

# Report on Sustainability at Illinois Wesleyan University

Compiled by the members of the 2020-2021 GREENetwork Committee  
March 2021



## Illinois Wesleyan Mission Statement (excerpt):

*...The University through its policies, programs and practices is committed to diversity, social justice and **environmental sustainability**.*





## **"REPORT ON SUSTAINABILITY AT ILLINOIS WESLEYAN UNIVERSITY"**

The GREENetwork Committee, Illinois Wesleyan University, Bloomington, Illinois

*March 2021*

This report was edited by the three current co-chairs of the Illinois Wesleyan University GREENetwork Committee, *Carl Teichman*, *Dr. Laurine Brown*, and *Leah Bieniak '21*, and member *Emily Schirmacher '21*. It represents the collective work compiled by many members of the 2020-2021 GREENetwork Committee. The GREENetwork is a group of volunteer students, staff, faculty, and administrators who meet regularly to discuss the status of sustainability on our campus, celebrate the improvements that are being made, and look for new ways to increase efforts across the campus. Website: [www.iwu.edu/greenetwork](http://www.iwu.edu/greenetwork)

# Table of Contents

	<i>Page</i>
<b>INTRODUCTION</b>	<b>5</b>
<b>KEY FINDINGS AND RECOMMENDATIONS</b>	<b>6</b>
<b>SUMMARY OF IWU'S SUSTAINABILITY EFFORTS</b>	<b>11</b>
<b>I. Waste Reduction and Recycling</b>	
A. Food Waste Reduction and Composting	
B. Recycling Contamination	
C. Printing and Copying	
D. Fraternity/Sorority Chapter House Recycling	
E. Textile Recycling	
F. Residence Halls Move-In, Move-Out Recycling	
G. Battery/Cell Phones/Ink Cartridge Recycling	
H. Electronics Recycling	
I. Community Mega-Recycling Household Waste Events	
<b>II. Energy and Water Conservation</b>	<b>16</b>
A. Efficient Air Conditioning Chillers	
B. Building Automation Systems (BAS)	
C. Electric Sub Metering Installation	
D. Installation of Energy Efficient Lighting	
E. Combined Heat and Power Cogeneration (CHP) Project	
F. Upgrade of Elevator Electrical Components	
G. Center for Natural Sciences (CNS) Fume Hood Calibration	
H. Hydration Stations	
I. Drought and Water Conservation Plan	
<b>III. Greenhouse Gas Inventory</b>	<b>19</b>
A. GHG Methodology	
B. GHG Findings	
C. GHG Recommendations	
<b>IV. Sustainable Transportation</b>	<b>21</b>
A. Bicycles	
B. EV Charging Stations	
C. Public Transit Bus Passes	

<b>V.</b>	<b>Green Cleaning and Other Custodial Practices</b>	<b>24</b>
<b>VI.</b>	<b>Environmental Health and Safety</b>	<b>25</b>
	A. Radon Testing and Mitigation	
	B. Filtered Water with Hydration Stations	
	C. Green Cleaning Products and Practices	
	D. Integrated Pest Management	
	E. New Construction Minimizes Hazardous Materials (CT)	
	F. Health and Safety Protocols	
	G. Chemical Hygiene Plant	
	H. Hazardous Communication Program	
	I. Fort Natatorium Swimming Pool	
<b>VII.</b>	<b>Peace Garden and Bertholf Apiary</b>	<b>28</b>
	A. Peace Garden	
	B. Lloyd M. Bertholf Apiary	
<b>VIII.</b>	<b>Campus Building Construction and Renovations</b>	<b>32</b>
	A. Memorial Center Dugout Renovations	
	B. State Farm Hall Construction	
	C. The Gates at Wesleyan – New Student Housing	
	D. The Minor Myers Welcome Center	
<b>IX.</b>	<b>Campus Grounds and University Farms</b>	<b>34</b>
	A. Grounds Maintenance	
	B. Snow and Ice Removal	
	C. Native Prairie Plot	
	D. Multifaith Meditation Garden	
	E. Illinois Wesleyan Campus Arboretum	
	F. University Farms	
<b>X.</b>	<b>Education, Communications, and Outreach</b>	<b>36</b>
	A. Website and Other Campus Communications	
	B. Environmental Studies Program	
	C. Sierra Student Coalition RSO (SSC)	
	D. Peace Garden RSO (PG)	
	E. Student Senate	
	F. Office of Residential Life (ORL)	
	G. Action Research Center (ARC)	
	H. Evelyn Chapel Multi-faith Ambassador Program	
	I. Other Activities	

# Report on Sustainability at Illinois Wesleyan University

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## INTRODUCTION

The concept of sustainability has been active on the Illinois Wesleyan University (IWU) campus for at least the past 30 years. A student-initiated recycling program was started in 1993, and the program was expanded in 2000 through the efforts of concerned faculty and students in the Environmental Studies (ES) program. A university-wide committee, The Green Task Force (GTF), was formed in 2000 in response to unanimous student and faculty resolutions with a mission to “assess the ways in which Illinois Wesleyan's daily activities impact the environment; consider successful approaches other institutions have taken to green their campuses; investigate state-of-the-art technology; and, develop a long-term environmental improvement plan for the University.” The GREENetwork evolved from the work of the GTF.

These efforts brought about the inclusion of sustainability during the last revision of the University’s mission statement in 2003-2004. Our mission now holds that the University through its policies, programs and practices is committed to diversity, social justice and **environmental sustainability**.

In 2007, President Wilson signed the Talloires Declaration, joining many other universities from all regions of the world in a commitment to implementing a ten-point action plan for incorporating environmental sustainability into higher education. The document acknowledges the University’s “deep concern about the unprecedented scale and speed of environmental pollution and degradation, and the depletion of natural resources.” This effort highlighted the need for the University to be more reactive to environmental issues and create an institutional culture of sustainability. To that end, the University opened the Minor Myers Welcome Center in 2008. It was the first newly constructed building in Bloomington to be certified as a LEED (Leadership in Energy and Environmental Design) Green Building by the U.S. Green Building Council. It was followed in 2014 by State Farm Hall, a technology-driven classroom building, designed and built to LEED standards on the Eckley Quadrangle.

The following pages are an accounting of sustainability initiatives that have occurred on the IWU campus for the past two academic years, in addition to important historical highlights over the past five or more years. While not an exhaustive review, it highlights some key actions by the multiple campus groups that are listed below. Substantial progress has been made to move the University forward on this important aspect of the University’s mission and the slowly evolving culture of sustainability. This report includes activities and actions taken by the following campus groups:

GREENetwork (GN) Committee	Environmental Studies Program (ES)	Sierra Student Coalition (SSC)
Physical Plant	Information Technology Services (ITS)	Peace Garden RSO (PG)
Sodexo Dining Services (Sodexo)	Evelyn Chapel Multi-faith Ambassador Program	Student Senate
Office of Residential Life (ORL)	Office of Fraternity and Sorority Life (OFSL)	Action Research Center (ARC)
Campus Safety	IWU Board of Trustees Farm Sub-Committee	IWU Wellness Program (until 2018)
Office of Communications	International Office	Math Department

# Key Findings and Recommendations

## KEY FINDINGS

Below is a summary of the key findings from each section of the report.

### Waste Reduction and Recycling

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1. In 2019-20, 43.4 tons of food was composted from the Sodexo Dining Services locations, diverting this from landfill waste streams.
2. Recycling contamination remains an issue for the campus with the need for new educational efforts.
3. A print management solution PaperCut was introduced in the Spring of 2020 and fully launched in the Fall of 2020 with a cap of 800-pages per semester for students to help reduce costs and environmental impacts of printing.
4. In 2019 the University recycled almost 2 tons of electronic equipment.

### Energy and Water Conservation, Greenhouse Gas Inventory

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5. A number of energy efficiency initiatives by the Physical Plant across varied campus locations have resulted in reductions in campus energy use. These include installation of energy-efficient T5 fixtures, efficient air conditioning chillers, geothermal HVAC systems, building automation systems (BAS) for thermostatic control of HVAC systems, electric sub-metering, elevator electrical upgrades, and laboratory fume hood calibrations. The University is also launching a CHP (co-generation) project through incentives with Nicor. CHP is an energy efficient technology that generates electricity and captures the heat that would otherwise be wasted to provide useful thermal energy.
6. Since 2014, the University has reduced its water consumption by 26%.
7. An Environmental Studies class conducted IWU's first Greenhouse Gas (GHG) Inventory in 2017 and calculated that the University generated a total emissions of 36,970 metric tons carbon dioxide equivalent (MTCDE). The group recommended that the University develop an Action Plan that would lay out institutional means to collect all GHG data and conduct a GHG Inventory each year.

### Sustainable Transportation

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8. The League of American Bicyclists awarded the University a Silver Bicycle Friendly University designation in 2018 recognizing the University's efforts to promote safe, accessible bicycling on campus. This was a move up from our Bronze designation in 2014.
9. Since the Fall of 2017, with the establishment of a universal bus pass on CONNECT TRANSIT financed by Student Senate, IWU students have taken over 16,300 rides with an average of over 4,300 per semester.

## **Green Cleaning, Environmental Health and Safety**

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10. With the onset of COVID-19, Physical Plant has adopted the use of the Stabilized Aqueous Ozone System (SAO™) which has earned the Green Seal™ certification and eliminated the use of chemical cleaners and its impact on faculty, staff, students, and visitors.
11. As of June 2020, IWU had 26 University-owned buildings with operating radon mitigation systems. Nine of these buildings include dorms and service centers with the remaining being rental properties. Retesting for 58 campus-owned buildings, and evaluation for needed action, is scheduled to be done every three years on a rotating schedule with about one third done yearly.

## **Campus Buildings, Grounds, Gardens, Apiary**

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12. The Lloyd M. Bertholf Apiary was established in 2018. In September of 2020, IWU was designated a Bee Campus USA affiliate in recognition of its adoption of a rigorous commitment to raise awareness and enhance habitats for pollinators. Bee Campus USA endorses colleges and universities that create well-maintained pollinator habitats and promote bee conservation efforts within the local community, among other criteria. Illinois Wesleyan is one of five universities in Illinois with this certification.
13. The IWU Peace Garden (PG), a student-led initiative established in 2012, added a native prairie plot in 2020 to expand sustainable gardening practices and provide nectar for the bees at the nearby Bertholf Apiary. Improvements to rainwater collection, including installment of gutters on the hoop house and an underground cistern, are also underway. Organic produce grown in the garden is donated to local humanitarian organizations and sometimes sold at locally-owned grocery stores and served in campus dining facilities. Leadership and labor is supplied by a PG Registered Student Organization (RSO), work-study summer garden managers, Environmental Studies and Action Research Center interns, and other volunteers.
14. The Minor Myers Welcome Center was the University's first LEED Silver Green Building and the first building in Bloomington to receive LEED certification. At the time of its opening, it was only one of 39 LEED Silver buildings in the State of Illinois and only one of 19 outside the City of Chicago. It was followed by State Farm Hall which was constructed to LEED Silver standard as well. Both buildings incorporate a ground-source geothermal HVAC system as well as a computerized building automation system to optimize the HVAC performance.

