INNISDALE'S ECO CONTRIBUTIONS LIST

INNISDALE
DISCENDO CRESCIT
SECONDARY SCHOOL

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Introduction

Innisdale Secondary School was established in 1978, and since then, the school has conducted various environmental-based initiatives. By educating students, parents, and even teachers, they learn how they impact the environment, and further teach them how they can improve their actions that will ultimately lead to a greener future for planet Earth. Furthermore, Innisdale is a school consisting of more than a thousand students, and getting students more involved in environmental initiatives will lead to a chain of reactions of environmentally friendly habits that can ultimately lead to a more sustainable Earth. Furthermore, engaging our school in initiatives to create a safer, more sustainable Earth, will promote our school. When everyone searches up Innisdale Secondary School, it will show our achievements that were done to make our school more environmentally friendly, and can encourage them, and other schools to lead in the same direction. By promoting our ecological habits, families will choose to send their children to Innisdale as this will demonstrate the education taught at Innisdale and how it can be applied to everyday life.

Innisdale Secondary School has reached platinum certification for the past four years in a row with Eco-Schools. Eco-Schools is a program for all schools to get certified by performing initiatives that revolve around making schools more environmentally friendly. Schools get awards based on what type of actions they do. For example, for this project, which is to create a new *Innisdale's Eco Contributions List*, this would fall under the *Environmental Literacy* plan, and Innisdale would get ten points based on this action. This ISU is meant to educate teachers, students, and the public about how Innisdale makes its community environmentally friendly and gives suggestions about what could be done at other schools and people's homes to improve their environmental impact. Furthermore, Innisdale integrates environmental literacy through its courses including Science, Environmental Science, Geography, and others. Environmental Science includes environmental literacy, but this course examines each student in the class's impacts by making them conduct an Eco self and an ISU, where individuals take on an initiative at Innisdale and carry it out. In Environmental Science, the class discusses the three main factors of environmental science which include: environmental stewardship, sustainability, and biodiversity. This course encourages youth to improve their environmental stewardship by performing initiatives at Innisdale as their ISUs, and they can research and discover the importance and the benefits of their environmental initiatives, which will make them realize how these initiatives can lead to a more sustainable future. Students at Innisdale are the reason Innisdale has been able to reach platinum-level certification from Eco-Schools for the past four years. Much recognition should also be shown to the teachers who have helped since Innisdale's establishment and helped the students conduct these programs and integrate them into everyday life at Innisdale.

Our world faces many environmental issues, including loss of biodiversity, air pollution, water pollution, ozone depletion, greenhouse gas emissions, deforestation, and more. Our job as Earth inhabitants is to do as much as possible to create a more sustainable Earth, and each step towards helping the environment counts. Some people may be using GOOS paper, which will help reduce the number of trees cut down, maybe people are choosing to carpool, bike or walk places to reduce their carbon footprint, or maybe people do not buy plastic water bottles to

prevent water pollution and reduce the amount of plastic on Earth. Even though one person cannot save the environment by themselves, if everyone on Earth does more, then Earth will be able to continue to thrive and become a more sustainable planet.

Outdoor Classroom and Mural

Location: Northwest of school.

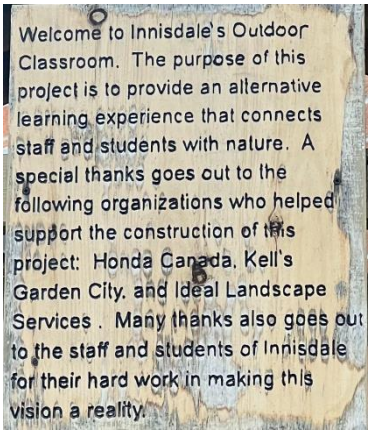
Date Started: Since 2017

Description:

The Outdoor Classroom is a classroom that is on the property of Innisdale, near the basketball courts and water tank. This class can accommodate around 35 students and contains a whiteboard for teachers to use for their lessons. There is also a shed for storing supplies for the Outdoor Classroom including the umbrellas for the tables. This Outdoor Classroom is important for students to get outside more and enjoy the environment that surrounds them. Furthermore, it develops an understanding of the natural environment and makes people grasp the concept of why our environment is important. Not only is the Outdoor Classroom beneficial for learning, but being outside has proven to decrease people's negative thoughts and stress. When we are outside in nature, our serotonin levels increase, which increases our happiness.

This area was constructed by the Science and Technology departments, but many of the materials and funding for this project were supplied by local organizations including Honda Canada, Kell's Garden City, and Ideal Landscape Services, as well as help from other initiatives taken out at Innisdale. Teachers are supposed to book the Outdoor Classroom on an online schedule like any school-wide resource like technology, and it must be booked for any part of the day including before and after school. The outdoor classroom also contains pollinator gardens with bird and bat boxes nearby.

