Trent Nature Sanctuary Self-Guided Tour 2025

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Hosted by : Trent School of the Environment
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Overview

Nature areas are assigned to preserve biodiversity and provide critical animal habitat and bird migration stopover sites. They are also used as reference sites for field research and recreational sites for visitors observing wildlife. The Trent Nature Areas offer ecological and recreational value, but they currently lack a comprehensive self-guided tour system. Without clear navigation tools or engaging educational content, visitors could feel disconnected from the biodiversity, history, and environmental significance of the area. This project addresses this gap by developing a self-guided tour for the Canal and Wildlife Sanctuary Nature Areas, designed to help visitors explore at their own pace while learning about biodiversity, conservation, safety, and responsible trail use.

Questions to Inform the Guide

- What unique biodiversity and historical highlights do the Trent Nature Areas feature?
- How can the Nature Areas be most effectively visually portrayed?
- Which content types captivate a diverse group of visitors and children?
- How can the guide be adapted and accessible for all trail visitors?
- What tools and resources will encourage engagement of hazard recognition and trail etiquette?
- How will interactive apps such as iNaturalist, Seek, and eBird improve trail user experience and promote citizen science?

Methods

- Review existing Trent Nature Area maps, biodiversity inventories, and environmental reports.
- Assess trail accessibility, and potential hazards (e.g., poisonous plants).
- On-site tree tagging with flagging tape & GPS marking.
- Use ArcGIS to map key points of interest (plant communities & tree locations).
- Combine mapped features with species profiles, safety tips, and trail etiquette guidelines to build the guide.
- Create a visually engaging, accessible, and adaptable trail guide.
- Analyze historical sightings data from iNaturalist and eBird.
- Develop user-friendly instructions for using these apps, including a focus on invasive species reporting.

To Contact Us!

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Purpose

- Increase visitor engagement and ecological awareness
- Help visitors identify wildlife and plant species
- Provide clear safety guidance to protect visitors from hazards like poisonous plants and berries.
- Foster responsible trail use through trail etiquette
- Encourage citizen science participation with interactive apps.

Trail Guide Preview

Step Gently: Respect, Safety, and Sustainability on the Trails

We are committed to protecting and preserving our nature trails while minimizing disturbance to local wildlife. To ensure a safe and enjoyable experience for everyone, we encourage you to review these trail etiquette guidelines before setting out. Please be mindful and respectful of these rules throughout your journey, helping us keep the trails beautiful and thriving for all to enjoy!

Dog Waste
Dog waste is more than just an inconvenience on trails, it poses serious environmental and ecological risks. When left behind, decomposing waste releases harmful bacteria and nutrients into the soil and nearby water sources, leading to decreased oxygen levels that can harm aquatic life. uncollected waste can disrupt local ecosystems. Proper disposal of pet waste helps protect wildlife, water quality, and the overall health of natural environments (Taylor & Harding, 2020).

Cycling on Trails
Cycling on nature trails offers a thrilling way to connect with the outdoors, but it's essential to be mindful of environmental impacts. Research shows that while mountain biking provides recreational and health benefits, it can contribute to trail degradation through soil erosion, vegetation damage, and wildlife disturbance if not managed properly (Marion & Wimpey, 2017). To minimize impact, cyclists should stay on designated trails, avoid riding in wet conditions, and follow local guidelines for sustainable trail use.

Leave Nature as You Found It
Nature trails provide a home for diverse plant species, many of which play a crucial role in maintaining ecosystem balance. Removing or picking vegetation can lead to habitat degradation, soil erosion, and a decline in biodiversity. Research shows that trail use already causes shifts in plant species composition and increases bare soil patches, making it even more important to minimize additional human impact (Pickering & Norman, 2017).

Trail Safety
1. **Stay on Marked Trails** – Avoid creating new paths to protect vegetation and minimize erosion.
2. **Yield to Others** – Hikers, cyclists, and horseback riders should follow proper right-of-way rules (e.g., cyclists yield to pedestrians).
3. **Keep Pets Leashed** – If pets are allowed, keep them on a leash and clean up after them to protect wildlife and other trail users.
4. **Pack Out What You Pack In** – Carry out all trash, including food scraps and biodegradable waste, to maintain a clean environment.
5. **Be Aware of Wildlife** – Do not feed or approach wild animals, and stay alert to avoid disturbing their habitat.
6. **Carry Essentials** – Bring water, a first-aid kit, a map, and a flashlight or headlamp in case of emergencies.
7. **Know the Weather Conditions** – Check forecasts before heading out and be prepared for sudden changes in weather.
8. **Use Proper Gear** – Wear appropriate footwear and protective equipment for the activity you're engaging in.
9. **Leave No Trace** – Follow the principles of Leave No Trace by minimizing your impact on the environment.

Every step you take on the trail leaves an impact, let's make it a positive one. By following these guidelines, you help protect the beauty, safety, and sustainability of our natural spaces. Respect wildlife, stay on designated paths, and leave no trace behind. Together, we can ensure these trails remain a place of wonder and discovery for generations to come.

Thank you for stepping gently and respecting nature!

Explore and Identify: Tree and Plant ID Guides

Citizen Science Identification Apps!

iNaturalist
Allows users to understand biodiversity and create research quality scientific data by sharing wildlife photos. Users can assist in identifying each other's observations at any level wildlife identification. Users can join groups while being connected to a social network of naturalists.

Seek
Created by iNaturalist, Seek uses image recognition to assist in wildlife identification. Users can aim their camera at a target to reveal what species they are observing, and can be automatically uploaded to iNaturalist. Users can earn badges and participate in challenges to improve their identification skills.

eBird
Created by Cornell Lab of Ornithology, bird watchers can log their sightings in 'checklists.' This data is used by researchers and educators that study bird conservation and migration.

Merlin
Created by Cornell Lab of Ornithology, Merlin allows users to identify birds by uploading photos, describing the bird's appearance, and recording their song/call. A database of bird photos and songs/calls can also be used as an identification aid, and observations can be automatically uploaded to eBird.

Other Tree and Plant Identification Tools

Trees in Canada
by John Laird Farrar
Trees in Canada is a guide to the many tree species, both native and introduced, that are found throughout Canada and the northern United States.

Minnesota Wildflowers
a field guide to the flora of Minnesota
Minnesota Wildflowers Plant and Tree Website (https://www.minnesotawildflowers.info/)

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