## **Campus Education, Communications, Outreach**

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15. The University has benefitted by a myriad of student-faculty-staff led education and research initiatives for the campus and local community focused on environmental sustainability and justice. Several examples include:
  - In May 2018, a unique and innovative travel program "*Vietnam Today: Addressing the Challenges to Sustainable Development*" brought Environmental Studies (ES) students to Vietnam where they explored sustainability issues firsthand, collaborated with Vietnamese peers, and returned to campus to complete a related research project in their senior seminar. The signature experience culminated in a visit by the Vietnamese collaborators to the IWU campus in December to present joint research in

- a public forum, and was featured in the [2019 quarterly IWU Magazine](#). A 2020 experience was cancelled due to COVID 19.
- In Fall 2020, the ES senior seminar class partnered with local agencies to research environmental justice issues and present findings from two projects in a public forum entitled: 1) *“Expanding the Environmental Justice Area under Illinois Solar for All: The Case of West Bloomington, IL”*; and 2) *“Historic and Contemporary Environmental Injustice in West Bloomington, Illinois.”*
  - A robust array, averaging over 10/year, of speakers, workshops, panels, student research and internship presentations, and academic field trips to inspire critical thinking and innovative action around sustainability included: *“Why Should We Trust Science?” (2019) by Dr. Naomi Oreskes*; *“Containing Climate Change: Restoring US Leadership Domestically and Diplomatically”(2019) by Dr. Rick Duke*; and *“How to Communicate About the Environment in 2020” (2020) with an IWU ES alumni panel.*
  - The Sierra Student Coalition (SSC), a completely student-run "green group" focused on sustainability and environmental advocacy, started a TerraCycle Program in 2014-15, partnering with St. Luke Union Church in Bloomington. Cereal, granola, and later chip bags were collected. With the success of the program, in 2019, SSC partnered with the service fraternity APO and Physical Plant to better manage collection and transportation of the increased collection volume. Unfortunately due to the church cutting the chip bag brigade and COVID-19 safety concerns, IWU’s program was suspended indefinitely in Fall 2020.
  - Student Senate worked with Sodexo in 2019 to launch weekly “Mindful Mondays” in Bertholf Commons, offering meatless options at every station in an effort to decrease meat consumption which carries a large ecological and climate footprint.
  - Multiple IWU Action Research Center interns played a role in creating the new West Bloomington Revitalization Program (WBRP) Healthy Eating program in the spring of 2020 with a grant to give 40 low-income, Westside families free Community Supported Agriculture shares from the local organic PrairiErth Farms.
  - Students from two courses (Math Modelling and the Analytical Titans FYE in 2019-20) worked with the West Market Street Council to make projections about what to stock on the shelves of a new grocery store in West Bloomington, classified as a food desert, to minimize carbon emissions from transportation.
16. The GREENetwork Committee recognizes that many in the IWU campus community may be unaware of current campus sustainability achievements outlined in this report. Efforts to improve visibility of these accomplishments are needed.



## RECOMMENDATIONS FOR FUTURE ACTIONS

The GREENetwork Committee recommends the following strategic actions.

### 1. **Improve Recycling/Waste Reduction**

The University's student-initiated recycling program has been part of our waste management operation since 1993. Over the years, the University has added additional programs to control the flow of campus waste to our local landfills. For example, in the Fall of 2020, the University fully implemented a print management system – PaperCut; this system will help to reduce print costs and the environmental impact of printing. Also, Sodexo introduced recyclable takeout containers in 2012 and expanded their use as part of COVID-19 pandemic precautions. And, since 2011, Sodexo has been composting food waste, and in 2019-20, 43.4 tons of food waste was diverted from the landfill. However, contamination in our recycling program continues to be a serious issue. We recommend:

- a. Implement an annual recycling education program to help address contamination concerns, generate greater awareness, and reinforce campus expectations.
- b. Develop a plan for consistent recycling containers across campus, especially in residence halls. The current containers are not always clearly marked or of a similar nature.
- c. Require all items used in the DugOut to be compostable or reuseable. Currently, many items cannot be composted or recycled due to food contamination. Useable takeout containers or all-compostable service would reduce waste going to the landfill.

### 2. **Enhance Energy and Water Conservation**

Through the efforts of Physical Plant, the University continues to make great strides in reducing consumption of energy on campus, including through installation of more energy-efficient lighting and conversion to more efficient air conditioning chillers across campus buildings. Addition of building automation systems and installation electrical sub metering has provided valuable performance information to evaluate equipment and make cost-effective decisions. We encourage the University consider the following:

- a. Continue to upgrade to more efficient equipment.
- b. Identify alternative sources of power. The campus would be a good candidate for solar power given our numerous roof structures.
- c. Implement the Combined Heat and Power Cogeneration (CHP) Project, currently undergoing a feasibility study, if results are positive. These efforts would help to lower energy costs and to reduce the University's carbon footprint.
- d. Continue to implement water reduction strategies such as: cooling towers efficiencies, improved water irrigation technologies and plumbing infrastructure upgrades.

### 3. **Reduce Campus Carbon Footprint**

An Environmental Studies class conducted IWU's first Greenhouse Gas Inventory in 2017 and calculated that the University generated total emissions of 36,970 metric tons carbon dioxide equivalent (MTCDE). This baseline sets a target to measure the University's reduction of greenhouse gases. We support the following actions consistent with the study:

- a. Develop an Action Plan that would lay out institutional means to collect all GHG data and conduct an annual GHG Inventory.

- b. Plan to maximize IWU vehicle fleet efficiency, including purchase of alternative fuel vehicles.
- c. Explore methods of conducting University business that reduces the need for carbon-based fuel travel.
- d. Create a carpool program for students.
- e. Establish a Campus Green Revolving Fund and a Campus Carbon Charge to fund efforts to reduce GHG emissions.
- f. Require our energy broker to ensure that 25% of our purchased energy comes from renewable sources by 2025.
- g. Become a [Tree Campus Higher Education](#) member with the Arbor Day Foundation to support and expand the Campus Arboretum and its many environmental benefits.

#### 4. **Expand Sustainable Transportation**

Students have actively supported the use of sustainable modes of transportation, in particular the use of bikes and the local mass transit system. In 2017, Student Senate provided financial support for a “Universal bus pass” allowing students to ride on CONNECT TRANSIT for free, averaging over 4,300 rides per semester. Bike use on campus has increased with the campus earning an upgrade of its “Bike Friendly” designation to Silver from Bronze in 2018. In addition, use of the charging stations for electric cars has also increased. To maintain these initiatives, we would recommend the following:

- a. Continue to make the campus bike-friendly by funding the University Bike Share Program and by providing the necessary bicycling infrastructure.
- b. Promote use of the local mass transit system, CONNECT TRANSIT, to students, staff, and faculty.
- c. Add at least two electric vehicle chargers in the next two years to support the growing number of electric vehicles in use by faculty, staff, students and campus visitors.

#### 5. **Promote Environmental Justice**

Recent events have further highlighted the need for our community to be educated on the environmental inequities that occur in our country. In the fall of 2020, SSC chose to focus more on Environmental Justice programming instead of campus sustainability, and the ES Senior Seminar students conducted extensive research and presented on environmental justice concerns within Bloomington. Continued efforts are needed, and the GREENetwork recommends the following actions:

- a. Expand the work of the Center for Human Rights and Social Justice to enhance aspects of environmental justice.
- b. Seek out, develop and support additional campus programming and curriculum development centered around environmental justice.

#### 6. **Increase Visibility of Campus Sustainability Efforts**

The GREENetwork Committee recognizes that many in the IWU campus community may be unaware of current campus sustainability achievements outlined in this report. Efforts to improve visibility of these accomplishments are needed.

- a. Include weekly updates on environmental issues in the Campus Weekly.
- b. Explore how to highlight campus sustainability issues on the campus website.
- c. Address sustainability items during New Student and New Employee Orientations.

# SUMMARY OF IWU'S SUSTAINABILITY EFFORTS

## I. Waste Reduction and Recycling

Since 1993, the University's student-initiated recycling program has been part of our waste management system. The University has added additional programs to control the flow of campus waste to our local landfills.

### A. Food Waste Reduction and Composting

1. It was the aim of the GREENetwork, the Sierra Student Coalition (SSC), and the campus food service provider, Sodexo, to reduce the amount of food waste traveling to landfills from campus. Food waste in landfills emits methane, a more potent Greenhouse Gas (GHG) than carbon dioxide, and contributes to global warming.
2. Eliminating trays was the initial strategy used in dining halls to reduce food waste, as students avoid taking more than will be eaten. The Bertholf Commons went trayless in 2010 (trays are available only on request), and since this change there has been a significant daily reduction in food production, according to Sodexo. With the renovation of the DugOut in 2014, trays were eliminated in that eating area as well.
3. In late 2011, the University and Sodexo partnered with Illinois State University (ISU) and a local contractor, Midwest Fiber, to compost pre- and post-consumer campus food waste "behind-the-scenes" in the Memorial Center kitchen, student dining hall, and all catering events.
4. In the first full academic year of the project, 2012-13, 36.9 tons of food waste was diverted from the local landfill. In 2013, compostable plates, bowls and napkins were added to the process, generating 49.6 tons of compostable waste. The initial program resulted in some confusion and contamination of bins. Subsequent student-faculty research



Sodexo employee David Calcote scrapes food waste for composting program, launched in 2011.



Environmental Studies & Psychology students present composting research "Scrape Your Plate" at IWU's John Wesley Powell Research Conference.

[Scrape Your Plate: Understanding & Promoting Composting Habits on a College Campus – Cheng, Feher, Gambaiani, Tiberi, Tomazin and Kunce](#)) resulted in several changes to enhance the effectiveness of the system (e.g., simplified signs, addition of lids on the composting bins). Preliminary analyses indicate substantially less contamination

subsequent to the changes. In the Fall 2019, changes were made to the student meal plan to reduce traffic in the Dugout, and these changes resulted in reduced usage and the collection of food waste. During the 2019-20 academic year, 43.4 tons of food waste was composted.

5. In an effort to eliminate the use of Styrofoam, a material which takes years to decompose, SSC, with the help of Sodexo, implemented in the fall of 2012 a reusable takeout container program in Tommy's. While there is currently a charge, the goal is to provide a free rental system of reusable containers across campus dining facilities modeled after other universities such as Oregon State University. Within the first semester of implementation, 50 students had applied for the program. It is believed that with additional advertising, this number will grow substantially. In the Fall of 2019, Sodexo introduced new recyclable takeout containers for student and faculty usage. With the onset of COVID-19, limitations of these containers were exposed. Food contamination left many of the containers unable to be recycled. The use of compostable containers would be a better option in controlling waste during the COVID-19 timeframe.

## B. Recycling Contamination

In 2012-2013, both the Town of Normal and City of Bloomington transitioned from dual to "single stream recycling" as part of their waste disposal program. The "single-stream" process allows for all recyclable items to be disposed of in one container and not separated into individual containers. In the past, the University's recycled waste was collected and deposited in roll-offs that serviced not only the University but also the residents of south Normal. In the summer of 2013, the Town of Normal ceased servicing these roll-offs and the University assumed responsibility for its recycled materials. The University selected Allied Waste to handle its recycled waste. The campus transition from dual stream to single-stream recycling was launched in August 2013, with accompanying educational strategies and instructional signage aided by findings from the [ES Senior Seminar research by Megan George '13](#). However, currently, issues continue with contamination in both indoor and outdoor bins. In addition, having the appropriate containers distributed across campus remains an issue. A recent presentation to the GREENetwork by Todd Shumaker of Midwest Fiber, highlighted the changing landscape of the plastics industry and the items that can be accepted for processing. These changes need to be incorporated into a new educational program to reduce contamination and allow for more effective on-campus recycling.



An Environmental Studies class conducts waste audit to evaluate recycling contamination.

