



# **ENHANCING AGRICULTURAL LITERACY THROUGH RECREATION**

**BEST PRACTICES FOR INCREASING AWARENESS &  
PROMOTING INTEREST ALONG THE G2G TRAIL**

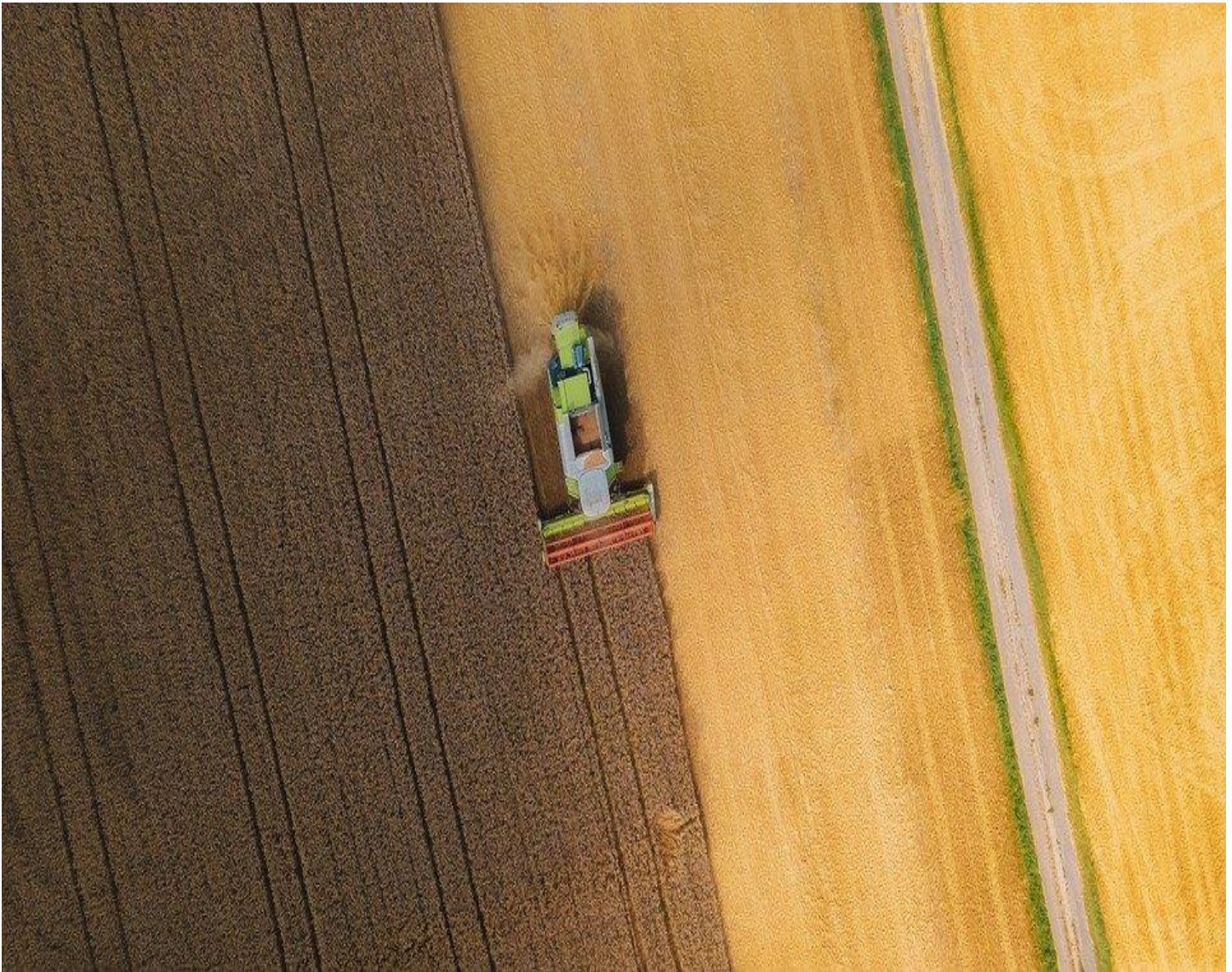
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## Acknowledgements

As graduate students at the University of Guelph in the Rural Planning and Development program, we undertook the Agricultural Literacy through Recreation project as part of our Advanced Planning Practice course RPD\*6280. While the information received from the key informants and desktop aerial review cannot be representative of the entire population of Huron County; however, the findings do provide insight into the issues and opportunities for further research. We would like to the acknowledge the individuals that contributed time and energy to this project:

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## **Project Summary**

Given the increasing usership of the G2G Trail and the opportunities and challenges presented by the agricultural context, the purpose of this project is to determine effective methods to raise awareness and promote interest in agriculture along the G2G trail. The principal goals are to help trail users understand the significance of the agricultural landscape, to reduce conflict between trail users and agricultural property owners, and to showcase the agricultural and food systems of Huron County.

