

A Green History of the Orange and Blue

A Brief History of Sustainability at Hope College

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Summer 2016

Abstract:

The history of sustainability at Hope College is mixed. While much progress has been recently made, care for creation has not been a high priority. How did we get to where we are today? Why aren't Christian Liberal Arts schools leading the sustainable effort worldwide? Where does the voice of God sit in His own creation? By telling the story of sustainability at Hope College, we hope to answer this question. This narrative is told through integrating many sources: interviews with the movers and shakers of Earth Care at Hope College; the College Catalog which shows the evolution of classes and efforts done by departments to educate generations of students about stewardship management; and archival research in the Anchor, alumni newspapers, and yearbooks. While it is easy to look only at the events that transpired at Hope College, a liberal arts education demands that we also keep the whole global timeline in mind as off-campus events can influence a small community such as ours. What comes together when all the things above unite is an image of Hope College in which Earth Care is not at the forefront of its planning, education, and mission, but there is a humble movement rich in depth whose growth continues to reach new heights. To quote a recent Anchor article, "It is not that Hope is going green as much as it is growing greener". Hope College has the leadership potential to make a large impact on not only West Michigan but the world. We should be showing others how to be stewards of the Earth through the sciences, arts, social sciences, and humanities.

Pre-History: The Age of Independence (1800-1866)

- Science breaks away from the Church.
- At the same time, the Church was being fragmented.
- The founder of Holland and co-founder of Hope College was Albertus VanRaalte who led a group of Dutch immigrants to America in order to find economic opportunity and freedom from the Dutch Church.
- Beginnings of Romanticism and the Transcendental movement, e.g., Emerson, Thoreau, which influenced later writers.

This historical journey begins with a look at global events that lead to the founding of Hope College. This time of history would bring about huge societal upheavals, including the Renaissance, Reformation, Revolutions (both scientific and political), ending with the Enlightenment. At the end of this time period was the rise of Romanticism and the Transcendentalism movement

Important to the environmental history of Hope College is the Scientific Revolution which began with Copernicus and later exploded under Robert Hooke and Isaac Newton. This set a scientific journey that cultivated curiosity as to how the natural world works and its importance to the relationship between humans and the earth. It also helped create that first environmental movement, whose later movements would impact the campus.

A second important societal change was the Reformation. As religious upheaval spread across Europe, Reverend Albertus Van Raalte founded the Dutch colony of Holland on the swampy shores of Lake Macatawa and co-founded with Dr. Phillip Phelps Jr. the school that becomes Hope College in 1866. Already in the first Anchor, a student-run newspaper, students noted the janitors, "working diligently to improve the campus grounds".

The Darwinian Revolution (1859-1900)

- Lamarck and Darwin both discover the role the environment plays in species evolution, even if they never understood how it worked (genes and DNA).
- Though quickly accepted by the scientific community, this new science still took a while to reach the American colonies, especially a newly founded Holland.
- An Anchor article by Malusdomus quotes the relationship between man and his environment. Though it doesn't use modern language, it notes climate change and humanity's impact on species habitats. It defines this relationship with the old phrase "A man is known by the company he keeps".
- As earth-keepers, we need to keep good company because that is what God calls us to.

Almost ten years before the College was founded, in 1859 Darwin and Lamarck published their ideas on natural selection which- seemed to reach the college a decade or so later. But once they reached campus they had an impact. An Anchor article published in 1894 includes a thought-provoking idea with the phrase "A man is known by the company he keeps". This proverb is used to warn us to wisely choose whom we associate with. But the wisdom this author offers up to all of us is how we should view our relationship with the environment. All organisms are affected by their environment and humanity is no different. He notes atmospheric impurity and habitat changes that organisms face. Though the terms for environmental problems are different from the time this article was written, the impact humans continue to make on the environment remain the same. The author, one Malusdomus from the class of 1895, ends by saying that "Environment often shapes the destiny of many; it should, therefore, be favorable, noble, elevating, so that its influence may be, as far as possible, for the good of humanity". As an institution of higher Christian learning, I cannot think of a better way to describe an ethical reason to establish ecological stewardship as part of our mission.

