Let's Make a Plan!

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OLTA Gathering October 2019

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Let’s Make a Plan

- Scales of conservation planning
- Tools for conservation planning
- What goes in the plan?
- Examples
- Benefits of conservation planning

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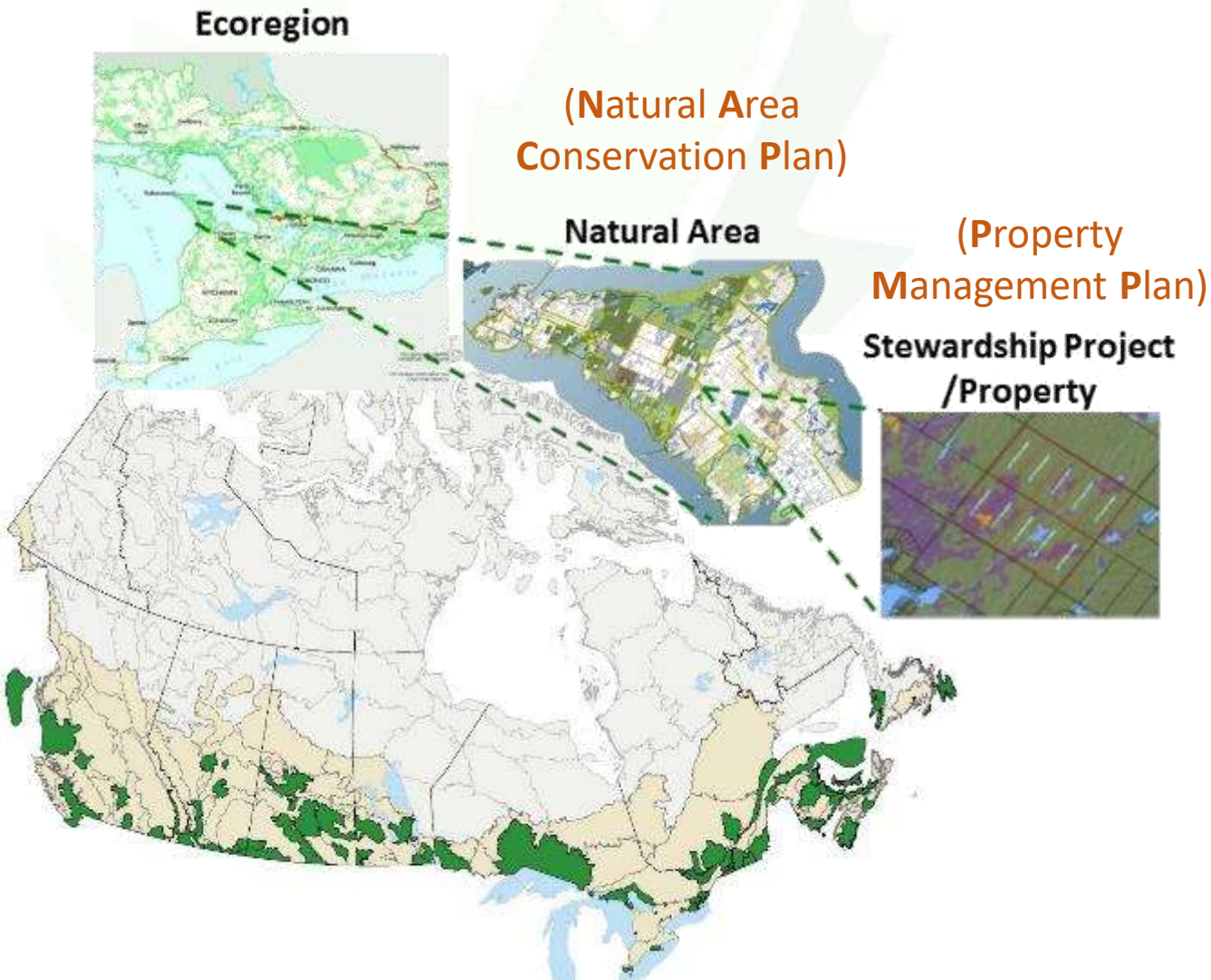
Scales of conservation planning



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Ontario Region Natural Areas
Ontario: 1,076,000 km²
(land: 910, 000 km²)
QC
Rainy Lake to
Lake of the Woods
Lake Superior
Thunder Bay
Wawa
Eastern Georgian
Bay Coast
Ottawa River
Valley
Carden
Alvar
Manitoulin Islands
Archipelago
Napanee
Plain
Frontenac
Arch
Saugeen Bruce
Peninsula
Eastern Lake
Ontario Coast
Lower Maitland
River Valley
Minesing
Wetlands
Rice Lake
Plains
Happy Valley
Forest
London
Southern Norfolk
Sand Plain
Essex Forests
and Wetlands
Western Lake
Erie Islands
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CONSERVATION DE LA NATURE

