

# Managing Invasive Plants in Toronto



Cara Webster, Natural Resource  
Specialist

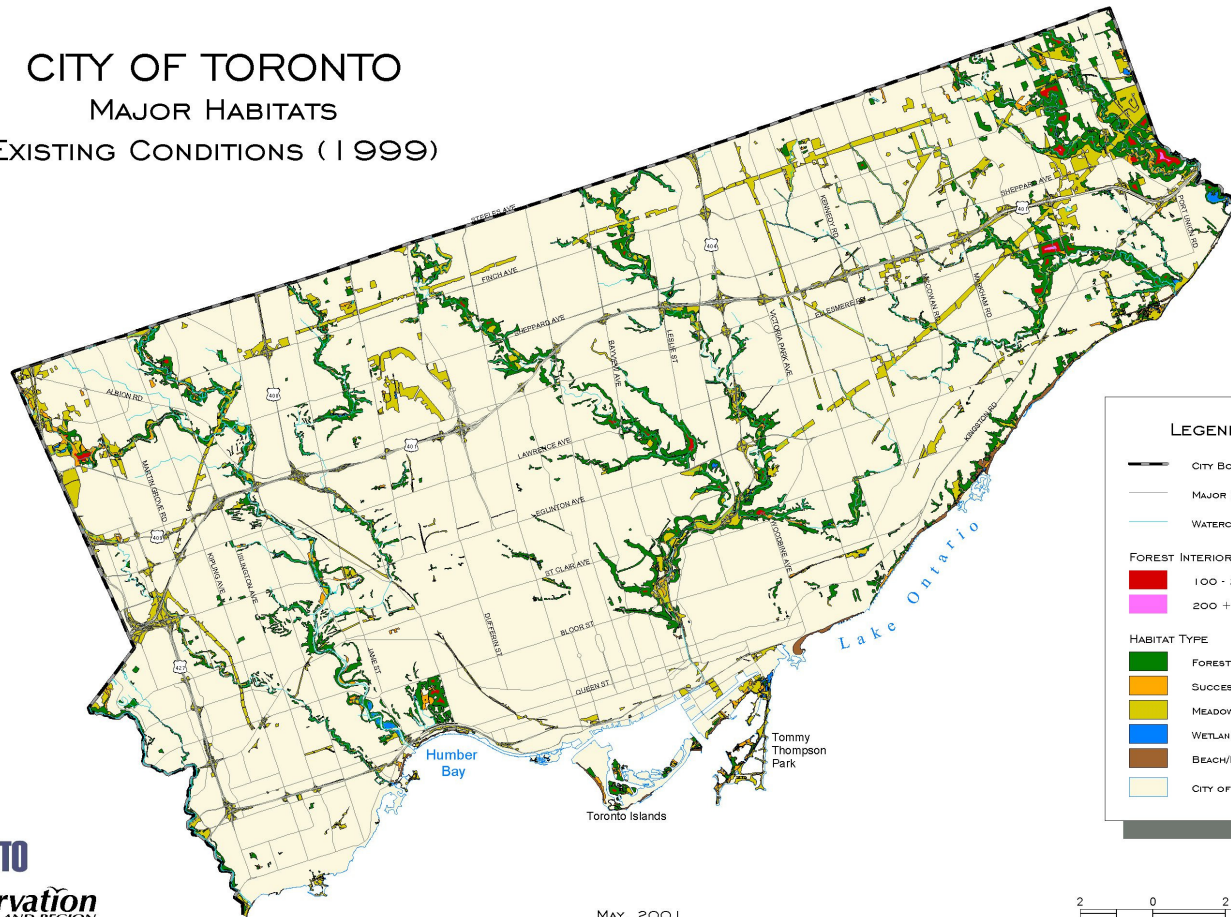
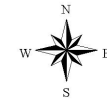
City of Toronto, Urban Forestry

# Urban Forestry Natural Resource Management Section

- 3 permanent field crews – natural resource workers (9 staff) across Toronto
- Planting & maintenance in natural areas/ravines & new naturalization sites
- Invasive plant control in key natural areas
- Assist with community stewardship

CITY OF TORONTO  
 MAJOR HABITATS  
 EXISTING CONDITIONS (1999)

