staggering large cost for farmers, and also to consumers with rising living costs. This is a major issue for consumers.”*

(Comment expressed and supported 2<sup>nd</sup> session, Sydney)

*“This is a big story. People just don’t know about it. The costs to farmers is something you feel sympathetic about, but to get the average person to take notice the message has to show where the costs hit the hip pocket, such as the increased cost of bread. Then people will take notice!”*

(Comment expressed and supported 1<sup>st</sup> session, Adelaide)

*“It is a serious problem and has a big economic impact. But the information has to show the extra costs to consumers and household budgets. The consumer story is much stronger than the farmers’ story.”*

(Comment expressed and supported 2<sup>nd</sup> session, Adelaide)

**(5) The Problem Of Hayfever, Asthma And Skin Allergies Caused To Many People By Weeds**

This potential “hot button” issue gained a reasonably strong level of concern, but it was not as strong as other potential issues. Also compared to the qualitative comments expressed in the 2003 focus groups the health impacts of weeds has declined in significance. Typical comments expressed were – *“it tends to be a more important issue if you are personally affected”* and *“it is a problem, but other things apart from weeds also cause allergies and this weakens the weeds story”*.

Comments expressed are shown overleaf.

Comments expressed during 2008 were:

### **2008**

*"It only is an important issue if you are personally effected."*

(Comment expressed and supported 1<sup>st</sup> session, Sydney)

*"It is a problem, but allergies are also caused by other factors and cannot be blamed entirely on weeds, and you don't hear of people dying from weeds."*

(Comment expressed and supported 2<sup>nd</sup> session, Sydney)

*"It is an important issue, but the usage of farm chemicals to control weeds is a much stronger story. Health problems and allergies only become a problem issue if you are personally effected."*

(Comment expressed and supported 1<sup>st</sup> session, Adelaide)

*"Health problems caused by weeds is important and can strike fear, but allergies can be caused by other factors as well and this weakens the relevance of weeds causing health problems if other factors also exist."*

(Comment expressed and supported 2<sup>nd</sup> session, Adelaide)

### **(6) The Issue Of Heavy Reliance On Agricultural And Farm Chemicals To Control Weeds**

This potential "hot button" issue also gained very strong levels of significant concern. Many comments were expressed along the lines of – *"my training shows me the significant danger of agricultural chemicals and it is an issue for rivers and waterways", "it is a serious issue and only solves the short term problems of weeds and not the long term problem, and I am also concerned about food poisoning and this exposure risk is a big problem", and "it is an area of strong concern because the farm chemicals get into the food chain and waterways".* Overall, the issue of heavy reliance on agricultural and farm chemicals to control weeds was a powerful story.

Comments expressed during 2008 were:

### **2008**

*"This issue raises strong public concern because the chemicals can flow into rivers, poison animals, and get into the food chain and get into people's bodies."*

(Comment expressed and supported 1<sup>st</sup> session, Sydney)

*"This is an issue especially for chemicals washing into rivers and waterways. Also farm chemicals are dangerous."*

(Comment expressed and supported 2<sup>nd</sup> session, Sydney)

*"It is an important issue, particularly the concern about food poisons and children. But we still eat fruit and vegetables, and this issue relating to the problem of weeds is only a vague story until it has personal impact."*

(Comment expressed and supported 1<sup>st</sup> session, Adelaide)

*"Chemicals on farms can cause cancer and be poisonous. It is a big health problem, but it doesn't affect city populations. It doesn't seem to be a big hot button issue."*

(Comment expressed and supported 2<sup>nd</sup> session, Adelaide)

**(7) The Loss Of Enjoyment For Bushwalkers, Campers And People Enjoying The Outdoors**

This potential “hot button” issue did not gain significant support and was felt to be “a low impact message”. It was felt to be a relevant message but “was not a life threatening issue”.

