



Ottawa's Great Forest: The South March Highlands

South March Highlands – Carp River Conservation Inc.

[All photos in this presentation were taken in or of the South March Highlands]

National Capital's 3 Major Eco-Corridors



A Wild Island Inside Ottawa

10,000 Years Old

3x Larger Than Stanley Park



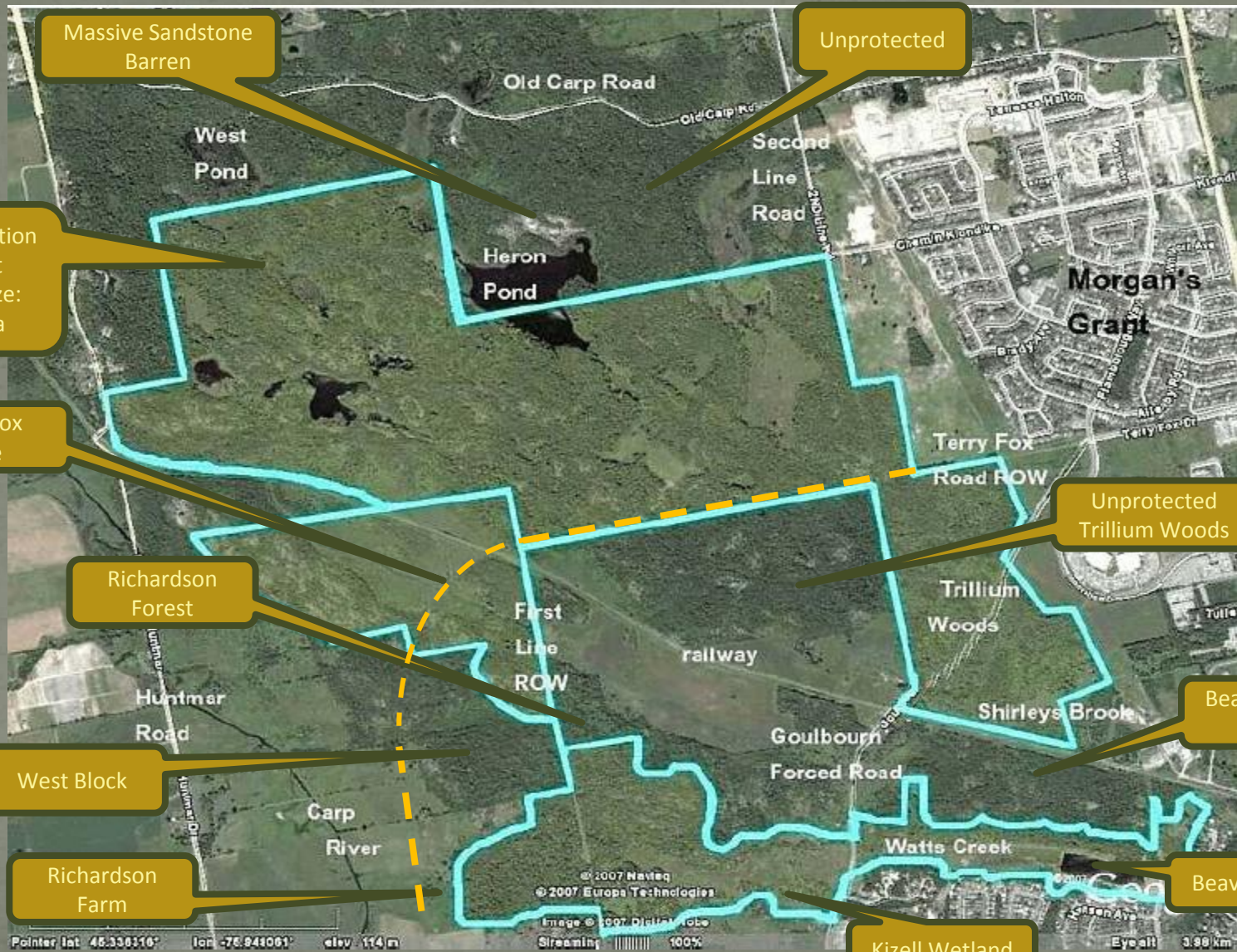
Old Growth Trees
> 100 Years Old

30 Eco-Types
Of Vegetation

10 Distinct
Habitats

Visible Canadian
Shield

South March Highlands



Massive Sandstone Barren

Unprotected

Conservation Forest
Total Size:
455 ha

Terry Fox Drive

Richardson Forest

Unprotected Trillium Woods

West Block

Richardson Farm

Beaver Pond Forest

Beaver Pond

Kizell Wetland

Rich GeoHeritage



Nepean Sandstone Pavement Barren

Shield Rock Is 1 Billion Years Old



Visible Fossils

LEGEND

- TERRY FOX DRIVE SITE
- ROADWAY
- RIVER OR STREAM
- WATERBODY
- FLOODPLAIN COMPENSATION AREA

SURFICIAL GEOLOGY

- 1a TILL, PLAIN WITH LOCAL RELIEF <5m
- 1b TILL, DRUMLINIZED
- 2a TILL, HUMMOCKY TO ROLLING WITH LOCAL RELIEF 5 TO 10 m
- 3 ICE CONTACT STRATIFIED DRIFT: GRAVEL & SAND
- 3_g OFFSHORE MARINE DEPOSITS: CLAY, SILTY CLAY & SILT (GULLIES & RAVINES)
