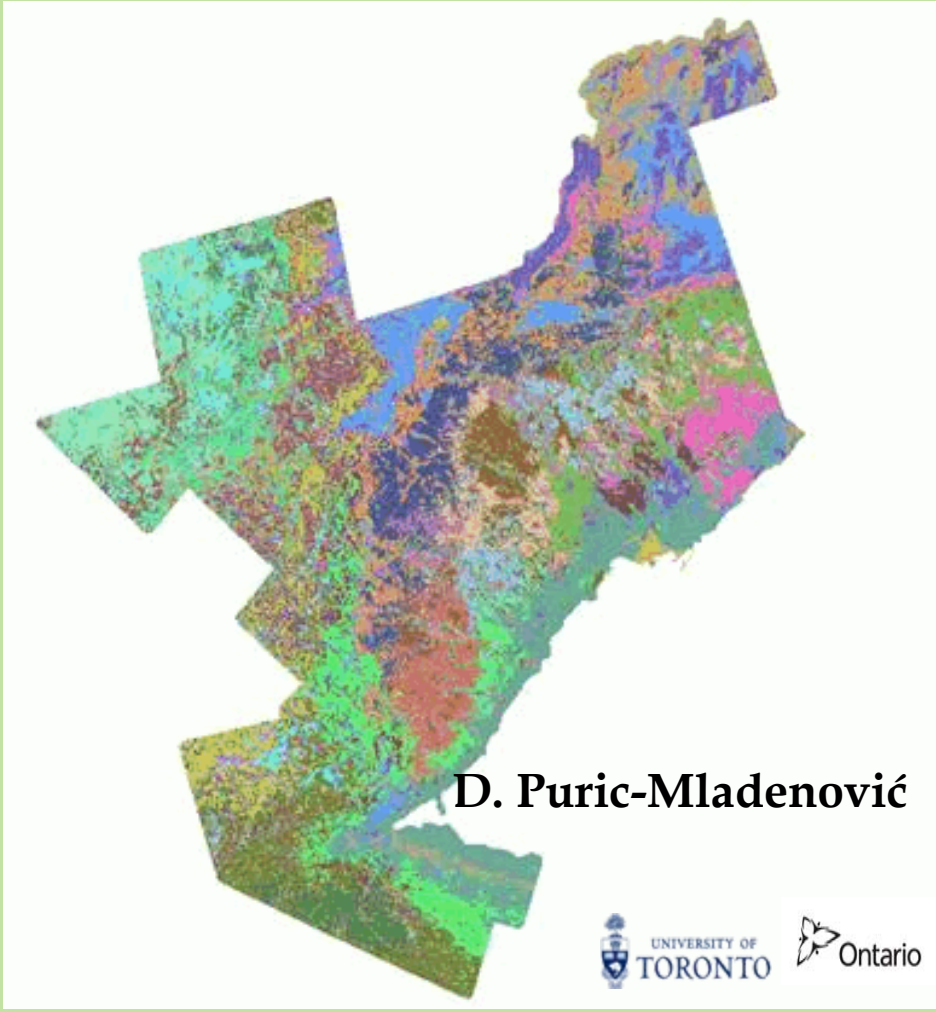
Reclaiming the Past to Inform the Future

THE GHOST OF CHRISTMAS PAST

This ghost took Scrooge to scenes from his boyhood to stir his gentler and more tender side by reminding of a time when he was more innocent.



UNIVERSITY OF TORONTO
CVC CREDIT VALLEY CONSERVATION
Halton REGION
York Region
Region of Peel Working for you
Hamilton
Ontario

….The timber was all hard timber, walnut, of most luxuriant growth beech and basswood, and oak and maple.

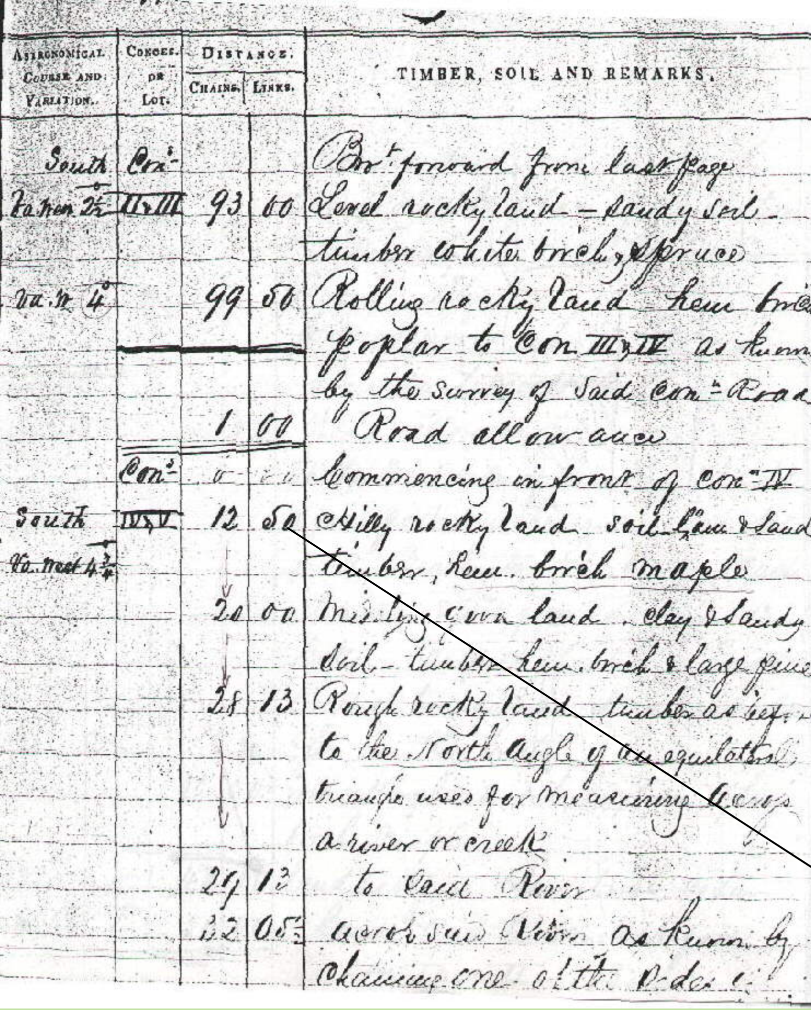
A. Jameson. 1838. Winter Studies and Summer Rambles in Canada

The best land is timbered with oak , ash, elm, beech, basswood and sugar maple. A fair mixture of this species is of trees is best, with here and there a large pine, and a few Canadian balsams scattered among the hard-wood.

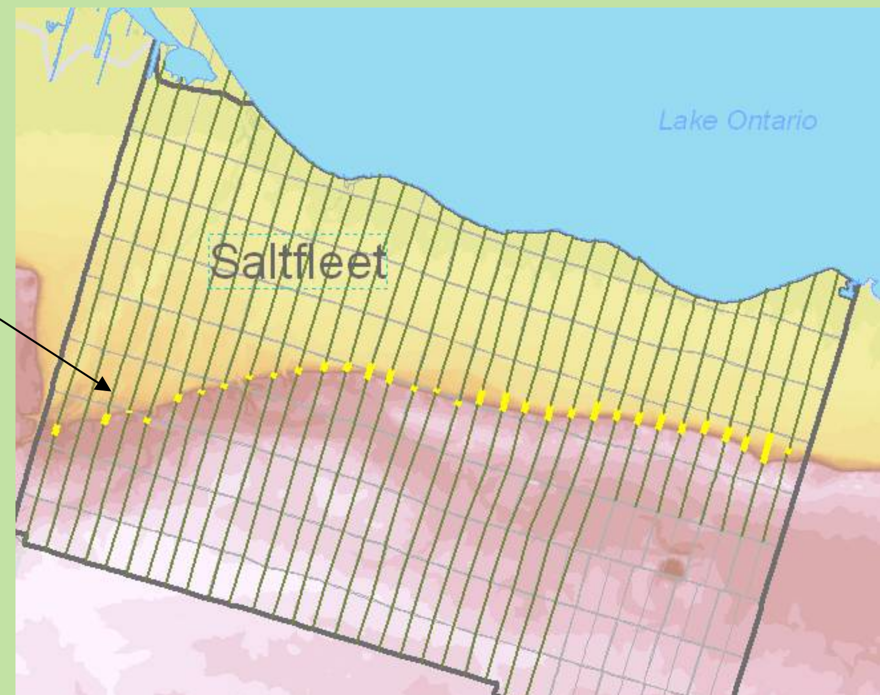
S. Strickland. 1853. Twenty-seven years in Canada West.

