LAKE HURON
COASTAL CENTRE

COASTAL CONSERVATION YOUTH CORPS

Youth Education Program

ACKNOWLEDGEMENTS

This program would not be possible without the generous funding from our sponsors and program partners. Thank you.

The 2024 Coastal Conservation Youth Corps was made possible with support from:

ENBRIDGE

Bruce Power

Saugeen Shores

The Municipality of Kincardine
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John Hindmarsh Environmental Trust Fund

EXECUTIVE SUMMARY

Wrapping up its 5th season, the Coastal Conservation Youth Corps (CCYC) initiative of the Lake Huron Coastal Centre (LHCC) provides high school aged teens with opportunities to learn about and facilitate community solutions for environmental challenges that impact Lake Huron. Designed as an experiential learning and skill building volunteer opportunity, the program provides an entry point for engagement in shoreline stewardship. Over all five years of the program, 164 youth participants have taken coastal stewardship action while developing their leadership and interpersonal skills to serve coastal communities with nearly 4500 volunteer hours.

OBJECTIVES

The Coastal Conservation Youth Corps is designed to educate, inspire, and engage youth about the threats, stressors and opportunities for resilient communities along the shoreline of Lake Huron, while making positive impacts through restoration and monitoring. The program is intended to provide young people with authentic experiences, as they acquire unique skills for social and environmental action and impact. Fostering a positive group experience and sense of community through supportive relationships, and a respect for diversity are valued objectives. By supporting youth in developing knowledge, communication, technical, interpersonal and leadership skills, they will be better prepared to steward a healthy Lake Huron through future personal choices and community involvement.

"Young people are important stakeholders in the global effort to achieve the Sustainable Development Goals. Their engagement at local, national, and international levels is vital for building resilience and developing effective adaptation policies. Their voices are not just whispers of tomorrow; they are the echoes shaping today's environmental discourse and action. Empowering youth-led initiatives, supporting their voices, and providing them necessary resources will unlock their transformative potential."

- Arvind Kumar (Commission on Environmental, Economic and Social Policy, 2023).

PROGRAM RESOURCES AND PARTNERSHIPS IN 2024

Thanks to funding from corporate sponsors and community organizations, two week-long sessions were held: July 8-12 in Saugeen Shores and July 15-19 in Kincardine. Program continuity was facilitated with the return of Coastal Education Technician, Kerry Kennedy, who coordinated the program with support from Sielo Naranja-Vargas, an alumna of the 2023 CCYC program, who was hired as LHCC's Stewardship Assistant with funding from the Canada Summer Jobs grant program.

Excellent partnerships and support from staff in the municipalities of Saugeen Shores, Kincardine and Goderich helped to facilitate field work on public spaces. Katie Prionis, the summer Waterfront Stewardship Specialist in Saugeen Shores was particularly supportive, frequently joining and facilitating CCYC efforts. The Southampton Rotary Club welcomed program participants when the threat of torrential rain forced the program indoors, enabling participants to continue learning without needing to cancel the day.

In the Town of Kincardine municipal staff assisted in fundraising to bring CCYC to their community and enthusiastically supported program logistics. The Lake Huron Fishing Club provided a tour of their fish hatchery operations located adjacent to the meeting place. Thanks to a strong connection with the Town of Goderich, participants from Kincardine took a day trip to continue their conservation work along the bluffs and dunes in Goderich, where a board member of the John Hindmarsh Environmental Trust Fund welcomed and volunteered alongside the group.

Mixed with the enthusiasm of staff and participants, the support of our community funders and partners is the essential ingredient to CCYC's success.

PROGRAM ENROLLMENT AND PARTICIPATION

Tracking program hours and attendance is important as participants use the Coastal Conservation Youth Corps experience as credit towards the community service component of their high school diplomas. With week-long sessions running Monday to Friday, from 9:00 – 3:00, participants had the potential to earn 30 volunteer hours. Five returning volunteers took on additional responsibilities as Senior Leads, bringing their prior experience, knowledge and enthusiasm to positively enhance the program, these assets contributed to making the program more successful for everyone.