- 3_b OFFSHORE MARINE DEPOSITS: CLAY, SILTY CLAY & SILT (GULLIES & RAVINES)
- 3_c OFFSHORE MARINE DEPOSITS: CLAY & SILT UNDERLYING EROSIONAL TERRACES
- 3_d OFFSHORE MARINE DEPOSITS: CLAY & SILT UNDERLYING EROSIONAL TERRACES (GULLIES & RAVINES)
- 4 DELTAIC AND ESTUARY DEPOSITS: MEDIUM TO FINE GRAINED SAND (GULLIES & RAVINES)
- 4_b DELTAIC AND ESTUARY DEPOSITS: MEDIUM TO FINE GRAINED SAND (GULLIES & RAVINES)
- 5a NEARSHORE SEDIMENTS: GRAVEL, SAND & BOULDERS
- 5b NEARSHORE SEDIMENTS: FINE TO MEDIUM GRAINED SAND
- 6a ALLUVIAL DEPOSITS: SILTY SAND, SILT, SAND & CLAY (GULLIES & RAVINES)
- 6_b ALLUVIAL DEPOSITS: SILTY SAND, SILT, SAND & CLAY (GULLIES & RAVINES)
- 6_c ALLUVIAL DEPOSITS: MEDIUM GRAINED STRATIFIED SAND WITH SOME SILT
- 6_d ALLUVIAL DEPOSITS: MEDIUM GRAINED STRATIFIED SAND WITH SOME SILT (GULLIES & RAVINES)
- 7 ORGANIC DEPOSITS: MUCK & PLAT
- d DUNE
- c_d DUNE (GULLIES & RAVINES)
- 8 LANDSLIDE AREA
- 8_b LANDSLIDE AREA (GULLIES & RAVINES)
- 9 BEDROCK: INTRUSIVE & METAMORPHIC
- 9_b BEDROCK: LIMESTONE, DOLOMITE, SANDSTONE & LOCAL SHALE
- 9_c BEDROCK: LIMESTONE, DOLOMITE, SANDSTONE & LOCAL SHALE (GULLIES & RAVINES)
- 2 WATER