- Study area: York, Peel, Halton, Hamilton, CVC, Toronto

- Land surveying from 1793 to 1838

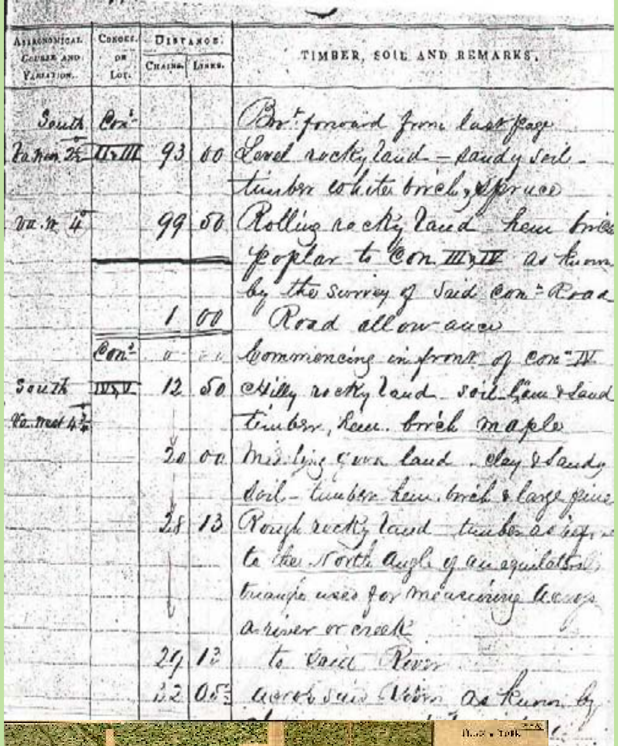


Astronomical Course and Variation.	Conces. or Lot.	Distance Chains.	Distance Links.	Timber, Soil and Remarks.
South	Con.			Brt forward from last page
	II & III	93	60	Level rocky land – sandy soil
				timber white birch, spruce
Va. N 4°		99	50	Rolling rocky land hem birch
				poplar to Con. III & IV as known
				by the survey of said Con. Road
		1	00	Road allowance
	Con.			Commencing in front of Con. IV
South	IV & V	12	50	Hilly rocky land soil loam & sand
				timber, hem. birch maple
		20	00	Rising [illegible] land clay & sandy
				soil – timber hem. birch & large pine
		28	13	Rough rocky land timber as before
				to the North angle of an equilateral
				triangle used for measuring across
				a river or creek
		29	12	to said River
		32	05	across said River as known by
				chaining one of the sides

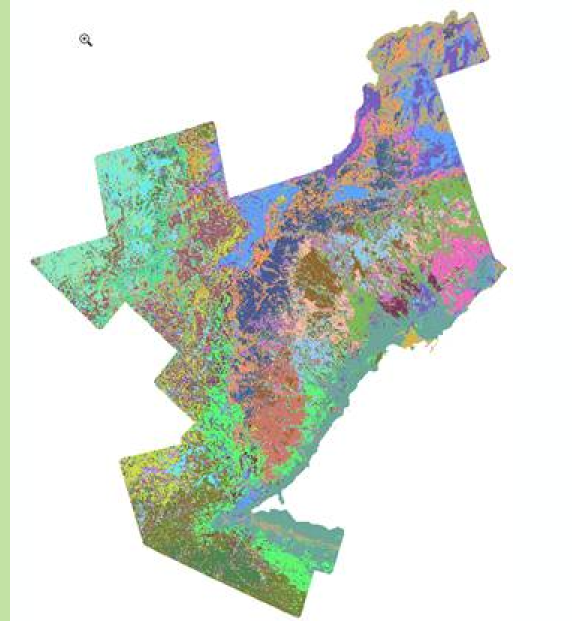


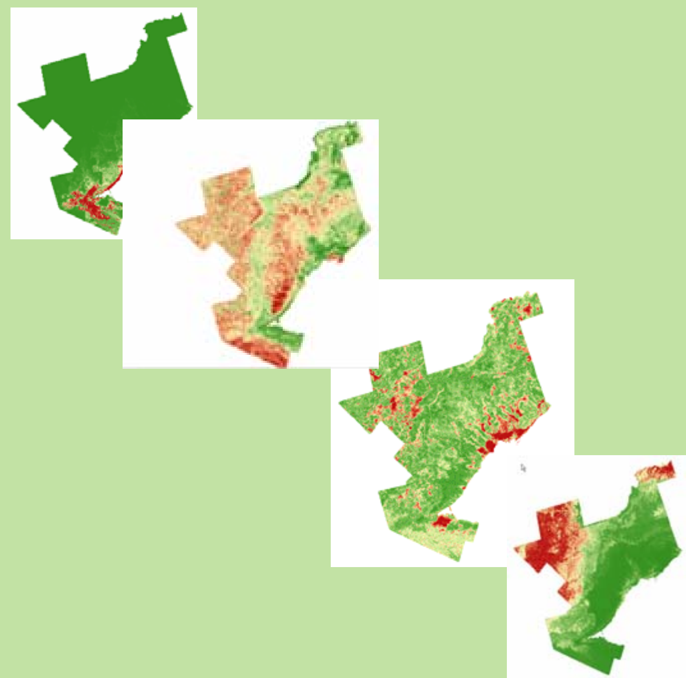
Sample entry from land surveyors' notes: Stegman's field notes of the township of Vaughan 1798, 2nd concession.

Lot Number	Chains	Links	Remarks
1	19	20	maple, elm and basswood
2	20	20	ash and elm, low land

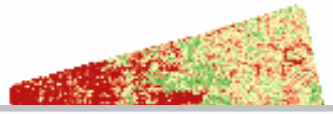


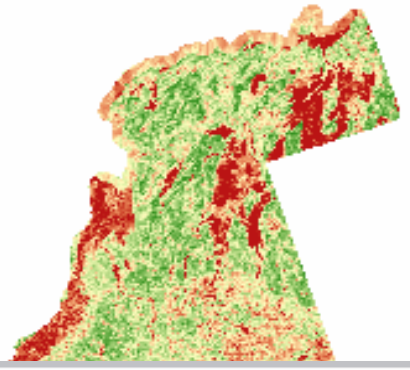
Astronomical Course and Variation	Concess. or Lot	Distance Chains	Links	Timber, Soil and Remarks
South	Con[n]			Brt forward from last page
Va. West 2½	III & III	93	60	Level rocky land — sandy soil — timber white birch, spruce
Va. W. 4°		99	50	Rolling rocky land hem. birch poplar to Con. III & IV as known by the survey of said Con. Road
		1	00	Road allowance
	Con[n]	0	00	Commencing in front of Con. IV
South	IV & V	12	50	Hilly rocky land soil loam & sand timber, hem. birch maple
Va. West 4½		20	00	Middling given land clay & sandy soil — timber hem. birch & large pine
		28	13	Rough rocky land timber as bef. to the North angle of an equilateral triangle used for measuring across a river or creek
		29	13	to said River
		32	05	across said River as known by