Both primary and secondary research was employed to explore opportunities to enhance agricultural education along the G2G trail. These methods included:

- Secondary research involving a review of the literature regarding case studies and best practices in agricultural education initiatives along recreational trails
- Key informant interviews with a representative of the agricultural community, a G2G Board Member, and a tourism development officer
- Aerial analysis using Huron County GIS platform and Google Maps to determine suitable areas for educational installments

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# 1. INTRODUCTION

Developing public use trails in agricultural areas can create positive opportunities for agricultural operations and rural communities. Trails can help foster a reconnection to agriculture by raising public awareness of agricultural processes and providing an opportunity for trail users to appreciate the agricultural community. They can also provide additional business opportunities for agricultural operations through direct farm marketing and agri-tourism opportunities (British Columbia Ministry of Agriculture and Lands, 2005). Educating recreational trail users about the surrounding agricultural and agri-food system provides an avenue to reduce the potential for conflict between trail users and agricultural property owners, optimizing the positive outcomes of the trail for both parties.

The agricultural literacy movement gained momentum in the 1990s in response to the globalization of the food system and growing urbanization. As more people moved to cities and away from small-scale farms throughout the 20th century, people became increasingly disconnected from basic facts about food production, agriculture, and natural resource systems. At the same time, the size and scale of agricultural operations grew significantly, agriculture technology radically progressed, and issues facing agriculture became more complex (i.e. climate change) and in some cases, controversial (i.e. animal rights and genetically modified crops). The need to educate and communicate to the public about agriculture became critical.

Unfortunately, despite over 30 years of agricultural literacy programming, how society understands agriculture has largely remained the same (Kovar and Ball, 2013). There remains a disconnect between the general population and those within the agricultural system. There is a lack of understanding between how food is grown and raised and what is purchased in the grocery store. The agriculture system has changed drastically, and it is critical to address both rural and urban communities through an agricultural literacy program.

## 1.1 Huron County Context

Huron County is a vibrant, growing rural community located along the shores of Lake Huron. Huron County's total land area amounts to around 3400 square kilometres and is bordered by Middlesex County to the south, Perth County and Wellington County to the east, Bruce County to the north, and Lake Huron to the west. The County has a population of approximately 61,000 residents and contains nine lower-tier municipalities: Ashfield-Colborne-Wawanosh, Bluewater, Central Huron, Goderich, Howick, Huron East, Morris-Turnberry, North Huron, and South Huron.

Huron County is the most agriculturally productive county in Ontario. According to the 2016 Census of Agriculture, Huron County has more census farms (2500 farms), more acres of farmland (735,696 acres) and more gross farm receipts (\$1.23 billion) than any other county in Ontario (Statistics Canada, 2016a, 2016b). With some of the best farmland in Canada, the agricultural industries in Huron County are diverse and include the rearing of livestock (ranging from beef cattle, dairy cattle, pigs, poultry, sheep, rabbits, and horses), field crop production (including soybeans, beans, wheat, corn, melons, potatoes, and hay), orchard production (apples), greenhouse production (such as for mushroom, floriculture, and nursery and tree production), and maple syrup production (Statistics Canada, 2016c).

Furthermore, there have been recent calls to action to improve active transportation in Huron County. The conversion of abandoned railway lines to trails has been encouraged to promote connectivity and maximize current infrastructure (Caldwell et al., 2014). Ensuring that the G2G trail successfully increases awareness of agriculture and respectful trail use can reduce opposition to future ‘rail-to-trail’ conversions and provide a baseline model for incorporating applications of agricultural literacy along these future trails.

## 1.2 The Guelph to Goderich Trail (G2G Trail)

The G2G trail is a former CPR rail line right-of-way that was converted into a multi-use, non-motorized green space connecting local communities along a 132-kilometre trail from the 401 corridor at Guelph to the shores of Lake Huron in Goderich. The Huron County portion of the trail is 55 kilometres long and crosses six of the nine local municipalities.