SCALE:
1:20,000

PROJECT:
TERRY FOX DRIVE PERMIT TO TAKE WATER

TITLE:
SURFICIAL GEOLOGY

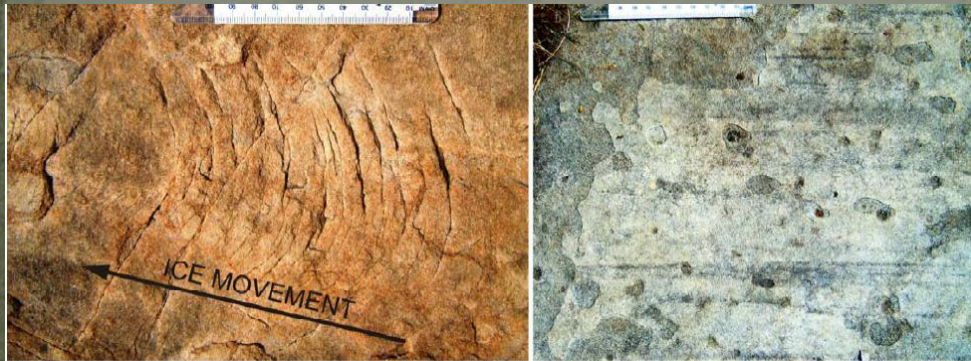
Only Location In Ottawa with Exposed Canadian Shield



