

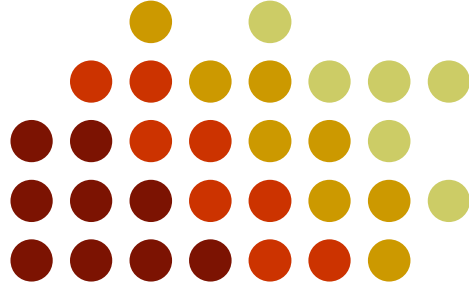
Water Conservation and Lot-level Storm Water Management

Market Constraints and Opportunities in
the Residential Sector

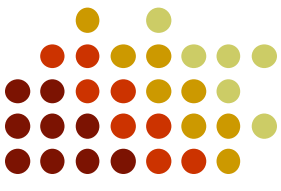
AWWA

Salem, Oregon

May 2009

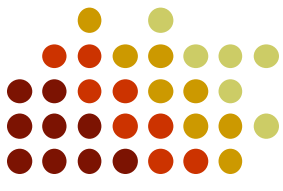


Today's Presentation



Overview:

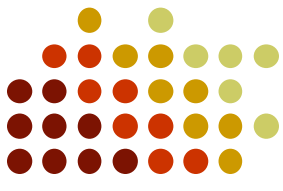
- Market research studies with residents exploring water use and lot-level storm water control
- How research samples were secured and the demographic focus of the studies
- Findings – Opportunities and Constraints
- Recommendations coming out of the research
- What it all means for marketing water conservation and lot-level storm water control



Market Research Studies

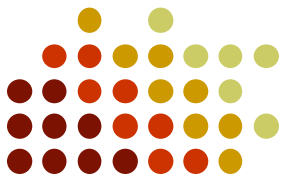
Four separate studies over three years:

- 2005 – Halton Region – Landscaping and water use – Municipalities of Oakville, Acton and Georgetown
- 2007 – TRCA – Landscaping, storm water management and water use – Municipalities of Markham, Thornhill-Richmond Hill, Don Mills (Toronto), Woodbridge and Brampton.
- 2008 – City of Mississauga – Landscaping, storm water management and water use
- 2008 – City of Toronto – Landscaping, storm water management and water use



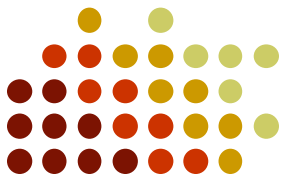
Market Research Studies

- The four market studies represent a total sample size of over 300 owner-occupants of single-family residential dwellings in 10 municipalities across the Greater Toronto Area.
- Over 90,000 responses grouped and analysed.
- Very high, statistically significant, correlation of responses amongst all four study samples.



Methodology – Research Sample

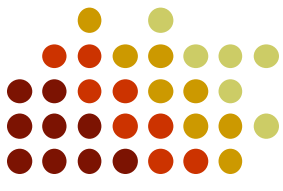
- Used Statistics Canada population data (National Census) to develop a demographic profile of owner-occupants of single-family dwellings in the target municipalities.
- Based on the demographic profile, developed a recruitment screener – a series of questions asked of residents by recruiters to screen potential research candidates (age, gender, ethnicity, country of origin, level of education, income level, marital status, etc).
- This process ensures the research sample mirrors the demographic of single-family homeowners in the study areas.
- Paid an incentive of \$100 to research participants.



Methodology – Research Sample

In all 4 studies focus on owner-occupants of detached single-family residences:

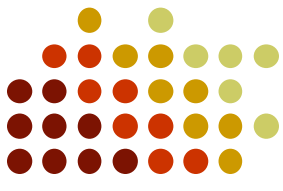
- Single-family dwelling have largest impact on water use and storm water on a per unit basis.
- Owner-occupants are responsible for decisions about design and maintenance of their home and landscape.
- Residents who rent may or may not pay the water bill.
- Renters often do not have the authority and/or inclination to modify or renovate their landscape.
- Lot-level practices and controls are most effective means of addressing water use and storm water management



Methodology – Research Sessions

Research Process:

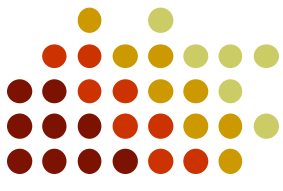
- Using a blank response form, resident participants provided written answers to questions asked by a facilitator.
- Classroom set up with facilitator at front and no discussion until the end of the research session.
- On average, participants answer about 120 closed- and open-ended questions, as well as complete landscape drawings.
- Respondents given a limited amount of time to answer each question and to complete their drawings



Methodology – Research Sessions

Research Process:

- Participants may provide multiple answers to open-ended questions so the total for any one question may be greater than 100%.
- Questions and their sequencing are designed to conceal the purpose of the survey and thereby reduce interpretation by the respondent and an attempt to provide the correct response.
- This research methodology enables the determination of **intrinsically held beliefs** in the research sample.

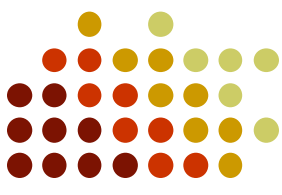


Background and Context

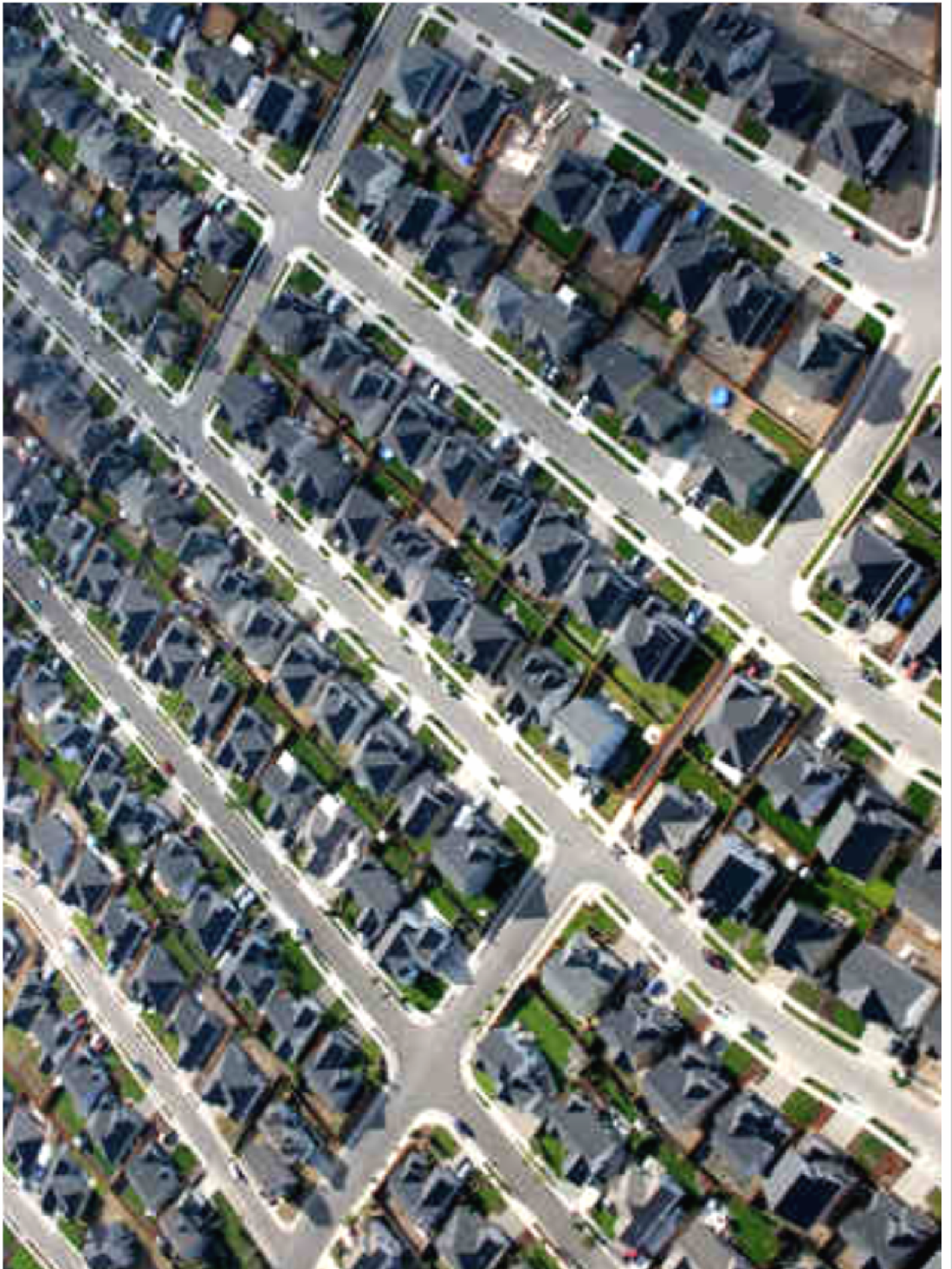
Focus of Market Research:

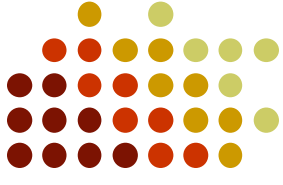
- Values and perceptions as they pertain to residents' home landscape and select lot-level sustainable practices and Best Management Practices (BMPs).
- Landscaping practices and other issues related to lot-level sustainable practices and the use of BMPs.
- Perspectives of their communities and neighbourhoods and the use of sustainable practices and BMPs.
- Where residents go and who they trust for landscape related advice.
- Constraints and opportunities within the target market.