This project is one of the Eco-Club's most prized developments for Innisdale. Since the creation of the Outdoor Classroom, a mural has been added for people to further enjoy the scenery and acknowledge the land that Innisdale is situated. With the help of Indigenous communities and departments at Innisdale, students were able to create a mural that is 8ft by 32ft. After a rain barrel sale in 2019, Innisdale was to fund the mural project, but COVID-19 happened, so the project was not fully finished until 2022. Furthermore, the mural is seen by the greater community and the main message of this mural is to love and respect the Indigenous land Innisdale is situated on. The Indigenous medicine wheel is represented in the mural through the centre, found in Mother Nature.



Whiteboard

Indigenous Mural

Contributors:

Native Tree and Shrub Planting

Location: Everywhere, particularly in the south and near the Outdoor Classroom.

Date Started: Spring 2017

Description:

The Eco-Club has planted over 150 native plants around the school to enhance biodiversity and help recycle carbon dioxide, produce oxygen, prevent soil erosion, and lower stormwater run-off. White Spruce, Ninebark and Sumac are some of the species planted. Regular mulch is added to help control weeds, prevent damage from lawnmowers and help hold moisture during periods of drought.

As the natural mulch decomposes over time, it also adds nutrients to the soil for the plants to absorb. Over the years, planting trees and shrubs has been one of the most positive environmental impacts Innisdale has had and gives many benefits. This was one of the first initiatives Innisdale's Eco-Club has done, and it led to the Eco-Club receiving a *Soil Conservation Award* from the Lake Simcoe Region Conservation Authority in 2018. Another name for the *Soil Conservation Award* is the *Healthy Land Award*. The *Healthy Land Award* is an award that is given to individuals, groups, and schools that perform actions to conserve the natural environmental characteristics of the local area, "including woodlands, wetlands, and their functions; wildlife habitat; biodiversity and ecological restoration; soil erosion; and trail development" (*Healthy Land Award*, n.d.).

Another part of this action is to trim and prune the already planted trees and shrubs. It is important to trim them often because the trees and shrubs can grow more. If they do not get trimmed, then the branches and leaves on the trees will die, and the dying parts will grow to the roots. However, if trees and shrubs get trimmed regularly, they will be able to grow stronger and live longer. It is important to trim them still often, even if they are not dying and the branches are long because when trees have longer branched, they will require more nutrients from the soil, which will not always be possible, especially if the soil has been damaged due to pollution or pesticides and fertilizers. Furthermore, each year at Innisdale Secondary School, the science classes plant more native trees on the property, and in Lackies Bush too. This allows the local community to further appreciate the variety of different native plants and trees, as well as appreciate the scenery.

Before



Now

Bird and Bat Boxes

Location: Fence that surrounds Innisdale.

Date Started: Fall 2018

Description:

Bird and bat boxes provide safe habitats for many species of birds and bats. According to tourismbarrie.com, Barrie is home to many species of birds including, “Warblers, Vireos, Sparrows, Kingbirds, Flickers, Flycatchers and Baltimore Orioles” (*Birding in Barrie*, n.d.). Some bat species that reside in Ontario include Little Brown Myotis,’ Big Brown Bats, Eastern Red Bats, Hoary Bats, and Silver-Haired Bats. Over the past few years, the birds and bat populations have decreased, and the main cause is habitat loss. The world's economy requires materials which birds and bats use for their home, so when we cut down trees for lumber and timber, we deprive these species of having a home. Furthermore, there is a disease called White-Nose Fungus that affects bats in hibernation, which causes malnutrition and eventually death.

Innisdale decided to create bird and bat boxes because they provide safe, secure, and stress-free habitats for these species. Both bird and bat populations are essential, and we need to improve their population size because they contribute to the eradication of the pests that destroy our crops and help with pollination. Innisdale’s bird and bat boxes have been effectively utilized since they were built, and Innisdale continues to see a variety of birds that use these structures.

Bird Feeding System

Location: Near the Outdoor Classroom, along the fence.

Date Started: Spring 2018

Description:

By installing a bird feeding system, Innisdale provides bird species with a food source, which overall improves their health. During winters, it is challenging for birds to find food sources because other animals have migrated elsewhere, there are not as many insects, berries are not ripe, and more. By providing food sources for birds, Innisdale helps decrease the chance of birds dying from malnutrition and increase bird population, which helps maintain a balanced ecosystem.

Furthermore, it helps people to connect with nature by attracting more wildlife to a communal area, safe for both birds and humans. Having the opportunity to see wildlife creates a deeper understanding of nature for humans, and to further connect them to other species. At Innisdale, birds including Chickadees, Cardinals, Robins, Blue Jays, and others have been spotted near the Outdoor Classroom.

Raised-Bed Vegetable Gardens

Location: South of the school, in between the *Fruit Tree Planting* initiative and *Outdoor Labyrinth* initiative.