21 youth participated in the Coastal Conservation Youth Corps program in 2024, accumulating 532 program hours (see Table 1). Youth initiative extended beyond the program

An exciting indication of interest in ongoing conservation, youth initiative extended beyond the scope of the program with support from the Stewardship Assistant. Eight youth attended to plan and implement a restoration planting at the Port Elgin Main beach in August. In addition, a couple of participants from Kincardine ignited an idea to design a poster raising awareness of nurdle pollution in the sand and the mindfulness benefit of collecting them.

Table 1. *2024 Coastal Conservation Youth Corps Participation Summary*

Group	2024 Program Dates	Participants	Hours	Staff Leaders
1	July 8-12	12	298	2
2	July 15-19	9	234	2
Total		**21**	**532**	
	Post CCYC			
Port Elgin Project	August 19	8	20	2
Nurdle Poster	July/August	2	10	2*
Total		**10**	**30**	

*staff support hours were less than participants' volunteer hours

PROGRAM FORMAT AND TOPICS

Over the course of five delivery years, the educational materials, options for field work, skill development, and leadership activities have expanded greatly and now contribute to the capacity to vary the program plan for each session and respond flexibly as needed. The schedule varied greatly between the two municipalities due to the options for field work, available meeting locations and transportation. Prioritizing field work and hands on engagement, a concerted effort was made to embed educational components within activities and minimize use of Powerpoint presentations, which had previously been relied on for delivery of the education aspect of the daily program. This adaptability enabled meeting locations without a power source. A summary of the program schedule is outlined in Table 2.

Table 2. *2024 Coastal Conservation Youth Corps Program Outline*

	Session 1 July 8-12 Saugeen Shores		Session 2 July 15-19 Kincardine	
Monday	**North Shore Park** **Beiner Woods**	Welcome. Lake Huron 101 Ecology and geology in Beiner Woods Urban hydrology/healthy headwaters Community Science Water quality - Water Rangers Human impacts on the shoreline/Low impact development practices	**Rotary Park** **Kincardine**	Welcome. Lake Huron 101 Hydrology and ecology walk along Penetangore River Low Impact Development Shoreline visit and introduction to restoration planning
Tuesday	**Eidt's Grove** **157 Saugeen Beach Rd access**	Coastal Processes, Sand dune ecosystems Plant identification SAR protection (Dwarf Lake Iris) Invasive species removal (Blue lyme grass, Scots Pine)	**Rotary Park** **Kincardine**	Coastal Processes Coastal Ecosystems Plant identification Vegetation monitoring Dune grass transplanting Dune Restoration
Wednesday	**Rotary Hall** **Southampton** **(inclement weather)**	Litter & Plastic pollution LID community assessment walk Microplastic analysis	**Rotary Park** **Kincardine**	Community Science- Coast Watchers Lake Huron Fishing Club visit Water quality- Water Rangers Bird monitoring Plant ID, invasive species removal
Thursday	**John Kyles Parkette** **Gobles Grove**	Biodiversity walk Restoration planning and monitoring Dune grass transplanting Restoration planting Removal of invasive species	**Bus to Goderich** **Sunset Park** **Main Beach** **Maitland Woods** **BYOB Zero Waste**	Coastal economies Bluff demonstration planting Invasive species removal Pollinator planting Wetland walk Sustainable consumer practices
Friday	**Long Dock Pavilion** **Southampton** **Mirimichi Bay**	Shoreline cleanup Coastal wetlands Phragmites monitoring & removal Participant feedback and consideration of future action	**Rotary Park** **Kincardine**	Shoreline Cleanup Microplastic analysis Participant feedback and consideration of future action

RESTORATION IMPACT

Thanks to support and collaboration with municipal partners, authentic and meaningful monitoring and restoration work was conducted across a broad range of ecosystems. The variety of field work outlined in Table 3 allowed participants to apply new skills while reinforcing health and safety considerations.