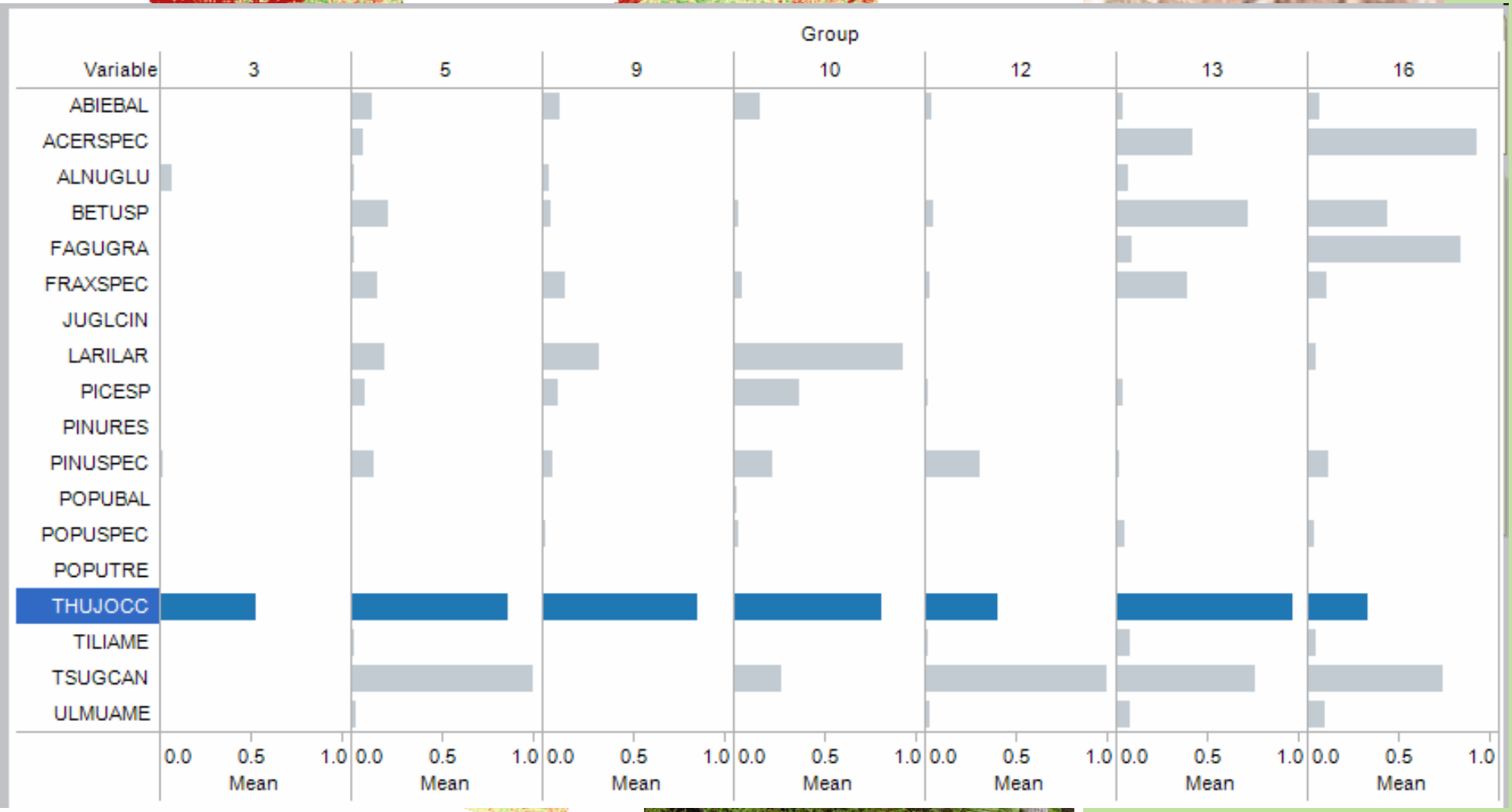




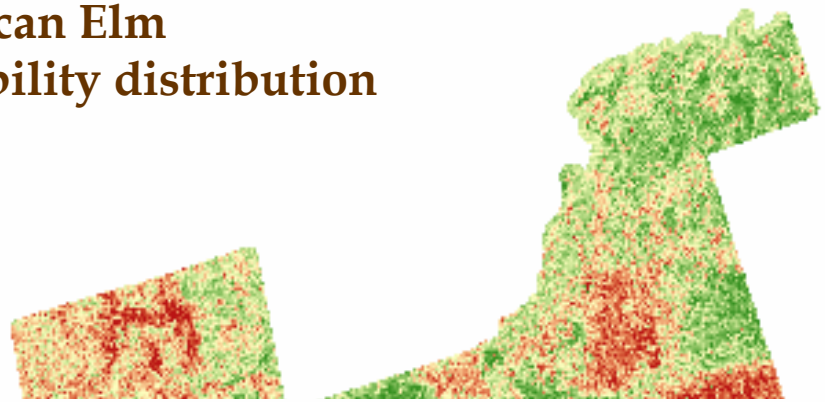
Eastern White Cedar probability distribution