Date Started: Fall 2017

Date Completed: Spring 2018

Description:

In 2018, Innisdale's Eco-Club created six sustainable raised-bed vegetable gardens to grow food on the school property. Innisdale only plants non-GMO, and chemical-free in the organic gardens. Innisdale uses the food grown in these vegetable gardens for the Food and Nutrition, and Hospitality classes. Furthermore, since so many vegetables are grown, Innisdale often donates to the Barrie Food Bank. Also, local community members often take some vegetables from the gardens when they are on a walk by themselves, with friends and/or family, and their pets.

This initiative first began in the Environmental Science room, planting plants indoors, but has since been extremely successful, and has expanded outside. This is considered one of the most engaging projects Eco-Club has conducted over the years. Many departments at Innisdale were a part of this major project. Eco-Club first developed the idea and found funding, and since its ever-growing success, the Construction classes built the raised-bed gardens, the science department planted the seeds, and the Hospitality and Tourism, and Food and Nutrition classes have effectively utilized the products.

There are several benefits of creating your own vegetable garden. First, it reduces the amount of fertilizers used. While fertilizers help with plant growth, they contribute to environmental issues including eutrophication. When it rains, fertilizers become runoff and they enter the nearby waterbody. This causes more algae to grow on the water, which prevents sunlight from hitting the water, and fish die because of not getting sunlight or oxygen, the algae also function as a barrier for new oxygen to enter. This also contributes to water pollution. By creating organic vegetable gardens, we avoid eutrophication. Furthermore, vegetable gardens allow people to interact with nature and ensure they are doing their part to maintain a healthy environment. Creating your own garden further creates a new hobby for people to enjoy when not working or hanging out with family and friends. This can also persuade and encourage others to become a horticulturalist or another related job in the future including botanists, florists, farmers, etc. There are several other benefits of creating and maintaining a garden, and Innisdale helps improve the local environment by effectively utilizing its six organic raised-bed vegetable gardens.


Responsibility

Fruit Tree Planting

Location: Next to the *Native Tree and Shrub Planting* initiative, beside the school.

Date Started: Fall 2018

Description:

Innisdale Secondary School partnered with *Barrie's Fruit Share Program* to secure four Native fruit trees to plant. Two pear trees and two apple trees were planted by students taking the Environmental Science class. This fruit is utilized throughout the school, and like the extra vegetables from the *Raised-Bed Vegetable Gardens* initiative, a portion is donated to the Barrie Food Bank.

Not only do the fruit trees provide Innisdale with food, but they also reduce carbon dioxide emissions. Like a regular tree, through the process of photosynthesis, the trees absorb the carbon dioxide from the outside, convert it into clean oxygen and release it back out the tree. More trees need to be planted so carbon emissions are reduced. Without trees, humans will cease to exist because humans cannot breathe in the same, dirty, and contaminated air. People would become extremely ill and die from causes such as lung disease, pneumonia, and other illnesses.

Before

Now

No-Mow Zones

Location:

No-Mow Zone #1: Northwest of the Outdoor Classroom.
No-Mow Zone #2: Behind the portables.

Date Created:

No-Mow Zone #1: April 2017
No-Mow Zone #2: May 2017

Description:

To create a thriving ecosystem, and to protect local wildlife, Innisdale began the *No-Mow Zones* initiative. There is no mowing within these areas, and the grass and other plants continue to grow. Rarely, do the plants get trimmed to preserve the plant, meaning the dead, and rotting parts of the plant get trimmed to avoid the decay spreading to the roots, and killing the plant entirely.

The no-mow zones increase biodiversity and create a healthy ecosystem. Often, the science classes visit these areas during their biology unit to provide an example of sustainability, biodiversity, and stewardship. Innisdale began seeing growth in Native Wildflowers, grasses, and shrubs after one complete cycle of seasons (one year). These plants attracted a variety of birds, bees, butterflies, and other insects. Garter snakes have also been spotted in the no-mow zones. This initiative was able to easily begin because Innisdale simply stopped cutting designated areas on the property, and the organisms were able to grow and thrive.

No-Mow Zone #1



No-Mow Zone #2

Rain Barrel Water Collection and Recycling Program

Location: South portables.

Date Began: Spring 2018

Description:

Innisdale's Eco-Club and Science classes install and dismantle rain barrels to recycle rainwater to be used in the gardens and for the trees. The rain barrels collect water when it precipitates, and they are strategically placed next to the portables on the school property to collect as much water as possible.

This is beneficial to the environment because rainwater is free and puts less dependence on Municipal water facilities. The water is generally safer to drink than processed water because there would not be any possible chemicals like chlorine and lead found in rainwater. Furthermore, rain barrels reduce stormwater runoff, which causes significant environmental issues such as eutrophication, and water pollution for local aquatic watersheds. When it precipitates, the rainwater becomes runoff and picks up pollutants on the ground including litter, road salt, dust, cigarette butts, etc. and forces them into the nearby waterbody. Innisdale's rain barrels provide gallons of recycled water for the local environment, and they promote sustainability, stewardship, and renewable resources.