The trail is recognized for its potential to generate economic benefits for Huron County while meeting sustainability goals for active transportation (Caldwell et al., 2014). Specifically, the G2G trail has the potential to draw in economic activity during all four seasons by providing safe off-road recreational opportunities, connecting destinations to the west with the large population centres to the east, and appealing to both the target baby boomer looking for outdoor leisure and the longer-distance cyclist (Caldwell et al., 2014).



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## 2. RECREATIONAL TRAILS

### 2.1 Benefits

Ontario communities are increasingly embracing active transportation as a key component to improving the health of residents, enhancing the quality of life, and creating healthy communities (Caldwell et al., 2014). They can also play a key role in securing lands for protection in perpetuity (Hike Ontario, 2021).

- **Active Transportation.** Trails are a common form of active transportation infrastructure and an integral part of recreation systems. There are also environmental benefits to trails. As a form of active transportation, trails can reduce energy consumption and emissions (Caldwell et al., 2014).
- **Health and Wellbeing.** Trails provide users with opportunities to pursue physical activity which is associated with positive health outcomes, improved fitness, and improved physical, mental, and social health (Social Planning Council of Cambridge and North Dumfries, 2008).
- **Tourism.** Trails provide economic benefits by attracting tourism, supporting local businesses, increasing property values, and providing affordable forms of recreation (Hike Ontario, 2021).
- **Education.** Trails present a unique opportunity for education, providing an active means of teaching users about the natural environment, culture, and history (Hike Ontario, 2021).

### 2.2 Challenges

There are some specific challenges surrounding trails that transect agricultural landscapes. Trail use can have implications on farming that are not always accounted for by trail developers and trail users.

- **Adjacent land.** In the case of rails to trails conversions, lands that were once an active railway corridor, and thus private property owned and policed by the railway, become open to public use as recreational trails (Ontario Federation of Agriculture [OFA], 2018). This puts trail users effectively in the backyard of Ontario farms which increases the potential for conflict between trail users and agricultural property owners and raises several challenges.
- **Security.** Issues with security and trespassing are a major concern (OFA, 2018). The potential for trespassing increases when trails border farms; trespassing can result in damage to crops, harassment of livestock, improper use of gates, theft, vandalism, and fire (British Columbia Ministry of Agriculture and Lands, 2005). Trail users may also poorly control and secure their dogs which can present risks to agricultural worker safety, crops and livestock well-being, and biosecurity (OFA, 2018).

- **Impede operations.** Farm adjacent trails can also interfere with day-to-day agricultural operations. For example, trail users' vehicles parked in front of gates and along narrow rural roads can impede access from farm machinery which can be costly to operations (British Columbia Ministry of Agriculture and Lands, 2005). Trails may increase the potential for litter and the spread of invasive species in agricultural areas (British Columbia Ministry of Agriculture and Lands, 2005). Other key concerns with rails to trails conversions in agricultural areas include: drain maintenance, farm crossings, farm practices, fences, liability, and policing (OFA, 2018).

## 2.3 The G2G Trail and Huron County's Agricultural Landscape

The Huron County leg of the G2G trail interacts with the agricultural landscape in myriad ways. Yet, the trails proximity to various elements of the agricultural system can create potential land use conflicts between trail users and agricultural property owners. There is a need to educate trail users about the surrounding agricultural system and respectful trail use in agricultural areas to reduce potential land use conflicts.

### QUICK FACTS ABOUT THE HURON G2G TRAIL

- Transects 375 agricultural parcels
- Crosses 40 constructed drains
- Abuts 6 agricultural commercial industrial establishments
- Has 45 farm equipment crossings
- Is located within 500 meters of 47 barns

Highlighting agricultural literacy along the trail presents a unique opportunity to raise public awareness of agricultural processes and to improve appreciation of the agricultural community. An agriculturally literate population is also a population that can make informed decisions and provide support to the agricultural system. When an individual possesses agricultural literacy, they have an understanding of how current economic, social, and environmental impacts could potentially affect the agricultural system. Educating trail users on the surrounding agricultural system has benefits for both trail users and adjacent property owners and can create a better overall user experience.