Intrinsically Held Beliefs



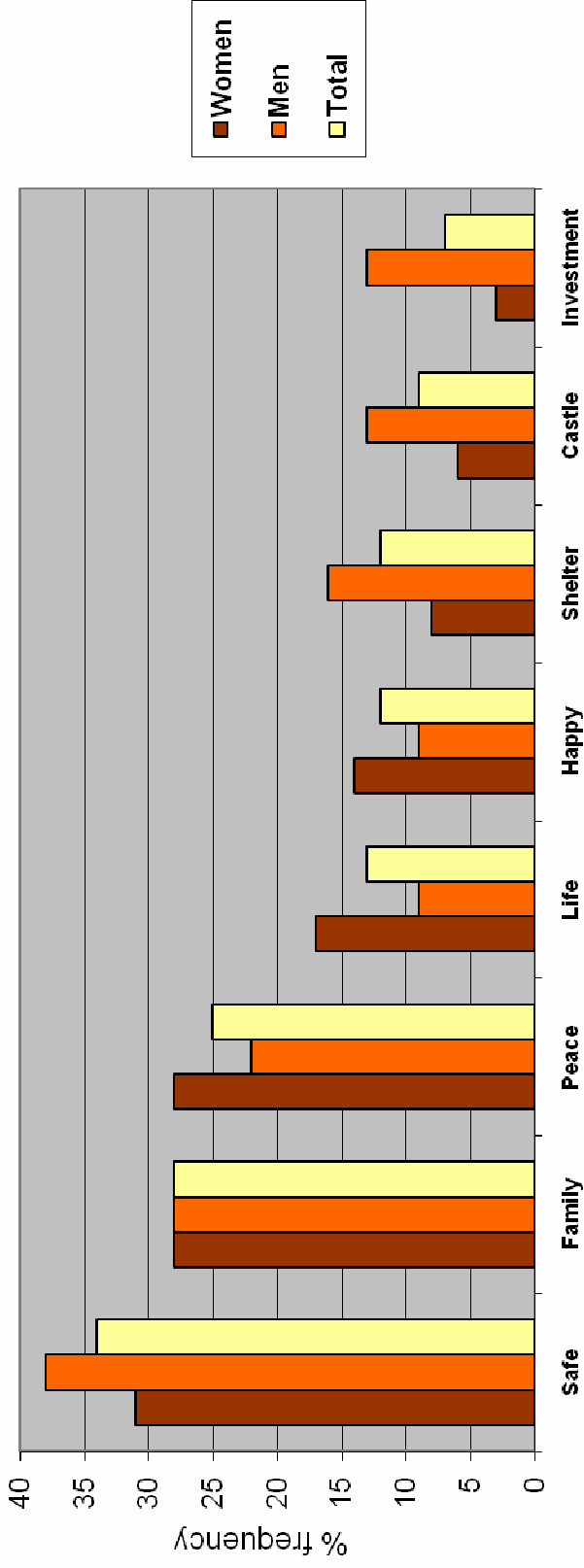
- **What are they?**
- **Why are they important/relevant?**

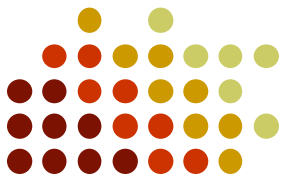




RESIDENTIAL MARKET RESEARCH HOME & LANDSCAPE - MISSISSAUGA

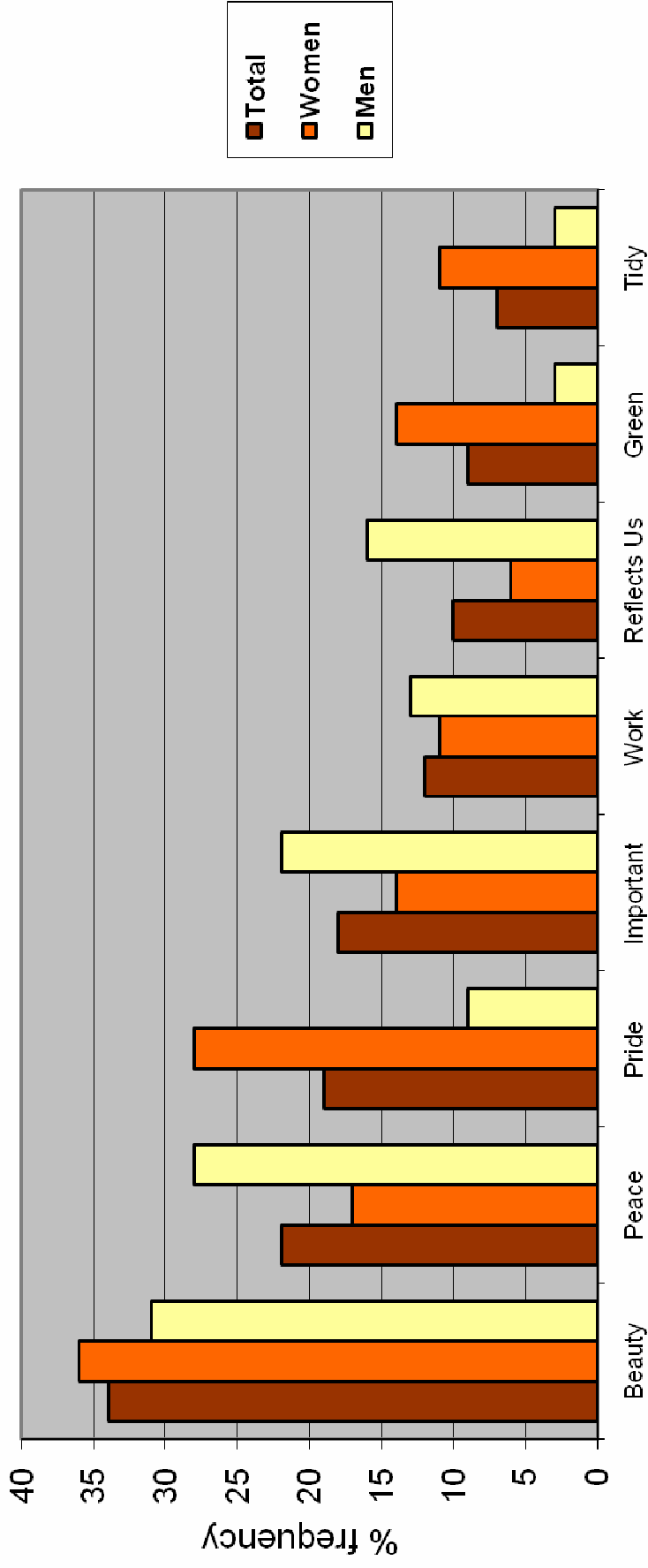
What does your home mean to you?





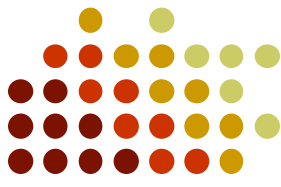
RESIDENTIAL MARKET RESEARCH HOME & LANDSCAPE - MISSISSAUGA

What does your home's landscape mean to you?

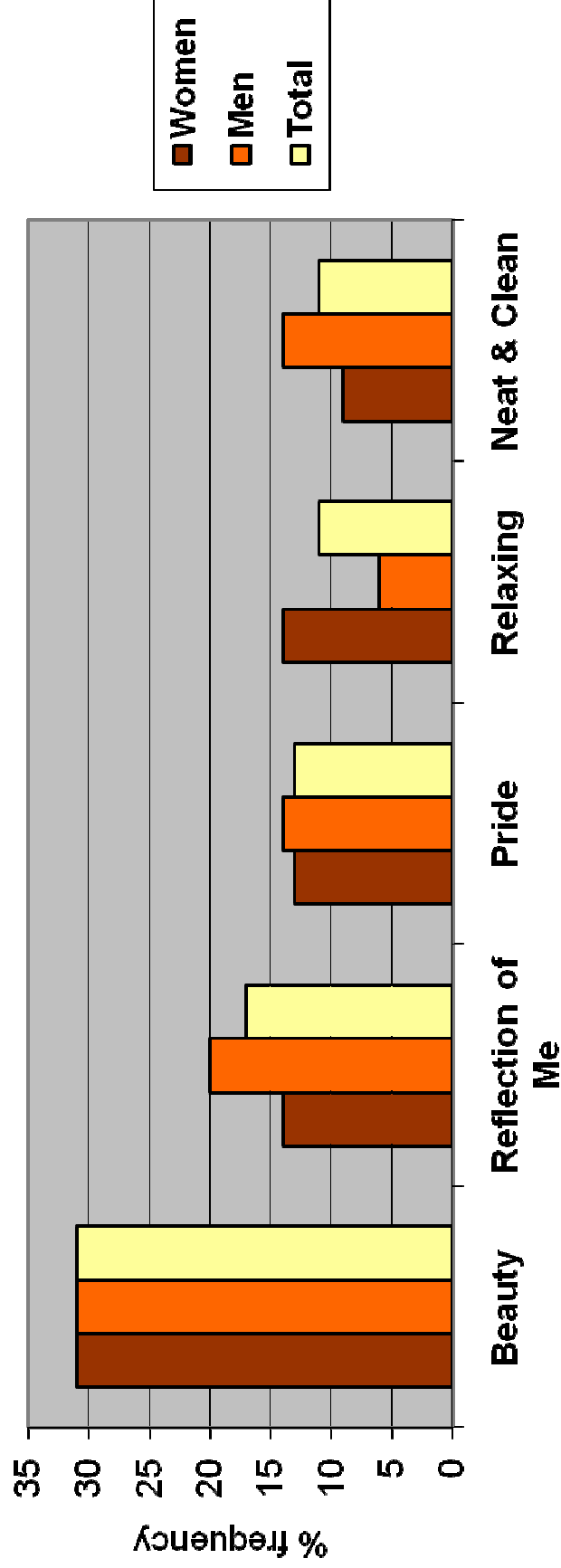


RESIDENTIAL MARKET RESEARCH

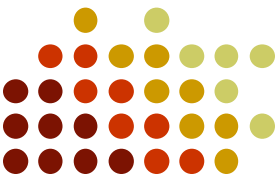
HOME & LANDSCAPE – TRCA



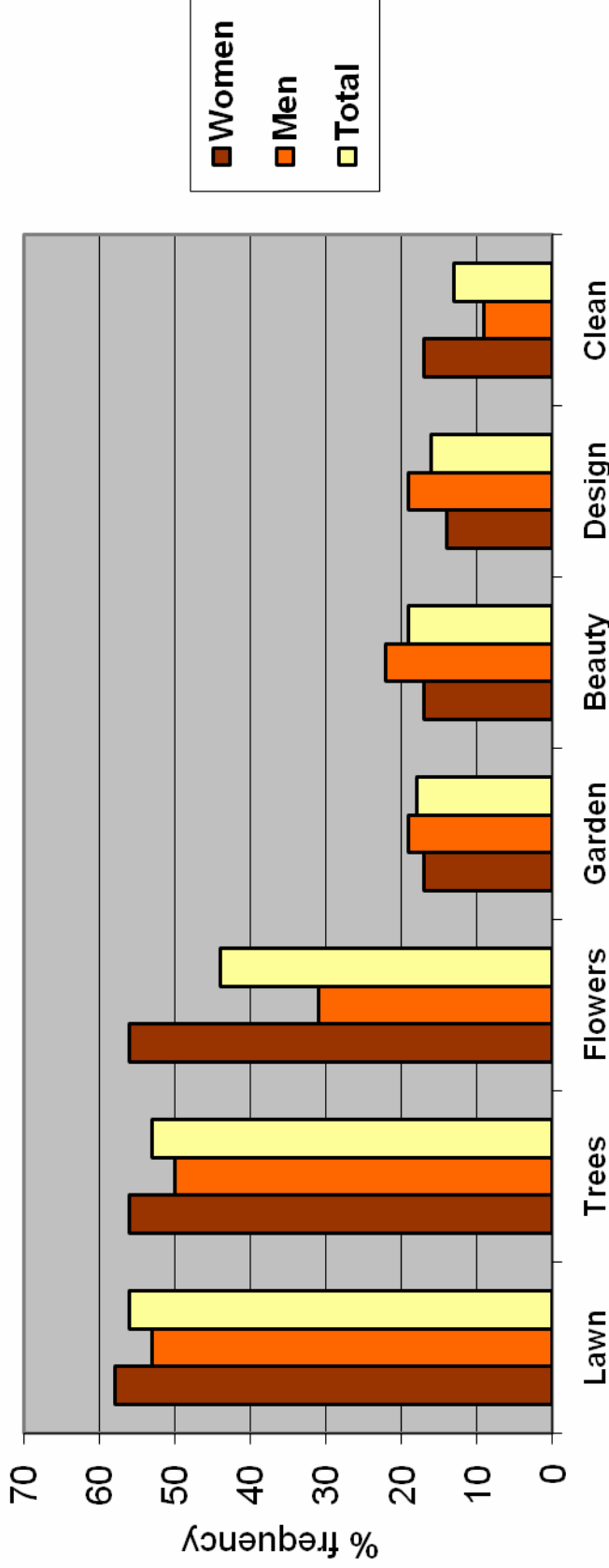
What does your home's landscape mean to you?



