

Trails for People and Wildlife

Presenters: Becky Collings, Lydia Uhlir & Jim Ziemba Wednesday, October 26, 2022



Land Acknowledgement

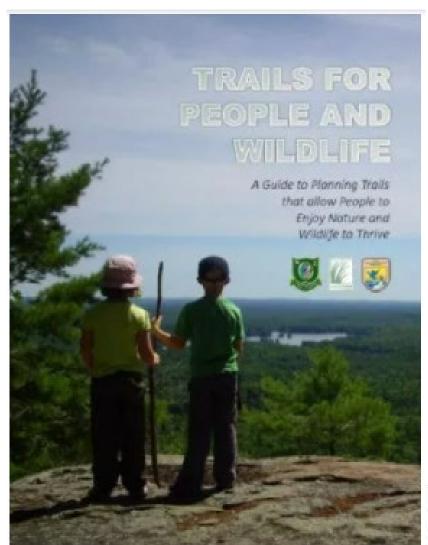
The Forest Preserves of Cook County acknowledges that we are on the lands of the Council of Three Fires—the Ojibwa, Ottawa and Potawatomi—as well as the Miami, Ho-Chunk, Menominee, Sauk and Meskwaki peoples.

As a land management agency, we acknowledge that we have played a role in shaping the histories of local Native Americans by acquiring this land. We also recognize, share and celebrate their immemorial ties to this land.

We commit ourselves to developing deeper partnerships that advocate for the progress, dignity and humanity of the many diverse Native Americans who still live and practice their heritage and traditions on this land today.

New Hampshire – Trails for People and Wildlife

- Mapping tool and guide used by land managers to assess impacts to wildlife from trails.
- Goal is to encourage people to get outside and enjoy nature while allowing wildlife to thrive.
- Funded by the US Fish and Wildlife Service and produced by the New Hampshire Fish and Game Department and Great Bay National Estuarine Research Reserve.



WES Loumty

Trail Impacts on Wildlife







Physiological

Changes in an animal's heart rate, temperature, or stress hormones.



Behavioral

Changes in foraging, vigilance or fleeing from perceived predators.





Reproductive Success

Reduction in the number of nests built, eggs laid or young born and successively raised.



Predation

Scaring an adult away leaves young vulnerable to predation. Adults may be preyed on directly.



SSS of Cook County

Trail Impacts on Wildlife

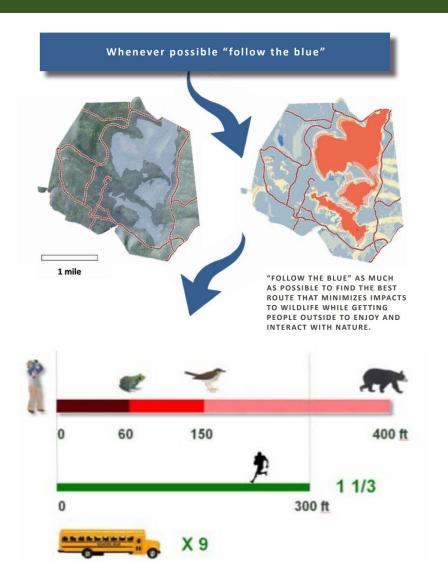


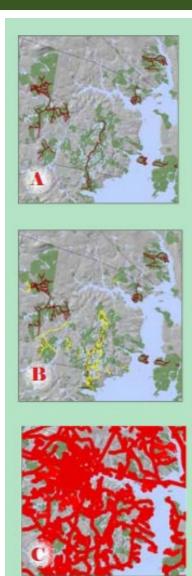


Purpose of Mapping Tool

The purpose of this mapping tool is help determine the best areas to locate trails to minimize impacts to wildlife and includes:

- Trail Suitability Model Uses key principles to determine what trail segments are problematic.
- Corridor of Influence Analysis Human presence can be detected by wildlife on either side of a trail up to 400ft.