A request has been sent to buy more rain barrels and for a new collection system. Innisdale has gotten rid of some of its portables, but on the ones that are remaining, Eco-Club and the Environmental Science class hope to create a more efficient collection system. For this new collection system, we want to add an eavestrough that goes all the way around the portable at the top, so that all the water can be collected. All the rainwater in the eavestrough would travel down to the rain barrel, ensuring the most amount of water can be collected.

Plant-Based Composting (Organics Recycling Centre)

Location: Cafeteria, Food and Nutrition, and Hospitality and Tourism classes.

Date Began: Fall 2018

Description:

The City of Barrie does not collect organics as part of their waste collection strategy, so Innisdale has decided to take on the responsibility of ensuring organics are properly disposed of. Contaminating landfills with organics is terrible for the environment because food such as apples can take almost a decade to break down. Innisdale partnered with Home Depot to acquire a couple of large spinning composters. In the composters, Innisdale collects food waste from the Food and Nutrition, and Hospitality classes to create plant-based and organic compost for the raised-bed vegetable gardens. Certain waste is not composed in the spinning composters including, dairy, meat, pasta, and bread. In the past, thousands of pounds of waste have been successfully reused and have been prevented from ending up in the local landfill. Compost is extremely important to the environment because it enriches the soil, which allows more organisms to live and grow.

There are five compost bins that a student in the Environmental Science class is responsible for each year. Three are in the cafeteria, one is in the Hospitality and Tourism class, and the other is in room 232, which is the Environmental Science class. This student takes out each bin every Wednesday so that it can be collected by the compost trucks every Thursday morning.

Litter Reduction Centre

Location: Bus area (East of the school).

Date Began: Winter 2018

Description:

In the joint parking lot between Innisdale Secondary School and the Allendale Recreation Centre, there have always been high quantities of litter. Often, what is seen is that a few weeks into the new school year, Innisdale's parking lot goes from clean to dirty fast. In 2018, the Global Perspectives program and the Eco-Club decided to pick up the garbage, and as a result, it took six big bags of garbage only two weeks into the new school year. Because of this, the Environmental Science class decided to secure two large recycling and waste bins with a donation from Busch Systems in Barrie. The two bins were positioned in the parking lot near Innisdale. These bins were helping reduce the amount of litter on the ground. Due to unforeseen circumstances, the administration requested to have them moved elsewhere. The bins are still in the parking lot however, they have been moved closer to the entrance and exit to the parking lot. Unfortunately, the litter has increased since the displacement, and the Environmental Science class and Eco club hope to eventually have them relocated back towards the school so that they can be utilized more.

Reducing litter is extremely important because when garbage is thrown on the ground, it all eventually leads to the ocean with the help of harsh weather. There is currently a large garbage patch, also known as the *Great Pacific Garbage Patch*, residing mostly in North America. It is estimated the size of the *Great Pacific Garbage Patch* is 1.6 million kilometres squared. Litter contributes to many environmental issues including air pollution and loss of biodiversity. If we reduce the quantity of litter at Innisdale, we will be greatly contributing to ensuring Earth's healthy future.

Pollinator Gardens

Location: A variety of locations around the property, including the Outdoor Classroom.

Date Created: 2019

Description:

In 2019, the Lake Simcoe Region Conservation Authority helped the grade 9 Science classes to complete the initiative, by allowing Innisdale to participate in a sprouting seeds program. In the program, the students began pollinating plants and flowers in the Science laboratory. They then created a natural-looking perennial-style bed in one of the natural growth areas near the Outdoor Classroom. The perennial style beds create a beautiful and successful pollinator bed.

According to TheSpruce.com, “A pollinator garden is designed to contain plants to provide food and shelter to animals (bees, birds, butterflies, moths, wasps, bats, and small mammals) that pollinate plants that support the local ecosystem and food web” (Engles, 2022). Bird and other insect populations have declined over the years, so Innisdale decided to make a variety of different pollinator gardens to increase those populations. These pollinator gardens create habitats and provide food for the populations too. Pollinator gardens can be found near the raised-bed vegetable gardens, near the Outdoor classroom, and in other locations too.

Outdoor Water Refill Station

Location: Tentatively around the corner from the Outdoor Classroom and football field.

Date: To be determined.

Description:

This is one initiative Innisdale hopes to implement in the future. It has yet to be approved, however Innisdale hopes it will soon. A proposal has been sent to the Simcoe Country District School Board office in 2018 to install an outdoor water refill station next to the Outdoor Classroom, close to the football field. In Innisdale there are three water refill stations, but two on the main floor. However, since Innisdale has a huge yard, and often gym classes, and other classes using the Outdoor Classroom are outside, it is practical to have an outdoor drinkable water source available to everyone. Innisdale often holds games, track and field meets, and hosts spirit days outside. This can help save time for people to simply refill their water bottles outside, instead of having to go all the way inside. There is an outdoor tap located in the preferred location for the refill station, so adding a tap that can turn on a off would be extremely beneficial.