## C. Printing and Copying

### 1. Overview of Copier/Printer Transition

Information Technology Services (ITS) began supporting office copiers in addition to

desktop printers in August of 2012. Konica-Minolta Bizhub copiers were selected for Konica's green initiatives. The Bizhubs are manufactured with internationally recognized eco-friendly designs and are fully compliant with Energy Star, Eco-Mark, and Blue Angel requirements. The Konica copiers are also part of an Eco-Leaf program that quantitatively identifies and discloses the environmental impact of products throughout their lifecycle.

## **2. Toner Cartridges**

The Bizhubs use a plant-based biomass toner that is a renewable, organic resource and has less environmental impact than conventional toners. It enables the Bizhub color MFPs to reduce toner consumption by more than 30%. Finally, the production process that creates Simitri toner generates nearly 40% less carbon dioxide – reducing output of a gas that contributes to global warming. The cartridges are also part of a recycling program where replacement toner and expendables are re-used. Additionally, Konica-Minolta manufactures the Bizhubs using recycled PET.

## **3. Office Printing Setup**

ITS worked with departments to help reduce the cost and environmental impact of printing by installing print drivers on individual computers so desktop printing can be routed to Bizhub copiers. ITS removed many inkjet printers and several departmental laser printers across campus. Business Administration and Economics removed all of the personal inkjets from offices, Admissions removed two inefficient laser printers including a color laser, the School of Nursing directed office printing to the Bizhub, all printing in the Office of Residential Life (ORL) is directed to the copier, and many administrative areas now use a copier as the main printed output device. The Ames Library moved high volume public workstation printing on floors 2, 3, and 4 from six laser printers to three Bizhubs for cost savings and to reduce the environmental impact of printing in the library.

## **4. Expansion with Paper Cut**

The next phase of the project deals directly with sustainability. A print management solution called PaperCut was deployed during summer 2014 to help reduce print costs and the environmental impact of printing. As a user prepares a print job, PaperCut shows the environmental impact of printing in three statistics: *1) Trees, or the number of trees that were expended to make the paper; 2) Carbon, or the CO2 equivalent in greenhouse gases released during the paper production; 3) Energy, or the energy used by the manufacturing process when producing the paper - this is expressed as the equivalent amount of time required to run a 60W incandescent light bulb.* One of the primary aims of PaperCut is to reduce printing levels by changing a user's printing behavior. Implementing monitoring and setting print quotas are a good way of drawing a user's attention to their habits. Giving individuals the ability to monitor and adjust their printing habits typically reduces printing by 10%. Options for filters and restrictions, such as stopping mistakes like printing a 100-page document instead of the one interesting page, and forcing double-sided printing, can reduce printing by another 10-30%. In the Spring of 2020, the University launched a pilot program with a cap of 800-pages per semester for students. This program was fully implemented for the Fall 2020 with the same 800-page per semester cap for students and the ability to print additional pages for an additional cost.

#### **D. Fraternity/Sorority Chapter House Recycling**

Through the implementation of single-stream recycling on campus and a partnership with Physical Plant, plans were made for the five University-owned fraternity chapter houses to have in-house recycling stations beginning in 2014-15. Each chapter was to have between 4-6 recycling containers throughout their house. Physical Plant would have maintained these, as they do in residence halls and small theme housing options. Based on ES Senior Seminar research by Gabriel Chanez'14, fraternities were to coordinate educational programs to help their members learn the best practices in recycling. As of this report, several of the fraternities, like in the residence halls, struggle with maintaining their programs. A renewed effort needs to be made to educate students on the importance and process of recycling.

#### **E. Textile Recycling**

IWU Wellness Program teamed up with Home Sweet Home Ministries (HSHM) in Bloomington in 2012 to offer an easy, convenient, and continuous way to recycle clothing, textiles, and shoes on campus. HSHM provided collection bins in three locations on campus: the Shirk Center, Memorial Center and the Hansen Student Center. Donated items went back to HSHM. Usable items were sold in the Mission Mart, and items past their useful life were recycled into new textiles and goods. All the proceeds from these efforts were used to assist individuals struggling with homelessness and poverty through services at HSHM. In 2016, 1,102 lbs of textiles were collected from the IWU campus. Over the last two years, HSHM has curtailed their recycling efforts and plans are being made to identify a single campus location to enable, once again, the campus community to recycle textiles.

#### **F. Residence Halls Move-In, Move Out Recycling**

During move-in of Fall 2020, student staff members from the Office of Residential Life worked hard to educate families on how to recycle their waste. Student staff members also worked many hours to separate and break down all cardboard, plastics, and Styrofoam from dumpsters at each residence hall to prevent them from going to landfills.

#### **G. Battery/Cell Phones/Ink Cartridge Recycling**

Batteries can be recycled on campus at the IT House. ITS will also accept old cell phones and ink cartridges. University departments can have these items sent to ITS for disposal. ITS uses a local recycling agent to properly dispose of the above items. In 2019, they recycled about 120 lbs of batteries.

#### **H. Electronics Recycling**

1. ITS began recycling University electronics in 2001. Cost limited the number of units that could be recycled at one time, and ITS stored the items until they could be disposed of properly. Changing market forces and the local availability have provided ITS with the option to properly dispose of items as they come off-line. The University's community efforts have provided an additional opportunity to dispose of these items. In the fall of 2013, ITS partnered with Home Sweet Home Ministries to dispose of all electronic waste from the University. In prior years, this was contracted out, as funds were available.

HSHM uses the funds generated by the sale of these items (and textiles, mentioned previously) to support their operations for the homeless and impoverished individuals.

2. With a drop in the electronic recycling market, HSHM has ceased collecting items, and the University returned to using a contractor for disposal. In 2019, the University used AT Recycling in Pontiac and recycled almost two tons of used electronic equipment.

**I. Community Mega-Recycling/Household Hazardous Waste Events**

1. From 2012 to 2018, IWU hosted on-campus community-wide Mega-Recycling events for the Bloomington-Normal community in partnership with the Ecology Action Center. These events collected electronics, textiles, batteries, compact fluorescents, eyeglasses, terracyle items, and plastic flower pots from residents and students. In addition, the event provided confidential on-site paper shredding. With the expansion of curbside recycling and public recycling sites in both municipalities, the need for these events diminished, and they were phased out in the Fall of 2019.
2. IWU student groups continue to volunteer for the Household Hazardous Waste collection events sponsored by the Ecology Action Center. This community event collects materials and chemicals that are toxic, flammable, corrosive, reactive, or explosive.



## II. Energy and Water Conservation

Through the efforts of Physical Plant, the University continues to make advances toward reducing the consumption of energy and water on campus.

### A. Efficient Air Conditioning Chillers

Starting in 2019, new efficient chillers have been installed at Harriet Rust, McPherson Theater, Ames Library, Ames School of Art, and the President's House. The original equipment was between 25 to 60 years old. These changes have resulted in a 25.5% reduction in energy use for the campus.

### B. Building Automation Systems (BAS)

The University installed integrated wifi-enabled thermostatic controls to better monitor and control the HVAC systems. The buildings done in 2019 included Blackstock, Carriage House, IT House, Drama Annex, Multicultural House, Phi Gamma Delta, and Theta Chi. The University saw a reduction of 7-9% in electrical and gas usage in all of these buildings and looks to do more smaller buildings in the next fiscal year.

### C. Electric Sub-Metering

During summer 2014, the University installed 12 electric sub meters in selected academic buildings and residence halls as well as in the Shirk Center. Energy consumption data from sub-metering is typically used to help identify equipment or systems with poor energy performance and allow for targeted performance improvement measures. Good metering underpins the energy monitoring and targeting process, which is an essential part of the University's energy management process.

### D. Installation of Energy Efficient Lighting

Starting in 2016, the University began installing new energy-efficient T5 fixtures, replacing the original metal halide bay fixtures in the Shirk Center Performance Gym, Practice Gym, and Activity Center. It is conservatively estimated that these fixtures will produce \$6,800 in annual electrical savings. T5 fixtures have a nearly 10-year life expectancy while the previously existing metal halide fixtures have a four-year life expectancy, which will save the University approximately \$5,500 over the next 10 years. In addition, the metal halide lamps run about 1,000 degrees



Energy efficient lighting in Shirk Center Performance Gym



Fahrenheit, adding to the cooling load of the building. T5's run only about 200 degrees Fahrenheit by comparison, potentially saving the University about \$1,700 annually in cooling costs.

**E. Combined Heat and Power Cogeneration (CHP) Project**

The University is currently underway with a feasibility study for a Combined Heat and Power Cogeneration (CHP) project, which would be funded with incentives by Nicor and energy savings. CHP is an energy efficient technology that generates electricity and captures the heat that would otherwise be wasted to provide useful thermal energy—such as steam or hot water—that can be used for space heating, cooling, domestic hot water and industrial processes

**F. Upgrade of Elevator Electrical Components**

The University replaced old DC drive motors with new variable frequency drives in the following buildings: Center for Liberal Arts, Ames Art Center, Memorial Center, Rust Hall, Stevenson Hall and the Welcome Center. These upgrades will result in energy savings, but the amount is yet to be determined.

**G. Center for Natural Sciences (CNS) Fume Hood Calibration**

The fume hoods (about 70) in the CNS operated for many years since initial installation and commissioning in 1995 without formal re-calibration. To evaluate the operations, testing was performed in 2014 by the Physical Plant using an outside contractor, and the fume hoods were found to be using approximately twice the amount of air they were designed to exhaust. Our fans run approximately 8,000 hours per year at 60 hp (or 45 kw). Recalibration was done, and with the hoods balanced, the University should expect a 70,000 kwh reduction or a savings of approximately \$7,000.

**H. Hydration Stations**

From 2012 to 2020, through the efforts of the Student Senate, Sierra Student Coalition and IWU Physical Plant, 17 hydration stations were installed in IWU campus buildings to provide greater access and convenience to filtered water and to reduce single-use water bottles on campus. Within the first six months of installation, the first two hydration stations diverted over 32,000 one-time-use 16-ounce water bottles. In Holmes Hall, a new station was added, and the three offices supporting the installation dropped the use of Culligan water stations. Hydration station installations continued to improve access to filtered water: Sodexo provided a hydration unit with the renovation of the Memorial Center DugOut area; three units were installed in the new State Farm Hall; two were installed in the Ames Library and Hansen Student Center thanks to Student Senate and Sierra Student Coalition; four were installed in the Shirk Center thanks to the Athletic Department; and additional units were installed in academic



buildings (Presser Hall, Center for Natural Sciences, and Stevenson Hall), residence halls (Dolan and Pfeiffer), and the Physical Plant.

#### **I. Drought and Water Conservation Plan**

The City of Bloomington approved a drought plan in the summer 2012 in response to lake levels falling to near crisis levels. Drought conditions were also experienced in summer 2013. Voluntary compliance by citizens avoided the need for mandatory actions, but the threat raised awareness that the University needs to have a plan in place to respond if drought conditions return. Research on campus water conservation strategies was also compiled by IWU student, [Tim Griffin '13, as part of his ES Senior Seminar research](#). His work provided insight for IWU as the University established a proactive water conservation plan.