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## 3 AGRICULTURAL LITERACY

**Agricultural literacy can be defined as possessing the knowledge and understanding needed to communicate basic information about the agricultural system. (Frick et al., 1991).**

It is important to note that the scope of literacy used in this study does not encompass disciplinary literacy, which focuses on specialized content within specific subject areas. Instead, content literacy is utilized, which focuses on broad subject areas and includes a person's knowledge and understanding of key principles and practices and their ability to broadly communicate about the subject. (Clemons et al., 2018).

Another key distinction framing this study is the difference between agricultural literacy and agricultural education. While literacy, in general, is the ability to read and write, education refers to the overall development of a person, involving the acquisition of knowledge, values, morals, skills, habits, and beliefs. Participating in an agricultural literacy program or event is a step toward an individual's overall agricultural education.

### 3.1 The Pillars of Agricultural Literacy

The Pillars of Agricultural Literacy is a framework developed by the American Farm Bureau Foundation for Agriculture to help guide and manage agricultural literacy programs and initiatives (2012). The framework is aimed at increasing understanding of the relationship between agriculture and society and provides a structure for agricultural literacy learning throughout life.

The framework also identifies five areas of foundational knowledge that learners of all ages should know, including:

- Definition of agriculture
- History
- Taxonomy
- Identification
- Production awareness.

Following this knowledge, learning expectations are divided into four age groups, ranging from early childhood to early adulthood. These resources allow people planning an agricultural literacy program to select a target age group and find key messages to share, as well as provide a framework for the development of agricultural literacy resources.

Table 1: Pillars of Agricultural Literacy

<b>SIX PILLARS OF AGRICULTURAL LITERACY</b>	
<i>The relationship between ...</i>	
<b>Agriculture &amp; the Environment</b>	For example, identifying natural resources, describing how and why farmers conserve water and how wildlife habitats are created and maintained by farmers.
<b>Agriculture &amp; Food, Fibre and Energy</b>	For example, identifying the common agricultural sources for common food, fibre and energy products, discovering how geography influences the type of agricultural products that can be produced, and differentiating between natural, certified organic and conventional farming practices.
<b>Agriculture &amp; Animals</b>	For example, examples of ways that farmers care for animals, discovering the difference between animal welfare and animal rights, identifying reasons livestock safety is a priority for farmers
<b>Agriculture &amp; Lifestyle</b>	For example, recognizing that agriculture provides the necessities of life (food, fibre, energy, shelter), discovering the path a processed product takes from farm to table, and identifying how agricultural products can contribute to a healthy lifestyle.
<b>Agriculture &amp; Technology</b>	For example, describing how technology helps farmers provide more food to more people, discovering how technology has changed over time to help farmers, and identifying how new technology is used in agriculture.
<b>Agriculture &amp; the Economy</b>	For example, identifying interesting jobs in agriculture, identifying the impact of agriculture on the local and national economy, and making a connection between the growing world population and the need for increased agricultural production.

## 3.2 Developing an Agricultural Literacy Program

There are many elements to consider when creating an educational program, such as setting objectives, developing learning activities and the evaluation process.

Backward design is an approach to program design whereby learning goals and/or desired results, and assessment are considered before contemplation of how to teach the content. Traditional 'forward design' considers learning activities and how to teach the content first. Backward design is a much more intentional approach focused on considering specific learnings before considering how the learning activities that will be provided.

The Centre for Teaching Excellence (n.d.) builds upon these concepts and identifies components to successful program design. These components are outlined below, and key questions have been amended for use in trail-based agricultural literacy programs.

### FIVE KEY COMPONENTS OF PROGRAM DESIGN

#### 1. Intended Learning Goals/Outcomes.

*What should trail users leave knowing, thinking, feeling or able to do?*

#### 2. Context.

*Who are the trail users?*

*What are their interests?*

*What are their expectations of the trail?*

*How can their diverse backgrounds and abilities be respected? (i.e. language or cultural differences, different learning styles, accessibility needs)*

*What additional resources are available?*

*What time of year is it?*

#### 3. Content.

*What will trail users learn?*

*What big ideas and important understandings should trail users retain?*

*What enabling knowledge (facts, concepts, principles) and skills will trail users need to be agriculturally literate?*

#### 4. Teaching Methods.

*What teaching methods are trail users familiar or comfortable with?*

*Are the necessary resources available? (i.e., funding or technology)*

*What activities will equip trail users with the needed knowledge and skills?*

#### 5. Assessment Methods.

*How will you know if trail users have achieved the desired results?*

*Does assessment fit into the agricultural literacy program? If so, how and when?*