Comments expressed during 2008 included:

**2008**

*“No! This issue is too weak. It has low impact and bushwalkers would know how to avoid dangerous weeds.”*

(Comment expressed and supported 1<sup>st</sup> session, Sydney)

*“It can be a problem and bushwalkers and others may complain. But it is not a life threatening issue.”*

(Comment expressed and supported 2<sup>nd</sup> session, Sydney)

*“No! You don’t care. This problem doesn’t seem relevant if you don’t do these activities.”*

(Comment expressed and supported 1<sup>st</sup> session, Adelaide)

*“The weeds problem just doesn’t seem to be strong enough an issue, even though you may notice the problem when you are doing these activities.”*

(Comment expressed and supported 2<sup>nd</sup> session, Adelaide)

**(8) Urban Home Gardens And The Impact Of Weeds**

This potential “hot button” issue also did not gain any significant support, and was also felt to be a low impact message and was “too self centred on people who have household gardens” and “it is an issue that home gardeners can control themselves.”

Comments expressed during 2008 included:

**2008**

*“No! Again, this is a weak issue to explain weeds as a national major problem. Householders would know how to control weeds.”*

(Comment expressed and supported 1<sup>st</sup> session, Sydney)

*“No! This problem is too self centred and is not the real problem, and can be controlled.”*

(Comment expressed and supported 2<sup>nd</sup> session, Sydney)

*“It just doesn’t seem to be a big issue to worry about.”*

(Comment expressed and supported 1<sup>st</sup> session, Adelaide)

*“No! It is not a major issue because it is something home gardeners can easily control.”*

(Comment expressed and supported 2<sup>nd</sup> session, Adelaide)

(9) **Getting Tough On “Non-Essential” Imports As 65% Of Australia’s Worst “Environmental Weeds” Invading Bushlands Come From Horticulture Gardening**

This potential “hot button” issue gained strong support because many participants felt that *“it is essential to stop any horticultural imports which may cause long term problems”* and *“it is essential to tighten up horticultural imports to help resolve long term mistakes”*. However, although strong support emerged for this message it was also felt to be a complicated issue.

Comments expressed during 2008 were:

**2008**

*“I had no idea it was such a problem. It is unbelievable that Australia takes unnecessary risks and lets potential weeds into the country.”*

(Comment expressed and supported 1<sup>st</sup> session, Sydney)

*“It is essential to stop imports in advance of later problems. Plant imports should be tightened up to help avoid long term mistakes.”*

(Comment expressed and supported 2<sup>nd</sup> session, Sydney)

*“It is a complicated issue and it might be unrealistic financially to address. It also needs more research in advance to identify potential problems, but it would be worthwhile to tighten up imports to control new weeds being imported.”*

(Comment expressed and supported 1<sup>st</sup> session, Adelaide)

*“It is a starting point, and it is never too late to shut the door. We need to review past policies and learn from the past, and be cautious.”*

(Comment expressed and supported 2<sup>nd</sup> session, Adelaide)

(10) **A Stitch In Time Approach Is Needed So That Early Attack And Eradication Is The Best Form Of Defence, Because Leaving The Problem Can Cause Weed Control Costs To Sky Rocket So High That The Control Of The Weed Is Given Up Due To The Cost**

This potential “hot button” issue also gained strong support, but many comments were also expressed that this “hot button” would also involve increased spending on science and research to understand how to control weeds and this should also be used as a supporting issue. Strong supporters for this “hot button” issue also recognised that to avoid weed controlling costs to skyrocket *“it is better to get stuck into it now and keep persisting”*.

Comments expressed during 2008 were:

**2008**

*“This is important. But you also need research and to spread the information to inform city people as well as farmers.”*

(Comment expressed and supported 1<sup>st</sup> session, Sydney)

*“It is a positive suggestion, and indicates eventual weed eradication. It is better to get stuck into the weed problem and persist. But it will also be important to identify problems early and not have committees slow down doing something about the problem.”*

(Comment expressed and supported 2<sup>nd</sup> session, Sydney)

*“This is a better option. Time is money and if a problem needs to be solved it is better to start doing something and hit hard. Relying just on science may be too slow, nor even solve the problem.”*

(Comment expressed and supported 1<sup>st</sup> session, Adelaide)

*“Attacking the problem early is a good idea. But using science is also important. Most problems need a multi-pronged approach.”*

(Comment expressed and supported 2<sup>nd</sup> session, Adelaide)

**(11) Spending More Money On Science To Do More Research On Controlling Weeds, And Giving Landowners More Advice And Information**

This potential “hot button” issue also gained strong support. Views were expressed that it addresses an implication *“that weeds are out of control”* and that the increased information flow to farmers and urban households based on science is a positive initiative because *“scientists and experts giving advice can help farmers and householders to resolve problems”*.