RESIDENTIAL MARKET RESEARCH HOME & LANDSCAPE - MISSISSAUGA

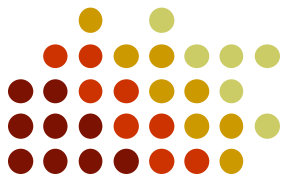


Most Important Aspects of Your Home's Landscape



RESIDENTIAL MARKET RESEARCH

HOME AND LANDSCAPE - TRCA



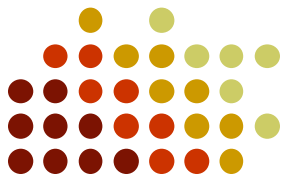
Important elements or aspects of “your home’s landscape”:

- Lawn (38%)
- Trees (36%)
- Flowers (30%)

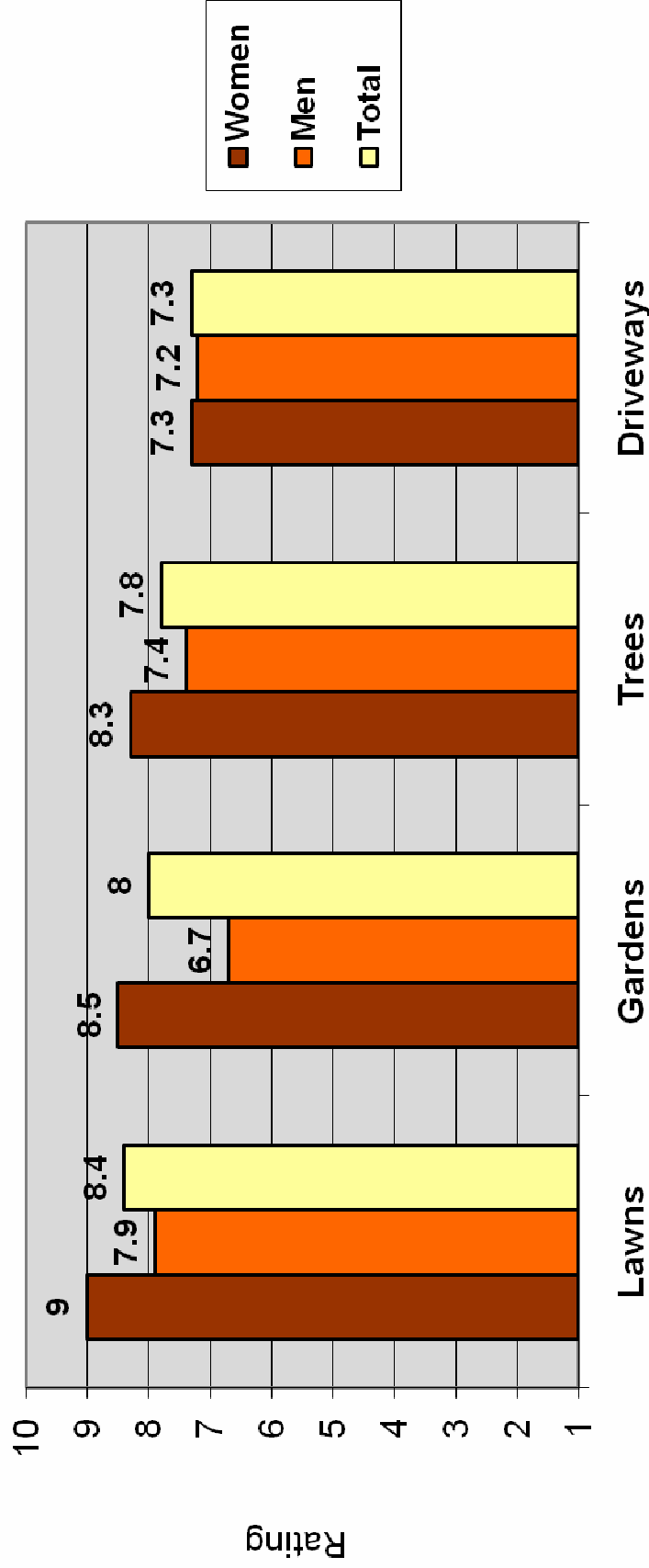
Meaning of home’s lawn and garden:

- Gardens (40%)
- Beauty (31%)
- Green & lush (28%)
- Well groomed, weed-free lawn (21%)

RESIDENTIAL MARKET RESEARCH LANDSCAPE - MISSISSAUGA

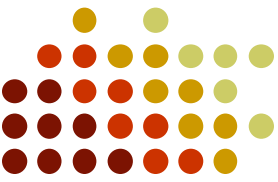


Importance of Lawns, Gardens, Trees, and Driveways

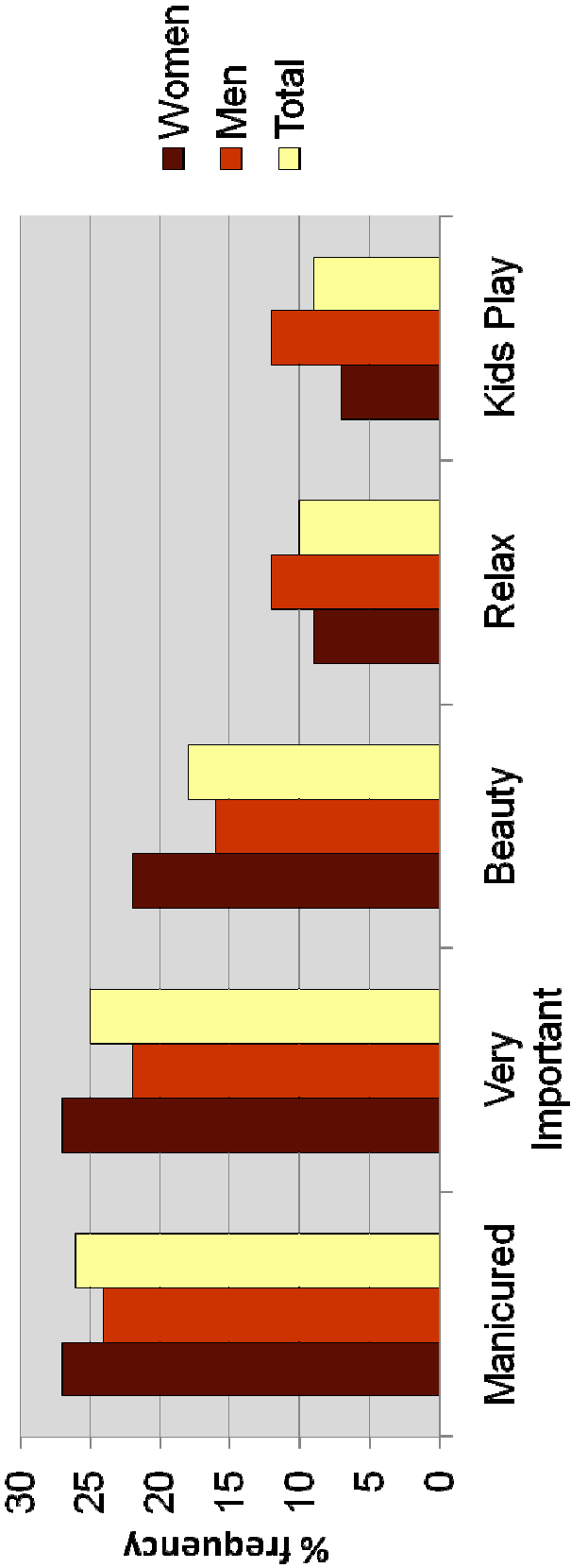


RESIDENTIAL MARKET RESEARCH

LANDSCAPE - TRCA

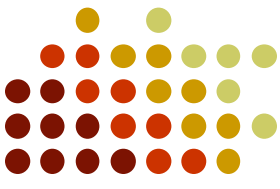


What does your lawn mean to you?



RESIDENTIAL MARKET RESEARCH

HOME LANDSCAPE - TRCA

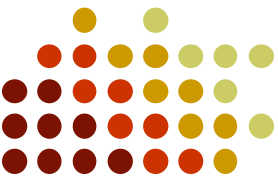


“Importance of the lawn to their home’s landscape”:

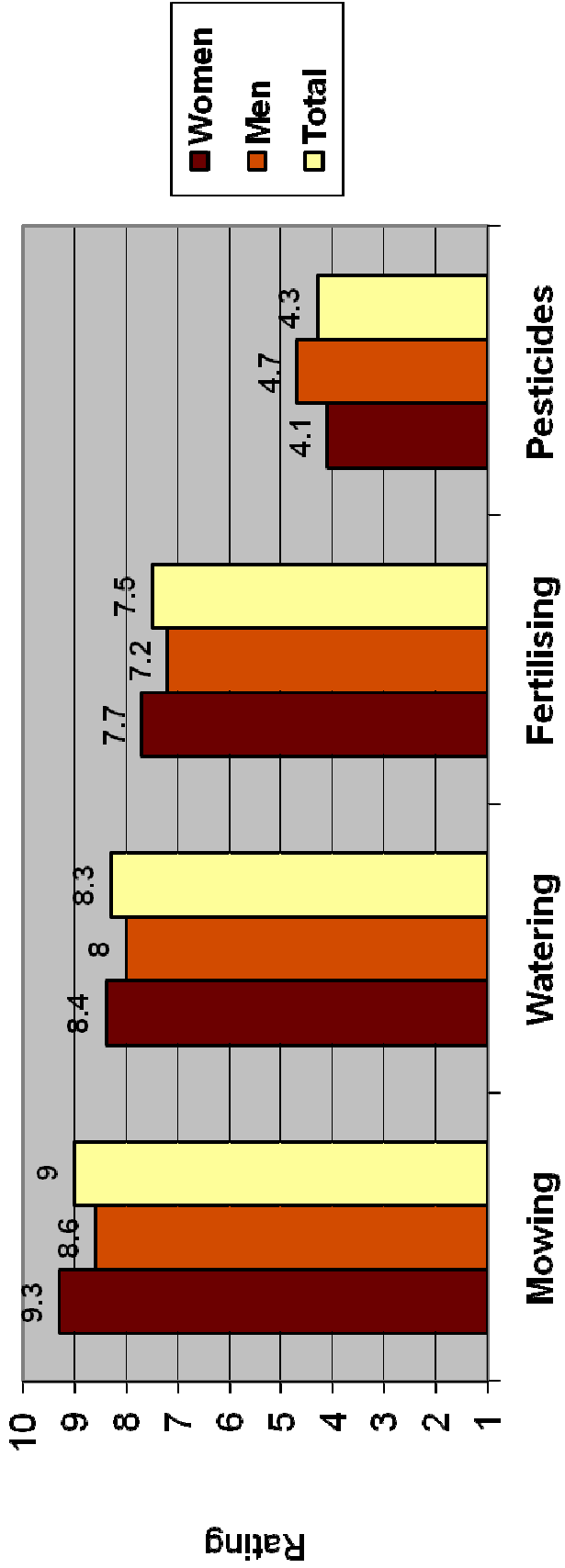
- Respondents provided a high average rating of 8.3 out of a possible 10 for the following reasons:
 - Beautiful, well-manicured appearance (50%)
 - Large green lawn is very important (14%)
 - Reflection of house and owner (9%)
- A beautiful, well-manicured appearance is most important to women (59% frequency) – a full 20% higher than men.
- Men do most of the lawn care maintenance with 85% of male respondents indicating they maintain the lawn and 45% of female respondents indicating their spouse maintains the lawn.

RESIDENTIAL MARKET RESEARCH

LANDSCAPE - TRCA

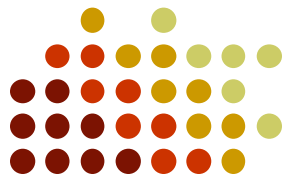


Ratings of Lawn Care Tasks



RESIDENTIAL MARKET RESEARCH

LANDSCAPE - TRCA



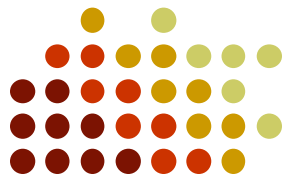
Ninety-five percent (95%) of respondents have flower gardens and 38% indicated they have both flower and vegetable gardens

What does your garden mean to you?

- beauty (42%)
- fresh vegetables (17%)
- happiness (17%)
- pride, passion, hobby (15%)
- relaxing, tranquility (14%)
- everything, very important (12%)

RESIDENTIAL MARKET RESEARCH

LANDSCAPE - TRCA

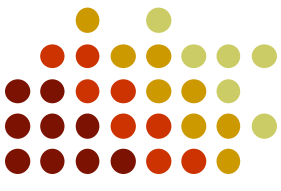


Importance of the garden to the home's landscape

- Respondents provided a high average rating of 8.3 out of a possible 10 for the following reasons:
 - Beautiful, curb appeal, colour and appearance (60%)
 - Pleasure, pride and care (22%)
 - Fresh flowers and vegetables (10%)

RESIDENTIAL MARKET RESEARCH

LANDSCAPE - MISSISSAUGA



Importance of watering lawns (7.3/10):

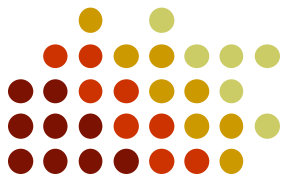
- Watering to keep lawn healthy 60%
- Watering 2 to 4 times / wk. 56%
- Watering for 1 to 2 hrs. each time 56%

Importance of watering gardens (8.3/10):

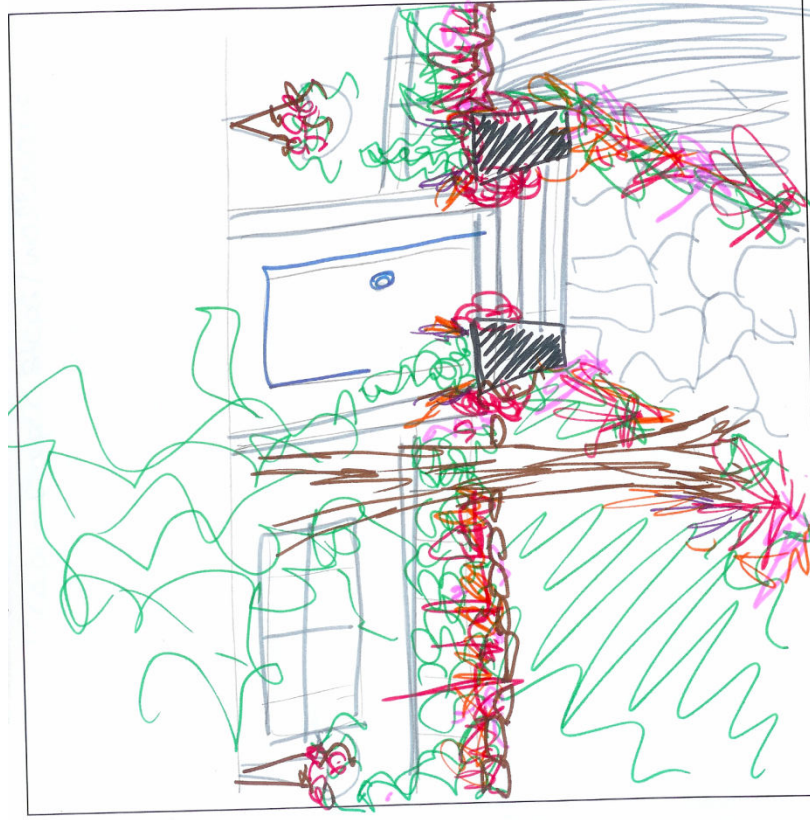
- Watering to keep plants healthy 68%
- Watering 2 to 4 times/wk. 69%
- Watering for 20 to 45 mins. / watering 41%
- Watering for 1 to 2 hrs. each time 44%

RESIDENTIAL MARKET RESEARCH

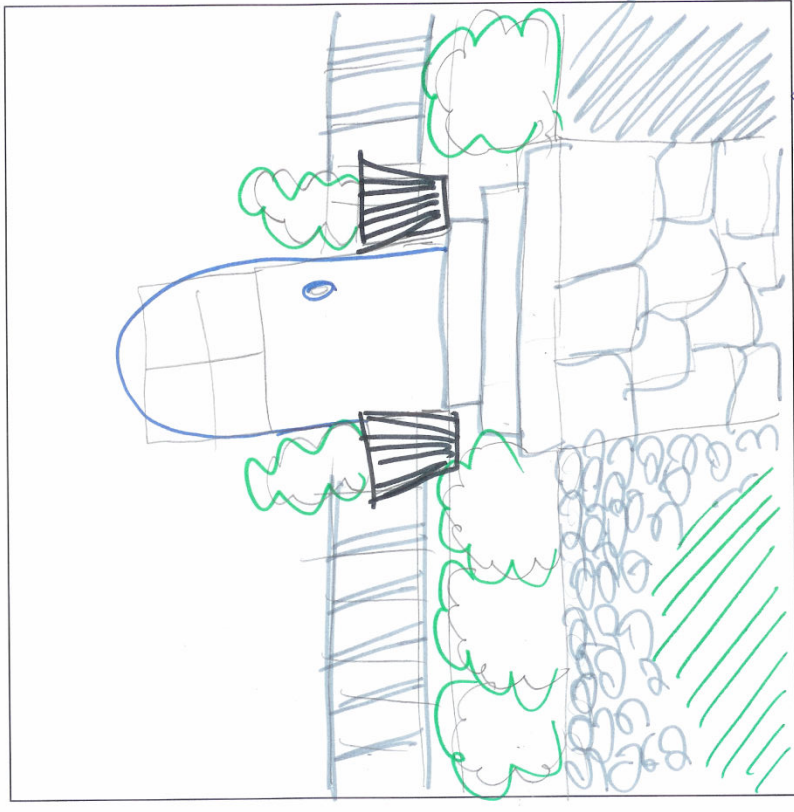
“IDEAL” VS “WATER EFFICIENT”



Ideal Landscape



Water Efficient Landscape

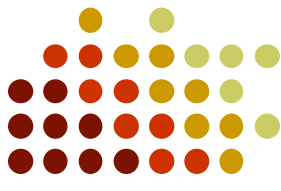


Halton Study – (62/62 or 100%)

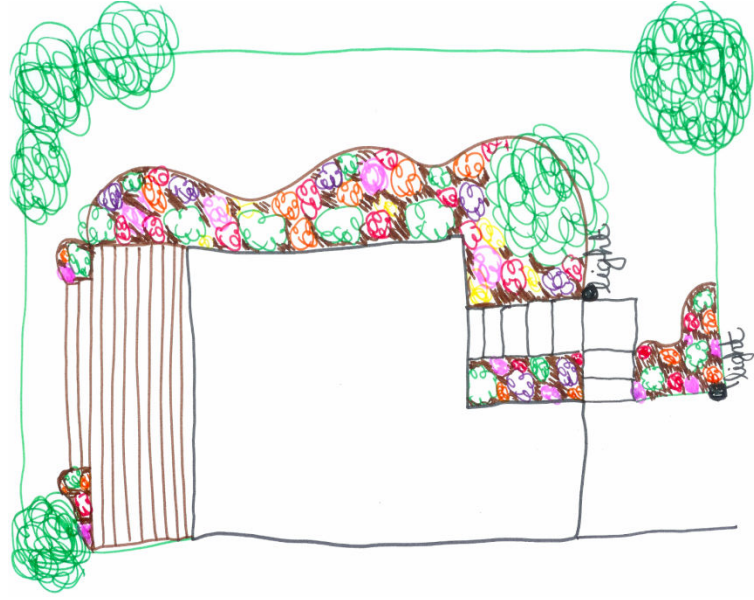
Freeman Associates

RESIDENTIAL MARKET RESEARCH

“IDEAL” VS “WATER EFFICIENT”



Ideal Landscape

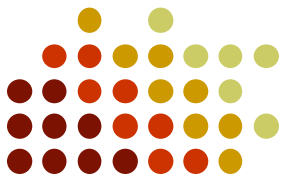


Water Efficient Landscape



Halton Study – (62/62 or 100%)

Freeman Associates



RESIDENTIAL MARKET RESEARCH

“IDEAL” VS “NATURALISED”