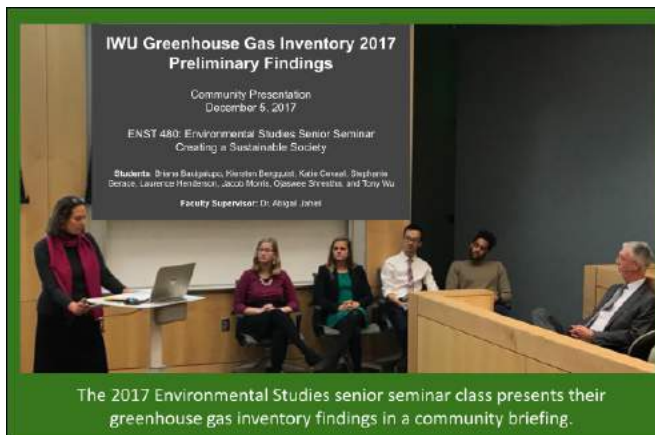
Currently, water usage for the University has been on a downward trend. The University currently averages 25.8 million gallons per year, down from 35 million gallons in 2014 or a 26% reduction. While the reductions in water usage is mainly due to less enrollment, the University continues to practice water conservation on many levels. The University installed low-flow showerheads and faucets, hands-free faucets, and flush valves for toilets. For Summer 2021, the University will be entering into a plumbing infrastructure upgrade to reduce our water use in every flushometer (commercial toilet flush valve) on campus. The University is pursuing water savings with our campus irrigation systems to make them smarter and more efficient through technological upgrades. The cooling tower at McPherson Theater was eliminated and replaced with a cooling system retrofit which will reduce the campus yearly water consumption by 200,000 gallons. In addition, the University is working with a water treatment vendor to improve efficiencies in our cooling towers to further reduce the amount of water needed in the cooling process.

### III. Greenhouse Gas Inventory (GHG)

In 2017, students in the Environmental Studies senior seminar class conducted Illinois Wesleyan's first Greenhouse Gas Inventory.

#### A. GHG Methodology

1. American College & University Presidents' Climate Commitment (ACUPCC) guidelines were followed, which require institutions to account for all emissions from purchased electricity, heating, ventilation air conditioning, refrigerants, university vehicle fleets, waste water, solid waste, landscaping, student/faculty/staff commuting, business travel, and study abroad air travel. Students chose to measure the GHG impacts of IWU food and paper use as well.
2. Estimates of Fiscal Year (FY) 17 emissions were calculated using SIMAP, which provides a common GHG accounting methodology based on guidelines and estimates of the Intergovernmental Panel on Climate Change (IPCC) to calculate a University's GHG footprint.



#### B. GHG Findings

1. Based on the data the students assembled, and using the SIMAP calculations, IWU's total emissions in 2017 were 36, 970 metric tons of carbon dioxide equivalent (MTCDE).
2. The energy sector accounted for 70% of IWU's total GHG emissions, with electricity accounting for the largest share (49.5%) and HVAC accounting for the second largest share (20.5%). Fugitive emissions from refrigerants, used both in heating and cooling and in refrigeration, accounted for 14.28%. Food accounted for 6.2% of emissions. Transmission and distribution losses from electricity production made up another 5%, while transportation accounted for only 4% of emissions assessed. Contributions from wastewater, solid waste, landscaping and paper consumption were insignificant.
3. Given that transportation is known to be a significant contributor of GHG emissions that cause climate change, the study concluded that problems with data collection led to a considerable underestimation of GHGs and recommended that the University develop a systematic means of tracking this data.
4. Multi-year data for HVAC emissions between FY13 and 17 provided an additional finding: technological retrofitting of the HVAC system, supported by a 2015 grant from Nicor Gas

to the University, had resulted in a 29% reduction of GHG emissions from HVAC.

5. Comparison with other schools demonstrated that consistent efforts can lead to significant cumulative reductions in a university's GHG footprint.

### **C. GHG Recommendations**

After conducting this study, students came up with 6 recommendations for the University. These recommendations include:

1. Developing a Climate Change Action Plan that would lay out institutional means for collecting all GHG data and conducting a GHG Inventory each year
2. Establishing a Campus Green Revolving Fund and a Campus Carbon Charge to fund efforts to reduce GHG emissions
3. Requiring our energy broker to investigate sources used to produce purchased energy and, on this basis, generate a clean energy portfolio for the campus
4. Creating a carpool program to reduce students' carbon footprint from travel.
5. Investigating ways to maximize IWU fleet efficiency, including the purchase of alternative fuel vehicles
6. Hiring a Campus Sustainability Coordinator to oversee efforts to reduce GHG emissions as well as perform other sustainability work

## IV. Sustainable Transportation

Students have actively supported the use of sustainable modes of transportation, in particular the use of bikes and the local mass transit system.

**A. Bicycles** - The League of American Bicyclists awarded Illinois Wesleyan University with a Silver Bicycle Friendly University designation in 2018, which recognizes the University's efforts to promote safe, accessible bicycling on campus. This designation is a move up from the University's Bronze award in 2014, signaling IWU's ongoing commitment to encouraging sustainable transportation on campus. The projects and resources related to biking at IWU are listed below.

### 1. IWU Bike Co-op

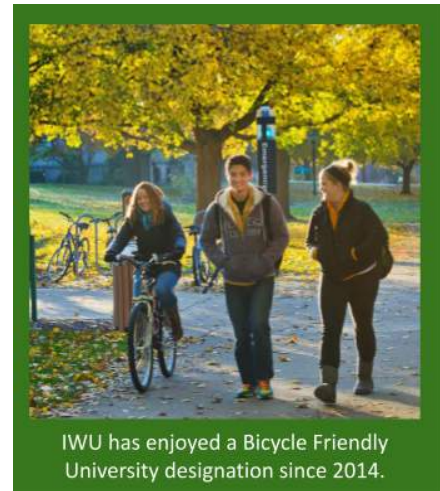
A donation by Todd Zoellick enabled IWU to open a bike co-op out of the garage behind the IT House. The bike co-op is a place where students, faculty, and staff can learn how to perform simple repairs on their bicycles at a more affordable rate than if they'd dropped them off at a local bike shop for professional repair. The bike co-op is also used to perform regular maintenance on the fleet of IWU bike share bikes.

### 2. IWU Bike Share

The West Bloomington Revitalization Project (WBRP) generously donated a handful of used bikes to serve as a pilot bike share program on campus beginning in September 2013. The bikes were put outside of Hansen Student Center for students, faculty, and staff to check out and ride for up to 24 hours at a time, free of charge. Since that time, a total of 15 more bikes have been purchased. By the end of May 2017, the bikes had been checked out more than 1,300 times by more than 300 people. In the 2018-19 school year alone, there were 293 bike checkouts, which was an increase from the previous year.

### 3. Bike Share 309

In March 2017, the Town of Normal launched a community bike share with 47 bikes and nine stations. One of those stations is in the parking lot adjacent to the Hansen Student Center. Everyone with an IWU email address was eligible to receive \$15 off an annual membership in this program. This



program was discontinued in Winter 2019.

#### 4. Indoor Bike Storage

When Harriett House was built in 1997, the architect included a room with exterior access for the purpose of bike storage, but that room had never been opened. The IWU Bike Committee worked with ORL and Physical Plant to open that space to students for the first time in February 2014. Fourteen students are able to get a key from ORL for one year at a time and lock their bikes in this room, sheltered from the elements, and are able to come and go any time they want to ride, day or night.

#### 5. Bike Racks

Since the fall of 2010, additional bike racks have been added across campus, bringing the total to 32 racks. Capacity now stands at 306 bikes. A bike rack standards document was also adopted in an effort to replace older, low-quality racks with ones that provide a consistently high-quality experience to those locking their bikes and to the broader campus community. An interactive feature on the IWU campus map at [www.iwu.edu/map/](http://www.iwu.edu/map/) shows the location of campus bike racks for public access.

#### 6. Abandoned Bike Policy

We have a few years of experience under our official abandoned bike policy. Campus Safety has been diligent about collecting bikes every summer. The WBRP's Walk-in/Bike-out program, where we used to donate collected bikes, has been receiving more donations than they're able to process, so we now keep the bikes in-house and use them to further the mission of the IWU Bike Co-op.

### B. EV Charging Stations

The two electric car charging stations, located at the Minor Myers Welcome Center, have seen daily use as the electric car population grows in the community. The primary users are faculty/staff members as well as some community members who come to campus. Increased demand may require additional stations or the establishment of a usage policy.



### C. Public Transit Bus Passes

As early as 2012, the University began exploring the possibility of universal bus passes with *Connect Transit*, the local public transportation system. Liz Kuehn '13 conducted an ES Senior Seminar research project that addressed this topic and offered guidance for the University to move forward. In February of 2017, Connect Transit and Student Senate, on a trial-basis, arranged for student-only use of the system to determine if there was sufficient student demand. In the final three months of the semester, students used the system over 700 times. Starting in the Fall of 2017, IWU students were able to use the buses with the Student Senate paying the

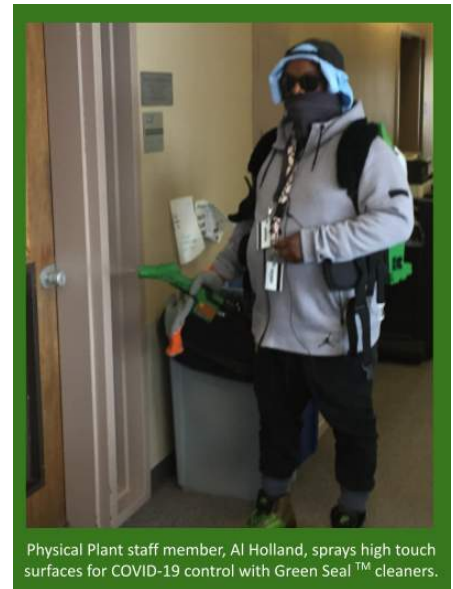


cost. During the first full year, students made over 5,700 trips on the system. Over the last three years, student usage has increased to over 16,300 total trips on the system with an average of over 4,300 rides per semester. During the Fall 2020 semester, the Connect Transit system provided a convenient option for students living in off-campus COVID-19 housing in Uptown Normal.

## V. Green Cleaning and Other Custodial Practices

Over the past six years, the Physical Plant has moved to implement a number of sustainability practices in the selection of custodial supplies, equipment, and procedures. Examples include:

- As equipment is replaced, **Green Seal™** products are chosen. New equipment for cleaning floors in the Shirk Center use less water and fewer chemicals, and the restroom cleaning system is **Green Seal™** approved.
- Cleaning products used on campus are **Green Seal™**, including floor cleaner, glass cleaner and hand cleaner. Peroxy is used for carpet and floor cleaning.
- Exterior and interior brush matting at building entrances traps dirt and reduces the need for cleaning, and the cycles for stripping hard floors are extended by scrubbing and recoating.
- Large stadium paper towel rolls and dispensers were installed throughout the campus, which has resulted in a 27% reduction in paper usage and an 80% reduction in packaging waste. Over the last 18 months, roll towels have been installed.
- With the onset of COVID-19, Physical Plant has adopted the use of the Stabilized Aqueous Ozone System (SAO™) which has earned the **Green Seal™** certification and eliminated the use of chemical cleaners and its impact on faculty, staff, students, and visitors.





## VI. Environmental Health and Safety

Environmental health comprises those aspects of human health and disease that are determined by factors in the environment (physical, chemical, biological, etc). It also refers to the practice of promoting human health and wellbeing and fostering a safe and healthful environment. Below are several examples of areas where the University has identified and addressed potential environmental health risks.