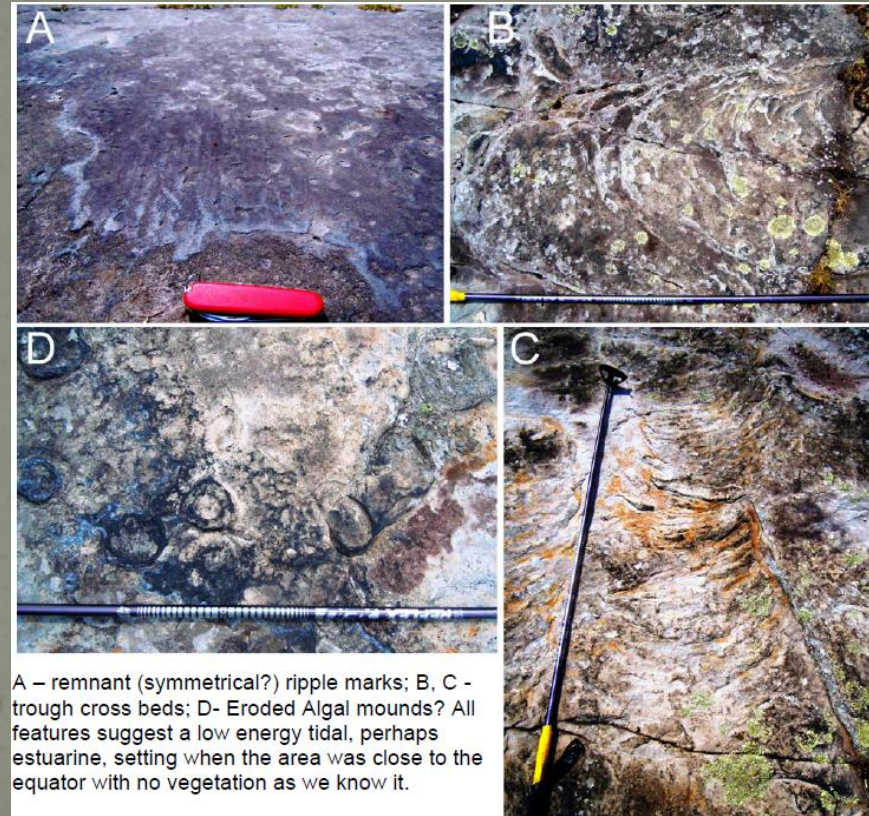
Distinctive and Unique GeoMorphology



Glaciation & Ancient Sea on Display



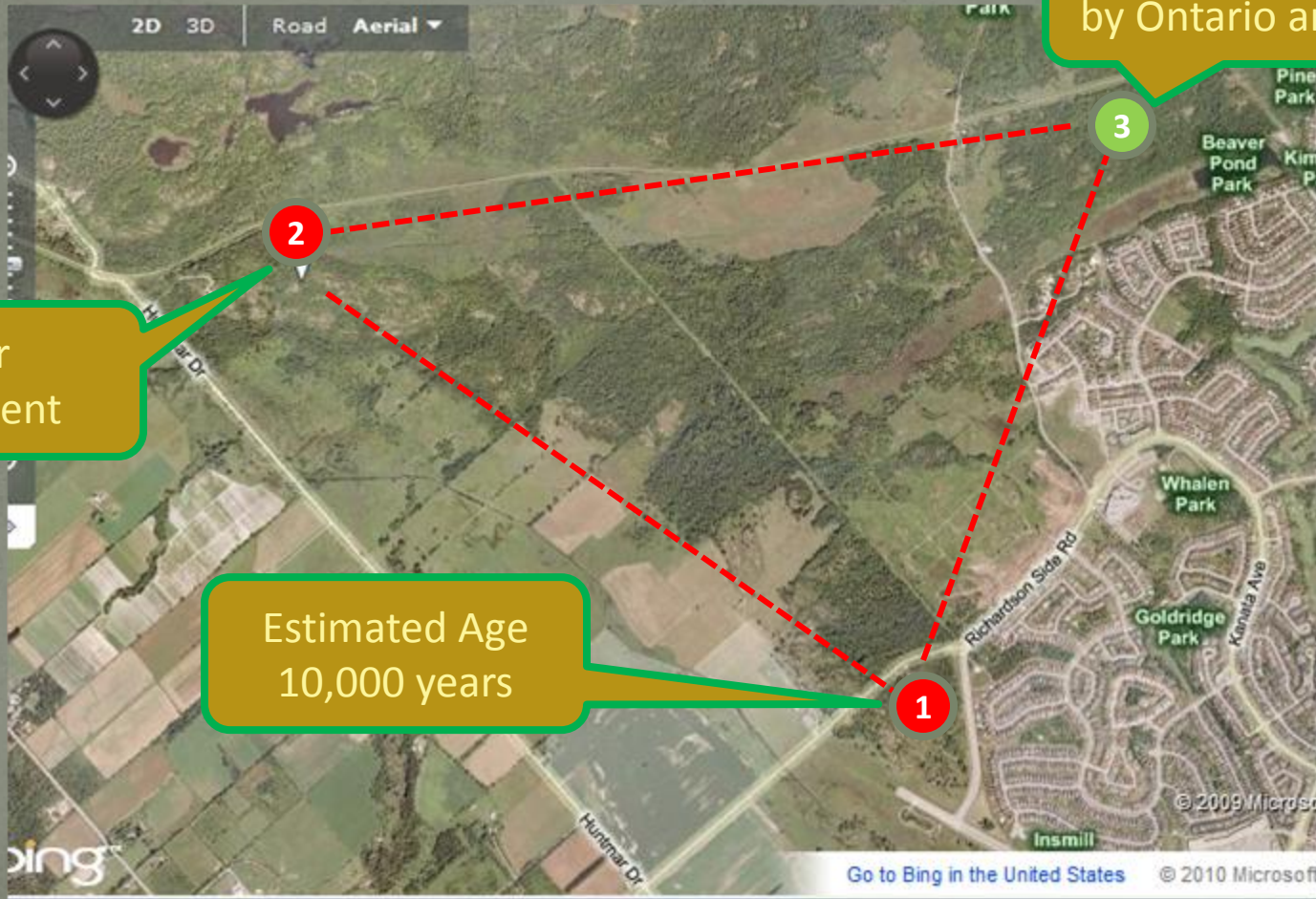
In area B, glacial chatter marks (above); striations (top right) and crescent gouges are evident. Only chatter marks and crescent gouges provide ice movement direction. The striated surface retains a remnant mm-thick glacial pavement of semi-fused quartz grains.



A – remnant (symmetrical?) ripple marks; B, C - trough cross beds; D- Eroded Algal mounds? All features suggest a low energy tidal, perhaps estuarine, setting when the area was close to the equator with no vegetation as we know it.

