



GREEN GUARDIANS

Summer Youth Training Series Program Report September 2024

Prepared by:
Kyla Muhammad
Will County Program Director
The Conservation Foundation

GREEN GUARDIANS

Summary

In the summer of 2024, The Conservation Foundation, Heart Haven OutReach (H2O), and Will County Community Development Division's We WILL Grow Community Garden Program (WWGCGP) piloted the Green Guardians program which provided 20 Romeoville & Bolingbrook area high school students with 10 contact hours of training and education about gardening, environmental restoration, and environmental career pathways, across five 2-hour workshops and an opportunity to participate in an outdoor recreational field trip. For each weekly workshop, participants were provided with door-to-door transportation from their homes to workshops held at McDonald Farm in Naperville, O'Hara Woods Nature Preserve in Romeoville, and Morton Arboretum in Lisle. All 20 participants successfully completed the program and received a certificate of completion and a \$200 cash stipend for attending at least 4 out of 5 workshops.

Overall, 100% of participants were satisfied with the program and 95% said that they'd definitely recommend the program to a friend. Participants reported that the cash stipend and exploratory and hands-on, interactive parts of the program were the aspects they most enjoyed. The program inspired participants to be more interested in volunteering to help the environment with 70% of participants reporting they are now more interested in doing environmental stewardship activities like tree plantings, restoration work, environmentally focused community science projects, etc. The program also provided clarity for some participants as to whether they'd like to explore a green career field or not with some participants' strong interest being reinforced by the program and other participants' initial moderate interest shifting to a lower career interest after program completion.



Background + Objectives

In 2023, The Conservation Foundation completed listening sessions with a variety of organizations serving Bolingbrook area youth and repeatedly heard from stakeholders that the community was concerned about supporting the social-emotional and mental health needs of teenagers. Per the CDC, in 2021, more than 4 in 10 (42%) high school students felt persistently sad or hopeless and nearly one-third (29%) experienced poor mental health and that these feelings were found to be more common among LGBTQ+ students, female students, and students across racial and ethnic groups, especially among Black teens. Additionally, stakeholders were concerned about social isolation and disconnection from the outdoors because of a lack of access, high electronics and social media use, COVID-19, and other factors. Despite these challenges, community members noted that teens have a pronounced interest in climate change impacts, water conservation, growing culturally relevant foods, and environmental stewardship, but do not necessarily have an educational or exploratory outlet to explore these interests and concerns. Research studies have also shown that learning in nature can support social-emotional wellbeing including improved relationship skills and a reduction in stress, anger, and aggression.

A priority of the WWGCGP was to provide youth from low-income households in Bolingbrook & Romeoville within DuPage Township with workforce development training opportunities related to sustainable agriculture, environmental sustainability, and healthy growing practices to help improve local capacity and interest in these fields. Per the 2022 Will County Community Health Assessment, 62% of Bolingbrook High School students and 61% of Romeoville High School students are from low-income households vs. the Will County high school average of 23%. Also, 78.6% of students at both high schools are non-white vs. 19.8% which is the Will County high school average. Therefore, recruiting program participants from these high schools was a priority.

A focus of Heart Haven OutReach's 2024 summer programming was "Find Your Spark," which provided teens with different opportunities to uncover and explore new interests and passions. The mission of H2O is "to transform the lives of (at risk) struggling teens through caring relationships and programs that support healthy development on an emotional, mental, physical, and spiritual level." Over the last year as H2O has collaborated with The Conservation Foundation, it was clear that the teens had an interest in the outdoors and the positive impact it could have on their overall development. As a community partner of the Valley View Community Unit School District 365U, Heart Haven OutReach has daily contact with teens in the Bolingbrook & Romeoville area, making H2O well positioned to recruit and spread the word about this new program.



Program Objectives

With the goal of combining the collective priorities of the three organizations while also aiming to address the needs and interests of teens, the main objectives of this training series were to match Bolingbrook and Romeoville area high school youth's environmental interest with skill development and learning opportunities and to foster connections among participants and the environment. Upon successful completion of the workshop series, the aim was for participants to have substantially increased their a) knowledge of possible green career pathways, b) aptitude for fundamental gardening and restoration skills, and c) interest in environmental stewardship and/or pursuit of additional environmental education or employment opportunities d) and to remove socioeconomic barriers to program participation like limited access to transportation, income, and food.



Program Structure

Green Guardians is a program created and administered by The Conservation Foundation, Heart Haven OutReach, and the WWGCGP that provided 20 Romeoville & Bolingbrook area high school entering 9th to exiting 12th graders with 10 contact hours of training and education about gardening, environmental restoration, and environmental career pathways, across five 2-hour workshop training sessions and the opportunity to participate in an outdoor recreational field trip in the summer of 2024. Workshops were held weekly from May 30th to June 27th and took place at McDonald Farm in Naperville, O'Hara Woods Nature Preserve in Romeoville, and Morton Arboretum in Lisle. The field trip took place at The Forge Adventure Park in Lemont on August 4th.