Introduction

We've all done great work with the knowledge we had at the time

We continue to build and improve based on new knowledge and our own experiences

Sometimes it is valuable to look back on where we have come from, to remind us to celebrate where we are, and think about where we could get to

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Before planning

- Somewhat scattershot approach to land acquisition:
  - No clear pattern;
  - No clear end point
    - (*"Are you guys just going to buy ALL the land?"*).
- Same with stewardship:
  - No goals;
  - No end point;
  - No way to demonstrate success;
  - One minute we're burning, next we're planting trees.
- Unclear how much anything costs – fundraising efforts not necessarily closely correlated with conservation need.

NACPs (and PMPs)

- Plans provide a framework to manage our work;
- Focus our resources geographically (in NAs);
- Targets/ Threats/ Actions provide a standardized backbone to all plans, repeatable between places and organizations.

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Open Standards

- *"The Open Standards for the Practice of Conservation help teams be systematic about planning, implementing, and monitoring their conservation initiatives so they can learn what works, what does not work, and why — and ultimately adapt and improve their efforts."*
- Focus our resources;
- Tell us when/ where to start;
  - and when/ where to stop;
- Provide real numbers to measure success/ impact;
- Targets – units of biodiversity
- Threats – problems those targets face
- Goals – statements about what we think needs to be achieved to improve targets
- Actions – what we will do to achieve our goals
- Strategies – groups of similar actions

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Open Standards

- Goals: measurable, time sensitive and target-based
  - Simple, therefore powerful.
- Strategies: provide way to group actions aimed at delivering same conservation outcome
  - No more fluffy, amorphous "*lets communicate*" actions.
- We break our work down to a fine scale, and include everything that takes staff/ contractor time
  - allows for more detailed, and increasingly accurate, budgeting.

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A made-up example

Please engage your sense of humour now

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Early planning example

- "*This NA is really important for Birdy McBirdfaces – support our work*"
- Actions
  - *Buy some land* (any of it, all of it?)
  - *Steward it* (somehow).

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Early planning example

- Outcomes
  - We may or may not have protected key Birdy McBirdface habitat.
  - We didn't know how many hectares of that habitat we needed to protect to keep Birdy McBirdface in the NA.
  - We didn't really know how to steward it for Birdy McBirdface.
  - **(We may have got it spot on of course, but we didn't always necessarily know that either, and lacked the metrics to report it in a compelling way).**

?

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Open Standards planning

- *"This area is really important for Birdy McBirdfaces*
  - *we need to acquire/ protect 2000 hectares in the Birdy Swamp watershed;*
  - *We need to restore 1000 hectares of [early successional, grass-rich] habitat by 2025 to maintain a viable population of Birdy McBirdfaces;*
  - *We need to reduce the area occupied by Nasty Invasive by 50 % to improve Birdy habitat*
  - *This will cost $5M".*

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The Power of Goals

- Goals: simple goal measured in hectares:
  - *Restore 1000 hectares by 2020 in Birdy watershed*.

  - Clear end point: people know when NCC is going to stop buying up/ restoring land.
  - Specific, focused restoration goal which science tells us is the best thing we can do for the species in the NA.
  - Easily measureable via GIS.
  - Technically doesn't require expensive Species at Risk surveys to demonstrate delivery of our goals (**not condoning this, but don't forget to report on the low-hanging fruit!**).

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The Power of Strategies

- Strategies "file" actions with common outcomes.
- Grouping actions under strategies keeps things focused
  - No more fluffy "*lets do…something*" actions which are impossible to implement and to report on.
- Strategy: *Improve Birdy McBirdface habitat*
- Actions nested under this strategy:
  - *Restore 1000 ha of former agricultural land via a direct seeding approach by 2030*;
  - *Eradicate Nasty Invasive from 500 ha adjacent to restored lands by 2020*;
  - *Produce a brochure explaining why we are cutting down Nasty Invasive*;
  - *Talk to local agricultural groups about the benefits of restoration in terms of ecosystem goods and services (flood control, pollinators).*

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Monitoring

- None of this is possible unless we go back to check it worked!
  - Seems obvious, but easily overlooked.

- Target Status Monitoring
  - could be an action under the same strategy:
    - *Every 5 years, starting in 2015, measure the area of Birdy McBirdface habitat via GIS, and compilation of NCC and partner restoration data*.
  - or we could have a "status monitoring" strategy which groups actions like the one above:
    - *Conduct target status monitoring*.