“Ideal” landscape



“Naturalised” landscape

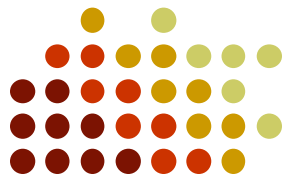


TRCA Study: TYPE 1 – Incremental change (50/121 or 41%)

Freeman Associates

RESIDENTIAL MARKET RESEARCH

“IDEAL” VS “NATURALISED”



“Ideal” Landscape



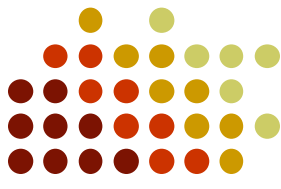
“Naturalised” Landscape



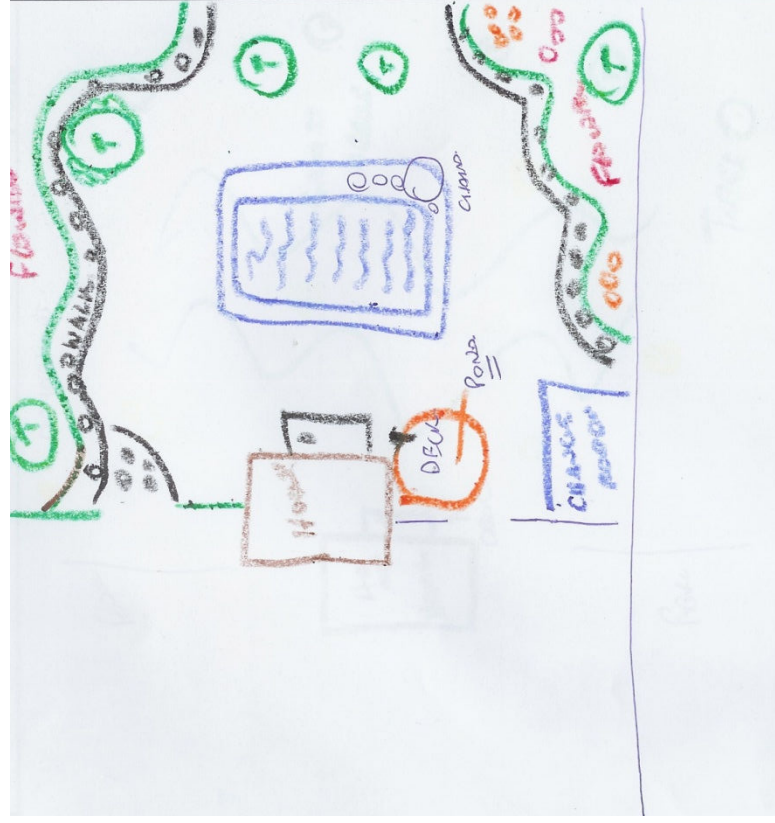
TRCA Study: TYPE 2 – Less colourful (30/121 or 25%)

RESIDENTIAL MARKET RESEARCH

“IDEAL” VS “NATURALISED”



“Ideal” Landscape

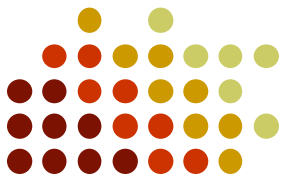


“Naturalised” Landscape



TRCA Study: TYPE 3 – Chaotic (26/121 or 21%)

Freeman Associates



RESIDENTIAL MARKET RESEARCH

“IDEAL” VS “NATURALISED”

“Ideal” Landscape



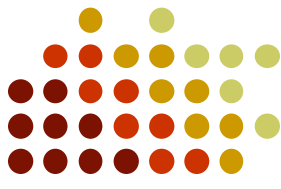
“Naturalised” Landscape



TYPE 4 – Nature positive (12/121 or 10%)

RESIDENTIAL MARKET RESEARCH

“IDEAL” VS “SUSTAINABLE” LANDSCAPE



“Ideal” landscape



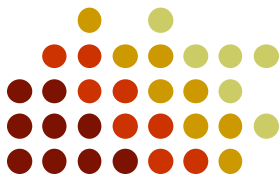
“Sustainable” landscape



TYPE 1 – Less colour and features (31/68 or 46%)

RESIDENTIAL MARKET RESEARCH

“IDEAL” VS “SUSTAINABLE” LANDSCAPE



“Ideal” Landscape



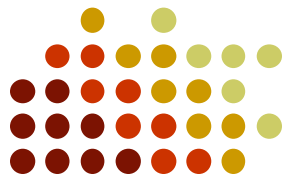
“Sustainable” Landscape



TYPE 2 – No change (28/68 or 41%)

RESIDENTIAL MARKET RESEARCH

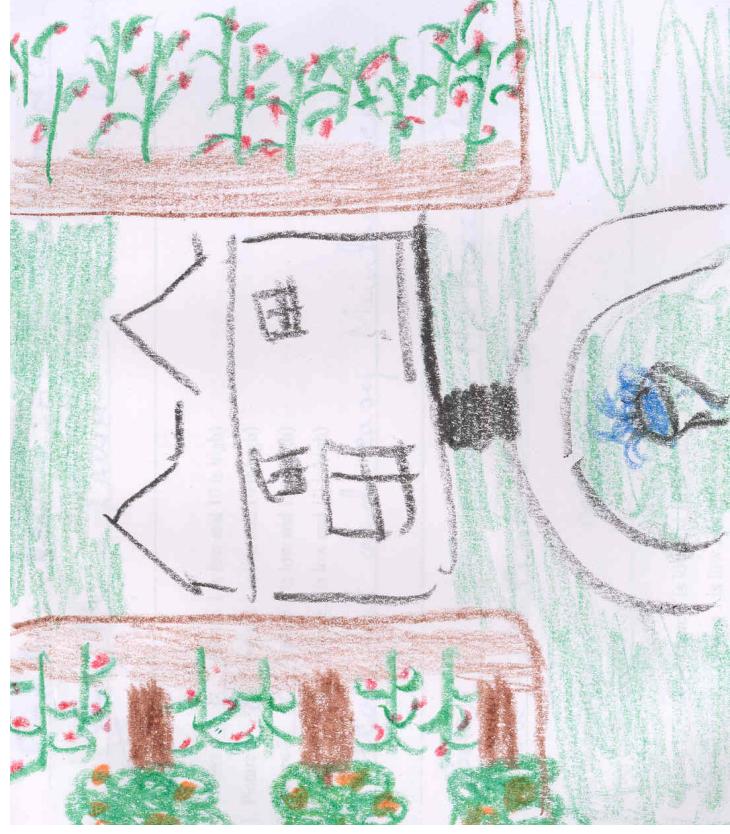
“IDEAL” VS “SUSTAINABLE” LANDSCAPE



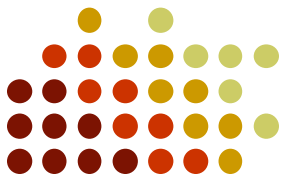
“Ideal” Landscape



“Sustainable” Landscape



TYPE 3 – More natural/functional (9/68 or 13%)



RESIDENTIAL MARKET RESEARCH

“IDEAL” VS “NATURAL” LANDSCAPE

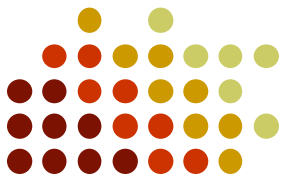
“Ideal” landscape



“Natural” landscape



TYPE 1: Less colour, design & structural elements (21/42 or 50%)



RESIDENTIAL MARKET RESEARCH

“IDEAL” VS “NATURAL” LANDSCAPE

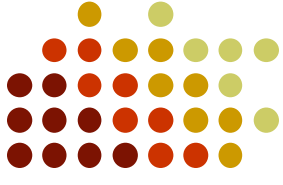
“Ideal” Landscape



“Natural” Landscape



TYPE 2 – Incremental change (9/42 or 21%)



RESIDENTIAL MARKET RESEARCH

“IDEAL” VS “NATURAL” LANDSCAPE

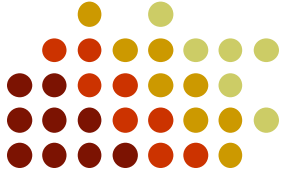
“Ideal” Landscape



“Natural” Landscape



TYPE 3 – No change (8/42 or 19%)



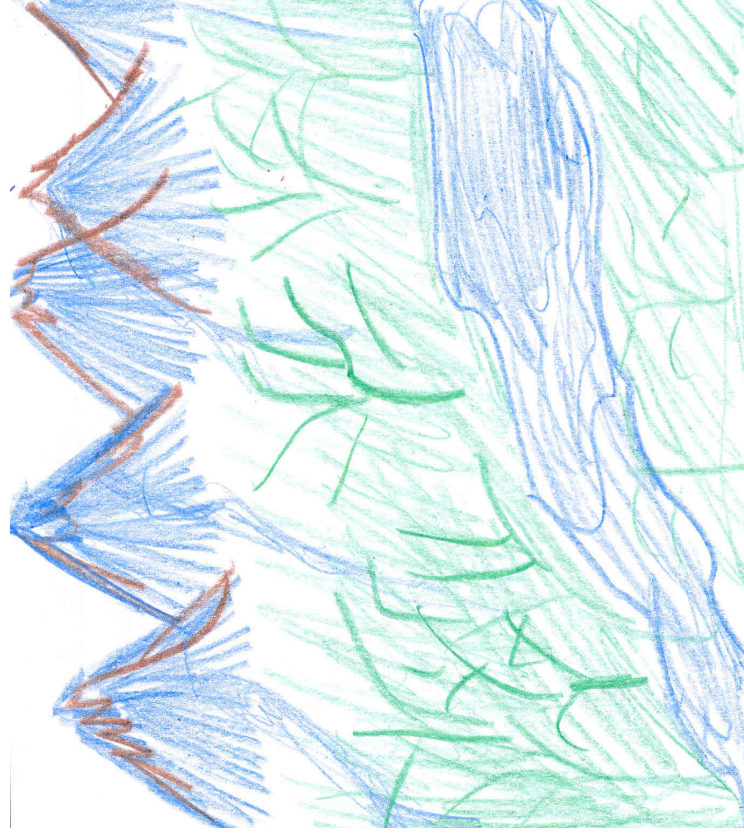
RESIDENTIAL MARKET RESEARCH

“IDEAL” VS “NATURAL” LANDSCAPE

“Ideal” Landscape



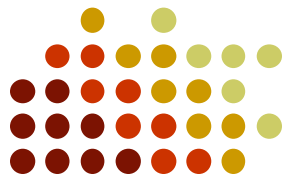
“Natural” Landscape



TYPE 4 – More wild (4/42 OR 9.5%)

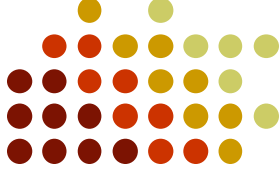
RESIDENTIAL MARKET RESEARCH

“IDEAL” VS “NATURALISED”