Comments expressed during 2008 were:

**2008**

*“This is an important way to approach the problem.”*

(Comment expressed and supported 1<sup>st</sup> session, Sydney)

*“This is an important factor to address. It is important to give money to scientists to try and resolve the problem if weeds are getting out of hand. You cannot bury your head in the sand.”*

(Comment expressed and supported 2<sup>nd</sup> session, Sydney)

*“Research and learning are important. But it is also important for the experts to advise farmers to help solve the problem. Farmers need knowledge and support.”*

(Comment expressed and supported 1<sup>st</sup> session, Adelaide)

*“New solutions are offered in this approach. Science is feeding into information feedback which helps the problem to be recognised and action to be taken rather than just having a knee jerk reaction.”*

(Comment expressed and supported 2<sup>nd</sup> session, Adelaide)

More outcomes are presented overleaf.

During and following the presentation, choice games, and discussion on the above range of “hot button” issues the following range of comments were also expressed:

**COMMENTS EXPRESSED ABOUT THE POSSIBLE “HOT BUTTON” ISSUES TO INCLUDE IN A “WEEDS” PUBLIC INFORMATION CAMPAIGN: 2008**

*“The critical issue is the loss of plants and animals due to the native vegetation they depend on being invaded by weeds. Another important issue is the billions of dollars in agricultural costs spent on controlling weeds, and the heavy reliance on agricultural chemicals and the associated negative food chain effects from such chemicals. The huge costs involved brings out the reality of the weeds issue. There should also be action taken to reduce the risk posed by horticultural imports and immediate response to any weeds problem arising. These are the important issues. By comparison, the issue of health allergies, weeds in home gardens, and loss of enjoyment for bushwalkers and campers are only low impact issues.”*

(Male, 42 years, engineer, Sydney)

*“Although I initially didn’t see weeds as a major problem I now feel that more scientific research and education of the public about weeds as a national problem should be undertaken.”*

(Male, 28 years, storeperson, Chinese non-English speaking background, Sydney)

*“I didn’t see weeds as a major problem, but now after completing this session I think there should be school based education programs to help future generations understand the problem.”*

(Male, 51 years, courier driver, Sydney)

*“I think a good idea would be to have television documentaries covering the serious problem of weeds and the issues involved.”*

(Female, 43 years, clerical worker, Sydney)

*“The most important issue is to get the required political leadership to encourage media and the general public to get interested in the issue of weeds as a national problem, and the threat posed to important Australian ideals. Television documentaries would be a good way of doing this.”*

(Male, 42 years, engineer, Sydney)

*“Local Councils should regularly include brochures about serious local weeds with the Council Rate Notices sent to householders.”*

(Female, 62 years, home duties, Sydney)

*“I feel there is a need to educate children about weeds and they in turn will educate parents.”*

(Female, 49 years, home duties, Sydney)

*“The experience of taking part in this research has increased my awareness and now I think public awareness overall should be raised on the weeds issue as a national problem.”*

(Female, 31 years, home duties, Sydney)

*"I now see weeds as a serious issue following this focus group. But most people don't see weeds as a serious national problem."*

(Female, 45 years, teachers aide, Sydney)

*"I think advertising placed on food packages, plus documentary presentations about the national problem of weeds would be a good approach, and to paint very visual messages of the weed problem."*

(Female, 31 years, has young children and employed part-time, Adelaide)

*"Having education about weeds will be very important, such as through TV documentaries, current affairs shows, and school education. Prior to this session tonight I knew nothing about weeds as a problem."*