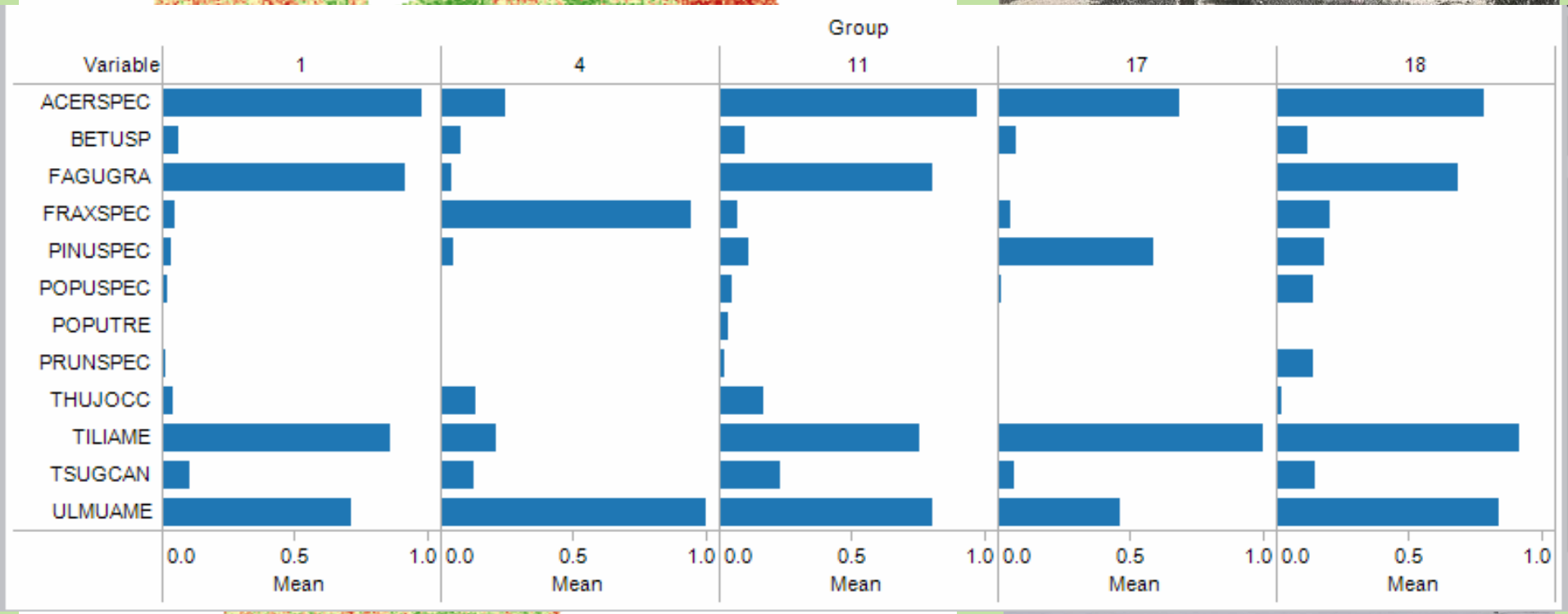


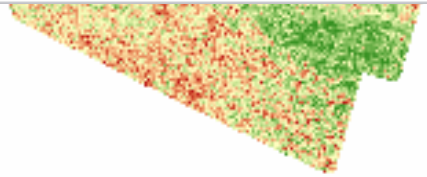


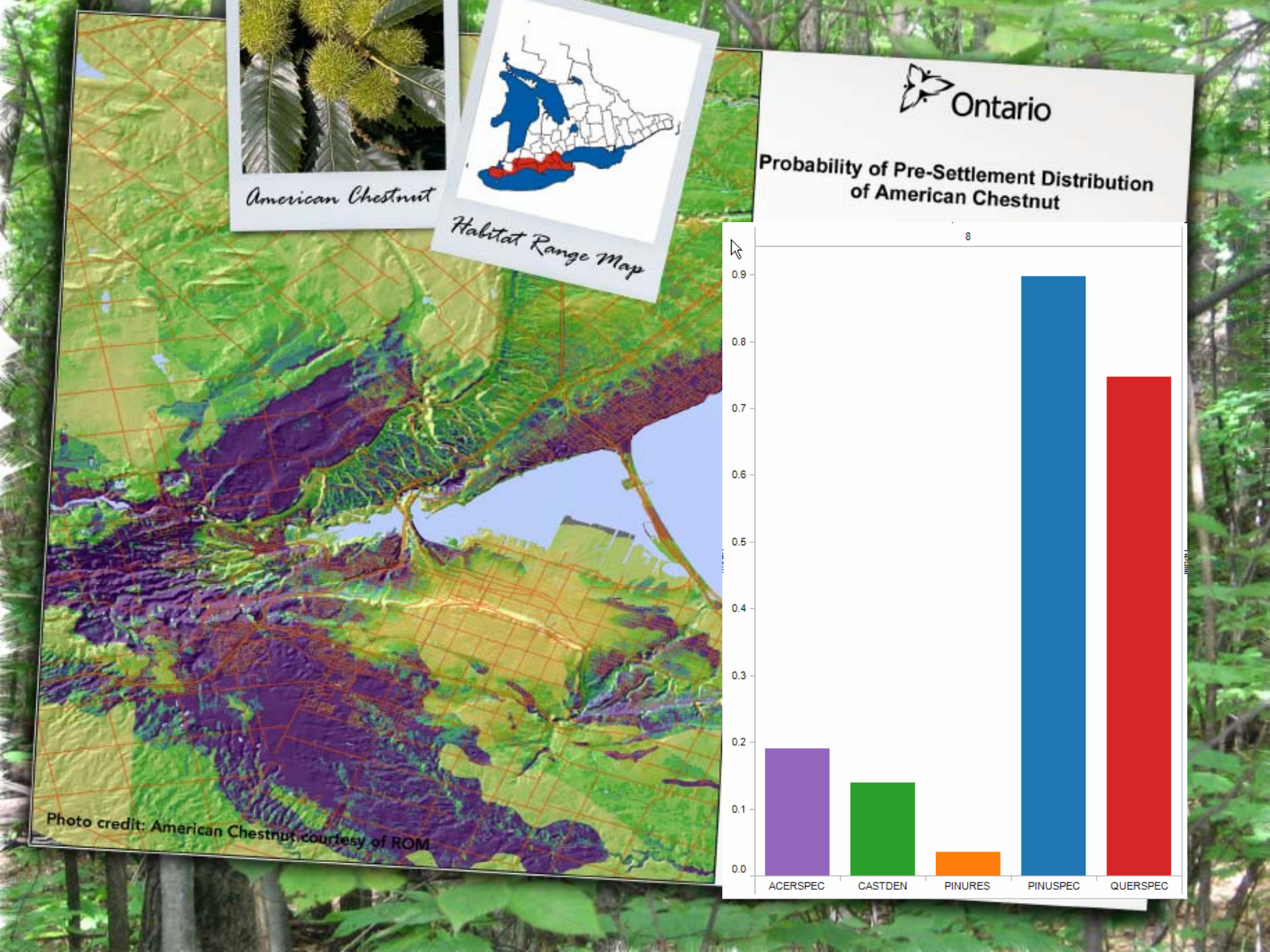


American Elm probability distribution

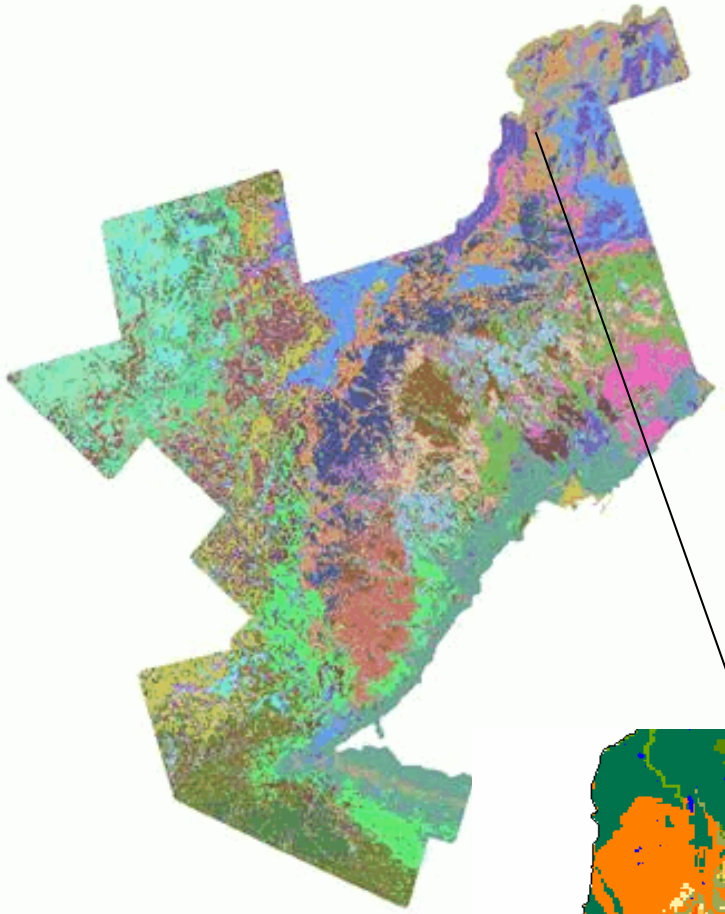


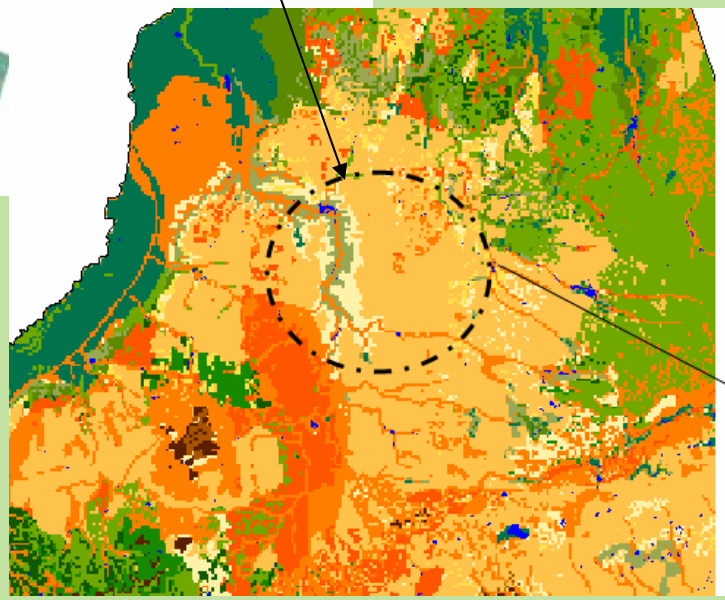





American Chestnut
Habitat Range Map
Ontario
Probability of Pre-Settlement Distribution of American Chestnut
8
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
ACERSPEC
CASTDEN
PINURES
PINUSPEC
QUERSPEC
Photo credit: American Chestnut courtesy of ROM