### A. Radon Testing and Mitigation

Radon is a cancer-causing, odorless, radioactive gas that comes from the natural breakdown of uranium in the ground and enters homes and other buildings from the soil. The US Surgeon General has warned that radon is the second leading cause of lung cancer in the US and the leading cause of non-smoking lung cancer. It is found in homes and buildings throughout Illinois, and elevated indoor levels are found in every county in Illinois, including McLean. Performing a radon test is the only way to know if radon levels in a building are high, with EPA recommended action levels at 4 pCi/L and above. Action typically involves installing a radon mitigation system in the building. During summer 2014, testing and re-testing of University-owned properties was initiated by the Physical Plant using the outside contractor L&M Radon Properties, and, if buildings exceeded action levels, additional radon mitigation systems were installed. Campus buildings with active air handling units (such as many of the campus classroom and administrative buildings) do not require testing, since air is constantly circulated, thus reducing risks of exposure to radon. As of June 2020, IWU had 26 University-owned buildings with operating radon mitigation systems. Nine of these buildings include dorms and service centers with the remaining being rental properties. Retesting of 58 campus-owned buildings is scheduled to be done every three years on a rotating schedule with about one third done yearly. These include ten academic buildings and service centers, 15 resident halls, and 33 rental properties. The Physical Plant will further evaluate and take action to reduce the risk of radon if any buildings exceed recommended action levels.

### B. Filtered Water with Hydration Stations

From 2012 until 2020, about 17 hydration stations or facilities with water filters have been installed across the IWU campus. Most of the campus tap water is supplied by the City of Bloomington, which draws its water from two lakes north of the city. Hydration station water filters can help reduce potentially harmful trace amounts of contaminants likely in the local tap water, such as pesticides and fertilizers from runoff of local agricultural farmland, chlorine by-products from municipal disinfectant treatments, and metals such as lead, which can leach from aging water pipes. Across the US, bottled water is much more poorly regulated for harmful contaminants than municipal tap water, which must test and report contaminants annually to consumers. Thus the practice of replacing bottled water with filtered local tap water may help reduce exposures to harmful water contaminants while

also reducing costs and waste from bottled water. Each filter supplies around 2,000 cycles/bottles with each cycle estimated at 16.9 ounces of water.

**C. Green Cleaning Products and Practices**

Physical Plant has recently adopted the use of the Stabilized Aqueous Ozone System (SAO™) which has earned the **Green Seal™** certification and eliminated the use of toxic chemical cleaners. This system reduces exposure to faculty, staff, students, and visitors to chemical cleaners.

**D. Integrated Pest Management**

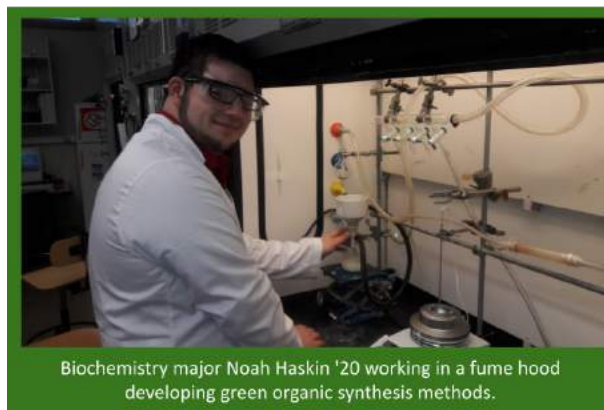
Campus grounds practices an Integrated Pest Management approach to landscaping, which helps minimize use of potential health risks associated with turf and garden pesticides and fertilizers.

**E. New Construction Minimizes Hazardous Materials**

As noted below, recent construction projects on the IWU campus (e.g., the Welcome Center, State Farm Hall) have been built to LEED standards (Leadership in Energy and Design) which incorporate use, for example, of low VOC paints and carpets and improved ventilation systems. These help improve indoor air quality and minimize health risks to building occupants, while also potentially improving work performance.

**F. Health and Safety Protocols**

Establishing, monitoring, and enforcing health and safety protocols that meet or exceed government, state, and local requirements is an important component of an institution's sustainability plan as it relates to environmental wellness. Campus safety protocols, such as the Hazardous Communication Program and Chemical Hygiene Plan, have been recently updated, and implementation is ongoing.



**G. Chemical Hygiene Plan**

The Chemical Hygiene Plan (CHP) establishes policies, procedures, and work practices intended to protect employees (including students) from health hazards associated with work involving chemicals in the University's laboratories, with standards set by the Occupational Safety and Health Administration (OSHA). It covers all work in instructional and research laboratories within the IWU Center for Natural Science (CNS). Last revised in 2015, in 2020 it is being reviewed and updated, and the development of a CNS Safety Team is in process. The Chemical Hygiene Officer is working with faculty in the sciences to reduce the amount of hazardous material in the CNS. These efforts have included reducing the inventory of laboratory solvents; properly disposing of degraded, expired, and unneeded chemicals; and disposing of degraded biological specimens. These efforts create a safer and less cluttered work environment. Accomplishments toward our full implementation of the

Chemical Hygiene plan include our transition to the new universal chemical labeling system developed by the United Nations called “Globally Harmonized System of Labelling of Chemicals (GHS) to define and communicate chemical hazards; implementation of improved procedures for testing safety equipment including laboratory fume hoods, eyewash stations, safety showers, and fire extinguishers; and improved hazard signage and evacuation signage in the CNS. Moreover, in compliance with the University's insurer, laboratories in the CNS were outfitted with natural gas safety valves. Personnel will need a key to start the flow of natural gas to the lines in a particular laboratory and, to guard against potential leaks, the gas flow to all labs will automatically shut off in the evening. Ongoing chemical hygiene work includes establishing an active CNS safety committee, improving our laboratory safety training program, and removing additional expired and/or unneeded chemicals from our inventory. Finally CNS faculty and staff are working closely with the Physical Plant and Administration on protocols for disinfection and social distancing in CNS for coronavirus pandemic safety precautions.

**H. Hazardous Communication Program:**

All other campus personnel and non-science laboratories (e.g., physical plant, art, theater) are covered under the IWU Hazardous Communication Program (HAZCOM) as required by OSHA [OSHA 29 CFR 1910.1200](#). This policy was rewritten to inform affected employees of the requirements of the OSHA HAZCOM standard, operations where exposure to hazardous chemicals may occur, how employees can access this program, and information about labels and safety data sheets (SDS). The IWU employee handbooks (exempt and non-exempt staff) were revised in February 2017, and revisions are in progress for the faculty handbook. Each unit within the University has one person designated as the Hazard Communications Program Coordinator (HCPC) for that unit. The Physical Plant has developed its own HAZCOM plan, because of the special circumstances pertaining to its operations, with the latest version (January 2016) posted on the Physical Plant’s Workplace Safety website.

**I. Fort Natatorium Swimming Pool**

In summer 2016, a new system was installed with the pool, opened in 1988, to bring it up to code. Improvements included a new dehumidifier unit, for the air, heat and AC, pool water filter and UV light. This reduces energy consumption, improves both air and water quality for swimmers and reduces the need for chlorine and potentially hazardous chlorine by-products.

## VII. Peace Garden and Bertholf Apiary

The Peace Garden and Bertholf Apiary are a strong, visible commitment of the IWU students, faculty and staff support for sustainability.

### A. Peace Garden

#### 1. Establishment

Groundbreaking for the IWU Peace Garden (PG) was on April 17, 2012, and a five-year lease for a plot on the grounds of the Immanuel Bible Foundation, located on the corner of Fell and Francis Street in Normal, was signed. Originally inspired by the IWU Peace Fellows and under the mentorship of Professor James Simeone, the garden's mission is to serve the curricular and culinary needs of IWU students, providing a tool of civic engagement with the surrounding community and beyond. The Peace Garden has since been moved to a University-owned plot of land on North Evans Street in Bloomington. Produce grown through the garden continues to be given to local organizations, such as the West Bloomington Revitalization Project, and at times sold at locally-owned grocery stores, such as Common Ground and Green Top Grocery. Produce from the PG has also been available at on-campus dining facilities. Organic practices are used and, when available, harvested rainwater is used for watering needs. Pesticides and synthetic fertilizers are never used and all yard waste is composted in onsite anaerobic and aerobic composting bins. Labor in the PG is done by hand. Besides the initial breaking up of the sod, garden beds are dug and weeded by hand. Produce is also often delivered on foot or via bicycle. A hoop house, established in 2012, allows for continued production of vegetables during the winter months. A PG Registered Student Organization (RSO) was also started in 2012, and additional student leadership and labor is supplied through work-study summer garden managers, ES and ARC interns, and other volunteers.



#### 2. Production and Expansion

Garden-planting expansion continued during the 2018-2020 seasons:

a) In the 2016-2017 season, the IWU Peace Garden was relocated to a plot on N. Evans

Street in Bloomington. This site has many advantages over the old one—the land is owned by the University, it is closer to the main quad, and it contains a garage which the garden uses to store tools.

- b) The John and Erma Stutzman Outdoor Classroom, comprising six 8ft. wooden benches in a hexagonal formation, was added to the Peace Garden plot in 2016. John and Erma Stutzman funded the Peace Fellows Program, which was created in 2007 with the purpose of encouraging talented Illinois Wesleyan University students to pursue focused study in areas involving peace, conflict resolution, and social justice, areas that reflect the broader university mission. The classroom is located under a white pine tree on the western side of the garden site. The tree shades the area and its dropped needles were extended somewhat so that the classroom's benches and shade are naturally set off from the grass and sun. The needles are sustainably replenished every year, and together with the heavy shade will reduce to a minimum weeding and other maintenance issues at the site. The design is large enough to seat 24 adults.

- c) The Peace Garden continued to develop its Sustainability Education Program, which was aimed to teach young, local elementary school students about sustainability efforts in the PG. In 2018, signs were made for each of the five stations--soil, seed, insect, compost, and hoop house--that the students visit. Adult versions of the talking points at each station were developed by the RSO students in expectation of expanding the program to IWU students in the fall as an option during orientation week. In 2019, the Environmental Studies Department funded the program to allow it to be offered to Glenn School students in the week between finals and graduation when volunteers are hard to find. The grant also encouraged outreach to other schools, but sadly the sustainability education program was cancelled in 2020 due to COVID-19.



- d) In the fall semester of 2020, PG interns added better insulation and gutters to the hoop house. This will allow for more successful winter crops and rainwater collection with the rain barrel donated by Andy Kreiss.
- e) When rainwater is unavailable, watering the crops at the PG is a very tedious and demanding task. Without rainwater, volunteers must haul water from the IWU Welcome Center using a



- wheelbarrow, which is located about a block away. To fix this problem, in 2020, PG interns began the process of installing an underground cistern next to the hoop house that will provide nearby storage for collected rainwater or hauled water.
- f) A sweet potato patch was added to the PG in 2020. Hundreds of pounds of sweet potatoes were harvested and donated to Sodexo for use in student meals. The leftover sweet potatoes were sold to students and faculty by PG RSO members. All of the proceeds from this sale, which totaled \$70, was donated to the Parklands Foundation.
  - g) A native prairie plot was added to the PG in 2020 to promote sustainable gardening practices and provide nectar for the bees at the Bertholf Apiary. Signage is expected to go up near the native prairie plot in 2021 that will detail the species of plants in this part of the garden. This will educate visitors on the types of plants they can grow in their own yards to promote sustainability.
  - h) Plans to add a large sunflower patch to the PG are currently underway. The goal of this patch is to increase student interest in the PG and provide more flowers for pollinators. The sunflower patch will be in the shape of a peace sign and have small walking paths which will include hand painted stones that were created by students during the 2020 Harvest Festival.
  - i) Official Illinois Wesleyan Peace Garden signage is scheduled to be installed in 2021 to help bring awareness of the garden to visitors.