(Male, 30 years, council worker, Adelaide)

*"More public education and information is needed, such as documentaries explaining the problem. Having billboards will also be useful."*

(Female, 29 years, secretary, Adelaide)

*"I have now become aware of the problem of weeds as a result of this session. I now think that having information about weeds as a national problem should be presented as information on billboards, and on packages such as milk cartons."*

(Male, 32 years, business executive, Adelaide)

*"I wasn't aware of weeds as a major national problem before this session. But I now feel high profile commercial mainstream media is required to make the problem more visible to the general public."*

(Male, 35 years, naval officer, Adelaide)

*"Having greater levels of scientific research and forwarding this information to farmers is very important because it gives farmers support to become more innovative and be able to adapt to changing conditions."*

(Female, 31 years, has young children and employed part-time, Adelaide)

*"All of the problems raised about weeds are important and need education, and science research should also be involved to stop problems before they get too large. Public education should also be emotive otherwise people won't care, and it needs relevance."*

(Female, 32 years, has young children and employed part-time, Adelaide)

*"Loss of the national landscape and icon areas are important because it reduces national pride and impacts on tourism, and we have lost native species. It is also better to use scientific research as a way to control weeds."*

(Female, 28 years, home duties, Adelaide)

The above range of comments suggest that "weeds as a national problem" in most people's minds has a low profile (and most people feel that they know little about the problem), but as discussion and detailed consideration was undertaken during the focus group, and as the discussion proceeded there emerged increasing concern and interest in hearing about "weeds" as a national environmental problem.

In 2008 the focus groups identified that the most powerful issues which created interest to listen to issues about “weeds” as a national problem were:

- loss of plants and animals dependent on the native vegetation being invaded by weeds;
- the significant annual cost of weeds for farmers and pastoralists and the associated higher costs for householders due to higher grocery costs; and
- the heavy reliance required on agricultural and farm chemicals to control weeds.

Hearing these stories via television documentaries and news stories and radio and newspaper news stories and advertisements was strongly mentioned.

Finally, at the end of the focus group sessions the participants suggested the following media delivery approaches to assist effective promotion of weeds invading farmlands and bushlands as a serious and urgent national problem:

### **MEDIA DELIVERY SUGGESTIONS: 2008**

| <b><u>SYDNEY</u></b>  |   | <b><u>ADELAIDE</u></b>  |  |
|---|---|---|--|
| <b><u>1<sup>st</sup> Session</u></b>  | <b><u>2<sup>nd</sup> Session</u></b>  | <b><u>1<sup>st</sup> Session</u></b>  | <b><u>2<sup>nd</sup> Session</u></b>   |
| <ul style="list-style-type: none"> <li>• TV news and documentaries to create a focus to show visual images, and to present a “striking” story</li> <li>• To have strong local Council based campaigns</li> <li>• To have a website to access information about weeds as a serious national problem</li> </ul> | <ul style="list-style-type: none"> <li>• Radio and TV documentaries</li> <li>• Having school based education programs on weeds</li> <li>• Having local Council sponsored home delivered brochures</li> <li>• Having information material about weeds as a national problem presented on milk carton advertisements</li> <li>• Having community seminars about weeds as a national problem (such as scientists speaking at Rotary events)</li> </ul> | <ul style="list-style-type: none"> <li>• TV and radio were believed effective, especially talkback radio, because everyone listens or watches TV</li> <li>• Having a website linked to relevant media stories about weeds as a national problem was felt to be useful, because otherwise people may not be interested to visit a “weeds” website</li> <li>• Billboards were also suggested as a useful media</li> <li>• Suburban newspapers having news stories about weeds was also suggested</li> </ul> | <ul style="list-style-type: none"> <li>• TV gardening improvement shows were suggested</li> <li>• TV current affairs programming and documentaries were suggested</li> <li>• School education programs were suggested</li> </ul> |

## Level of Support for a Public Communication Campaign to Explain The Serious Problem of Weeds in Australia

During the national surveys conducted in metropolitan and regional city areas questioning next explored the extent to which urban residents could recall hearing about the issue of weeds as a major problem in Australia, and whether or not the Australian public should be told more about the problem of weeds.