Table 3. *2024 Coastal Conservation Youth Corps Restoration Initiatives*

Date	Location	Activity	linear metres
July 9	Eidt's Grove, Port Elgin	Invasive species removal (Scots Pine, Spotted Knapweed, Blue Lyme grass, Bladder Campion)	150
July 9	Access 157 Saugeen Beach Rd.	Removal of Periwinkle & Coltsfoot near area with Dwarf Lake Iris (special concern SAR)	
July 11	Gobles Grove, Port Elgin	Dune restoration. Transplant of American beach grass. Native grass and shrub species planted as living sand fence	100
July 12	Miramichi Bay, Southampton	Phragmites management. Removal using cut to drown method in water. Monitoring and spading on shore.	60
July 12	Chantry Dunes, Southampton	Shoreline cleanup	500
July 16	Reunion Park, St. Albert St. Beach, Kincardine	Dune Restoration. Transplant of American beach grass. Native grasses planted for diversity	30
July 17	Reunion Park, btw. St. Albert St. and Gordon St., Kincardine	Removal of invasives	35
July 18	Sunset Park, Goderich	Removal of Himalayan Balsam and Garlic Mustard. Planting of deep-rooting native grasses and shrubs on top of the bluff.	20
July 18	Main Beach, Goderich	Removal of White Sweet Clover	30
July 19	Station Beach, Kincardine	Shoreline cleanup	300
August 19	Port Elgin Main Beach	Dune restoration. Transplant of American beach grass.	100
	TOTAL		**1325**

Shoreline Cleanups

By conducting shoreline cleanups, CCYC participants removed harmful litter from the environment. In addition to collecting large and obvious debris, participants sought to collect microplastics in the sand. The discovery of particularly high numbers of nurdles (pre-production plastic pellets) at Station Beach led to a post program project in which a pair of alumnae designed an awareness raising poster which highlighted the mindful benefit of collecting. Beach cleanup stations, recently installed through LHCC, demonstrated that litter pickup can easily be done when visiting the beach in the future.

Vegetation Restoration

Habitat restoration focused on reducing the spread of invasive plant species while enhancing biodiversity through planting native herbaceous plants and shrubs with preference to locally sourced plant material.

Planting in shoreline situations aids in the controlled deposition of sand, minimizing wind-borne sand loss and retaining it in the sand cycle of nearshore waters. Table 3 lists the habitat restoration sites tended in 2024.

Timing is an issue affecting restoration success as the heat and dry conditions at the height of summer are not ideal for plant survivability. As an example, plantings on the low, wet portion of Gobles Grove beach survived through the season, while those higher up, in loose sand showed higher signs of stress and mortality. For plantings on

slopes, low water retention may have led to plant stress, despite using a terracing technique. Recognizing the need for a vegetated dune buffer at Port Elgin's Main Beach, an additional post-program restoration event was held in mid-August.

New to the program in 2024 was the introduction of plant propagation using two methods for starting stem cuttings of Bearberry (*Arctostaphylos uva-ursi*). Although unable to source this shrub before the 2024 program, hopefully this effort will lead to some CCYC grown plant material for 2025.

Gobles Grove Test Plot Planting

With recent research on the genetic subspecies variations of American Beachgrass and questions raised on the growth patterns of different subspecies and resulting sand deposit, restoration planning with participants at Gobles Grove in Port Elgin led to the planting of informal test plots using seedlings grown from Inverhuron sourced seeds, a location known to have the Champlain subspecies of *Calamagrostis (Ammophila) breviligulata*. This is the third year of restoration adjacent to a reconstructed roadway eroded by high water levels in 2020. Map 1 and Table 4 outline the varying vegetation decisions made in this location.