Cultural Heritage

Ancient Archaeological Sites



Under
Assessment

Estimated Age
10,000 years

Likely Site Ignored
by Ontario and City

Euro-Canadian Sites Too



**McMurtry's Tannery
(Circa 1860)**

Also:

- **Several 19th Century homestead sites dating back to 1820 (as old as Pinhey's Point)**
- **Richardson Stone House dating back to approx. 1860 (as old as the Log Farm)**
- **A Feldspar Mine dating approximately to 1919-1921 (unique in Ottawa)**

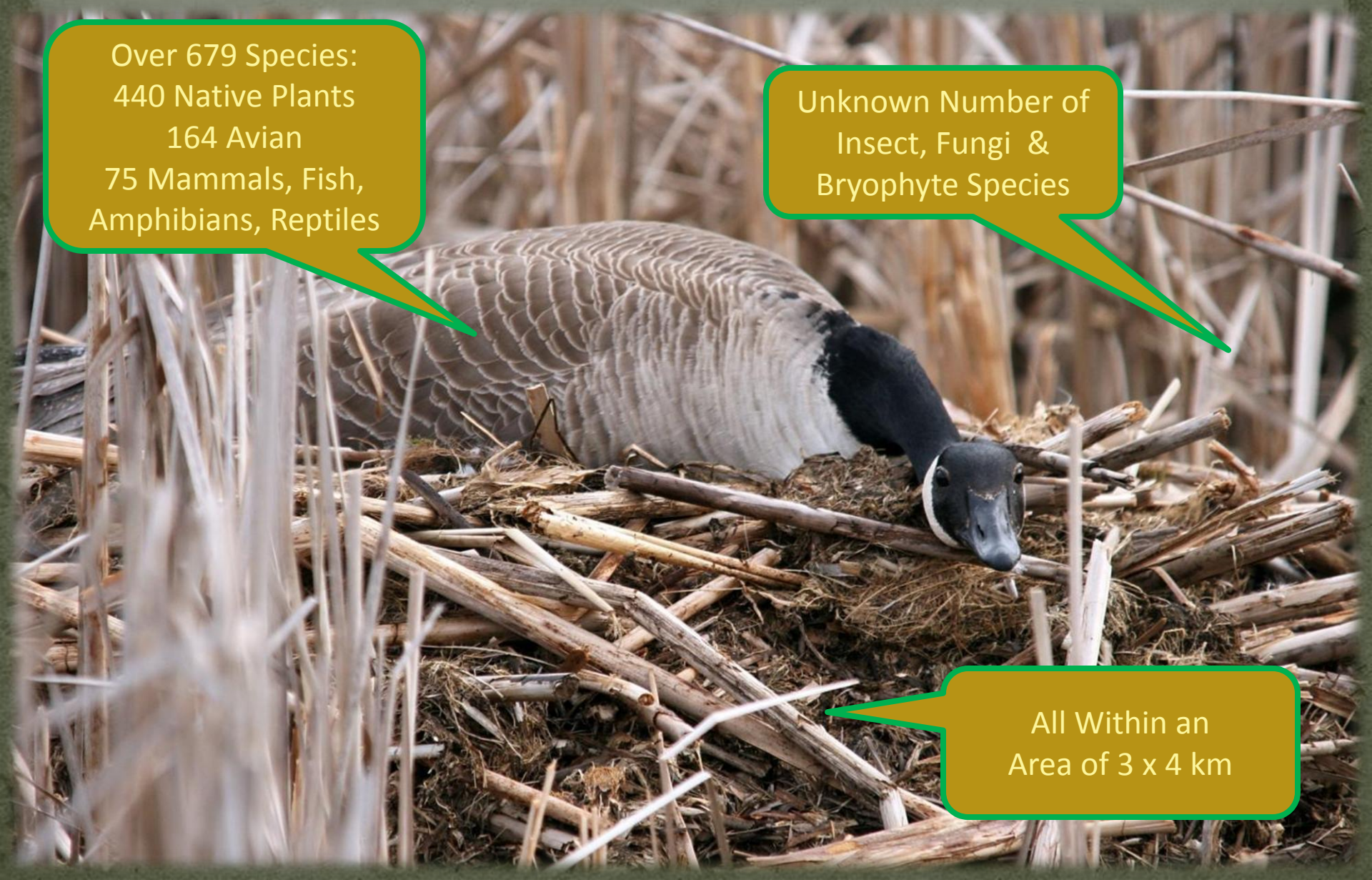
Natural Heritage: Densest Bio-Diversity In Ottawa