## B. Lloyd M. Bertholf Apiary

1. The Peace Garden oversaw the formation of the IWU Beekeepers, a group of students who are interested in beekeeping and work year-round to maintain the PG's colonies. The Environmental Studies program funded the purchase of a beehive and a starter colony of bees in 2018, but the queen from this colony died. Two replacement colonies were added in April 2019.
2. In the summer of 2020, the bee hives were relocated to the PG grounds, and fencing was added around them. The location containing the hives, known formally as the Lloyd M. Bertholf Apiary, was named after IWU President Lloyd Bertholf, who was renowned for his research on the physiology and behavior of honeybees.
3. Honey was successfully extracted twice during the summer and fall months of 2020, including once during a honey extraction event which brought students to the garden to learn about the PG and bees.
4. In September of 2020, IWU was designated a Bee Campus USA affiliate in recognition of its adoption of rigorous commitment to raise awareness and enhance habitats for pollinators. Bee Campus USA endorses colleges and universities that create well-maintained pollinator habitats and promote bee conservation efforts within the local community, among other criteria. Illinois Wesleyan is one of five universities in



Illinois with this certification.

5. Signage is currently being produced, along with a video, to commemorate and promote the creation of the Bertholf Apiary and the Bee Campus USA designation.
6. Honey from the hives was given to PG volunteers. Leftover honey was sold to faculty and staff, creating a revenue of \$184 which was donated to the Parklands Foundation.



## VIII. Campus Building Construction and Renovations

The Minor Myers Welcome Center was the first LEED Silver GREEN Building on the IWU campus and the first in the City of Bloomington. Since its opening in 2009, the University has strived to build to LEED standards in all its construction projects.

### A. Memorial Center DugOut Renovation

As renovation plans were developed, Sodexo and the University looked to improve the sustainability of the DugOut area. Building construction materials were chosen to meet our sustainability efforts. Better recycling bins are available as well as bins to compost food waste. Hydration stations are located in the public areas and Sodexo has reduced the availability of bottled beverages while providing greater fountain drink options. Low VOC paints and wall products were chosen for use in the renovation.

### B. State Farm Hall Construction

Opened in the Spring of 2014, State Farm Hall was designed to meet Leadership in Energy and Environmental Design (LEED®) Silver status without applying for official LEED certification, due in part to the significant costs associated with certification. With LEED standards in mind, many sustainable practices have been incorporated into the design to reduce energy consumption and provide a healthier learning environment. The building envelope was designed to minimize outside air infiltration using low-E glass and double-glazing, additional insulation to minimize heat loss/gain, and thermal breaks on all exterior wall systems. A ground-source geothermal HVAC system was used as well as a computerized building automation system to optimize the HVAC performance. Low-flow lavatories, urinals, and toilets were included with energy-efficient, high-speed hand dryers. A high-efficiency traction elevator was used in lieu of a more typical hydraulic elevator. Low VOC paints and wall products were used in the construction process to reduce product off gassing.



Class meets on quad near the underground geothermal wells installed for the newly constructed State Farm Hall.



State Farm Hall is built to LEED standards.



**C. The Gates at Wesleyan – New Student Housing**

Like recent University construction projects, sustainability practices have been incorporated into the design and construction of the project. The building envelope was designed to minimize outside air infiltration. The paint and carpets are low-VOC and energy-star washing machines, refrigerators, and dishwashers were installed.

**D. The Minor Myers Welcome Center**

In 2009, the University opened the Minor Myers Welcome Center, the University's first LEED Silver Green Building and the first building in Bloomington to receive LEED certification. At the time of its opening, it was only one of 39 LEED Silver buildings in the State of Illinois and only one of 19 outside the City of Chicago. The building incorporates a ground-source geothermal HVAC system as well as a computerized building automation system to optimize the HVAC performance.



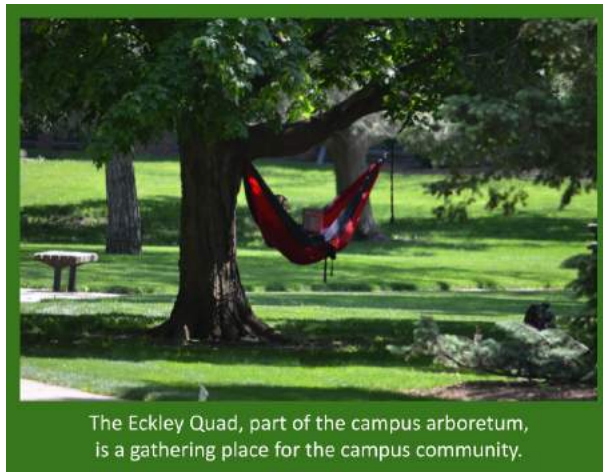
LEED plaque in Welcome Center

## IX. Campus Grounds and University Farms

The University endeavors to operate the grounds in an environmentally friendly manner.

### A. Grounds Maintenance

The University continues to minimize the use of synthetic pesticides and fertilizers on the Minor Myers Welcome Center landscaping and uses an in-house Integrated Pest Management (IPM) system across the remainder of the campus grounds. The installation of artificial turf on the football field in 2012 eliminates the need for watering and chemical usage. A [campus arboretum tree map](#) update is expected this Spring. Art Killian, retired Groundskeeper, obtained the designation and created the tree map and is helping to update the map.



### B. Snow and Ice Removal

In 2017, for ice and snow removal, Physical Plant shifted to using salt products with a corn-based coating. While more environmentally-friendly than rock salt, this product proved to be significantly less effective, resulting in unsafe sidewalks and parking lots. In 2019, they began using a brine system that pre-treats surfaces and allows for more effective removal of ice and snow. The brine system (23% salt – 77% water) uses less salt and reduced runoff into storm drains. Additionally, it has eliminated the die-off of vegetation.

### C. Native Prairie Plot

The Native Prairie plot along the southwest side of the Center for Natural Sciences building continues to serve as a learning lab for biology classes as well as allowing for the University to make a small reduction in the amount of natural turf that needs to be maintained. A student initiative, the plot was designed and installed in the spring of 2009 and features native Illinois prairie plants, which are resistant to drought and provide important wildlife habitat. The prairie is now fully established and self-perpetuating and it attracts a large number of pollinators each spring/summer.



**D. Multifaith Meditation Garden**

The Multifaith Meditation Garden, featuring a Multifaith *Green Rule* Tree, is an outdoor space on the east side of Evelyn Chapel. It was designed as a senior seminar project by Nicole Chlebek '16, a Multifaith Ambassador Environmental Studies major, as a place to sit and reflect amidst a diversity of native prairie plants and wildflowers.



Nicole Chlebek '16 celebrates planting the Multifaith Meditation Garden designed as her ES senior seminar project.

**E. Illinois Wesleyan Campus Arboretum**

Illinois Wesleyan University was built on a 10-acre plot sold to the University in 1854 by Franklin K. Phoenix, then-owner of Phoenix Bloomington Nursery. From those “roots”, the now 82-acre campus has become home to more than 1,000 trees representing nearly 150 species and cultivars. Thanks to the efforts of



IWU's campus arboretum has over 1,000 trees.

members of the IWU Grounds crew (Eric Nelson, Art Killan, and Ken Detlof) the University has become a designated arboretum. Through the efforts of retired Groundsman Art Killian, the variety of trees at Illinois Wesleyan are catalogued and photographed on the [Campus Tree Map](#). This interactive tree map is available on the IWU web site and aims to provide a virtual field trip while answering questions frequently asked of University grounds keepers regarding the different species of campus trees.

**F. University Farms**

Illinois Wesleyan University owns 22 farms across Illinois with roughly 5,300 acres of farmland. The Board of Trustees Farm Sub-Committee coordinates management of the farms. The committee utilizes the professional services of FIRST MID AG Services. For 2019, 68% of the farms used some strip-till or no-till practices. Eighty-one percent of the soybean acres use no-till practices, and 56% of the corn acres use strip-till or no-till practices. The percentages vary from year to year based on soil conditions and the crop choice at each farm. Five of the farms have a total of six wind turbines with plans for an additional four farms to have possibly six turbines. The power generated from these turbines currently goes directly into the regional electrical grid and not to campus.



IWU owns 22 farms across Illinois which incorporate some sustainability features such as no-till and wind turbines

## X. Education, Communications, and Outreach

The University has benefitted by the engagement of many diverse groups across campus in educational and research initiatives focused on advancing environmental sustainability and justice locally (on campus and the local community) and globally. Following are some examples - led by engaged students, faculty, and staff - with highlights in the past several years.

### A. Website and Other Campus Communications

The IWU Office of Communications distributes periodic news releases on sustainability efforts, which are published on the University website, such as in this [2020 article on Bee Campus USA certification](#), and occasionally in the quarterly *IWU Magazine*, such as this [2019 Signature Solutions article](#). Sustainability news items also are featured on the [Strategic Initiatives web page](#) and on the [Environmental Studies home page](#) with an automated news feed and periodically are shared with the campus community through the Campus Weekly newsletter. Plans to improve visibility of campus sustainability actions are ongoing with efforts to create sustainability-focused videos for the website, and update and promote actions via website and social media channels.



### B. Environmental Studies Program (ES)

ES is the only academic unit on campus that specifically engages the University's commitment to sustainability with a goal of educating a new generation of students who are socially engaged, critical and creative thinkers, committed to advancing environmental sustainability both locally and globally. It offers a full curriculum of courses on environmental topics related to sustainability which contribute to the ES major, minor, and the IWU general education program, supplemented with high impact learning experiences through community-based research, international collaborations, internships, and robust extra-curricular programming for the campus. Examples of sustainability actions by the ES Program include:

- 1. Applied community-based research, locally and internationally.** As part of the **Creating a Sustainable Society** senior seminar course, each student majoring in Environmental Studies for over a decade has worked on a community project addressing a local sustainability challenge on campus, in the local Bloomington-Normal community, or internationally. These experiences allow students to interact with the community – local or international – to engage in real-world problem solving. Examples:

a) **Innovative Signature Experience “[Vietnam Today: Addressing the Challenges to Sustainable Development](#)” travel course combined with senior seminar research** - In 2018, a new program was designed to give majors direct exposure to the challenges of sustainable development and climate change in Vietnam. In May of 2018, eight upperclassmen from the ‘19 and ‘20 classes and two ES faculty travelled to Vietnam, where they spent two weeks conducting field studies of agricultural and urban ecosystems in the Mekong River Delta and Ho Chi Minh City (HCMC). While there, they partnered with students and faculty at Ho Chi Minh University of Natural Resources and Environment (HCMUNRE) and jointly developed a research project on means of achieving a more sustainable transportation system in HCMC. That fall during senior seminar, ES majors followed up by investigating the health and environmental impacts of traffic emissions in HCMC, the flooding situation and ecological means of addressing it there, and commuter behavior in the city. Drawing on the experiences of other cities, they researched ways of reducing the negative environmental impacts of transportation in HCMC, including consideration of the feasibility of introducing electric motorbikes as substitutes for the omnipresent four-stroke motorcycles and improving the public bus system. In December, the 12 HCMUNRE student and faculty partners came to IWU, where ES seniors and their Vietnamese collaborators jointly presented their research findings in a public forum. This program was scheduled again in May of 2020, but due to COVID-19, the trip was canceled.



Dr. Abigail Jahiel, Dr. Aaron Wilson, and students in Vietnam May term course restore mangroves destroyed by war-time defoliant chemicals.

b) **Multiple local ES Senior Seminar student research projects** focused on some aspect of environmental sustainability in Illinois and the local community. Examples:

- *"Lessons from Scandinavia: Developing Sustainable Transportation Systems in Illinois"* (Amanda Best '20)
- *"Exploring Environmental Values Based on Age Demographics and Landscape Type Differences"* (Hannah Horn '20)
- *"Perceptions and Attitudes Regarding Stream Restoration Efforts"* (Carina Silva '19)
- *"Expanding the Environmental Justice Area under Illinois Solar for All: The Case of West Bloomington, IL"* (Annika Fuller '21, Leah Carter '20, and Emily



Amanda Best '20 and Maria Wipfler '19 conduct research on mussels with Dr. Aaron Wilson.