These findings are shown below...

### **AWARENESS OF RECENT MEDIA STATEMENTS ABOUT WEEDS AS A MAJOR PROBLEM IN AUSTRALIA: 2003 to 2008**

**Q4. Have you seen, read or heard anything about weeds as a major problem in Australia over the last 12 months?**

|                   | 2003<br>Total<br>N=750<br>% | 2008<br>Total<br>N=750<br>% | 2008  |
|-------------------|-----------------------------|-----------------------------|---|
| Yes               | 55                          | 52                          | In 2008, a new measure identified that 37% of the Australian population <u>could recall a specific news story or commentary about "weeds as a national problem"</u> – specifically news stories and commentary about specific weeds (such as Patterson's Curse invading farmlands or lantana or blackberries invading bushlands) or issues about weeds invading waterways were mostly recalled. |
| No                | 42                          | 47                          |   |
| Unsure/Don't know | 3                           | 1                           |   |

### **LEVEL OF AGREEMENT THAT THE AUSTRALIAN COMMUNITY SHOULD BE TOLD MORE ABOUT THE PROBLEM OF WEEDS: 2003 to 2008**

**Q5. Do you think the Australian public should be told more about the problem of weeds in Australia?**

|                   | 2003<br>Total<br>N=750<br>% | 2008<br>Total<br>N=750<br>% | 2008   |
|-------------------|-----------------------------|-----------------------------|--|
| Yes               | 87                          | 91                          | In 2008, a new measure identified that 34% of the Australian community commented in open ended qualitative comment assessed that <i>"it is an important issue for the Australian community to be advised about"</i> , 24% of the Australian community commented <i>"having increased public information about weeds as a national problem will help resolve the problem"</i> , and 17% commented that <i>"there should be increased public awareness created for people who know little about weeds as a national problem"</i> . |
| No                | 10                          | 5                           |  |
| Unsure/Don't know | 4                           | 4                           |  |

The conclusion to draw is that as people progressed through the interview survey about the potential for weeds to be a serious national problem there emerged almost universal support (87% support in 2003 and increasing to 91% support in 2008) for the need to have a public information campaign to help urban residents become more aware of the weeds invasion problem in Australia.

### **“Hot Buttons” Which Raise Urban Resident Interest in Hearing About “Weeds” As a Significant National Problem**

Questioning in the 2003 benchmark and 2008 tracking surveys next explored the level of concern about some issues relevant to weeds as a problem....

#### **LEVEL OF CONCERN ABOUT SPECIFIC ISSUES RELATING TO WEEDS: 2003**

**Q6. How strongly concerned or not are you about the following issues?**

| SAMPLE BASE: N=750 URBAN HOUSEHOLDS 2003  | Strongly concerned | Concerned | Neither concerned or not concerned | Not concerned | Not concerned at all | Don't know/unsure |
|---|--------------------|-----------|------------------------------------|---------------|----------------------|-------------------|
|   | %                  | %         | %                                  | %             | %                    | %                 |
| Garden plants escaping from towns and cities to become major weed problems..... | 19                 | 68<br>49  | 6                                  | 19            | 21<br>2              | 5                 |
| Weeds affecting farming in Australia.....                                       | 24                 | 79<br>55  | 4                                  | 9             | 10<br>1              | 7                 |
| Weeds having a negative impact on bushland in Australia .....                   | 27                 | 81<br>54  | 5                                  | 10            | 11<br>1              | 4                 |

#### **LEVEL OF CONCERN ABOUT SPECIFIC ISSUES RELATING TO WEEDS: 2008**

| SAMPLE BASE: N=750 URBAN HOUSEHOLDS 2008  | Strongly concerned | Concerned | Neither concerned or not concerned | Not concerned | Not concerned at all | Don't know/unsure |
|---|--------------------|-----------|------------------------------------|---------------|----------------------|-------------------|
|   | %                  | %         | %                                  | %             | %                    | %                 |
| Garden plants escaping from towns and cities to become major weed problems..... | 15                 | 69<br>54  | 6                                  | 19            | 22<br>3              | 3                 |
| Weeds affecting farming in Australia.....                                       | 26                 | 87<br>61  | 2                                  | 7             | 8<br>1               | 3                 |
| Weeds having a negative impact on bushland in Australia .....                   | 30                 | 89<br>59  | 1                                  | 8             | 8<br>-               | 2                 |

A summary of these trends is presented overleaf.