Water refill stations are extremely beneficial because they promote reusable water bottles. This will reduce the amount of plastic used yearly, reduce money spent, and allow people to hydrate themselves regularly. Innisdale hopes to become one-day plastic-free, and this will be a huge step toward meeting that goal.

Bee Boxes

Location: Around the school property.

Date Began: 2019

Description:

In 2019, Innisdale placed several Mason Bee Boxes on school property to raise awareness for bees and help increase their population by providing them with a habitat. Mason Bees are a specific type of bees that are non-aggressive pollinators and are used for flowering fruits and vegetables. The bee houses are easily made by students and hung in areas on the school property that do not have many visitors. Innisdale put them in unpopular areas to prevent people from getting stung or disturbing the bees. The bees help pollinate the vegetable gardens and fruit trees on the school property and the local community by providing pollen for their plants.

Textile Drive

Location: Small bins can be found in classrooms, and larger bins outside the main office, and room 232.

Description:

Every couple of years, Innisdale holds a Textile Drive to collect textile waste from the members at Innisdale. Innisdale accepts items such as clothing, blankets, curtains, sheets and towels, jackets/coats, hats, mittens/gloves, shoes, boots, yarn, wool, ties, handbags, backpacks, and sleeping bags. During the 2023-2024 school year, Innisdale partnered with a local organization called Kidney Clothes. Innisdale collects the accepted items, then Kidney Clothes collects them. The proceeds from the Textile Drive go towards the environmental initiatives at Innisdale. Posters are posted around the school with more specific information regarding the Textile Drive. There are small bins in classrooms, a large bin outside the main office, and a large bin outside room 232.

A Textile Drive is extremely beneficial because it allows us to reuse old clothing by donating it to others. Furthermore, this can significantly reduce the amount of textile waste since they are being properly recycled and reused. Innisdale's Textile Drive initiative can reduce air pollution and greenhouse gas emissions. Clothes are made in factories which are one of the main contributors to GHG emissions and therefore, air pollution. By reselling old clothing, it can reduce factory emissions since clothing factories will not have to make as much clothing.

Past Years


TEXTILE WASTE FUNDRAISER
MAIN OFFICE
25 YEARS


ISS
Eco-club
TEXTILE WASTE FUNDRAISER


Kidney Clothes

Recycling

Location: Outside, at the dumpsters, next to the parking lot.

Description:

Innisdale has around 1,000 students and staff, so there is a high quantity of waste that needs to be properly disposed of. Each year, the Environmental Science class promotes proper disposal of products such as Tim Hortons coffee cups, yogurt containers, milk cartons, paper, etc. The Environmental Science class promotes recycling by putting up posters, creating bulletin boards, and sometimes videos to show the advantages of recycling and its importance. Whoever has taken on recycling as their ISU is also responsible for creating recycling campaigns with tips and strategies to educate students and faculty at Innisdale.

A common misconception when recycling is that Tim Hortons coffee cups are to be thrown out in the recycling, HOWEVER, they are to be thrown out in the organics because they are biodegradable. Also, it is important to rinse dirty food containers to avoid contamination. When the recycling reaches the landfill, if the batch or garbage is too contaminated, it is often thrown into the garbage area, and not the recyclables area.

Every week, an announcement is made in the entire school for classes to bring their recycle bins down. The classes must bring the entire bin, and not just the bag, and if the bag is extremely dirty, then after dumping the recycling out, they can take out the bag and place it in the garbage dumpster, not the recycling dumpster. Often, a student will double-check your bins to make sure there is no garbage or anything else that should not be in there like food scraps.

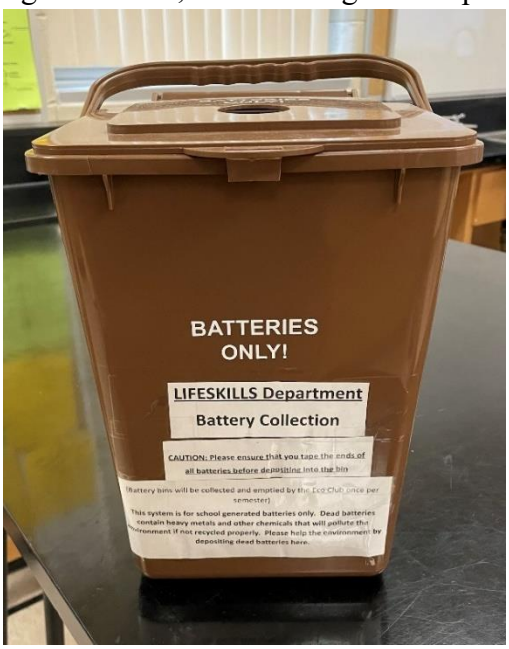
Battery Collection

Location: Throughout the school.