Schirmacher '21)

- "Historic and Contemporary Environmental Injustice in West Bloomington, Illinois" (Refugio Moreno '21, John Nairn '21, Riley Rooney '21, and Leah Bieniak '21)

## 2. Student Independent Research

Under supervision of ES faculty, students have the opportunity to present independent research at professional conferences, including IWU's John Wesley Powell Conference (JWP). Examples of recent projects include:

- "Using GIS to measure walkability in Bloomington-Normal" (Amanda Best '20, for IWU's JWP but cancelled due to COVID-19)
- "Fish Biodiversity and Percent Imperviousness Over Time in Sugar Creek" (Maria Wipfler '19, External Conference)
- "Estimating Streamflow from Rainfall Runoff as a Tool for Predicting Variance Variability in Freshwater Mussel Surveys" (Jake Williams '19, JWP)
- "Microhabitat effects on freshwater mussel distribution in Mackinaw River tributaries" (Amanda Best '20, Maria Wipfler '19, & Shannon Anderson [Emory University], NGRREC Summer Research Symposium)
- "Estimating the Impact of Large Hog Farms on Freshwater Mussel Diversity" (Ojaswee Shrestha '18, JWP)
- "Determining Soil Science Lab Protocol to Measure Soil Fauna Influence on Nutrient Flow from Leaf Litter to Soil" (Kirsten Bergquist '18, JWP)



Ojaswee Shrestha '19 experiments with biological pest controls in summer internship with International Rice Research Institute.

- ## 3. A number of ES sustainability-related internships occurred both locally and abroad for academic credit (ENST 397-ES Internships), and additional ES internships for experience. For instance, between Fall 2013 and Spring 2021 over 70 ES students (majors or minors) participated in internships for academic credit, 53 locally and 20 in the Freeman Asia program. In 2020 and 2021, the COVID-19 pandemic cancelled some programs, but others were sustained and modified, moving forward with attention to safety precautions.

### a) Examples of ES-related local internship

**agencies** include: the IWU Peace Garden, Ecology Action Center, Bloomington Farmers Market, Sugar Grove Nature Center, Parklands Foundation, West Bloomington Revitalization Center, Children's Discovery Museum, and Illinois Environmental Council in Springfield.



Sam Yoest '19 completes internship with the Illinois Environmental Protection Agency.

**b) Examples of ES-related internship agencies internationally** (through the IWU Freeman Asia Summer Internship Program) include: Gawad Kalinga Enchanted Farms (GKEF), Philippines; World Friendship Center, Hiroshima Japan; Friends of Earth, Tokyo Japan; International Rice Research Institute (IRRI), Philippines; Human Nature, Philippines; MAD Travel, Philippines; EarthRights International, Thailand; and Second Harvest, Tokyo Japan. Summer 2020 international internships were canceled due to COVID-19 pandemic.



Students gardening during internship at Gawad Kalinga Enchanted Farms, Philippines.

**c) Example of sustainability activities through ES internship:** A group of 11 IWU students and two IWU faculty/staff attended the [Illinois Environmental Council Lobby Day in Springfield](#) in April 2018. They lobbied legislators on clean coal, transparency in fracking, pollinator-friendly solar fields, Volkswagen settlements, and more.

**4. Sponsoring or co-sponsoring a robust program of co-curricular programming** related to sustainability, averaging 8-10/year. Events include professional/academic speakers, workshops, panels, Q/A student research and internship presentations, and organizing academic field trips.

**a) 2018**

- *"Puerto Rico After Hurricane Maria: Tales from one of the Canaries in the Coal Mine"*(spring 2018) by Brenda L. Martínez Quiñones
- *Climate Change and Water Quality in Vietnam and Ho Chi Minh City* (fall 2018) by Dr. Thị Vân Hà Nguyễn
- *"Generation Zapped" Film Documentary* (fall 2018)
- *"Encountering Climate Change on the Ground: What IWU Students Learned in Vietnam and South Africa This Summer"* (fall 2018)



Students from environmental health course present research on health impacts of climate change.

**b) 2019**

- *Founders Day Convocation "Why Should We Trust Science?"* (spring 2019) by Dr. Naomi Oreskes
- *"Containing Climate Change: Restoring US Leadership Domestically and Diplomatically"*(spring 2019) by Dr. Rick Duke
- *Field Trip to Midwest Fiber Recycling* (fall 2019)
- *"Environmental Facts & Fictions Workshop"* (fall 2019)



Dr. Naomi Oreskes presents "Why Should We Trust Science?"

2019)

- "Making Buildings Safe for Migratory Birds" (fall 2019) by Annette Prince

**c) 2020**

- "The Dynamics of Environmental Policy-Making in China" (spring 2020) by Xueying Yu, Ph.D.
- "Seasons of Change on Henry's Farm" - a film by Ines Sommer Film "sneak preview" and Q&A with farmer Henry Brockman and film co-producer Terra Brockman (spring 2020)
- "PUBLIC TRUST" Film Screening and Virtual Discussion (fall 2020)
- "How to Communicate About the Environment in 2020" (fall 2020) by Katie Coleman '04, Anna (Groves) Funk '11, Leslie Morrison '08, Amanda Solliday '06
- "Health & the Environment Virtual Workshop" (fall 2020)



Paddling excursion at Moraine View

**C. Sierra Student Coalition RSO (SSC)**

Established in May 2005, SSC is IWU's active, completely student-run "green group" focused on sustainability and environmental advocacy. Though the main activities of SSC vary by year depending on the needs of the campus and the most pressing environmental issues, highlights over the 2016-2020 school years focused mainly on waste management and sustainability awareness, including:

**1. Food composting implementation, evaluation, and education in the Dugout**

Since fall of 2013, SSC has been involved in designing, pilot testing, and revising attempts at composting in the Memorial Center Dugout with mixed success. The revised dugout waste disposal system in the fall 2016 semester brought continued confusion with resulting contamination of the waste streams. For example, a one-day waste audit conducted in October 2016 by an ES class found 38% contamination in Dugout composting bins, meaning that over one-third of the material in the compost bins was not compostable. In response, SSC implemented a survey in Fall 2016 about composting knowledge to a sampling of IWU students. In response to the finding that 75% of surveyed students did not compost reliably, SSC designed and implemented barrier lids for compost bins and new signage, which were launched January 2017. A follow-up one-day audit conducted by SSC in March 2017 found compost contamination decreased to only about 10%, suggesting that the signage and compost lids effectively decreased contamination. A group of SSC students showcased these results at the 2017 John Wesley Powell Research Conference. They recommended an educational program be introduced that informs students about proper waste disposal via Titan Orientation Week and the First Year RA's.



SSC members enjoy their annual camping trip.



## 2. TerraCycle

TerraCycle is an international enterprise that collects typically non-recyclable items and, through partnerships with other companies, turns the items into new, useful products. IWU's participation in the program began in the 2014-15 school year with the collection of cereal bags and granola bar wrappers from students in specific residence halls.

For every collection that reached a certain number of pounds, SSC would

receive money that would then be donated to a local charity or non-profit. IWU's Terracycle program saw substantial growth in 2016-17 with the help of key SSC members. Partnering with St. Luke Union Church in Bloomington, SSC added chip bag collection to the ongoing cereal bags and granola bars. Informational posters were put in dormitory halls, and Blackstock and Harriet Halls were selected as trial halls and provided with bins. With successful collection from these two halls, SSC was able to locate additional collection bins for residence halls as well as order two custom plexiglass bins to be placed in Dugout. The extra bins increased the volume of TerraCycle collection substantially, and SSC partnered with the service fraternity APO and Physical Plant to develop a system to manage collection and transportation of the TerraCycle. This system was officially implemented Fall 2019. Unfortunately, the TerraCycle program cut their chip bag brigade, which eliminated the bulk of IWU's collection. With this change, and concerns about COVID-19 safety, IWU's TerraCycle program was cancelled indefinitely beginning Fall 2020.



SSC members sort Terracycle items.

## 3. Other

a) SSC has partnered with several other environmentally minded RSOs on campus to sponsor several community showings of documentaries, including *“Before the Flood,”* *“Public Trust,”* *“Bag It,”* and more. They also began a campus wide Earth Month event, during which residence halls would compete to see which hall could reduce their energy and water usage the most.

b) In the fall semester of 2020, SSC chose to focus more on Environmental Justice instead of campus sustainability. The group put together several presentations throughout the semester to educate its members on the connections between racial and environmental injustice in the U.S.



SSC raffles Ecology Action Center bags at “Bag it” film.

## D. Peace Garden RSO (PG)

### 1. PG Sustainability Education Program

- a) One of the main goals of the PG is to educate visitors about sustainable agriculture and gardening through the PG Sustainability Education Program. During the spring of 2017, the PG Sustainability Education Program was revised and improved, allowing for Glenn School 3rd and 5th graders to be invited to the PG on April 21st, 2017. The program began and ended at the outdoor classroom and included stations on soil, insects, compost, plants, the hoophouse, and seed saving. Students were also given notebooks and pencils to record their observations of nature in the garden, which helped to underscore the theme that nature must be carefully observed to be understood. The PG's permaculture approach allowed us to highlight how, when farming is done in the conventional way, it is not sustainable as the production disrupts the soil's natural processes. Approximately 90 students attended this event.
- b) The Sustainability Education Program is designed to be expanded or shortened depending on the age range of the audience. The soil station, for example, can rest on the three different kinds of soil particles—clay, silt, sand—or it can reach to a discussion of the nitrogen cycle. Similarly, the hoophouse station can address the issue of global warming with a greater or lesser degree of sophistication.
- c) In 2019, the Environmental Studies Department funded the program to allow it to be offered to Glenn School students in the week between finals and graduation when volunteers are hard to find. The grant also encouraged outreach to other schools, but unfortunately, the program was cancelled in 2020 due to COVID-19.
- d) More information on the Peace Garden can be found above in Section VII.



### 2. PG RSO Activities

- a) The PG RSO holds multiple events each semester that help to cultivate community and interest in the PG's efforts on campus including the annual PG Harvest Festival that celebrates the last harvest of each year. During the event, there is often music, crafts, and fresh vegetables from the garden for attendees to harvest and eat. In the fall of 2020, even with Covid-19 restrictions, the PG had a very successful Harvest Festival that included painting stepping stones for the garden, live musical performances, and pumpkin carving.
- b) The PG RSO also has weekly workdays that bring students from across campus together to help out in the garden. Workdays vary by season and week, but often they include activities such as weeding, watering, harvesting, and planting seeds.

## E. Student Senate

1. The Illinois Wesleyan University Student Senate serves as the voice of the student body. They are committed to representing the needs and opinions of the students to the

campus administration and to providing the Illinois Wesleyan campus with a forum for discussing important matters, along with focusing on bettering the campus for all current students, alumni, and future students of IWU. The Student Senate is made up of the President, Vice President, Treasurer, Chief of Staff, and multiple Commissioners. One of the Commissioners in the Student Senate is the Sustainability Commissioner (SC), who leads the Committee on Sustainability, Facilities, & Safety. This committee discusses matters relating to sustainability initiatives on campus, grounds and facility improvement ideas, and ideas to improve student safety on campus.