A summary of key trends are shown below:

**OVERVIEW: URBAN HOUSEHOLD RESPONSE TO SPECIFIC  
ISSUES RELATING TO WEEDS: TRENDS 2003 to 2008**

|   | <b>Strongly agree/<br/>Agree ratings</b> |                   | <b>Disagree/<br/>Strongly disagree ratings</b> |                   |
|---|--|-------------------|--|-------------------|
|   | <b>2003<br/>%</b>                        | <b>2008<br/>%</b> | <b>2003<br/>%</b>                              | <b>2008<br/>%</b> |
| <b>Garden plants escaping from towns and cities to become major weed problems .....</b> | 68                                       | 69                | 21   | 22                |
| <b>Weeds affecting farming in Australia.....</b>  | 79                                       | → 87              | 10   | 8                 |
| <b>Weeds having a negative impact on bushland in Australia .....</b>                    | 81                                       | → 89              | 11   | 8                 |

The above findings show that most public concern in 2003 related to issues associated with “weeds having a negative impact on bushland in Australia” (81% concern expressed), followed by “weeds affecting farming in Australia” (79% concern).

By 2008 both issues increased strength in public agreement:

- “weeds affecting Australian farmland” issues – increasing from 79% perception in 2003 to 87% in 2008 (Note: this increase is statistically significant); and
- “weeds having a negative impact on bushland in Australia” issues – increasing from 81% perception in 2003 to 89% in 2008 (Note: this increase is also statistically significant).

Least concern related to “garden plants escaping from towns and cities to become major weed problems” (68% concern in 2003 and 69% in 2008).

More findings are shown overleaf.

Questioning next explored further issues to identify possible “hot buttons” relevant to potentially raising the issue of weeds as a national problem...

**PERCEPTION OF EXTENT TO WHICH URBAN RESIDENTS SEE THE FOLLOWING ISSUES TO BE ASSOCIATED WITH THE PROBLEM OF WEEDS: 2003**

**Q7. How strongly do you agree or disagree with the following issues would be associated with the problem of weeds?**

| SAMPLE BASE: N=750 URBAN HOUSEHOLDS 2003                                    | Strongly agree | Agree | Neither agree or disagree | Disagree | Strongly disagree | Don't know/unsure |
|---|----------------|-------|---------------------------|----------|-------------------|-------------------|
|   | %              | %     | %                         | %        | %                 | %                 |
| Changing the appearance of Australia's natural environment .....            | 18             | 76    | 6                         | 13       | 14                | 5                 |
| A decline in the number and variety of Australia's plants and animals ..... | 22             | 77    | 4                         | 11       | 12                | 8                 |
| An extra cost of \$4 billion each year for Australian farmers.....          | 12             | 60    | 6                         | 9        | 10                | 24                |
| A heavy reliance on chemicals by farmers .....                              | 19             | 73    | 5                         | 16       | 17                | 6                 |
| Health problems such as asthma and allergies .....                          | 20             | 69    | 5                         | 12       | 13                | 13                |
| An increase in bushfire risk .....  | 16             | 65    | 7                         | 16       | 18                | 10                |

**PERCEPTION OF EXTENT TO WHICH URBAN RESIDENTS SEE THE FOLLOWING ISSUES TO BE ASSOCIATED WITH THE PROBLEM OF WEEDS: 2008**