Description:

People often mistake a garbage bin for the place where batteries are put, however, batteries should not be disposed of in the regular waste steam. Heavy metals including cadmium, nickel, and mercury are found in batteries, and they can create toxic leachate in landfills that seep into the nearby water supply, and the soil. The toxic leachate spreads in the soil, severely damaging the soil. It is essential to be careful when collecting batteries because they can be dangerous.

A couple of years ago, Innisdale decided to create a proper battery collection system. Innisdale was first a part of a variety of battery collection programs, however, after certain health concerns, Innisdale decided to create their own system. Now, in each department office, there is a battery recycling bin, where teachers put old and used batteries instead of in the garbage. The bin is made with specialized polymer plastic, and there are instructions on the bin to ensure there will be no dangers when the batteries are all placed in the same bucket. They instruct you to tap the ends of the batteries together before they are put in the bin. You need to do this because it will tell you if the batteries heat up and leak out toxic substances. Towards the end of each semester, the batteries are transported to the local recycling plant. It is important to empty them often to reduce injuries to faculty and students at Innisdale, and the workers at the recycling plant. The thirteen battery bins are supervised by teachers, and not students to ensure their safety. Students still play a significant role because they give the batteries to the teachers to be disposed of properly, and people take on battery recycling as their ISU in the Environmental Science class. They are responsible for raising awareness, and ensuring each department still has a bin.



Used Pen Recycling

Location: Containers found in some classrooms around the school.

Description:

There are containers in some classrooms around the school that are used for dead pens. A couple of years ago, Eco-Club noticed an influx of dead pens and markers being thrown away each year which resulted in a negative impact on the environment.

Pens and markers are mainly comprised of plastic, which never fully break down and often lead to the ocean. Due to the copious amounts of plastic and other garbage, there are around five main plastic garbage patches globally, and there is currently more plastic in the ocean than plankton. Furthermore, plastic is a choking hazard for all animals. Sea turtles eat food that resembles that of a plastic bag, so thinking it is algae or a jellyfish, the sea turtles consume the bag, and they choke.

Staples offers a recycling option for used pens and markers, and Innisdale has decided to take part in the option. Innisdale has made containers where students and faculty can drop off their dried-up pens/markers, which are then sent to Staples. This helps divert hundreds, if not thousands of pens and markers from being thrown into the local landfill.

Electronic Recycling

Location: Large bin found in the science office.

Description:

Like batteries, other electronics must not be thrown into the normal garbage steam and must have their own. Many local companies take the salvageable electronics to be recovered. Like most plastics, electronics are made from non-biodegradable plastic and can contain hazardous materials. In the science office, there is an electronic collection bin where calculators, cellphones, iPads, keyboards, lamps, and other electronics can be disposed of. The money collected from the Electronic Recycling initiative sometimes generates funds for clubs and teams at Innisdale Secondary School.

Cafeteria Greening

Location: Cafeteria.

Description:

Waste audits that are completed by the Eco-Club prove the main source of waste and recycling is the cafeteria. The containers from the cafeteria are often contaminated with non-recyclables such as food scraps. Most of the containers are also single-use, meaning they can only be used once, and cannot be used repeatedly. Over the years, the Innisdale cafeteria has tried to convert to more environmentally friendly ways. However, reusable materials do cost more than single-use, so it is challenging to completely convert to ecological ways. The Eco-Club has worked with the Hospitality and Tourism classes to provide reusable cutlery, and dishes from special events such as banquets, dances, staff meetings, etc., which has significantly reduced waste produced. The Hospitality classes try to participate in plant-based organic composting when it is possible. The cafeteria has also converted to compostable straws instead of plastic, so we are reducing our plastic usage.

However, the cafeteria can become more ecologically friendly. It is simply a means of finding regular funding for this initiative. Currently, we are converting to compostable utensils and compostable containers.

The Conqueror Medal Program

Location: Room 240.

Description:

At Innisdale, the Learning Centre students participate in the Conqueror Medal program. The Conquer Medal program has challenges anyone can do that to complete. When you accomplish an achievement or complete a certain amount of distance on the map, the Conquer Medal Program either plants a tree or prevents ten plastic water bottles from going into the ocean. There are Virtual Fitness Challenge Series. When you sign up for one of these challenges, you are given a distance for a specific place, and then when you complete the challenge you are sent a medal. For example, there is an Inca Trail Challenge where you would do an exercise such as running, walking, swimming, biking, etc. for 42km, which is the distance of the Inca Trail. You can complete them over time, so you do not have to complete the entire challenge at once.