2. Since 2018, the Student Senate, with the help of the Sustainability Commissioners that have served, has implemented multiple initiatives on campus to help lower the University's impact on the environment. Some examples of these initiatives include:
  - In 2019, the SC gave a presentation to President Georgia Nugent about divestment and the benefits this could bring to the University.
  - In April of 2019, Student Senate hosted an Earth Day Banquet, which featured free vegetarian and vegan food, a speech by EPA hazardous waste inspector and civil enforcement officer Brenda Whitney, and raffles for environmentally friendly prizes.
  - "Mindful Mondays," which occurs every week, was successfully implemented in 2019. Each Monday, the main dining facility on campus, the Berthoff Commons, serves meatless options at every station. This has helped to decrease the meat consumption on campus.
  - In fall of 2020, the SC played a big role in completing the formal designation of the Berthoff Apiary. They also led the movement to designate IWU as a BEE Campus USA Affiliate.
  - The SC has helped to fund multiple sustainability initiatives and activities across campus, including: SSC's Earth Month Competition, supplies for the PG, the Ames Bike Share Program, and Connect Transit universal bus passes

#### **F. Office of Residential Life (ORL)**

1. In 2009, a Sustainability Educators (SE) program was instituted through ORL to promote sustainability activities within campus housing. Much of the initial programming focused on waste issues. In 2012, ORL expanded the SE program to incorporate a nine-pronged approach to sustainability to include 1) waste management; 2) materials & toxicology; 3) biodiversity; 4) food; 5) water; 6) energy; 7) transportation; 8) environmental economics; and 9) management accountability. Each month, all of the SEs, as well as some other ORL staff members, program towards one of these issues. This program was in effect until 2019, when it was discontinued due to a lack of student interest in the position.
2. Sustainability continues to play a major role in the Office of Residential Life. The Mission of the Office of Residential Life at IWU is to "facilitate enjoyable, sustainable, and inclusive communities that support and enhance students' academic achievement and personal development." The departmental mission draws upon five core values of the department: diversity, sustainability, fun, learning and warmth.
3. Though the Sustainability Educator position was discontinued in 2019, ORL student staff members continue to conduct programming on topics of sustainability for students, including informational bulletin boards, hall events, and campus wide events. Examples

of programs:

- In Ferguson Hall: Bulletin board on statistics of environmental injustice in the United States and programming on how to create self-watering flower pots from old plastic water bottles.
4. Waste reduction and proper waste management are central parts of the ORL's sustainability efforts. Paper products are one of the most highly used materials in the office, as staff members are required to make bulletin boards and door decs each month. Staff members are encouraged to use every single bit of paper they take, and if they cannot, then ORL has bins for unused paper that others can use in the future. Terracycle, recyclables, and compost are also collected in the ORL office by staff members.

### G. Action Research Center (ARC)

Since 2003, ARC has connected the IWU campus and the community in ways that create impactful change and address pressing social justice issues through coursework, internships, action research projects, and student volunteerism. Some of these activities promote sustainability. Recent examples:

1. The West Bloomington Revitalization Project (WBRP) Tool Library, launched in 2012, continues to expand. Multiple grants support the operation and volunteers work to keep the library, which has over 300 tools available for rent, open. ARC interns regularly train as "Tool Librarians" and are an essential part of the organizational leadership.

2. The Veggie Oasis has been active since 2014 when the program was established by an ARC intern who conducted research on the local food desert in West Bloomington and identified access to quality fresh produce as a continued problem. In this program, volunteers glean produce from the Downtown Bloomington Association's Farmers' Market and transport it for distribution to the food desert on the Westside. Veggie Oasis has delivered thousands of pounds of fresh produce to Westside families.



The success of Veggie Oasis led to a new partnership with Beacon of Hope that brings rescued produce from local grocery stores to the WBRP for distribution to the Westside.

3. Multiple IWU ARC interns played a role in creating the new WBRP Healthy Eating program in the spring of 2020. The WBRP received funds from the John M. Scott Health Commission to give 40 low-income, Westside families free Community Supported Agriculture shares from PrairiErth Farm.
4. The IWU First Year Experience students enrolled in the Reimagining Citizenship course built a greenhouse at the WBRP in the spring of 2019. The greenhouse was used for greens, such as kale and spinach, in 2019 and was used to start seeds in the spring of 2020. The starter plants established here lead to the creation of the WBRP Victory

Garden on Roosevelt & Mulberry streets.

5. Hannah Horn (IWU '20) and Michelle Roy (IWU '20) were enrolled in the 2020 Action Research Seminar. Hannah and Michelle created videos on the WBRP website about starting seeds and building bee-friendly gardens.
6. Devan Patel (IWU '22) won the 2019 Weir Fellowship and will use the funds to provide free rain barrels to low-income, Westside families. The rain barrels will be provided by the Ecology Action Center.

#### H. Evelyn Chapel Multi-faith Ambassador Program

Offers opportunities for students to explore the connections between environmental sustainability and their faith and non-faith traditions. Examples include:

1. **A Green Rule Tree Dedication** took place in the Meditation Garden in April 2017. The new redbud tree is encircled with stones engraved with teachings from the world's religious and secular traditions regarding care of the environment. The "Green Rule" is adapted from the Golden Rule, developed by the group Faith and the Common Good.



Green Rule Tree dedication in the Meditation Garden by Evelyn Chapel

2. The Chapel sponsored Mission Day events for Turning Titan Orientation in August 2015 and 2016 entitled **Food, Faith, and Justice**. Illini Fighting Hunger, a Wesley Foundation-related non-profit at the University of Illinois, was our partner for the first food packaging event where 60 first-year students re-packaged 1650 lbs of rice for distribution to Central Illinois food pantries. Incoming students were also introduced to the values of interfaith service and working out of shared values regarding hunger and poverty. In 2016, the Multifaith Ambassadors started their own program, IWU Fighting Hunger, as a result of a grant from Illini Fighting Hunger.
3. Students coordinated the 2nd and 3rd annual **Harvesting Help: An IWU Interfaith Service Day** in November of 2015 and 2016, respectively. Following a food repackaging event, students worked at IWU's Peace Garden and/or volunteered at Midwest Food Bank. Much of the rice in 2016 was delivered and donated to the Water Keepers at Standing Rock by 3 IWU students who traveled there to stand in solidarity with the Standing Rock community.
4. In October 2018, former Chaplain Elyse Nelson Winger and former Director of the ODI, Hannah Mesouani, led a group of 10 students on a **Changing Climates, Changing Faith Alternative Fall Break** trip to promote religious literacy, encourage interfaith dialogue and appreciation, make connections between spirituality and social justice, and explore the ways faith communities are responding to changing climates, particularly global climate change. The group visited different places of worship and learned about stewardship and environmental commitments at each community. They also spent a day with an environmental activist who introduced the group to environmental grassroots activists in Pilsen and Altgeld Gardens.

5. In March 2019, the **Common Ground IWU Interfaith Summit** included a workshop about **The Climate Ribbon Tree and Storytelling**, led by Sierra Student Coalition leaders and Multifaith Ambassadors. They discussed the power of storytelling, art, and activism as it relates to interfaith engagement and climate action, and they invited participants to share their own stories and contribute to IWU's very own Climate Ribbon Tree (built by Dominic Gambaiani '19 with recycled materials from Theatre Arts). On a ribbon, they wrote their answers to the question: "What do you love and hope to never lose due to climate chaos?"



## I. Other Campus Activities

Examples of other sustainability related events across campus include:

### 1. IWU Annual Themes and Sustainability Activities

Since 2014, IWU has sponsored Annual Themes around which curricular and extracurricular programming are built and connected. Themes for the past two years have invited considerable campus programming around sustainability with 2018-19 Changing Climates and 2019-20 Fact or Fiction, including open house presentations by students. The current year's 2020-21 Health, Healing and Humanity has invited programming on environmental and social justice combined with planetary health as we face a pandemic affecting all aspects of life. Some examples of events are listed previously, and others include:

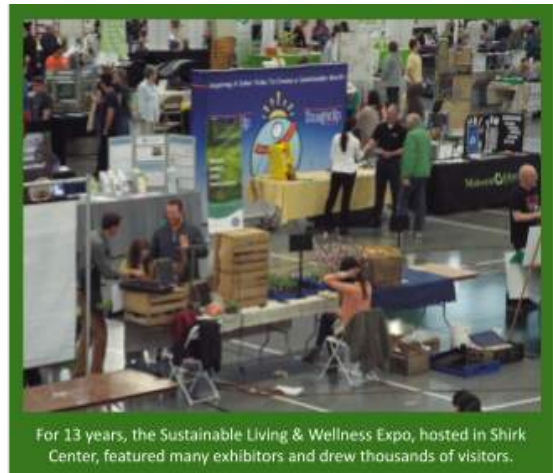


- *Natural Science Colloquium: "Interactive Effects of Environmental Stressors on Bees: Nutritional Physiology, Disease, and Landscape" (spring 2018) Sponsored by the IWU Biology Department*
- *Natural Science Colloquium: Trends in Energy Production Talk (spring 2018) Sponsored by the IWU Physics Department*
- *Human Rights and Environmental Justice Workshop (fall 2018) Sponsored by the Center for Human Rights*
- *Climate and Society: our past, present, and future" with Dr. Amir Jina (fall 2018) Organized by the IWU Department of Economics with sponsorship from the IWU Office of the President*
- *"Normal is Over" Film Screening and Discussion with Director Renée Scheltema (spring 2019) Co-Sponsored by the JWP Audubon Society*
- *Changing Climates Course Cluster Open House (spring 2019)*
- *"The Future of Food" by Dr. Vandana Shiva (spring 2019) Co-hosted by Illinois Wesleyan University and Illinois State University as part of the Adlai E Stevenson Memorial Lecture Series*
- *Health and Environment Virtual Workshop (fall 2020) Co-Sponsored by the Office of Diversity and Inclusion, the School of Nursing, and the Sierra Student Coalition.*

2. **Math Modeling & Analytical Titans FYE** - Students from two courses (Math Modelling and the Analytical Titans FYE taught by faculty Dan Roberts & Zahia Drici) worked with the West Market Street Council to make projections about what to stock on the shelves of a new grocery store in West Bloomington, which is currently classified as a food desert. Students hope to incorporate as many local products as possible, minimizing carbon emissions from transportation. A total of 25 students have contributed to the project. The bulk of the work was done in Fall 2019, with some continuing into Fall 2020, and projected into Spring 2021.

3. **Illinois Sustainable Living and Wellness Expo (ISLWE)**

For 13 years, from spring of 2006 through 2018, IWU hosted the annual ISLWE in Shirk Center, a community-wide event focused on health and environmental sustainability ([www.islwe.org](http://www.islwe.org)) that was free and open to the public. Sponsored by the IWU Wellness Program and the local Ecology Action Center - with the help of over 65 volunteers, including IWU students - ISLWE featured up to 100 exhibitors and 20 presenters. A community-wide Mega-Recycling event was added to the Expo in 2012. Additionally, the ISLWE was McLean County's major Zero Waste event. With the help of Midwest Fiber, who accepts all food waste for composting, this event was planned and managed to avoid any generation of waste that cannot be recycled, reused, or composted. The event drew between 1,000 to 2,000 visitors and averaged only 25-30 pounds of land filled waste. When ISLWE first started, the idea of blending an expo on environmental sustainability with wellness was a novel, non-mainstream idea for central Illinois and the event served a valuable purpose for community members. But through the years, environmental wellness became more mainstream and the need for such an expo waned. Thus, the event was phased out in 2019 to allow the agencies to focus instead on other types of programming.



**"REPORT ON SUSTAINABILITY AT ILLINOIS WESLEYAN UNIVERSITY"**

The GREENetwork Committee, Illinois Wesleyan University, Bloomington, Illinois

March 2021