**Q7. How strongly do you agree or disagree with the following issues would be associated with the problem of weeds?**

| SAMPLE BASE: N=750 URBAN HOUSEHOLDS 2008                                    | Strongly agree | Agree | Neither agree or disagree | Disagree | Strongly disagree | Don't know/unsure |
|---|----------------|-------|---------------------------|----------|-------------------|-------------------|
|   | %              | %     | %                         | %        | %                 | %                 |
| Changing the appearance of Australia's natural environment .....            | 23             | 78    | 4                         | 14       | 15                | 3                 |
| A decline in the number and variety of Australia's plants and animals ..... | 30             | 83    | 2                         | 11       | 12                | 3                 |
| An extra cost of billions of dollars each year for Australian farmers ..... | 24             | 82    | 3                         | 6        | 7                 | 8                 |
| A heavy reliance on chemicals by farmers .....                              | 25             | 84    | 3                         | 8        | 9                 | 4                 |
| Health problems such as asthma and allergies .....                          | 14             | 72    | 5                         | 13       | 14                | 9                 |
| An increase in bushfire risk .....  | 17             | 67    | 8                         | 16       | 17                | 8                 |

Trends 2003 to 2008 are shown below:

**OVERVIEW: PERCEPTION OF EXTENT TO WHICH URBAN RESIDENTS  
SEE THE FOLLOWING ISSUES TO BE ASSOCIATED WITH THE  
PROBLEM OF WEEDS: 2003 to 2008**

|   | <u>Strongly agree/<br/>Agree ratings</u> |           | <u>Disagree/<br/>Strongly disagree ratings</u> |           |
|---|--|-----------|--|-----------|
|   | 2003<br>%                                | 2008<br>% | 2003<br>%                                      | 2008<br>% |
| <b>Changing the appearance of Australia's natural environment.....</b>            | 76                                       | 78        | 14   | 15        |
| <b>A decline in the number and variety of Australia's plants and animals.....</b> | 77                                       | 83        | 12   | 12        |
| <b>An extra cost of billions of dollars each year for Australian farmers.....</b> | 60                                       | 82        | 10   | 7         |
| <b>A heavy reliance on chemicals by farmers ...</b>                               | 73                                       | 84        | 17   | 9         |
| <b>Health problems such as asthma and allergies.....</b>                          | 69                                       | 72        | 13   | 14        |
| <b>An increase in bushfire risk.....</b>  | 65                                       | 67        | 18   | 17        |

These outcomes show that the strongest growth in association of specific issues with the problem of weeds occurred for:

- “a decline in the number and variety of Australia's plants and animals” (an increase in urban households associating this issue with the weed problem occurred rising from 77% agreement in 2003 to 83% in 2008);
- “an extra cost of billions of dollars each year for Australian farmers (increasing from 60% agreement in 2003 to 82% in 2008); and
- “a heavy reliance on chemicals by farmers” (increasing from 73% agreement in 2003 to 84% in 2008).

Weaker associations in 2008 were given to issues such as “an increase in bushfire risk” (67%), “weeds changing the appearance of Australia's natural environment” (78%), and “health problems such as asthma and allergies” (72%).

The most strongest public opinion gain shown above emerged for the issue of the weeds problem causing “an extra cost of billions of dollars each year for Australian farmers” (increasing from 60% to 82% of Australians perceiving this problem as a major issue). This finding suggests that the additional costs to farmers (and the additional cost to household grocery bills) because of the significant problem caused by weeds could become a major message in public information campaigns to explain the problem to the Australian public. Equally strong supporting persuasive messages should also include the impact of weeds in “the decline in the number and variety of Australia's plants and animals” and, for farmers, the serious problem of weeds requires “a heavy reliance on chemicals by farmers”.

## **Conclusion**

The conclusion to draw (bearing in mind the insights gained from the focus group discussions and the national surveys) is that messages about the significant national problem of weeds which have most impact are:

- the annual billions of dollar cost required to control weeds across Australia (and the perception that this is adding to the cost of food at supermarkets and food retail outlets);
- the loss of bushland and natural areas, and native fauna and flora because of the invasion of weeds; and
- the heavy reliance of farmers (and the heavy costs) on using agricultural chemicals to control weeds.