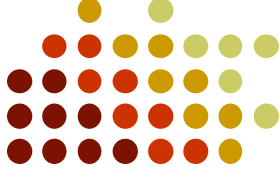
Feelings and Emotions	Ideal Landscape		Naturalised Landscape	
	Frequency	Weighted	Frequency	Weighted
Calm, relaxed, warm	43%	23%	25%	13%
Peace, Tranquility	34%	18%	27%	14%
Beautiful	29%	15%	10%	5%
Happy, Content, Satisfied	25%	13%	10%	5%
Fun, Pleasure, Enjoyment	17%	9%	7%	4%
Design, Dream, Home	14%	7%		
Proud	11%	6%		
Wonderful, Exciting, Wow	10%	5%	3%	2%
Colourful, Bright	3%	2%	4%	2%
Natural, Healthy, Grace			31%	17%
Easy Care, Freedom, Wild			20%	11%
Clean, Simple, Space			12%	6%
Total Positive Emotions	186%	98%	149%	80%
Frustrated, angry, upset	4%	2%	12%	6%
Untidy, Chaotic, Eyesore			10%	5%
Boring, Plain, No Colour			8%	4%
Ugly, Cold, Unwanted			8%	4%
Total Negative Emotions	4%	2%	38%	20%
Total Percentages	190%	100%	187%	100%

RESIDENTIAL MARKET RESEARCH “IDEAL” VS “SUSTAINABLE”

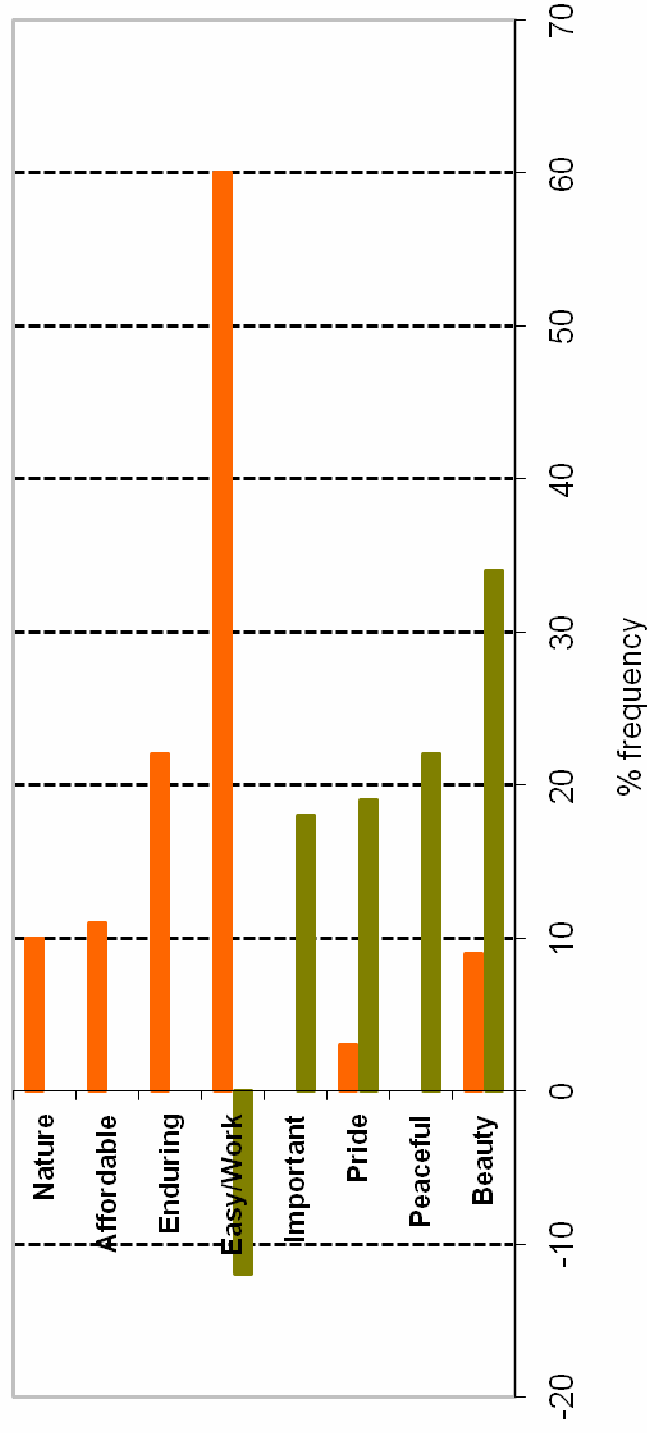


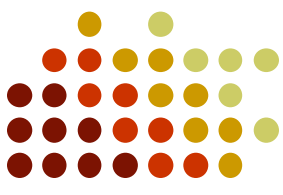
Elements or Aspects	49. Ideal Landscape		58. Sustainable Landscape	
	% Frequency	Weighted %	% Frequency	Weighted %
Trees (& Shrubs)	46%	22%	38%	24%
Flowers	34%	16%	12%	8%
Grass/Lawn	27%	13%	31%	20%
Beauty & colour	27%	13%	12%	8%
Water, pond, pool	16%	8%	7%	4%
Gardens	13%	6%	4%	3%
Driveway (Interlock or asphalt)	13%	6%	4%	3%
Walkway (Interlock)	12%	6%	6%	4%
Place to sit (patio, deck)	10%	5%	2%	1%
Variety	6%	3%		
Design			9%	6%
Mulch (wood chips)			6%	4%
Perennials			6%	4%
Easy to maintain	4%	2%	19%	12%
Total Percentage	208%	100%	156%	100%

RESIDENTIAL MARKET RESEARCH “IDEAL” VS “SUSTAINABLE” LANDSCAPE



What does your home's/a sustainable landscape mean to you?





RESIDENTIAL MARKET RESEARCH FRONTYARD

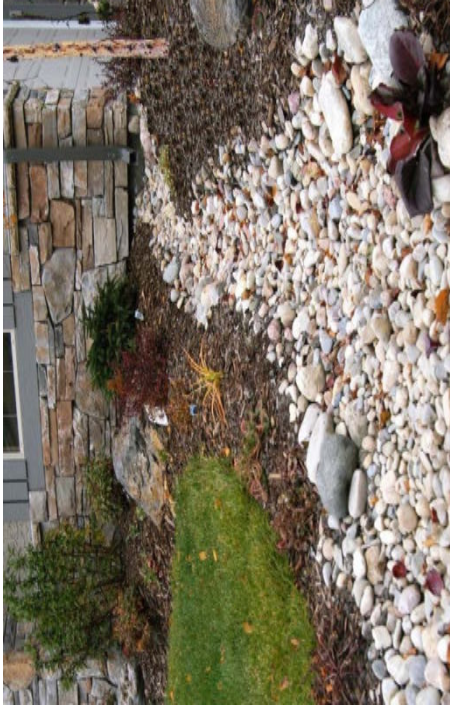
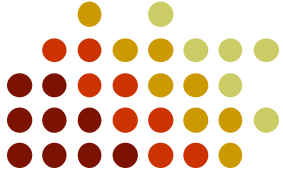
6.5/10



7.2/10



RESIDENTIAL MARKET RESEARCH DOWNSPOUTS/DRAINAGE



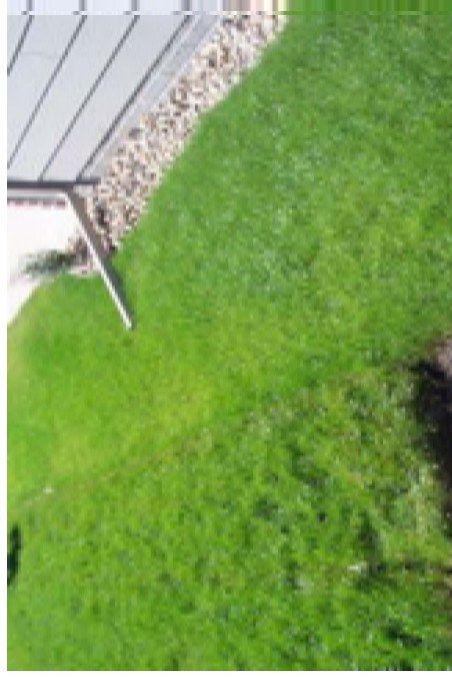
5.7/10



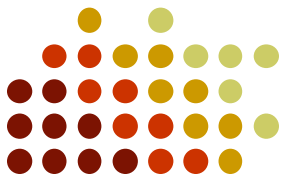
6.4/10



7.3/10

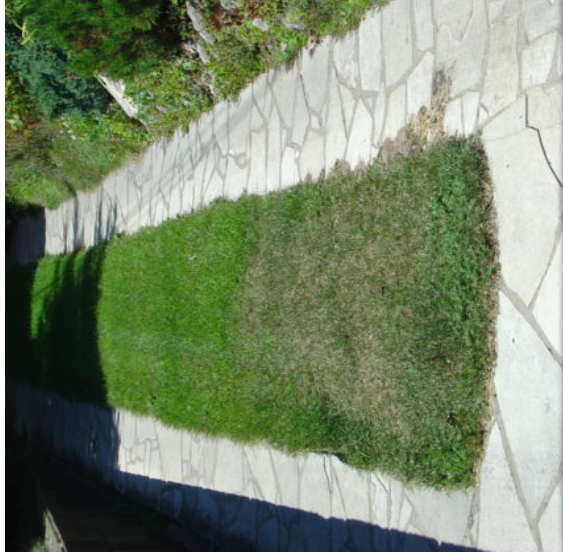


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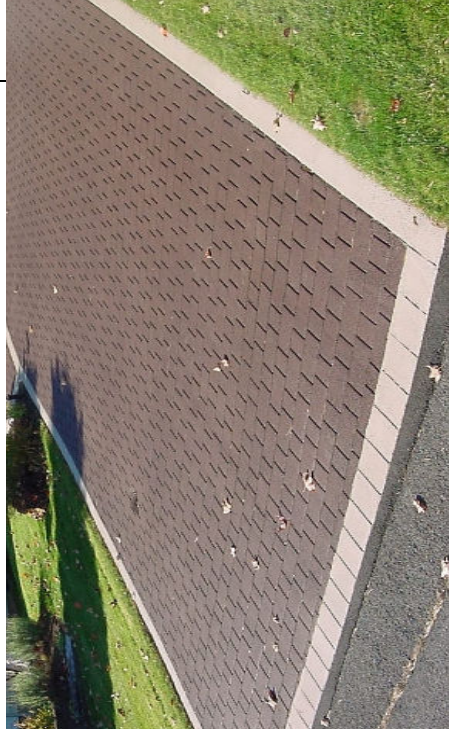
RESIDENTIAL MARKET RESEARCH