The Learning Centre has completed seventy-seven challenges. As a result, they have planted hundreds of trees and contributed to the removal of hundreds of plastics from the ocean. They are continuing to complete more challenges and encourage others to participate. This is an excellent program to use when exercising.

Outdoor Labyrinth

Location: West end of school.

Date Built: During COVID-19.

Description:

This initiative was created by the Integrated Arts program at Innisdale. Because of COVID-19, most entertainments were closed, and nobody could travel, so the Integrated Arts program decided to create an outdoor labyrinth on Innisdale property, where students can spend time together with friends and family.

Labyrinths create peace of mind. They provide a calming, stress-free environment where people can go to relax and collect their thoughts. If someone is overwhelmed by homework, personal life, or other issues in their life, it is best to focus and think about something else that engages their focus.

Eco-Club Classroom and Members

Location: Mostly in room 232.

Date Began: 2015

Description:

Innisdale has established an Eco-Club to raise awareness and continue to conduct environmentally friendly initiatives all year around. Most of the environmentally friendly initiatives are conducted by students with help from teachers, but everyone deserves recognition for helping and participating in the initiatives. Club meetings are often held weekly in room 232 with the teacher advisor, Mr. Cairns.

Innisdale's Eco-Club's goals are to promote sustainable living and improve our local environment. They generate ideas on how to make the school more ecologically friendly, and with the help of the Environmental Science classes, initiate sustainable solutions that demonstrate environmental sustainability, stewardship, and biodiversity.


I.S.S.
EcoClub
ISS
EcoClub
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Phys Ed


NO-MOW ZONE

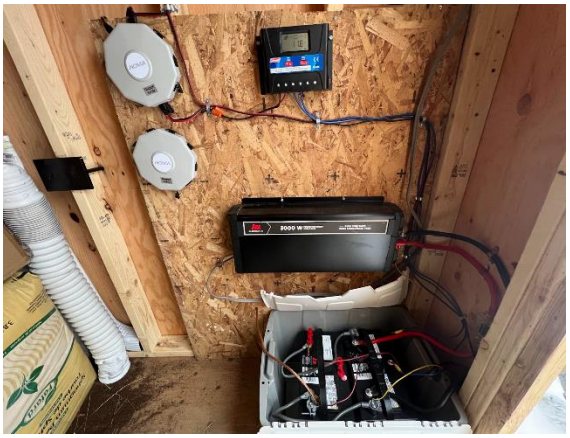
Solar Powered Charging Station

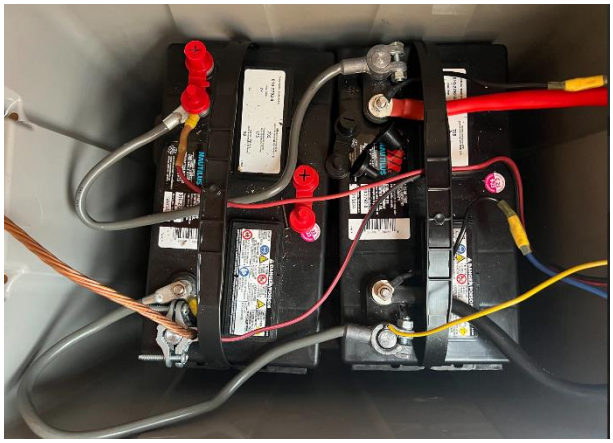
Location: Near Native Tree and Shrub Planting initiative, and Fruit Planting initiative.

Description:

Students and faculty bring electronics from home whether it is a phone or a computer. The school also provides laptops for everyone to use. People need to sometimes charge their electronic devices, so Innisdale has outlets around the school to accommodate that. The Environmental Science teacher decided to create a solar-powered charging station for devices. The solar panels capture the energy from the sun, and it runs through a cable, which generates electricity for an outlet. A battery, a charge controller, and an inverter were wired and installed in a case with an external power bar that can charge up to ten devices at a time. This charging station reduces the number of interruptions caused by cellular devices going off during class. Furthermore, since the charging station runs on solar energy, no fossil fuels are used that can contribute to air pollution.

A current plan is in the making of plugging in a light bulb connected to the shed, which is lit using solar panels, as well as a wind turbine has been added. However, Innisdale has not completed the plan yet but hopes to one day.





Photocopy/Toner Recycling

Description:

Innisdale hopes to eventually become paperless. More teachers are creating online documents, lessons, tests, and quizzes and uploading them to the online platform for students. If a student does not have a personal laptop, Innisdale's main office does offer the choice of borrowing a Chromebook. This can help students to easily access PDF documents and easily complete them. While some classes at Innisdale have become paperless like the Environmental Science class, and many technology classes, photocopiers, binders, paper, and pens and pencils are still primarily used in class. Schools heavily rely on photocopiers, and excessive paper use and other components in the photocopier create harmful impacts on the environment. Photocopiers and many printers may require parts to be replaced like fuser modules, toner, and toner bottles and ink. Most of these components must not go through the normal recycling stream and they should be disposed of in the electronic bin. Many printer and photocopier brands like Xerox have created recycling programs for the old components. Students at Innisdale send back certain components to these companies or they dispose of them properly like the other electronics. In the library, there is a toner eco box and a collection area in the main staff room. With the help of both students and faculty, ensuring the electronic parts are collected and prepared to be sent back, Innisdale can help the environment significantly by diverting these components away from the local landfill.