[Brunton, 2008]

Over 679 Species:
440 Native Plants
164 Avian
75 Mammals, Fish,
Amphibians, Reptiles

Unknown Number of
Insect, Fungi &
Bryophyte Species

All Within an
Area of 3 x 4 km



Provincially Significant Life Science Area

895 Hectares
Rated ANSI

Highest Floristic
Diversity of Any
Natural Area in
Ottawa

5.08 = Highest
Coefficient of
Conservation in
Ottawa

440 Species
Native Vascular Plants

26 Species
Traditionally Used for
Native Medicine

2 Endangered
6 Provincially Rare
64 Regionally Rare
50 Uncommon
Native Vascular Plants



Ponds, Meadows & Forests



“Trillium Woods, which is like a chunk of the Gatineau in the urban landscape of Ottawa, with rich plant and animal life found nowhere else in the urban part of the City”

Ottawa Urban Natural Areas Environmental Evaluation
[Muncaster & Brunton, 2008]

Old Growth Commonly Found



No Comprehensive Biological Survey



Largest Deer
Wintering Yard
In Ottawa

+ Provincially Significant Wetland Complex

114 Hectares
Rated ANSI

164 Avian Species
Observed

1 Endangered
4 Threatened
5 Special Concern
30 Regionally Rare
Avian Species



136 Bird Species Nest in the SMH



Undocumented Number of Vernal Pools

Over 26 identified species of
Herpetofauna

3 Threatened Species
2 Special Concern

Insect of Special Concern
(Monarch Butterfly)



20 Known Species At Risk

Endangered or Threatened

- American Ginseng
- Butternut
- Loggerhead Shrike
- Bobolink
- Whip-poor-will
- Golden Winged Warbler
- Olive Sided Flycatcher
- Western Chorus Frog
- Blanding's Turtle
- Eastern Musk Turtle
- Chimney Sweep

Special Concern

- Bridle Shiner
- Short Eared Owl
- Black Tern
- Common Nighthawk
- Snapping Turtle
- Eastern Milksnake
- Monarch Butterfly
- Bald Eagle
- Red Headed Woodpecker