BMP PHOTOS – DRIVEWAYS



4.9/10

8.2/10

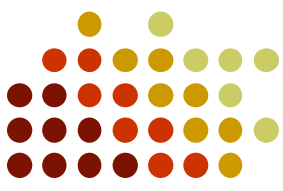


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RESIDENTIAL MARKET RESEARCH

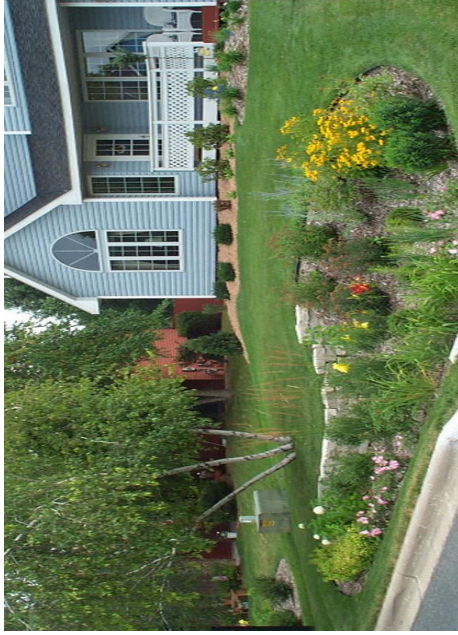
BMP PHOTOS – FRONT YARDS



7.9/10



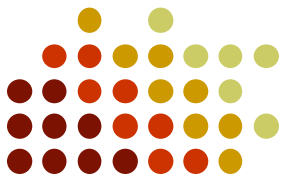
6.3/10



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RESIDENTIAL MARKET RESEARCH

BMP PHOTOS – BACK YARDS



6.7/10



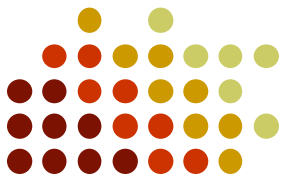
7.2/10



8.5/10



6.7/10



RESIDENTIAL MARKET RESEARCH

BMP PHOTOS – GARDENS



7.2/10



6.4/10



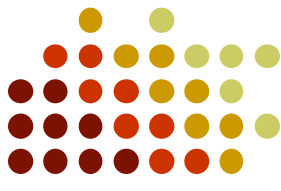
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5.8/10

RESIDENTIAL MARKET RESEARCH

BMP PHOTOS – STREETSCAPES



7.9/10

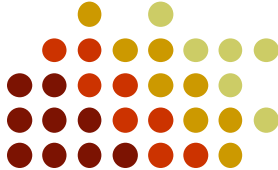


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RESIDENTIAL MARKET RESEARCH

BMP PHOTOS – SIDEWALKS



6.1/10



7.5/10



7.0/10

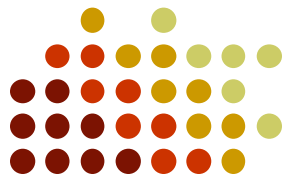


7.1/10



RESIDENTIAL MARKET RESEARCH

MODIFIED PERCEPTIONS

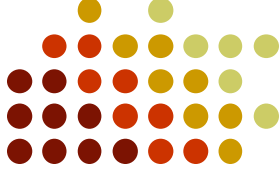


After viewing photos:

- 84% of respondents indicated they “would consider naturalising some or all of their home’s landscape”
- 75% of respondents would consider adding “sustainable features/elements to their home landscape”

RESIDENTIAL MARKET RESEARCH

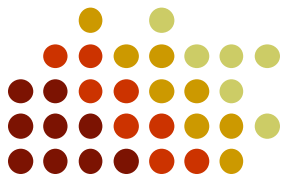
TRUSTED SOURCES OF ADVICE



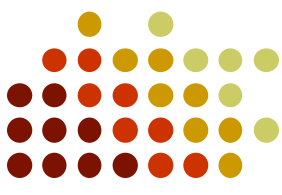
Source	106. Landscape Design & Maintenance	107. Plants, Trees & Shrubs	% +/-
Garden Centre/Nursery	40%	74%	34%
Professional	27%	6%	-21%
Large Box Store	7%	12%	5%
Family	24%	25%	1%
Friend or Neighbour	21%	7%	-14%
Myself	7%	3%	-4%
Books, Magazines	22%	18%	-4%
Internet	10%	12%	2%
HGTV	3%		-3%

RESIDENTIAL MARKET RESEARCH

SOURCES OF PRODUCTS



Retailers	108. Lawn Care Products	109. Plants, Trees & Shrubs	% +/-
Home Depot	50%	31%	-19%
Canadian Tire	40%	13%	-27%
Rona	18%	9%	-9%
Costco	10%	13%	3%
Wal-Mart	9%	6%	-3%
Total Big Box Stores	127%	72%	-55%
Various Retail	12%	17%	5%
Garden Centre/Nursery	30%	50%	20%
Sheridan Nurseries	7%	16%	9%
Terra Garden Centre	2%	9%	8%
Total Independents	51%	92%	42%



RESIDENTIAL MARKET RESEARCH

RESPONDENTS' UNDERSTANDING

When asked:

“Name three native plants (not trees, or shrubs) in southern Ontario”:

- 31% Trilliums
- 26% Dandelions
- 21% No answer

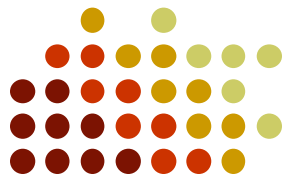
“What is a rain garden?”:

- 38% Don't know
- 13% A garden or pond that stores water

“What is a watershed?”:

- 44% Don't know
- 22% Man-made collection or storage of water
- 13% An area drained naturally by rivers, streams, etc.

RESIDENTIAL MARKET RESEARCH CONSTRAINTS



- A deeply held aesthetic motivation that defines a beautiful landscape as one with:
 - A manicured, green, weed-free lawn
 - Lots of colour, primarily provided by flowers (principally annuals)
 - A neat, tidy appearance
 - Good design and an organised layout
- This underlying aesthetic motivation leads homeowners to unsustainable behaviours.
- Limited understanding

MARKETING STRATEGY RECOMMENDATIONS



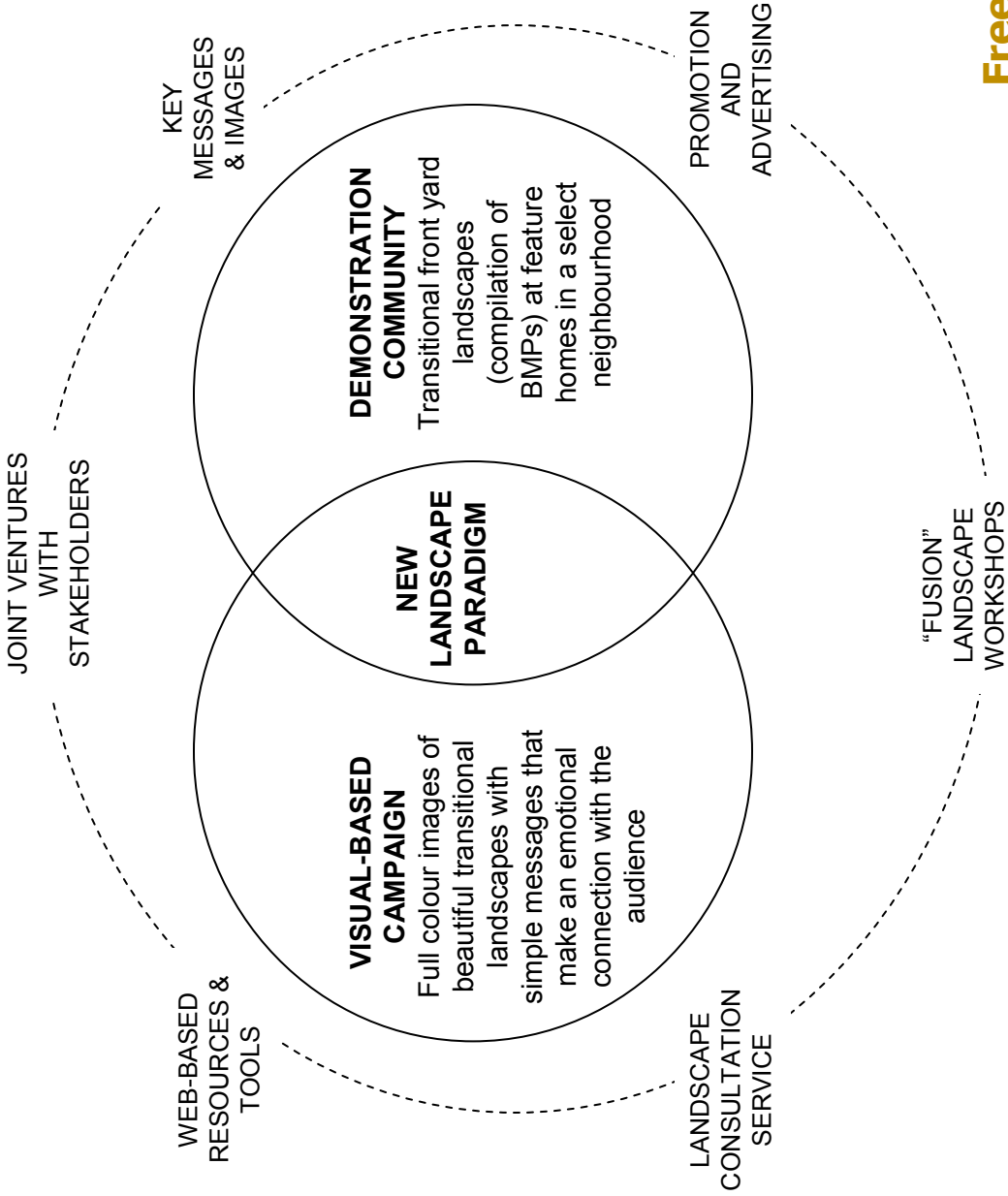
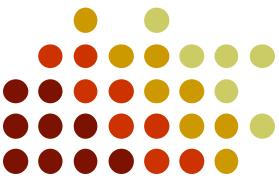
- A marketing program must **tap homeowner’s strong emotional connection to the aesthetic** value of their home’s landscape and surrounding neighbourhood.
- Marketing initiatives targeting modifications to residents’ properties and/or the right-of-way approximating their properties **must focus on the aesthetic value of the modifications not the functional aspects.**
- Lot-level BMPs should be marketed as a **collective vision – a new landscape paradigm.**

MARKETING STRATEGY RECOMMENDATIONS

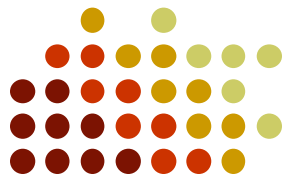


- Utilise trusted sources to engage the target market, e.g., retailers, architects/architectural designers, landscape architects/designers, building contractors, landscape professionals, etc.
- Use residents own words, “beautiful”, “curb appeal”, “oasis”, “paradise”, “peaceful”, “lush”, “vibrant”, “exciting”, “wow”, “tranquil”, “zen”, “family and friends”, “place for entertaining”, etc. to evoke an emotionally positive response.