## Other important components to consider:

- **Target audience.** When developing an agricultural literacy program, it is important to consider the target audience and their level of understanding of agricultural literacies. In general, creating an informal learning environment is encouraged to support diverse audiences outside of a classroom setting (Sandlin & Perez, 2017). Agricultural literacy programs, and research, often focus on academic learning for K-12 students and their teachers. However, agricultural literacy programs have also been found to be an effective tool to educate the general adult population (Kovar & Ball, 2013). Improving one's quality of life is a powerful motivator for adult learning.
- **Learning Styles.** It is important to consider the most common types of learners when developing and planning learning experiences. Learning styles and preferences can take many forms and often individuals identify with more than one type.

## 3.3 Applications

A review of current applications of agricultural literacy along recreational trails revealed several opportunities that could be replicated along the G2G trail. These examples are outlined in this section.

### AGRICULTURE HITS THE TRAILS

[Agriculture Hits the Trails](#) was a project involving the installation of signs along popular hiking trails in Ontario's Greenbelt to showcase the many environmental advancements made by farmers (Rabinowicz, 2009). Topics range from general environmental planning on farms to specific achievements in greenhouse gas reduction and reduced energy use. While the project is from 2008/09, it is a successful example of highlighting the relationship between agriculture and the environment in a way that is being replicated throughout Ontario.

The [Middlesex Federation of Agriculture](#) is re-creating this project with post-mounted signage that can be moved to different areas each year/season (OFA, 2021). The design of the signs is intended to be generic enough to rotate around the county and would include an agricultural education component, crop/livestock production information, and rural safety messaging. For example, messaging on a sign along a section of trail paralleling a field planted with corn might include an explanation about the field of corn, heat units, potential yield, and a warning not to play/explore fields. The inclusion of links or QR codes would refer viewers to online resources with more detailed information. Signage of this sort can emphasize the important relationship between agriculture and the environment that comprises one of the six pillars of agricultural literacy.

## FARM HERITAGE TRAIL AND SCAVENGER HUNT

The [Farm Heritage Trail](#) is a scenic driving route through agricultural communities with conserved working farms in northwest Buncombe County, North Carolina that celebrates farming families' commitment to farmland conservation (Buncombe County Soil and Water Conservation District, 2021). The trail has designated 'Farm Stop' signage to identify farms that are open to the public along with their hours of operation. Farm stops are also highlighted on the Farm Heritage Trail website along with maps and directions of the trail to assist visitors in planning their trips. These signs and the associated website serve to provide economic opportunities for participating farms through direct farm marketing and agri-tourism while also serving to educate the public on the history and importance of these heritage farms to the surrounding communities. The website also features an ongoing calendar of events, hikes, farm-to-table dinners, educational opportunities, and fun family-friendly activities throughout the year.

One of the key activities for families is a scavenger hunt of agricultural-related sights observable from the trail (Buncombe County Soil and Water Conservation District, 2021). The Farm Heritage Trail offers three scavenger hunts: (1) Participants count how many Farm Heritage Barn Signs can be seen along the trail, (2) Participants count how many silos that can be seen along the trail, (3) Participants count and name the different types of animals you see along the trail. Once any of these scavenger hunts are completed, families are urged to go to a local municipal office to check their answers and receive a sticker for participation.

Scavenger hunts of this sort are an example of the gamification of learning and place-based inquiry that encourage families to consider more deeply the agricultural landscape that they are exploring, its history and tradition, and its connection to the food system. Developing a similar scavenger hunt along a walking trail is feasible. For example, trail signage could incorporate hints and information to strengthen the educational potential of this option. Though, caution must be given for families to remain on the trail for a scavenger hunt.

## STORY TRAIL SIGNAGE, EVERGREEN CREATIONS

[Evergreen Creations](#) is a company that seeks to help farmers profitably attract, entertain, educate, and inspire visitors (Evergreen Creations, 2019). Evergreen Creations creates and distributes 'edutainment' content that provides children with the opportunity to connect with their local food sources and develop an appreciation for agriculture. One of the formats offered is Story Trail Signage where classic children's stories and songs are altered with an agricultural education twist, blown up onto outdoor signage, and placed along a trail.