11 Species Already Extirpated From SMH

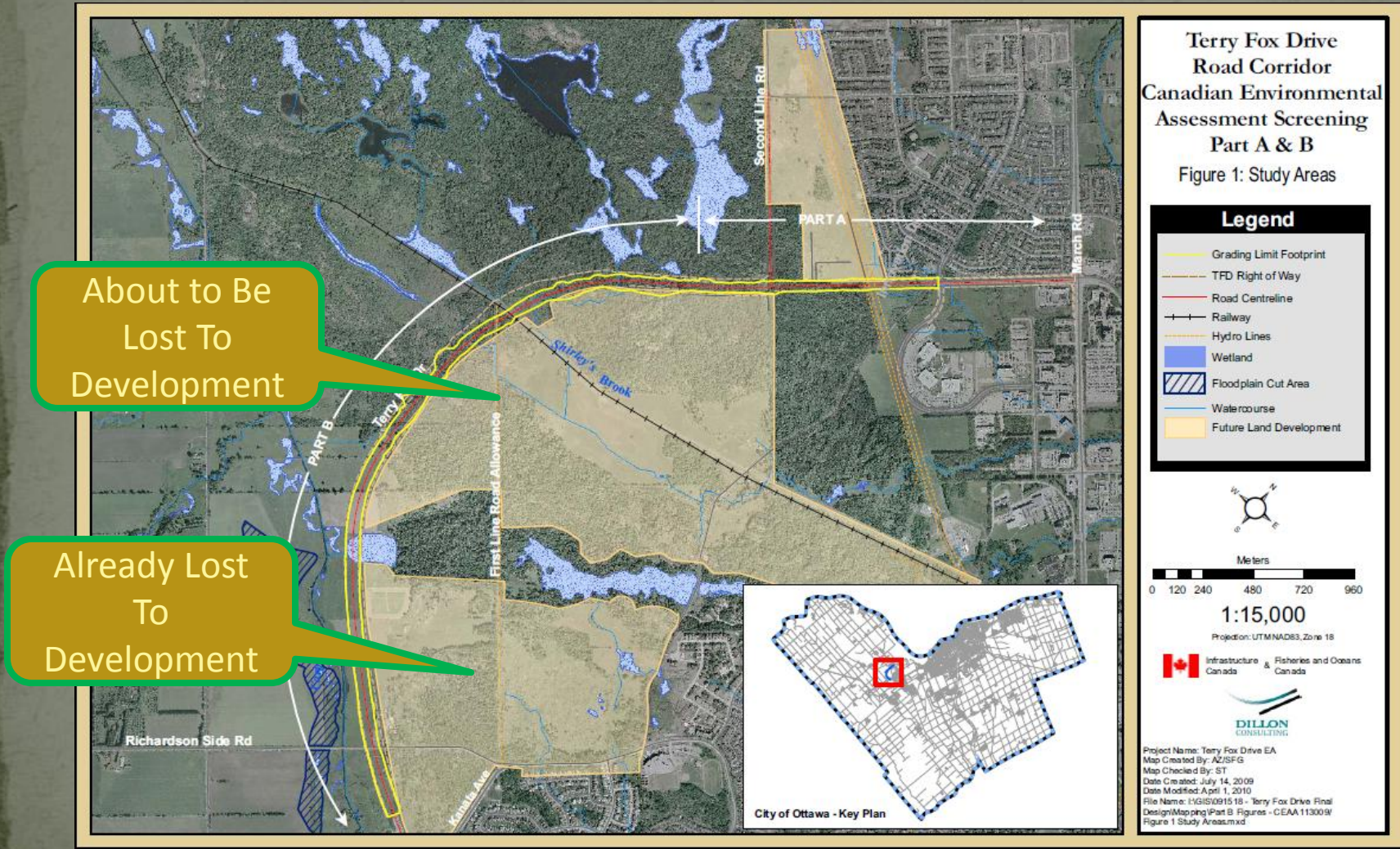
- Cathcart's Woodsia
- Oregon Woodsia
- Spiny Coon-tail
- Adder's-tongue Fern
- Back's Sedge
- Large Duckweed
- Long-spurred Violet
- Showy Orchis
- Southern Arrow-wood
- Strawberry-blight
- Virginia Spring Beauty



18 Candidate SAR Also Found in SMH

- Evening Grosbeak
 - Eastern Wood Peewee
 - Wood Thrush
 - Bank Swallow
 - American Bullfrog
 - American Kestrel
 - Belted-Kingfisher
 - Eastern Red-Backed Salamander
 - Field Sparrow
 - Blue-Spotted Salamander
 - American Toad
 - Bluntnose Minnow
 - Boreal Chickadee
 - Killdeer
 - Midland Painted Turtle
 - Northern Two-Lined Salamander
 - Green Frog
 - Wood Frog
- 
- A photograph of a Midland Painted Turtle swimming in a pond. The turtle is the central focus, with its head and front legs visible above the water. Its shell is dark with a pattern of light-colored spots and lines. The water is a clear, light blue color, and the background shows some ripples and reflections.

Development Threatens ½ The SMH



Alternative Vision of Eco-Corridors Revitalizing The Emerald Necklace



11 Eco-Corridors
Linking
7 Ecological
Reservoirs

Opposition to Development

- Coalition To Protect South March (5000+ people)
- David Suzuki Foundation
- Sierra Club of Canada
- Greenbelt Coalition
- Canadian Parks & Wilderness
- Federation of Community Associations
- Green Party of Canada
- Ottawa Riverkeeper
- Ecology Ottawa
- Ottawa Valley Field Naturalists
- Ottawa Carleton Wildlife Centre
- Greenspace Alliance
- and many others



Will You Help Save This Forest?

5273 people via Web
1025 people via Twitter
183 people via E-Mail

All Major Ecological
Groups in Ottawa

All of the Community
Associations in Ottawa