Map 1. *Approximate outline of test plots at Gobles Grove, Port Elgin*

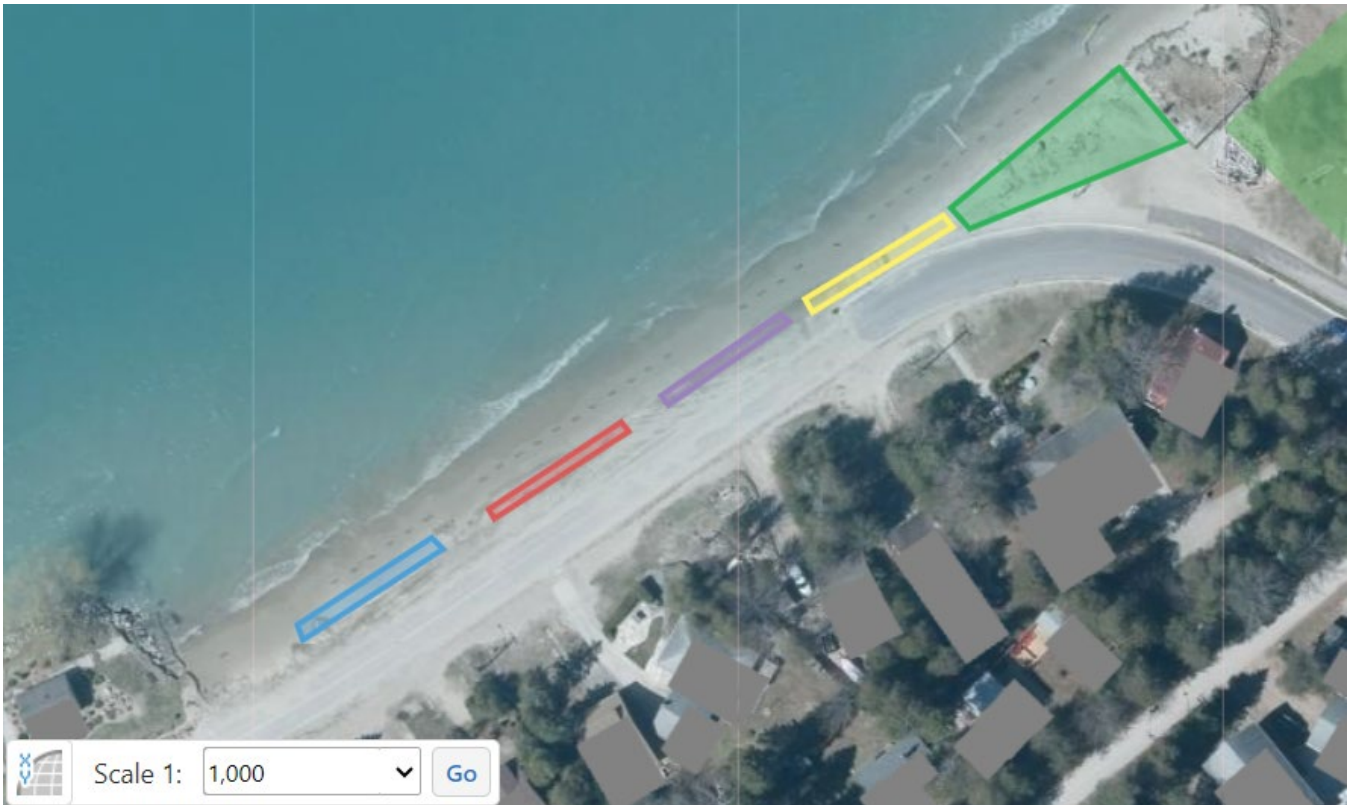


Table 4. *2024 Test Plot summary at Gobles Grove, Port Elgin*

Map section	Initial planting	Action in 2024	Other species planted in 2024
Green	2022	invasive removal, potted plants along northern edge	Sand Cherry, Smooth Wild Rose, Creeping Juniper, Wild lupine, Ninebark
Yellow	2022 fall	Invasive removal	
Purple	2023	invasive removal only	
Red	2023	removal of 2023 American beachgrass, replacement with Inverhuron seedlings	Canada Wild Rye
Blue	2024	New planting of Inverhuron seedlings	Canada Wild Rye