The Conservation Foundation primarily developed the program structure, coordinated location logistics, and provided the workshop instruction, Heart Haven OutReach primarily provided door-to-door transportation for all participants, handled the main marketing of the program and registration, and participant and guardian communications, and the WWGCGP primarily served as a program catalyst, provided funding to support the program, and consulted on program structure.

The Green Guardians program was designed to address and overcome potential barriers to program participation by teens in low-income households where limited access to transportation, income, and food are more likely socioeconomic factors at play. Participants were picked up and dropped off at their homes and transported to workshop locations, cash stipends were provided to encourage participation in this program versus pursuit of other income opportunities, snacks and beverages were provided at each session to help promote participant focus and engagement, and the number of sessions and duration of sessions were designed to balance meaningful exposure and skill development while not requiring an extended time commitment that could seem daunting for teens that do not currently spend much time in outdoor spaces. Additionally, gardening enrichment materials and the outdoor recreational field trip were provided to participants, so that costs would not inhibit their ability to explore gardening practices at home or to participate in outdoor recreation activities that might otherwise be inaccessible.



Program Content

Sustainable Gardening + Organic Agriculture

During the workshop sessions 1 & 2 at McDonald Farm, participants learned fundamental gardening skills through working in various types of gardens including a raised bed, backyard-style garden, pollinator gardens, and permaculture/edible forest gardens. Participants learned about different garden types, discussed the importance of native plant gardens, soil health, compost systems, prairie habitats, ecosystems, and participated in hands-on learning of basic gardening maintenance skills.

A sampling of some of the activities the participants experienced were:

- Touring the farm, greenhouses, and wash-pack station and seeing the farm equipment
- Exploring sustainability features of the farm like our water collection, green roof, wind mill, swale system, and hydro panel
- Learning about different types of gardens and exploring our demonstration gardens (rain garden, pollinator garden, sensory garden, children's garden, edible forest garden/food forest, raised bed food gardens) looking for pollinators and learning about plant identification
- Using their senses in the sensory garden to identify different plants and sample some edible herbs
- Harvesting herbs and learning their different uses
- Trying out different weeding, digging, and planting tools to determine the best tools for different types of garden maintenance and activities
- Weeding a garden bed to prep the space and learning about the importance of removing the entire root system, then planting squash in that bed in the children's garden
- Learning about the importance of composting for our gardens and farms, discussing how to create it and different types of composting systems, and adding plant material and food scraps to the compost pile.
- Taking home a tomato plant to care for for hands-on learning at home

Environmental Restoration + Ecology

During workshop sessions 3 & 4 at O'Hara Woods Nature Preserve, participants learned the fundamentals of ecological restoration of a woodland area and safety basics of using restoration tools and equipment. The workshops covered an overview of land and ecological restoration, Illinois nature preserves, elements of healthy aquatic ecosystems, restoring the balance of ecosystems, macroinvertebrate identification and water quality, ways to identify and assess the outcomes of restoration work, impacts of invasive species, and recreational uses of open space and related careers.

A sampling of some of the activities the participants experienced were:

- Cutting the flowering seedheads off of exotic and invasive reed canary grass to restrict germination of new plants. Participants used clippers and buckets to remove the seedheads off several patches.
- Having a discussion about the importance of aquatic life and water quality
- Doing a food web activity using string and ropes to show connections between plants and animals, represented on cards given to each person.
- Using nets and buckets, searching for aquatic insects and animals along the shores of Lake Strini, located just eastward of O'Hara Woods.
- Using a macroinvertebrate index and aquatic animals found to determine that the water quality at Lake Strini was fair to good.
- Doing a stewardship clean up activity using buckets and trash pickers to remove trash from around the perimeter of Lake Strini.



Program Content (Cont'd)

Green Career Pathways

During workshop 5, participants had an opportunity to engage in experiential learning activities facilitated by Chicago Region Tree Initiative staff at Morton Arboretum and to talk and listen to a panel of environmental professionals across different careers to gain a deeper understanding of various green career pathways. Participants learned about different environmental career tracks from industry experts and received tips about ways to transition into those fields. Panelists included a certified arborist from the Chicago Region Trees Initiative and staff from Illinois Dept. of Natural Resources, Chicago Botanic Garden, the Resource Recovery & Energy Division of Will County Land Use, College of DuPage, The Conservation Foundation, and UrbanHydro Engineering, Inc.

Field Trip + Celebration

The three hour field trip in August at The Forge Adventure Park in Lemont served as both an opportunity for participants to engage in various outdoor recreational activities including archery, kayaking, canoeing, and orienteering, and to celebrate their successful completion of the program.

Materials

As part of the program, participants received tomato plants and 5-gallon grow bags, garden sleeves, a trowel, a watering can, kneeling pad, gardening gloves, a water bottle or cap, and Green Guardians reusable tote bags to take and use at home.

Program Incentives

Each program participant that attended at least 4 out of 5 of the workshop series sessions received a certificate of completion and a \$200 cash stipend.



Cash Stipends

Per the U.S. Census' 2022 American Community Survey, 10.5% of Bolingbrook residents and 8.4% of Romeoville residents under age 18 are living in poverty and given this plus the fact that some teens may have limited opportunities to earn money due to transportation and other socioeconomic limitations or household obligations, offering a \$200 stipend for participation in the program seemed to serve not only as a significant incentive for program participation and completion, but also as an acknowledgement that the skills that the participants are learning and providing are of economic value.