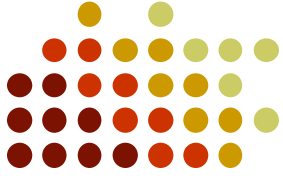
MARKETING STRATEGY RECOMMENDATIONS



WHAT DOES IT MEAN?



- LIFESTYLE DECISIONS ARE DRIVEN BY INTRINSIC VALUES, THEY ARE EMOTIONALLY-BASED DECISIONS
- AESTHETICS DRIVES RESIDENTS' DECISIONS ABOUT THEIR HOME AND LANDSCAPE
- CHANGE THROUGH EDUCATION WILL TAKE GENERATIONS, CHANGE THROUGH EMOTIONALLY-BASED, SOPHISTICATED MARKETING WILL TAKE AT MOST, SEVERAL YEARS



PORTLAND'S HOME GARDEN AND LIFESTYLE MAGAZINE

PORTRAITTM OF PORTLAND



Freeman Associates



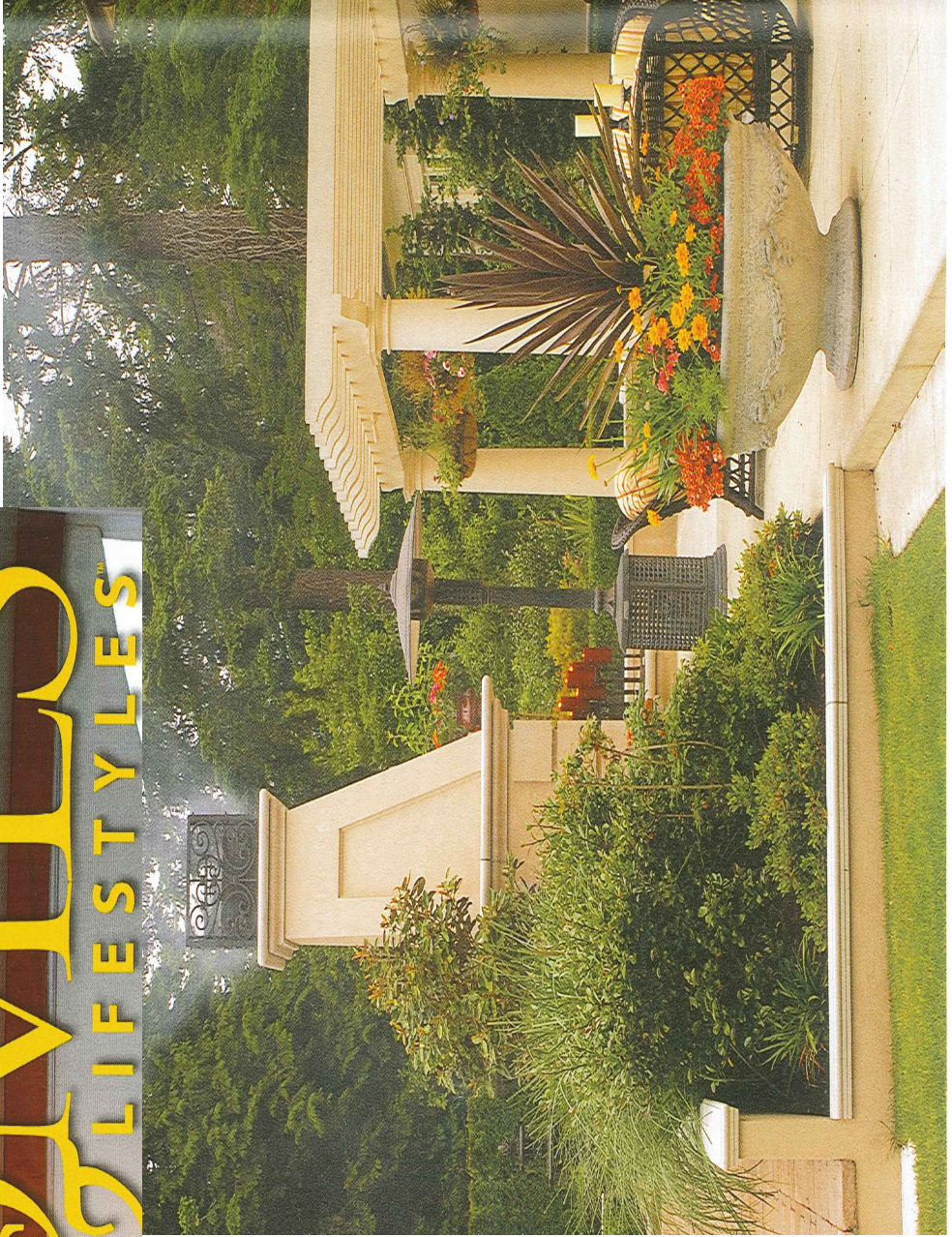
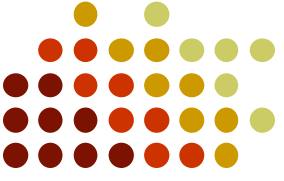
PORTLAND'S HOME GARDEN AND LIFESTYLE MAGAZINE

PORTRAITTM OF PORTLAND

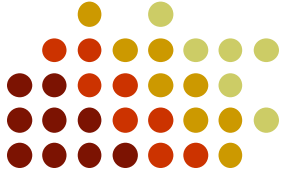


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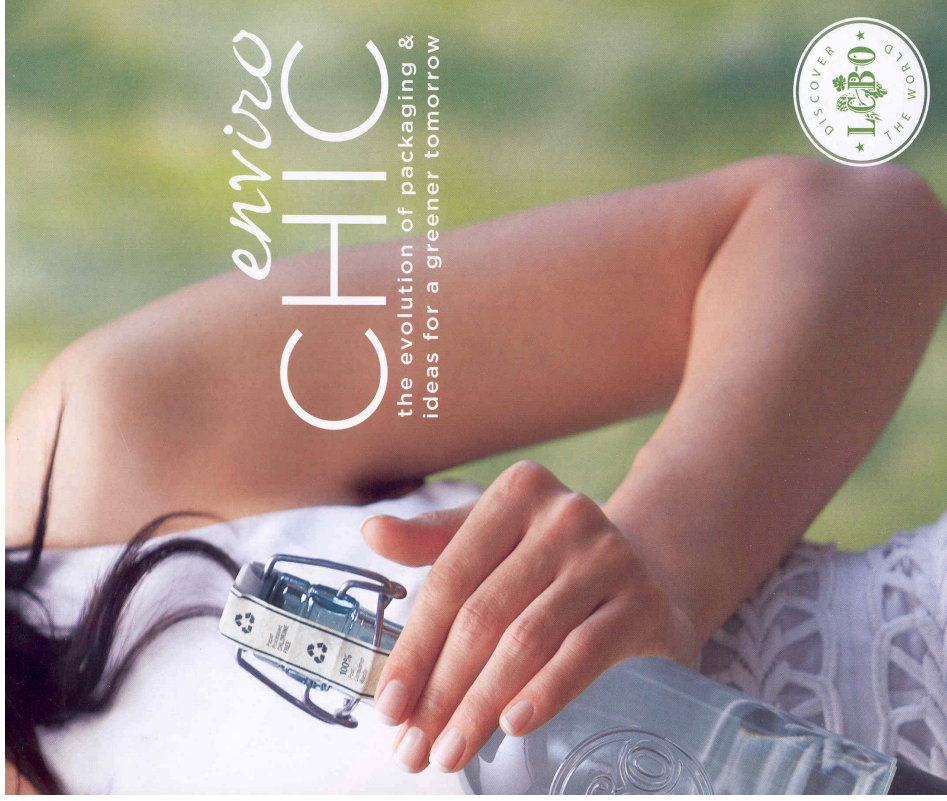
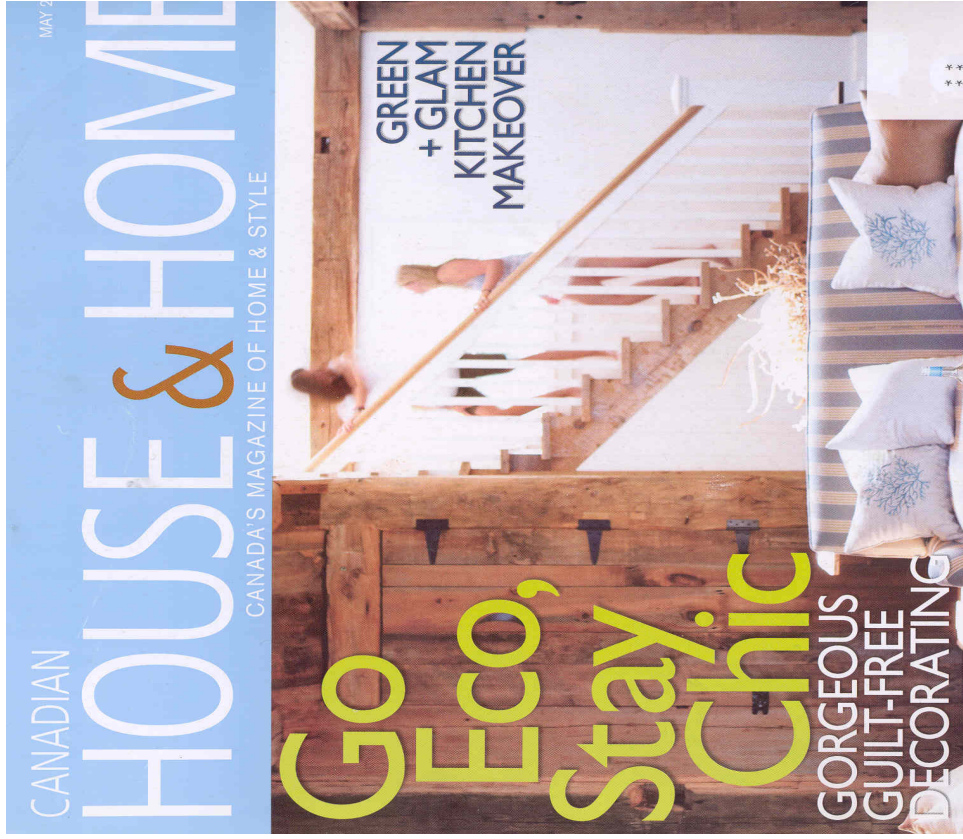
SEATTLE SHOW & LIFESTYLES™



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WHERE TO BEGIN?



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THANK YOU!

QUESTIONS?