Lackies Bush Enhancement Suggestions

Location: Next to Innisdale Secondary School.

Date: To be determined

Description:

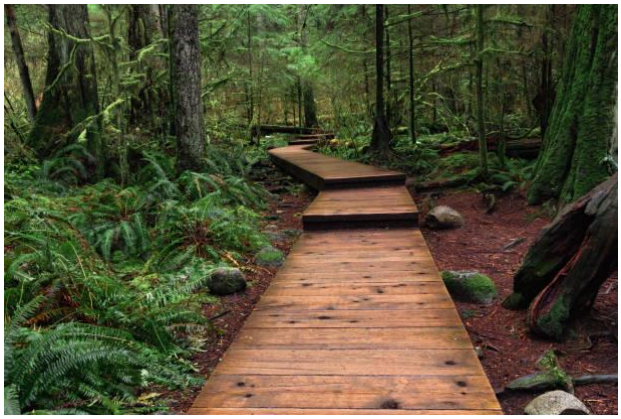
Lackies Bush is situated next to Innisdale Secondary School, so often classes decide to take their learning there for a period, or a nature walk. Lackies Bush is a learning environment that can substitute for the Outdoor Classroom if the classroom is booked already. Lackies Bush is also a communal area for students to hang out after school and during the lunch break. Unfortunately, this has led to litter issues. Since Innisdale utilizes the forest often, we have also noticed effective suggestions that would be beneficial to members of the local community.

Innisdale hopes to partner with the City of Barrie, and the Lake Simcoe Region Conservation Authority to complete this initiative. This initiative will definitely be long-term to complete because it is a large-scale project if we want to complete all the suggestions.

Suggestions

1. **A Curved Wooden Bridge –** A curved wooden bridge would help people cross the stream better. Now, when you first enter the forest off Bayview St., you can cross the stream there. However, there is no bridge and is challenging to cross safely. The other option is to walk further into the forest where a bridge can be found, but this is not always ideal. This can further reduce the number of injuries sustained in Lackies Bush.

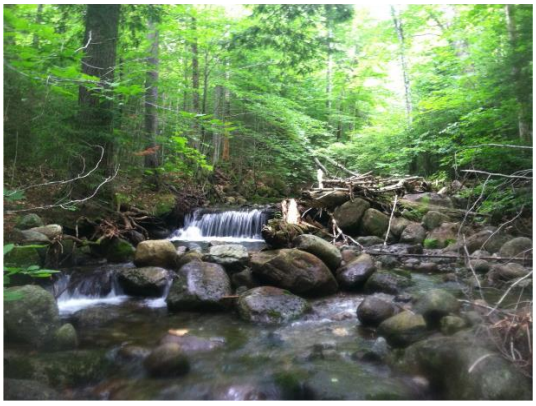
2. **A Boardwalk –** Adding a boardwalk can be extremely beneficial in certain areas because this can help stop people from tripping or slipping from the wet ground. A boardwalk also helps prevent erosion and deal with moisture and degradation for specific swampy areas.



3. **Mulch –** Mulch can be used to create a path that highlights the main trails at Lackies Bush, so people do not get lost. The mulch can be donated by local partners, or the City of Barrie has wood chips that they often collect seasonally from cleaning up the bushes and trees they could donate.

4. **An Understory Tree Planting Initiative –** This initiative could be funded and assisted by the Lake Simcoe Region Conservation Authority. This is an initiative where we can grow new trees that are Native since trees in the area are maturing. This is necessary because it allows people to notice the different ages of trees in the forest by noticing certain physical features.

5. **Stream Edge Restoration –** Over the years, the stream at Lackies Bush has become unhealthier, so Innisdale hopes to improve the stream quality. This will be beneficial because it will help increase biodiversity. We hope to build up planks of wood, which will help the flow of the water, and then we hope to plant Native plants along the edge of the stream to enhance the stream structure. This can be funded by the LSRCA.



6. **Information Plaques –** Innisdale hopes to add informative plaques to Lackies Bush. The plaques could highlight possible trails, Native species of animals and plants found here, and historical facts about the sight. This can cost a lot of money and will need to be done with the city of Barrie.

7. **Trail Markers and Benches –** Innisdale can build benches with the Woodshop classes, which can be created as a memorial bench, and that can be enjoyed as a calm place to hang out with friends and family. It would have to be permanently fixed to the ground.

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