Key Principles for Modeling Trail Suitability

Slopes





Habitat Edges







Wetlands

Trail Suitability Model

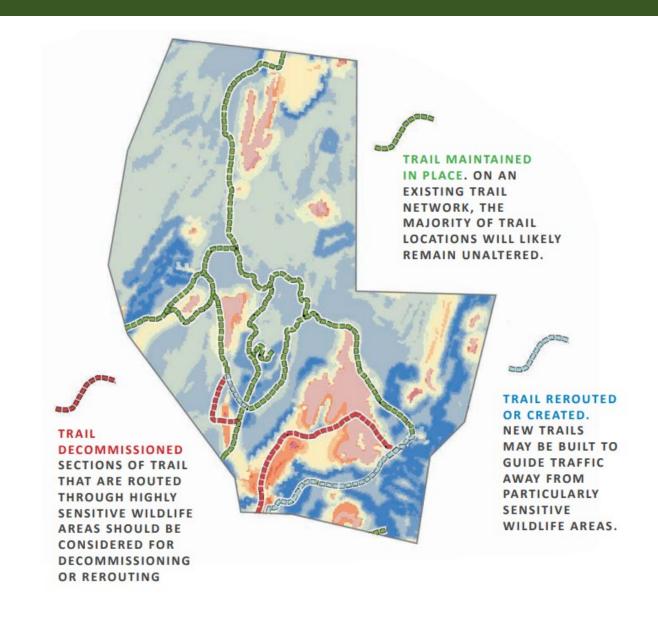
- 1.) Gather data for each parameter
 - a. Slopes
 - b. Habitat Edge
 - c. Special Habitat & Rare Species Areas
 - d. Wetlands
- 2.) Group values and assign ranking based on potential impact to wildlife
 - 1=least sensitive to wildlife, most suitable for trail
 - 2=moderately sensitive, moderately suitable for trail
 - 3=most sensitive to wildlife, least suitable for trail
- 3.) Aggregate all parameter layers into single suitability "heat map"
- 4.) Overlay trail data to assess suitability



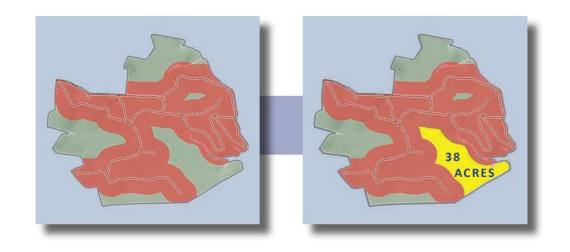
Trail Suitability Model

	1 (least sensitive to wildlife)	2 (moderate sensitivity)	3 (most sensitive to wildlife)
Slopes	0-10 degrees	10-15 degrees	>15 degrees
Habitat Edge	0-50 ft from edge	50-125 ft from edge	>125 ft from edge
Special Habitat/ Rare Species	No special habitat, no recorded presence of rare species, no restoration investment, etc.	Recent restoration work/investment area	High quality remnant prairie, uncommon habitats (fen, seep, dolomite prairie, canyon), T&E species, rare plant populations, osprey platforms (occupied or not), bald eagle nests, heron rookeries, sensitive soils
Wetlands	>120 feet from wetland	60-120 feet from wetland	0-60 feet from wetland

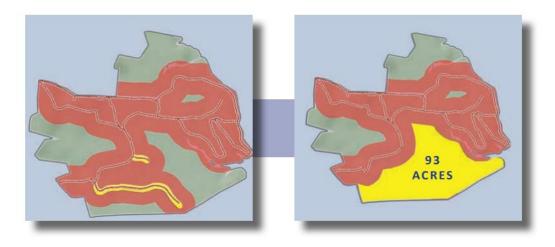
Trail Suitability Heat Map



Corridor of Influence Analysis

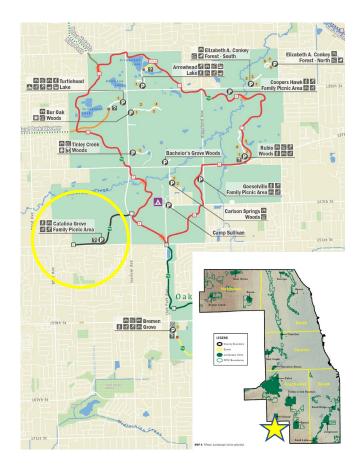


Calculate area of influence by measuring out 400ft from both sides of entire trail network



Decommissioning small portions of trail can create significant gains in habitat not impacted by trail users