MAP 2



**LEGEND**

- CITY BOUNDARY
- MAJOR ROADS
- WATERCOURSES

**FOREST INTERIOR**

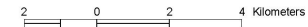
- 100 - 200 M
- 200 + M

**HABITAT TYPE**

- FOREST
- SUCCESSIONAL
- MEADOW
- WETLAND
- BEACH/BLUFF
- CITY OF TORONTO



MAY, 2001



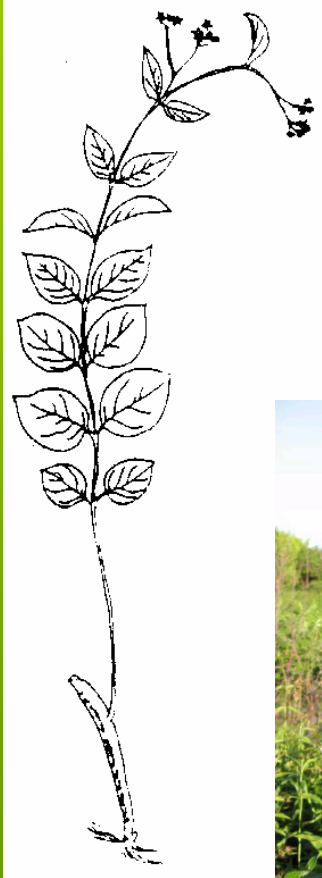
- 13.5% natural area
- 1500 parks
- 44 ESAs (TRCA designated)
- 9 ANSIs (MNR designated)



# Invasive Plant Management Priorities

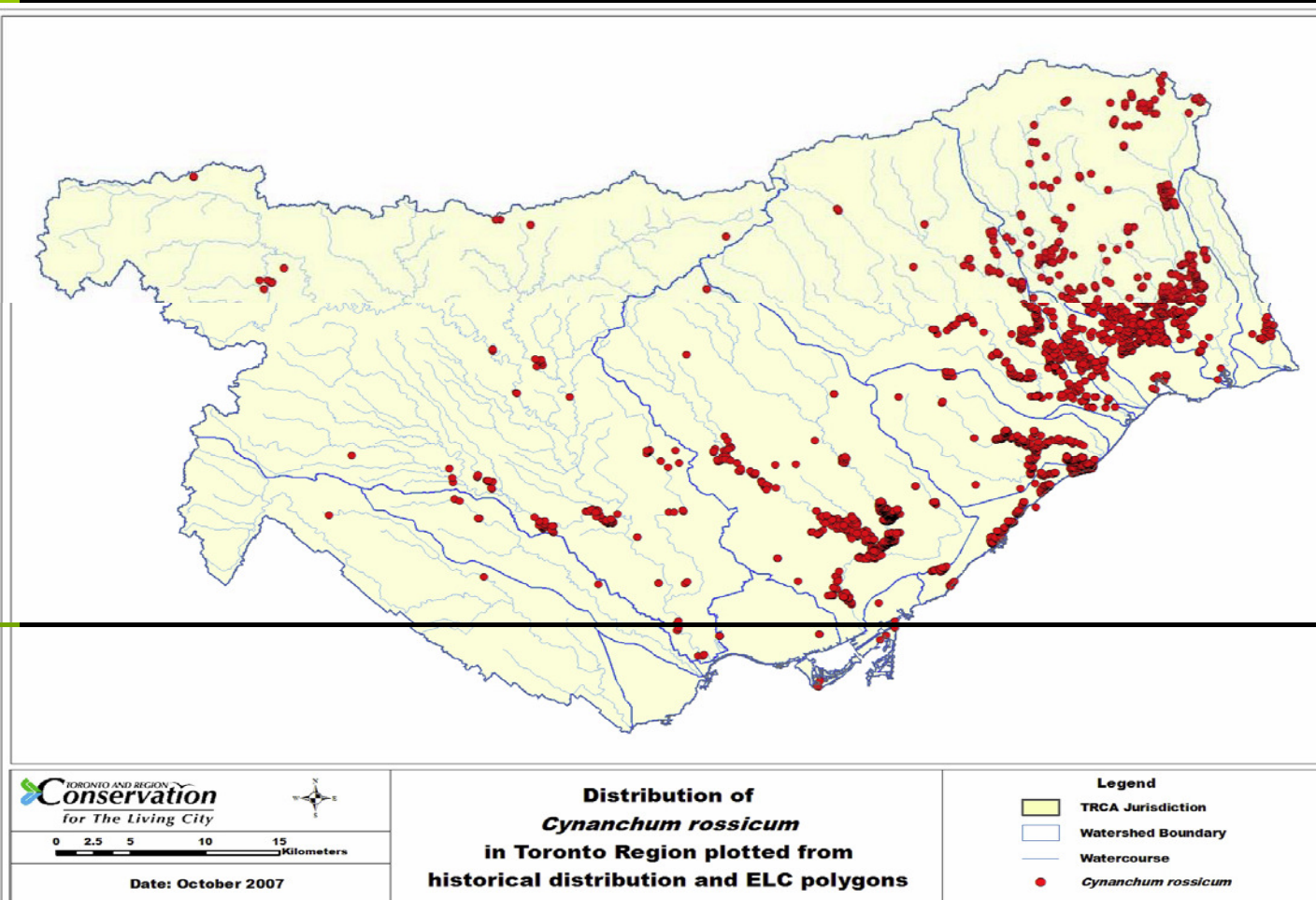
- Protection of rare or endangered ecosystems
- Protection of restoration sites / investments
- Invasive species ranking
- Infestation level
- Staffing / Budget constraints