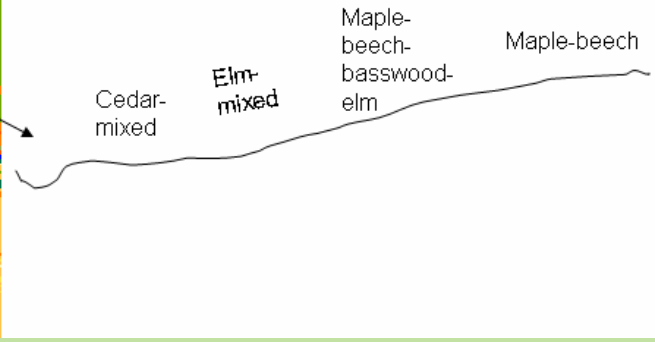
Preliminary map of pre-settlement vegetation types

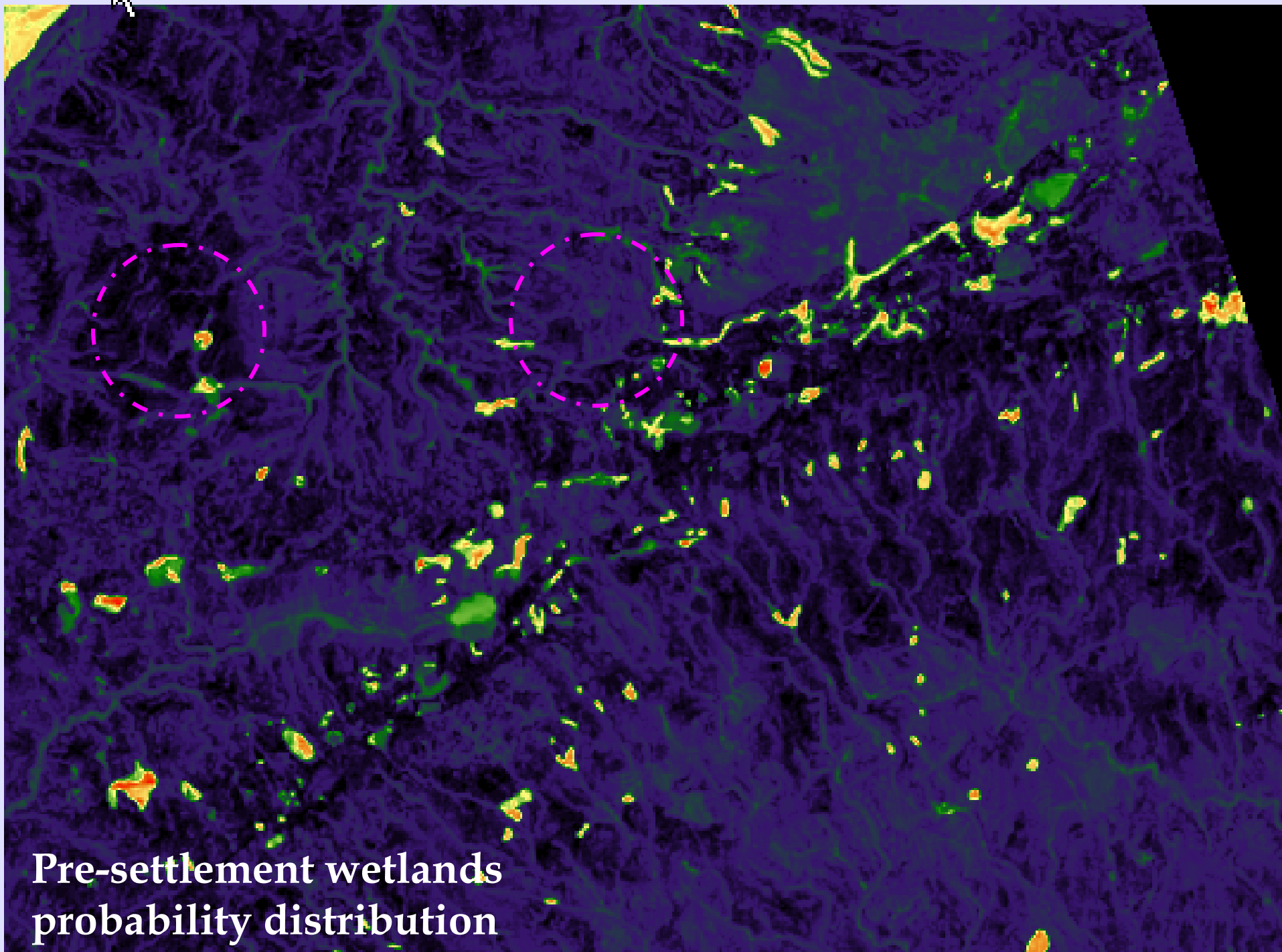


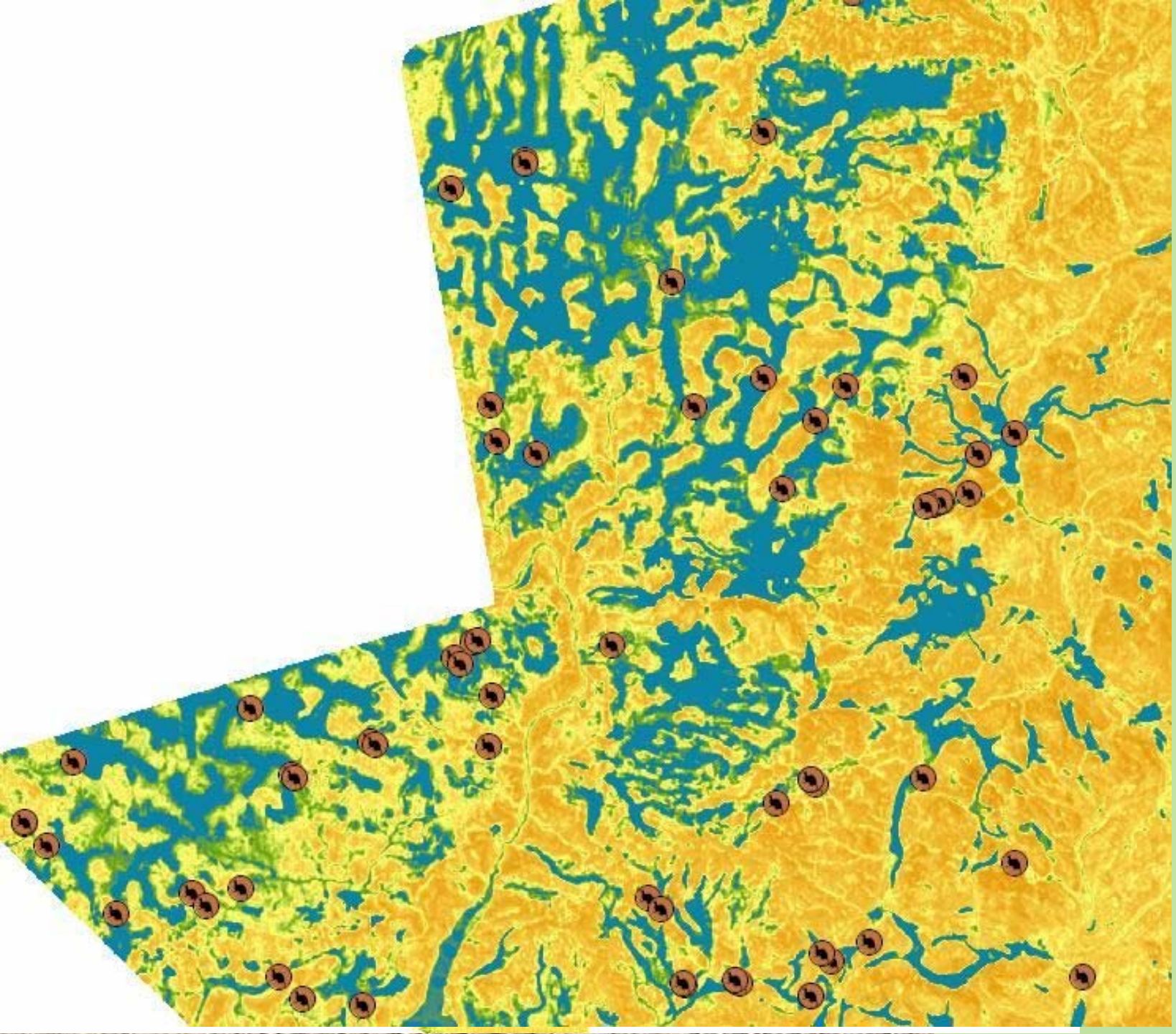


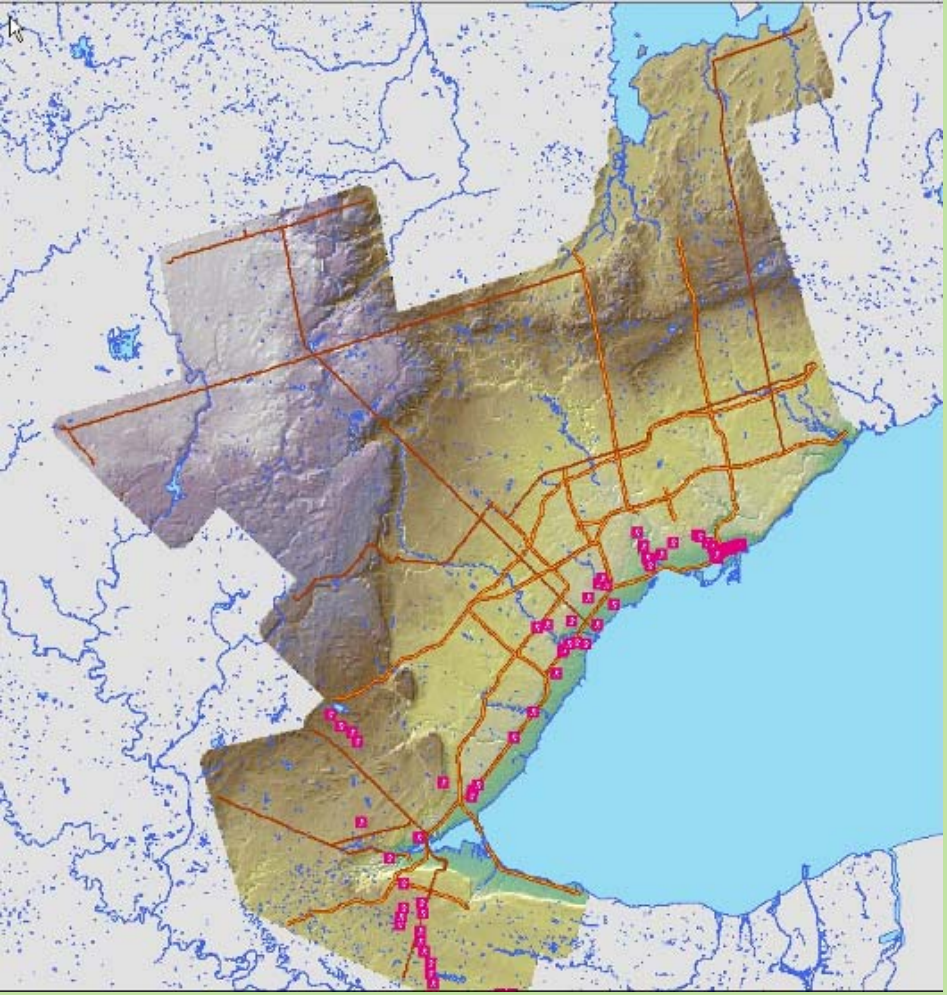
Modified ELC vegetation types

- ash/yellow birch
- beech
- cedar
- cedar-hemlock
- cedar-mixed
- elm
- hemlock
- hemlock-mixed
- hemlock-pine
- maple
- maple-basswood
- maple-beech
- maple-beech-oak
- maple-birch
- maple-conifer
- maple-elm
- maple-hemlock
- maple-mixed
- maple-oak
- maple-oak-pine
- oak (red)
- pine
- tamarack
- tamarack-spruce
- lakes