Tinley Creek Ravines



Tinley Creek Ravines:
Priority Landscape (#11)



Before Condition 500-acre restoration: 2018-2021



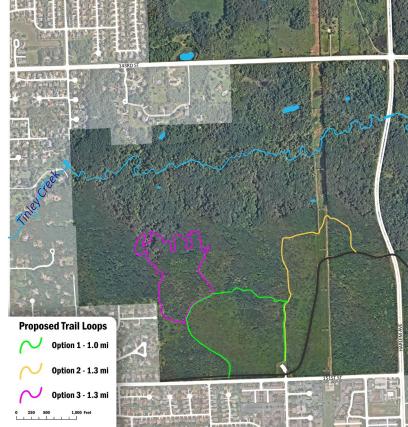
After Condition 500-acre restoration: 2018-2021

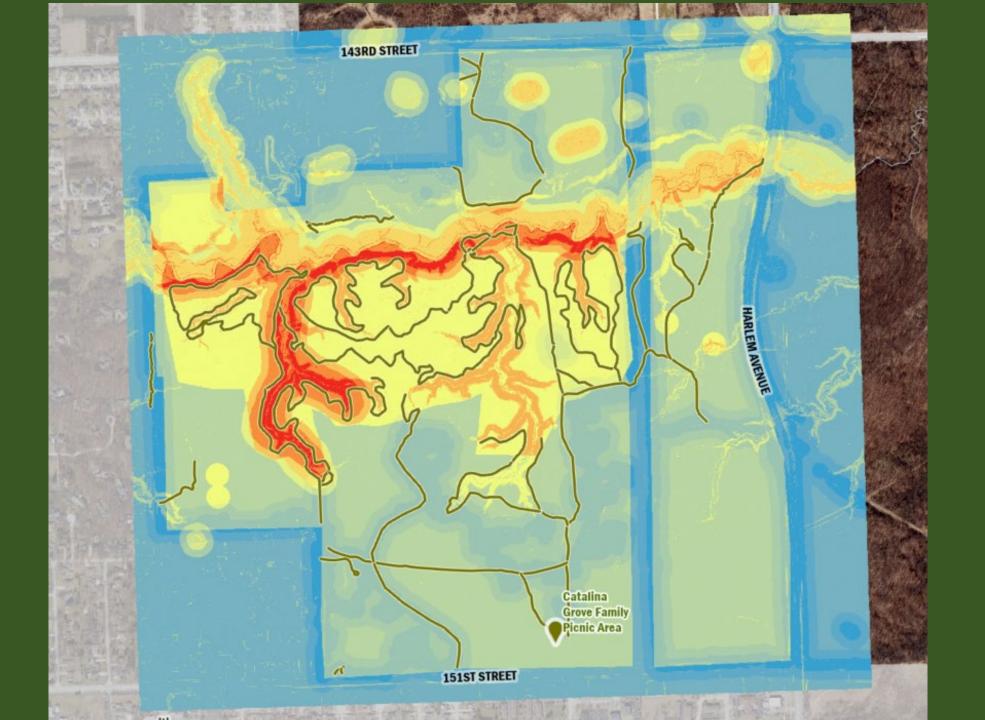
Tinley Creek Ravines



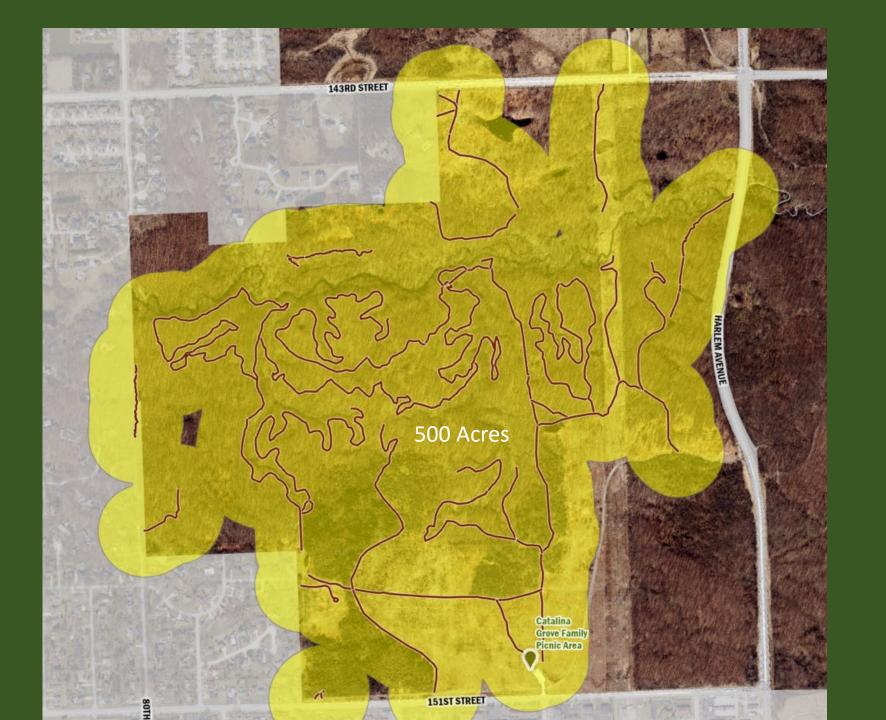
Tinley Creek Ravines Restoration Project