Stipends were paid in cash to afford participants the maximum flexibility in how they'd like to use the funds and to help ensure there are no barriers for participants being able to access the funds.

Certificates of Completion

Participants received a certificate of completion acknowledging their successful completion of the program and may list this program experience when applying for future opportunities. Additionally, graduates of this program are eligible to apply for the Paul Pirotti Memorial Scholarship and The Conservation Foundation Environmental Scholarship if they meet the other eligibility requirements. For participants who received certificates, WWGCCP has offered scholarships and H2O has offered transportation to attend the 2025 "Wild Things" conference for further exploration of environmental interests.

Program Assessment

All 20 of the program participants were surveyed at the start of the program and at the conclusion of the program to assess their prior experience with and exposure to nature and the outdoors and to assess growth in interest in environmental stewardship and/or pursuit of additional environmental education or employment opportunities and skills development.

Program Outcomes

Cash stipends were an important part of the program for participants. 100% of participants completed the program and received the cash stipends and 80% said that earning the stipends was an aspect they most enjoyed. This information confirms that offering the cash stipends was a key incentive to facilitate successful program completion of participants. Part of the Heart Haven OutReach philosophy is holding teens to high expectations because of the belief they are more than capable to meet and even surpass those expectations, which can help lead them to live even more successful and meaningful lives. Green Guardians laid clear expectations, holding teens accountable and because teens were given the chance to earn \$200, they met those expectations. In order to do that, the teens needed to be reliable, consistent and committed to attending and participating in the sessions. This taught them work ethic and the rewards that can follow. Successfully completing Green Guardians helped build self confidence, giving participants courage to continue to step into future opportunities that may have felt out of reach previously.

Participants were very satisfied with their overall experience and would recommend the program to others. 100% of participants were satisfied with the program of which 65% were highly satisfied and 95% said that they would recommend the program to a friend with the remaining 5% said they'd possibly recommend it. Several program participants added in their survey comments that they loved the program and thought it was a fun experience.

The program inspired participants to be more interested in volunteering to help the environment. 70% of participants said they are now more interested in volunteering for an environmental stewardship activity like tree plantings, restoration work, environmentally focused community science projects, etc. than before they started the program. Prior to the program, 50% of participants had never volunteered for an environmental stewardship activity and 25% weren't sure if they ever had. Additionally, after the program, participants overall reported a stronger interest in caring for the environment and sustainability.

Participants most enjoyed exploratory and hands-on, interactive parts of the program. Aspects of the program that participants said they most enjoyed were getting to travel to different outdoor locations (75%), having hands-on opportunities to learn a broad range of skills (65%), participating in the outdoor recreational field trip (55%), and learning gardening and growing skills (50%). Some participants also added survey comments that they wanted more hands-on activities, interactive elements, and field trips and minimal passive learning.



Program Outcomes

The emergence and peak of 17-year cicadas during the program period and extended outdoor time of the program likely resulted in a temporary decrease of other outside time spent outside. During the program period, participants reported that the frequency of time spent in natural areas like parks, forest preserves, and gardens went down by 35% from either frequently (4+ times per month) or sometimes (2-3 times per month) to occasionally or rarely (1 or less times per month). Participants also reported that time recreating or relaxing outside during the program went down by 25% from either frequently or sometimes to occasionally or rarely. During workshop 3, which took place in the wooded area of O'Hara Woods Nature Preserve, cicadas were at their peak and were constantly landing on people and flying in front of participants. Participants had such an adverse reaction to the cicadas that the program content for workshop 4 at the same location was revised to keep participants out of the wooded areas. Furthermore, with participants spending two hours each week outside for the whole month of June during peak summer heat as part of the program, participants likely were trying to minimize being outside more than was necessary. It's expected that these trends identified during the program period are likely temporary, especially given the overall participant satisfaction with the program and interest in doing more environmental-based volunteering in the future.

The program helped provide clarity for participants as to whether they'd like to explore a green career field or not. Prior to starting the program, 15% of participants expressed a low interest, 75% expressed a moderate interest, and 10% expressed a high interest in pursuing an environmental or agricultural-related career. However, after the program, 35% of participants expressed a low interest, 55% expressed a moderate interest, and 10% expressed a high interest in pursuing an environmental or agricultural-related career. For the participants that already had a strong interest in green careers, the program seems to have reinforced this interest and provided confirmation to continue exploring green career pathways. However, for participants that had a moderate interest at the beginning, many of them seemed to get clarity from participating in the program that they do not likely want to work in a green career field, but rather support environmental efforts from a volunteering capacity. Having the opportunity to engage in this hands-on learning for participants to better understand different green career fields, roles, and responsibilities can be invaluable when considering post-secondary educational options and reducing time and money spent on careers that are not ultimately the right fit for students' goals and interests.

To further support the participants that still have a moderate to strong interest in exploring green careers, Heart Haven Outreach and WWGCGP are exploring additional opportunities to provide support for participants to attend upcoming local environmental conferences and workshops.