## SELF-GUIDED AUDIO TOURS

Self-guided audio tours are increasingly being used in municipal tourism and heritage initiatives (see Fredericton Tourism, 2021) and for farm tours (see Rodale Institute, 2022). A self-guided audio tour involves utilizing pre-recorded audio files that highlight key heritage features and points of interest along a route to create an immersive, educational, and self-guided tour experience.

There are several different options for hosting self-guided audio tours. In rural areas should be made available for download to ensure they can be played without use cellular data. Several mobile applications exist to specifically host audio tours. For example, [GeoTourist](#) and [VoiceMap](#) are both audio tour hosting applications that are capable of tracking your GPS location to provide location-specific audio guides that follow along with your movement along a trail. Another option is integrating audio files with interactive maps so that users can listen to files at points of interest. This avenue is being used by the Town of Stratford which has leveraged the [Mapme](#) platform to create several audio walking tours (see [Stratford Audio Walking Tours](#)). Overall, self-guided audio tours provide an immersive option for enhancing agricultural literacy along a trail.



# 4 RESEARCH FINDINGS

## 4.1 What We Saw: An Aerial Review of the G2G Trail, Huron County

An aerial review of the trail was conducted to identify potential locations for agricultural literacy along the G2G trail. This involved examining the land around potential sites on google maps and identifying points of interest. Please note, that the aerial review is a desktop exercise. All identified spots were chosen because of how they looked from a satellite perspective. All points of interest are intended to be suggestions and illustrative of potential agricultural literacy opportunities along the trail. As such, some of the chosen sites may not end up being suitable locations for sites of explanation. While crop identification is challenging from an aerial perspective it is still important to discuss farming practices and identify the variety of crops grown in the area. The farms identified on the map were selected because they had buildings visible from the trail which would likely attract interest. Details such as sightlines may interfere with some listed sites.





➤ **Site 1** (starting from the eastern edge of the trail) appears to be a barn for holding cattle, and what appears to be tanks to hold milk before transportation. This site exemplifies 3 of the 6 pillars of literacy. The relationship between animals and agriculture is displayed by the way that the farmer uses cows, the technology used to feed them, milk them and store the milk is also on display and visible from the trail. The farm serves as a visible piece of the production chain which shows how milk is produced and transported.



➤ **Site 3** shows a barn and several other buildings as well as grain silos. This suggests that other animals than dairy cows are being held here. The lessons to be learned are most likely similar to site 1 and emphasis can be put on the connections of animal farms to consumers and the equipment on their farms.



➤ **Site 4** is an old quarry. The land around it was once cleared and used for a quarry and homestead. The land was given to Huron County and a managed forest has been cultivated since then. This information is provided by a sign on the site next to the former quarry. This site is a great opportunity to showcase the relationship between agriculture and the environment. It shows that land use has a lasting effect on the landscape, but that nature can also reclaim it if given enough time.



- **Site 8** is a fertilizer blending facility. It is an industrial site and a good showcase of the relationship between agriculture and the food, fiber and energy, as it furthers the discussion around environmental stewardship. In addition, the plot shows off a lot of specialized technology which could be explained to trail users.



- **Site 11** is an example of a livestock operation. The pillars it could exemplify are similar to sites 1 and 3. This farm seems to be a much larger operation than those two previous ones though, potentially allowing for an explanation of how such a large operation runs.

Where rivers cross the trail are also potential places to engage trail users as they can be spots where trail users would naturally stop and take in the sights. More general concepts of agricultural literacy such as broader definitions and examples from off the trail may be better suited in towns and other common entrance points for the trail. In addition, some information about the towns themselves could be informative for long-distance hikers and cyclists and can help to direct travellers into the towns for recreation and tourism, also supporting a buy local campaign.

## 4.2 What We Heard: Discussing the G2G Trail with Community Members

Key informant interviews were conducted to allow for limited community consultation. Informants were selected from the Huron County area based on their professional and personal expertise:

Informant 1 is a farmer, an agricultural advocate, and municipal planner.

Informant 2 is a board member of multiple rural tourism initiatives.

Informant 3 is a tourism officer.

The interviews revealed some consistent themes and some areas of disagreement between respondents.