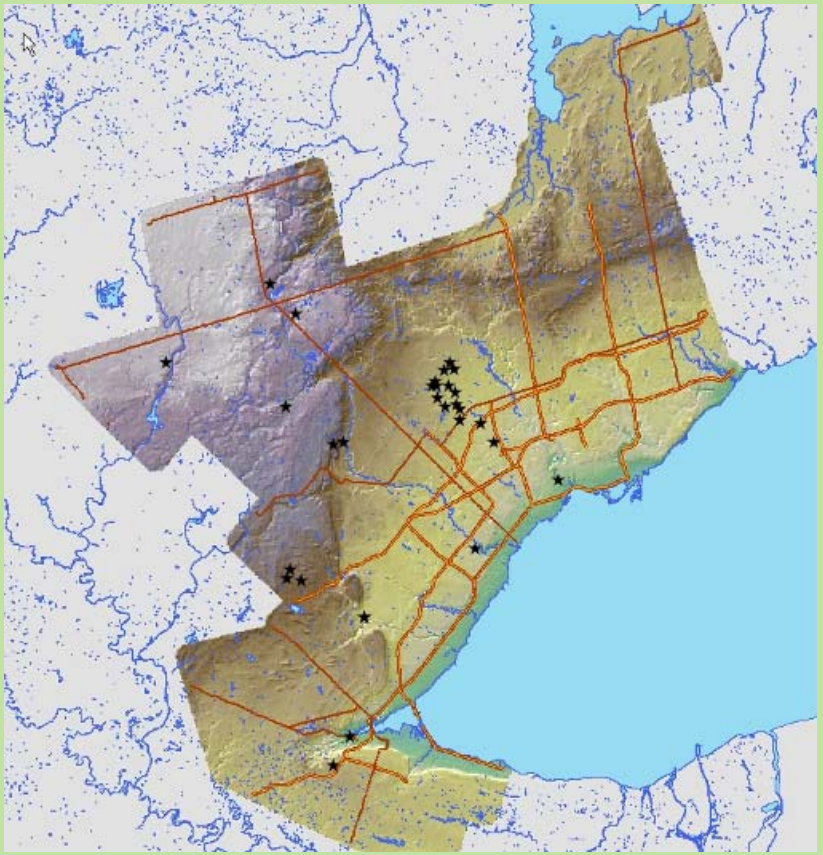

Pre-settlement wetlands
probability distribution

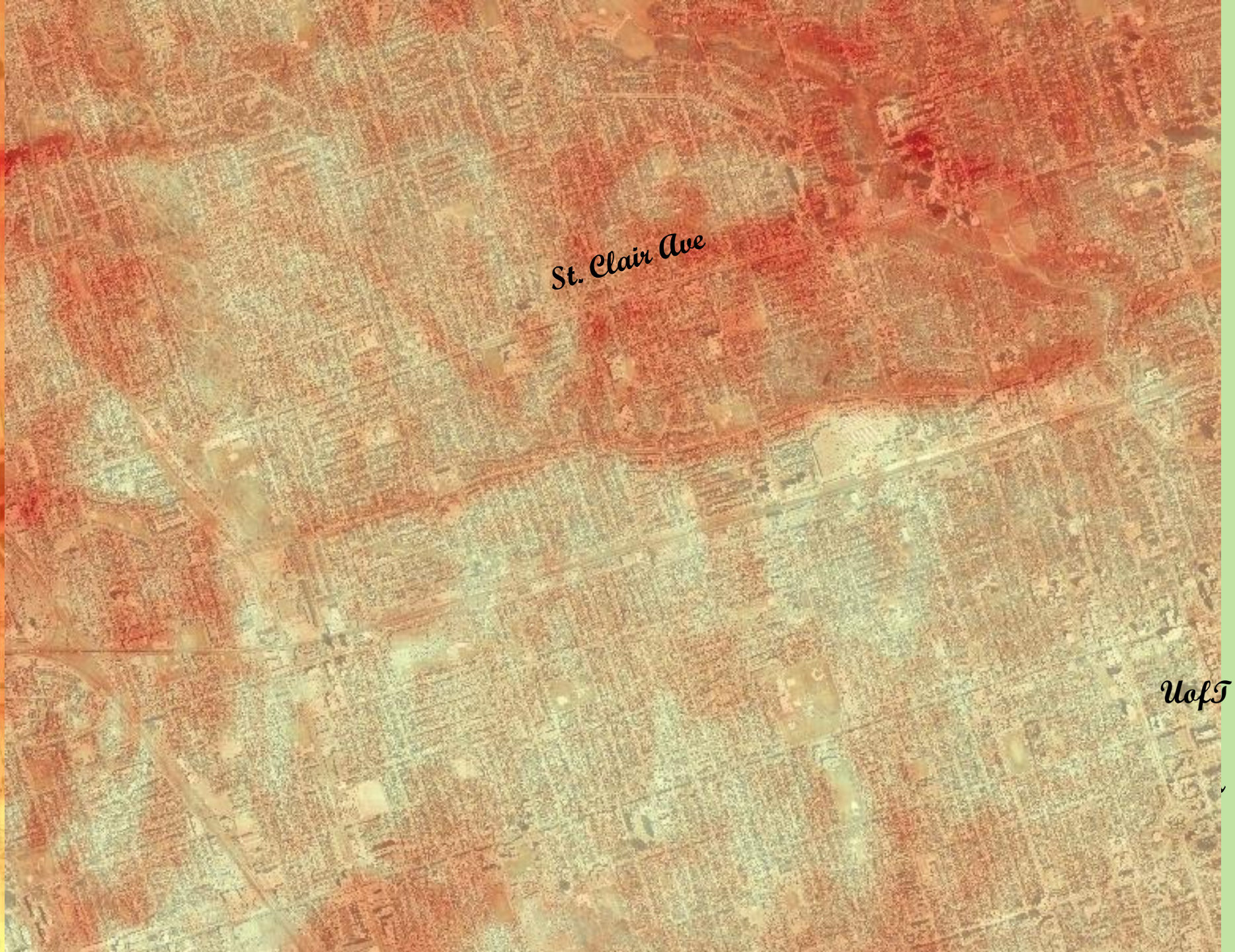


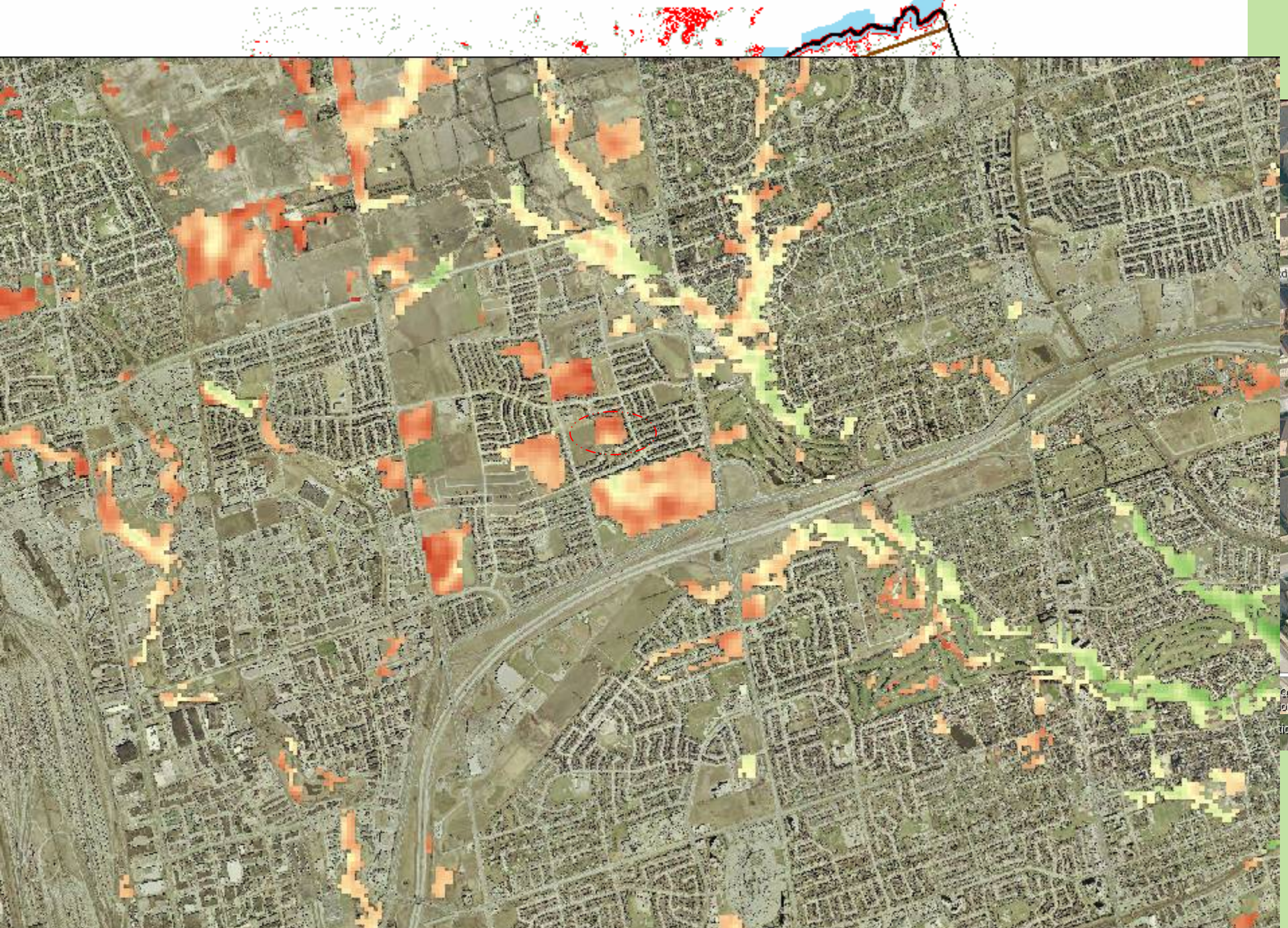


Paths and trails

Good mill sites




St. Clair Ave
UofT



High : 1

Low : 0.1

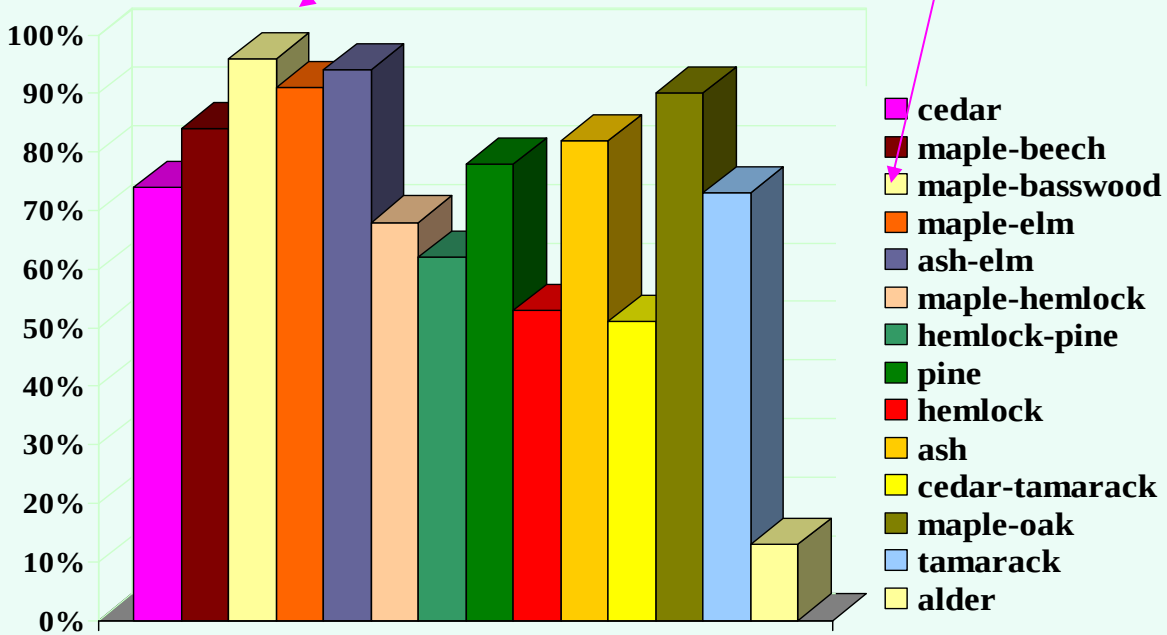
Why to look back

- Sense of place
- Present state can't (shouldn't) be taken as a threshold
- SAR recovery planning
- Restoration
- Habitat protection
- Landscape and natural system planning
- Forest management
- Climate change
- Education
- …..

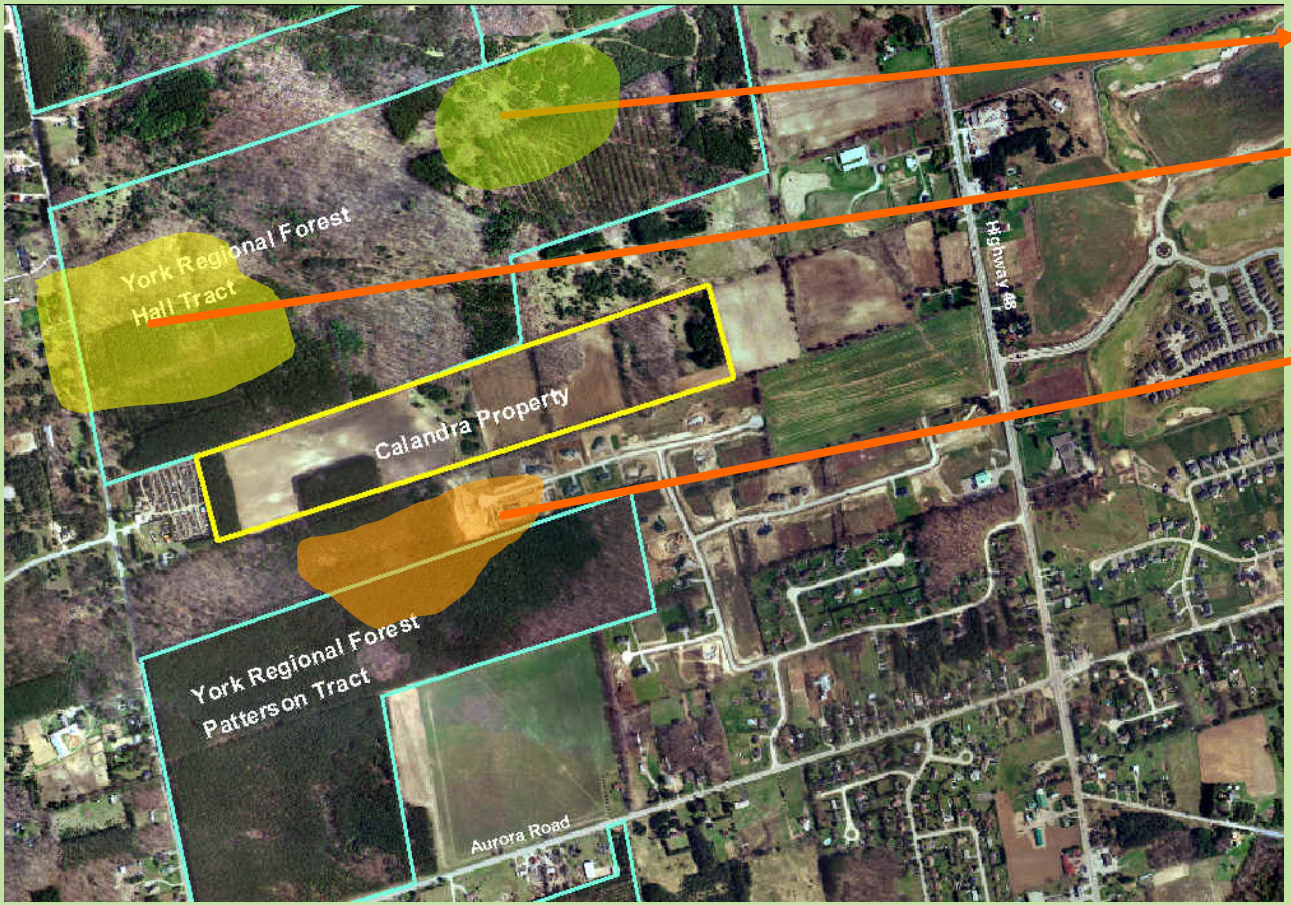
- **As land managers, decision-makers, and the public we have no information and knowledge about what the natural vegetation was like before, what it could be, and what it's current state is.**

- **As a result of this, we accept the current state as an upper threshold, which leads to further forest loss and degradation.**

Forest types loss (GAP analysis)



Forest (stand) management



- Hemlock-pine
- Hemlock-maple
- Maple-mixed

“If we are serious about restoring ecosystems health and ecological integrity, then we must first know what the land was like to begin with”

American ecologist Aldo Leopold

Team members, technical and expert support

Southern Science and Information

- Julia Buck
- Iain Rayner
- Geoff Clark
- James McHattie
- David Bradley
- Nayna Khalatkar,
- Gergin Naoumov
- Ryan Large

Faculty of Forestry University of Toronto

- Dr. Andy Kenney
- Alex MacIntosh
- Shahwar Aslam

Natural Heritage Information Center

- Wasyl Bakowsky

Crown Land Surveyors Office

Eric Ansel, Jim Macdonald Deborah Scott, Donna Gertridge

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UNIVERSITY OF TORONTO

CVC CREDIT VALLEY CONSERVATION

York Region

Ontario

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Hamilton