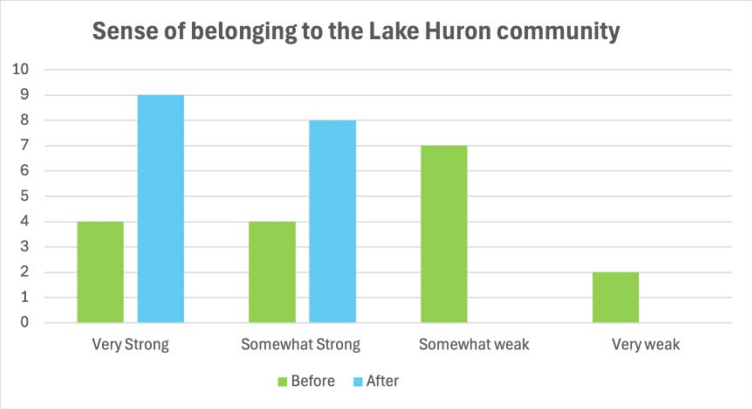
EVALUATION

On the final afternoon of each session, participants completed surveys to provide feedback on their experience, growth and recommendations for improvement. The survey format for 2024, is consistent with the 2023 format. Participants also received questions from a local reporter to answer, which provided additional testimonial responses.

Indicative of the positive experience youth had in the 2024 program, 100% of survey respondents would recommend this program to others (Graph 1).

Graph 1

Graph 2

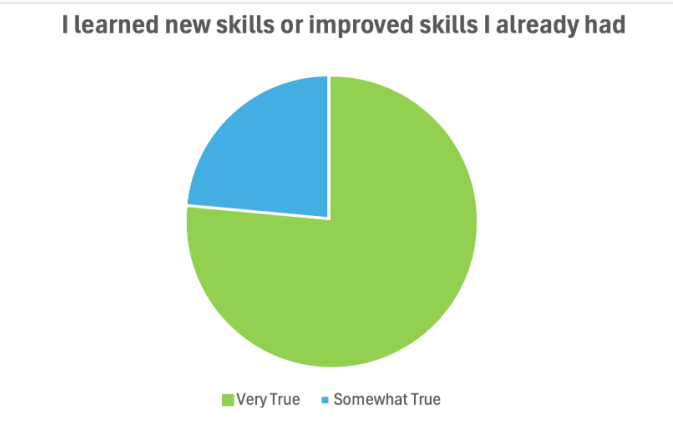


An increase in the participants' sense of belonging to the Lake Huron community is evident from the beginning to the end of the program (Graph 2). Except for the participants who already ranked themselves as very strong at the beginning of the program, every participant indicated a greater sense of belonging at the end of the program.

> *"I feel more connected to the beaches and coastal ecosystems, I also feel more passionate about protecting and sharing about these dunes. I see these beaches and water in a different way now." (CCYC participant 2024)*