- **THEME 1: Safety for Everyone.** One common theme across the three interviews was the importance of safety for everyone. The interaction between farmers, trail users, and others in and around the G2G such as fisherfolk and tourists poses potential risks to all. Farm equipment moving between fields poses a potential hazard to other forms of traffic, especially those who are unfamiliar with farm equipment. Farm equipment is slow-moving, larger than most forms of motor vehicle traffic and can cause traffic problems including the accumulation of vehicles impeded by farm equipment. The large size of farm equipment reduces visibility for operators, especially near machines and obscures the vision of other road users. The issue of vehicles parking in Huron County in non-designated parking areas was highlighted as an issue of concern by two of the key informants.
- **THEME 2: Tourism and the Local Economy.** Agriculture and tourism are both important economic drivers for the County of Huron, though agriculture outpaces tourism. There was agreement among the informants about the importance of the G2G trail as a tourism asset for the region. The G2G board has made recent improvements across the trail, especially in terms of ensuring the trail is accessible to many different user groups such as cyclists, walkers, and people with a broad spectrum of accessibility needs. Informant 2 stressed that inclusivity and accessibility were key hallmarks of the G2G trail and that ag-literacy initiatives also need to ensure they are inclusive and accessible (Personal communication, March 10, 2022).
- **THEME 3: Natural and Cultural Heritage Conservation.** The preservation of local cultural, heritage and natural heritage features along the trail is an important consideration. Concerns around the encroachment of farming operations onto the G2G trail were also revealed through the key informants. The G2G estimates that they have lost approximately 200 linear acres of what was once 900 linear acres of trees to farmers intruding onto the trail (Informant 2, personal communication, March 10, 2022). The encroachment onto the trail is a particular area of frustration for the board of the G2G as they are concerned about the loss of hard-to-replace wooded areas and the disregard for clearly marked property lines. The railway company placed the markers for the boundary between private land and the trail long ago.

- **THEME 4: Waste Disposal.** Two informants were apprehensive about garbage in and around the G2G trail, though they differed in terms of who they felt was responsible. One noted that the G2G trail has sometimes been used as a place to burn garbage and attributed this improper use of the trail to landowners along the G2G (Informant 2, personal communication, March 10, 2022). Conversely, another interview revealed that trail users and more generally tourists to Huron County were responsible for leaving garbage throughout the countryside and on the trail (Informant 1, personal communication, March 8, 2022). The commonality is that garbage is indeed a concern, and needs to be addressed, regardless of who is to blame for the issue.
- **THEME 5: Biosecurity.** Biosecurity was raised as a common concern, though the level of concern differed greatly amongst respondents. The farmer expressed concern about the potential devastation of a disease outbreak such as the spread of avian flu to a poultry operation from the excrement of Canadian geese (Personal communication, March 8, 2022). The tourism officer expressed concern that farmers may be unwilling to have visitors on the farm due to biosecurity worries as well and that the availability of on-farm tours has lessened over time (Personal communication, March 24, 2022). Yet, the board member noted that G2G trail users were unlikely to threaten biosecurity and was unaware of any instance of trail users trespassing on agricultural land (Personal communication, March 10, 2022).
- **THEME 6: Relationships.** Though there were some difficulties between landowners and the G2G in the past, relationships have greatly improved, and some farmers have begun to utilize the trail systems with their families and have come to appreciate having access to the G2G trail. Further, usership of the G2G trail has dramatically increased during the COVID-19 pandemic, especially among cyclists, as people have sought out rural recreational opportunities yet conflict on the trail has lessened (Informant 3, personal communication, March 24, 2022). All of the respondents highlighted the link between active transportation and healthy lifestyles.

## Summary

All of the interviewees were supportive of efforts to improve agricultural literacy along the G2G. As a corollary to improving agricultural literacy on the G2G, an opportunity exists to promote the cultural, historical, and natural heritage features of Huron County. All of the key informants touched on the important role of farmers as stewards of land and water resources. The respondents spoke about how much of society has become disconnected from agriculture as people have urbanized and stressed that agricultural literacy programs will be most effective if they have the participation of farmers. Agricultural literacy is an opportunity for farmers to tell their own stories on their own terms. It also provides the opportunity to challenge and correct misconceptions and misinformation about farming.

## 5. BEST PRACTICES

Based on a review of agricultural literacy initiatives for recreational trails, an aerial analysis of potential sites to highlight in agricultural literacy initiatives, and key informant interviews with community members, we have identified several best practices and recommendations for incorporating agricultural literacy along the G2G trail.