# 1) Dog Strangling Vine Biology (*Vincetoxicum rossicum*)



- Extensive root system
- Seeds are wind-borne
- Invades sun & shade; less fit in shade

# Dog Strangling Vine Distribution



# Impacts to Wildlife



Monarch Butterfly (*Danaus plexippus*)



Common Milkweed (*Asclepias syriaca*)

# Dog-strangling Vine Ecological Considerations



*Vincetoxicum nigrum*



*Vincetoxicum rossicum*

# Dog Strangling Vine Control



- Small infestations/back yard patches – digging out roots
- **BEFORE** seed set at flowering – early June
- Large scale (park/forest landscapes) - manual methods not effective - multiple herbicide treatments needed
- Long-term Biocontrol

## 2) Asiatic Bittersweet (*Celastrus orbiculatus*) Biology



- Introduced for landscaping/ flower arrangements
- Berries spread by birds
- Invades forest edges
- Girdles young & older trees

# Bittersweet Vine Identification



*C. scandens*



*C. orbiculatus*

Non-Native Species -  
Asiatic Bittersweet

Native Species -  
American Bittersweet

# Asiatic Bittersweet Control



- Hand pulling and/or digging can be successful – **small seedlings**
- **BEFORE** seed set
- Resprouts after disturbance (cutting, incomplete pulling)
- Most effective method to apply herbicide to a freshly cut stump

### 3) Bushing Bush (*Euonymus* spp. – *E. alatus*) Biology



- ornamental shrub
- spreads by seed & root suckers
- tolerates full shade
- invades woodlands forming dense understorey

# Winged Burning Bush Identification

- 'wings' along stem



# Bushing Bush Control



- Small scale - Hand pull and/or dig out root system
- **BEFORE** seed set
- Cut at base of stem & apply herbicide

# How you can help – Plant native species and avoid non-native varieties



# How you can help – Proper disposal of yard waste materials



# How You Can Help – Minimize Impact in Natural Areas



- Stay on designated trail systems – keep pets on trails to avoid disturbance & seed spread

# How You Can Help - Community Stewardship / Education



- Sign up for Guildwood Community Tour early June 2009





- Links: Urban Forestry - [www.toronto.ca/trees/ravines.htm](http://www.toronto.ca/trees/ravines.htm)
- TRCA DSV Research [www.rougepark.com/unique/reports.php](http://www.rougepark.com/unique/reports.php)
- MNR DSV Fact Sheet [www.mnr.gov.on.ca/260834.pdf](http://www.mnr.gov.on.ca/260834.pdf)
- Ontario Invasive Plant Council [www.ontarioinvasiveplants.ca](http://www.ontarioinvasiveplants.ca)
- Fletcher Wildlife Garden in Ottawa  
[www.ofnc.ca/fletcher/research/swallowwort/index\\_e.php#disposal](http://www.ofnc.ca/fletcher/research/swallowwort/index_e.php#disposal)