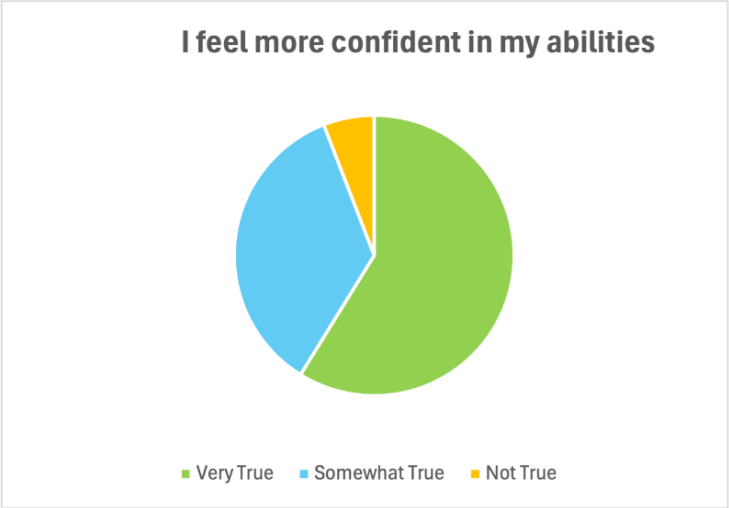
Responses to a segment of questions related to personal development are depicted in Graphs 3-6. The results indicate skill and knowledge development along with confidence and working as part of a team.

Graph 3



Graph 4

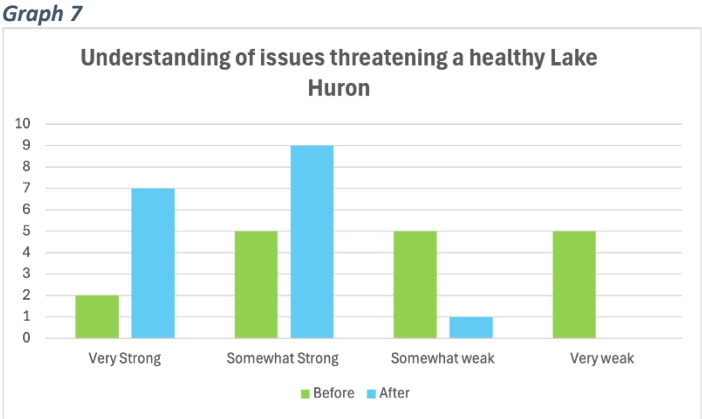
Graph 5



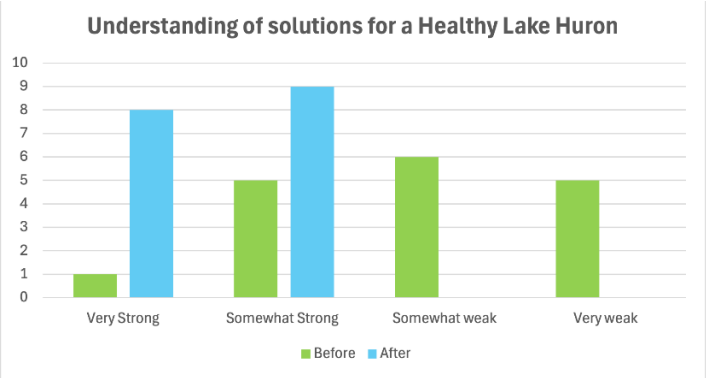
Graph 6

The final graphs reflecting the survey results demonstrate an overall increase in understanding of the issues threatening a healthy Lake Huron (Graph 7) and the solutions (Graph 8) to these challenges.

Graph 7



Graph 8



ON THE HORIZON

In anticipation of continuing the CCYC program in 2025, it will be imperative to fundraise early to secure a base amount adequate to operate a minimum of two weeks and then to leverage for supplemental funding and an expanded program as the season approaches. Sponsorships, grant opportunities, individual donors and support from community organizations will be sought. Since Goderich wasn't used as a program site in 2024, it would be beneficial to return to the community next year. Financial resources could also be considered for supporting youth initiatives beyond the structured program.

Several interesting suggestions worth considering for the future were made by CCYC participants in their exit surveys. One suggestion is to expand the program age to include adults, having a separate program for adults, or inviting parents for a day. Other suggestions included more community and indigenous involvement, as well as broader promotion.

Bringing together young community members with mentors to learn about and support conservation is well worth the investment and will pay dividends as a new generation of coastal decision makers and stewards recognize and take action to support shoreline resilience for long-term community health.

Kincardine July 15-19

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