### What content should be included along the G2G trail to enhance agricultural literacy?

- **Information involving the pillars of agricultural literacy.** Each selected site or interaction should each relate to one of the agricultural pillars.
  - Agriculture and the Environment
    - Highlight information on environmental planning on farms or specific achievements in greenhouse gas and/or energy reduction
  - Agriculture and Food, Fibre and Energy
    - Highlight how crops along the G2G trail contribute to food, fibre, and/or energy
  - Agriculture and Animals
    - Highlight how farmers along the G2G trail care for and contribute to the safety of the animals they raise
  - Agriculture and Lifestyle
    - Highlight how an agricultural product from Huron County contributes to a healthy lifestyle
  - Agriculture and Technology
    - Highlight how technology is employed on a farm along the G2G trail
  - Agriculture and The Economy
    - Highlight the contributions of Huron County's agricultural industry to the local and national economy
  
- **Information on safety and respectful use of the G2G trail.** For example,
  - Pesticide, herbicide, and fertilizer application practices and the importance of staying on trail to avoid contact with these chemicals
  - Respecting farms as private property
  - Keeping pets secured and under control
  - Biosecurity in agricultural operations
  - Avoid littering and to instead carry out trash for later disposal
  - To not park where they might block large farm machinery from being able to use roadways

- **Information on the history and culture of agriculture in Huron County**
  - Heritage farm properties
  - The origin of the railway and its importance to agricultural communities

## What teaching methods should be used to enhance agricultural literacy along the G2G trail?

- **Content should be communicated using plain, simple, child-friendly language**
- **Content should be communicated in a way that appeals to multiple learning styles**
  - *Visual* - People who learn best through sight and understand information when presented in a visual way, such as through posters, illustrations, photographs, and charts
  - *Auditory* - People who learn best when the subject matter is presented through sound, such as audio recordings, podcasts, or videos.
  - *Kinesthetic* - People who learn best through experiencing or doing physical, hands-on activities, such as through games, demonstrations, and being physically active.
  - *Reading and writing* - People who learn best through written words. While similar to visual learning, reading and writing learners are drawn to text, long-form articles, definitions, and doing research.
- **Content should be communicated in multiple ways to improve accessibility and inclusivity of learning experiences along the G2G trail**
- **Informational Signage** that incorporates visual elements along with small blocks of text
  - Include information on the pillars of agricultural literacy and about safe and respectful trail use
  - Incorporate both visual elements and text
  - Include a QR code linking viewers to more in-depth information
  - Locate signs at points of interest identified in the aerial review and at popular trail entrance points
- **Self-guided Audio Tours** that allow trail users to listen to informational material on the agricultural landscape surrounding the G2G trail while physically experiencing the environment
  - Include information on the pillars of agricultural literacy and about safe and respectful trail use
  - Consider integrating with video that includes captions to improve accessibility and inclusivity

- Consider including content aimed at different age groups (Ex: an informative podcast vs. a children's story)
- Make links to download audio tours available on the G2G website, the Ontario West Coast website (Huron County's tourism site), and on Huron County's social media pages
- Place QR codes to access and/or download audio tour files on signage near popular trail entrance points

## What opportunities are there for collaboration to enhance agricultural literacy along the G2G trail?

- **Huron County Economic Development.** To integrate agricultural literacy projects along the trail to create an enhanced Buy Local campaign to better inform residents of the significance of agri-business to the County (as recognized in the County's Economic Development Plan).
- **Local Huron 4-H Association.** To collaborate on a local project for agricultural literacy along the G2G trail. Fits within three of the four 4-H Leadership Development Pillars: Sustainable Agriculture and Food Security, the Environment and Healthy Living, and Community Engagement and Communications (4-H Ontario, 2022).

Parallels existing 4-H projects such as the Farm to Table Connections Project - where youth learn the importance of local food, factors influencing where food is grown and produced, and how food gets from producer to consumer and brainstorm ideas for local food businesses - and the Community Involvement Project - where youth identify things in their community to support, build, or change and start community projects

- **Huron County Active Transportation Plan.** To integrate with existing initiatives.

For example, trail guides are already provided to Grade 5 students in Huron County (Caldwell et al., 2014). Ensuring that these guides have information regarding the agricultural system surrounding the G2G trail and trail etiquette for agricultural areas could improve agricultural literacy and respectful trail use by youth.

- **Agriculture in the Classroom and the local school boards** to prepare a lesson plan for a field trip (virtual or in-person) to the G2G trail for students

For example, target grade 5 students to accompany the previous trail guide initiative

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