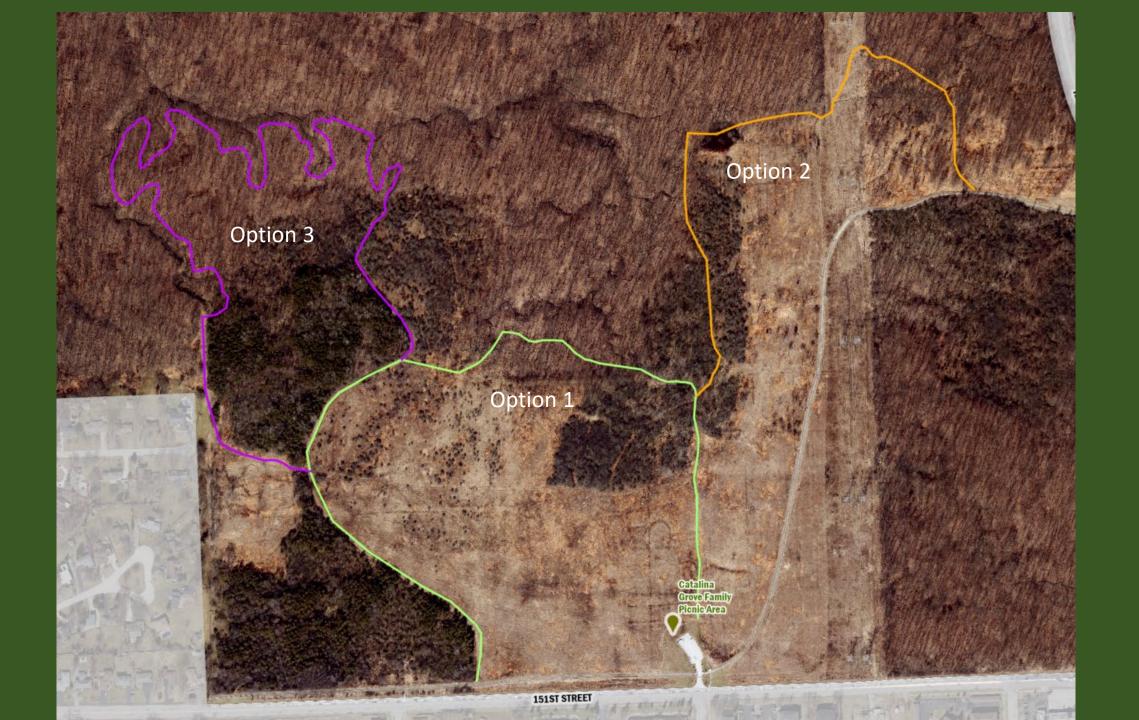


















Discussion Questions:

- Have you previously thought about trail impacts to wildlife?
- Do you believe this tool would be helpful in evaluating trails at your organization to lessen negative impacts to wildlife?
- How does your organization currently evaluate trail impacts to wildlife?
- What are other ways land managers mitigate impacts to wildlife from trails?