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Knowledge Gaps

- We might know we need to manage vegetation succession for Birdy McBirdface, but we don't know when to do so to minimise impacts – we don't know when the chicks fledge in this NA.
- Actions, possibly under the same Strategy:
  - *Examine eBird data to estimate fledging dates for the area*;
  - *Reach out to Prof Bird at University of The Birds to gauge interest in having a grad student work on Birdy McBirdfaces in the NA*;
  - *Use the results of the above two actions to develop a vegetation management plan (include decision on when to burn vs mow, and whether this should be done in March or September)*.

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Plan structure

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What goes in the plan?

- Targets
  - Defined units of biodiversity with specific conservation needs
    - “Forest”, “Wetland”, “Grassland”, a rare species (“American Ginseng”) or species group (“Snakes”).
- Threats
  - Specific things which impair the targets
    - “Invasive species”, “Drainage”, “Lack of disturbance”.

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What goes in the plan?

- Break down to meaningful units
  - Split targets by conservation needs;
  - Split threats by method of abating.

WETLAND

European Alder
Phragmites

GRASSLAND

Autumn Olive
Quackgrass

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Assessing target viability

- So you know what to fix!
- Size
  - Species abundance *(how many pairs?)*
  - Minimum dynamic area (*how many ha*?)
- Condition
  - Composition (*e.g. native vs. nonnative*)
  - Structure (*e.g. age)*
  - Biotic Interactions (*e.g. reproduction*)
- Landscape Context
  - Environmental regimes/processes (*e.g. fire)*
  - Connectivity *(e.g., access to habitats/resources; ability to disperse, migrate, re-colonize – how many km to nearest similar patch?)*

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What goes in the plan?

- Threats
  - Things which impact the size/ quality/ function of the targets
    - "Invasive forest plants", "Common Reed", "Invasive woody species", "Poaching".

Assessing threat magnitude

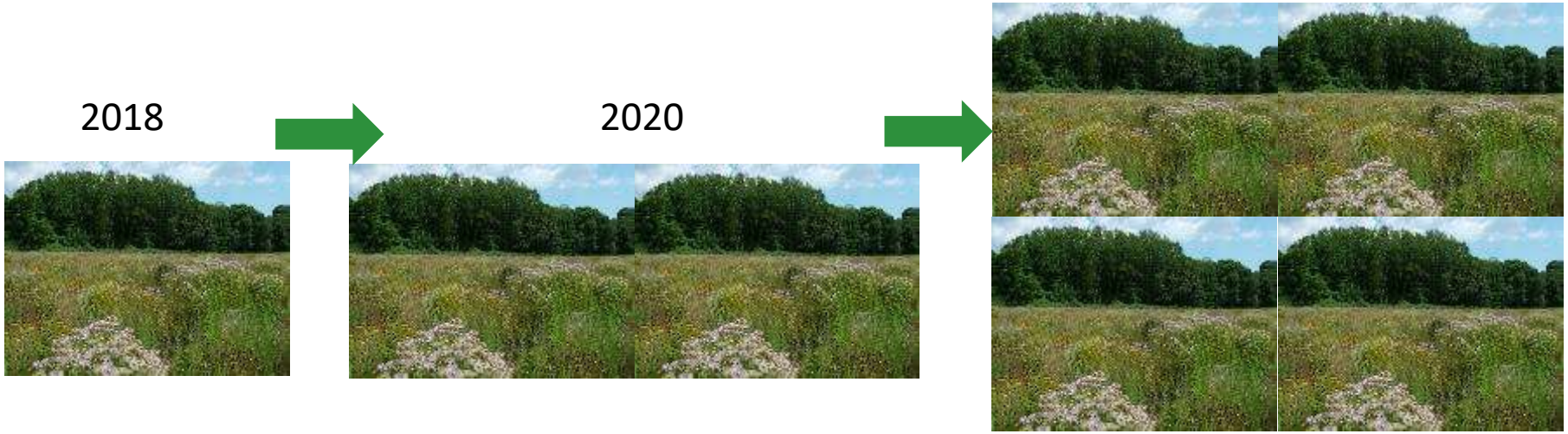
- Severity: within the next 10 years, is the threat likely to:
  - Destroy/ eliminate target?
  - Seriously degrade it?
  - Moderately degrade it?
  - Slightly impair it?

- Scope: within the next 10 years, is the threat likely to be:
  - Widespread, throughout the occurrence?
  - Widespread, in most of the occurrence?
  - Localized, at some locations?
  - Very localized, limited portion?

What goes in the plan?

Goals

- Goal: *Restore 100 ha of forest to create a 200 ha block by 2030*.
- Milestone: *Restore 20 ha south field by 2018, and 30 ha north field by 2020* etc.



What goes in the plan?

- Actions
  - What needs to be done to reduce the threats and improve the targets?
- Include everything you can think of so there are no surprises:
  - Updating the plan, paying property taxes, removing garbage, managing leases, restoring the field, monitoring.

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