The Green Awakening (1910-1969)

- 19th Century mainstream living is all about industrial capital and classical economic theory as a way of life.
- World events such as WW I, the Great Depression, WW II, shows the failure of the traditional way of doing things.
- 'Silent Spring,' published by Rachel Carson in 1962, is a wake-up call to many about the effects of various kinds of pollution.
- Hope College experiences this change slowly in the 1960s with the founding of the Geology Department and the start of early "ecology" classes.
- One major turning point was the iconic photo named Earthrise, taken by astronaut William Anders in 1968.

World War I was an atrocity on a scale no one was expecting. As a response, many looked to industrial capitalism to solve problems. This brought the Roaring 20s and a time of apparent peace and prosperity. Industrial Capitalism, as it had centuries before allowed for quick recovery of markets but not sustainable ones. The world thus was shocked following the events of Black Tuesday and the collapse of the market force beliefs that many believed would always hold true. This led many people to look towards power to curb their fears which only fueled the rise of W-W-II and -the deadly potential of nuclear weapons. This spiraling down after centuries of great advancement ended with a few having the power to destroy all of the Earth multiple times over in a time known as the Cold War.

This was, however, a time of great advancement in science, with the emergence of independence and democracy worldwide brought together by the United Nations. A Green awakening began slightly before the release of Rachel Carson's "Silent Spring" in 1962 but quickly accelerated after the harmful effects of DDT were made known. The Environmental Movement was for someone part of the countercultural movement which has stained the name of environmentalism and sustainability ever since in the eyes of the public as a hippy movement from the far left. This is defiantly untrue today but many Americans still view it that way.

Hope College was not left unaffected by these events. The Geology Department began in 1966 and Eldon Greij of the Biology Dept. remembers teaching the first Human Ecology course at Hope in 1968. The first Principles of Ecology course was taught in 1970. According to Dr. Greij "at that time Hope was interested in teaching more classes that dealt with environmental integration. The importance of ecology as a field of science was known, but the problem was that at the time of many early classes there was only one ecology textbook. And you can't teach multiple classes with one book. Everything would be repeated." Serious study of the earth and ecology had now begun at Hope, ahead of many schools even if it was a humble beginning.

Humble Beginnings (1970-1979)

- First Earth Day new policies are made e.g. the Clean Water Act and Clean Air Acts 1970
- UN conference in Stockholm in 1972 gave us the commonly used but poorly defined definition of sustainability.
- Hope surveys show the rise and fall of the importance of the environment in the minds of students. The 1960s saw the biggest boom in interest in sustainability, but the next generation showed less interest.
- Class boom of ecology and environmental classes
- Environmental cluster begins but disappears a few years later
- Environmental Health studies also begins.
- Hope purchases its Field Station in 1972 in Laketown Township

The beginning of the 1970s opened with great interest in caring for the Earth, in part due to an iconic image the astronauts took of the earth from space. This image would again be repeated during the Apollo 17 space mission in 1972 with the photo *The Blue Marble*. It put humans in an astronomical perspective. Environmentalism was no longer a liberal cause; it became everyone's responsibility to care for the Earth. These two images helped to pass environmental laws in the US such as the Clean Water Act (1972) and revisions to the Clean Air Act (1973). Internationally, the United Nations met in Stockholm in 1987 to discuss environmental issues and write the traditional definition of sustainable development: development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

At Hope College, new environmental courses were appearing, such as Principles of Ecology and Environmental Psychology. In 1974, Hope College also purchased 74 acres of land in Laketown Township to use as a field station never to be developed or sold. New course tracks were being offered as well, such as Environmental Public Health and "cluster tracks" that included an environmental track along with tracks in American, urban, and minority studies. These tracks appeared in 1972-1973 but had disappeared by the 1976-1977 school year. The world was changing rapidly and Hope was both using its tradition of listening to God's calling and being swept into the ever-changing world culture.

Surveys administered by the American Council on Education (ACE) began with the class of 1975 (so given in 1971 to children of the 1950s and teenagers of the 1960s) and provide interesting evidence of how the attitudes of Hope students compared to college students more generally. About 97% of the class of 1975 agreed with the statement “The government is not strongly controlling pollution”. By the time the class of 1977 arrives only 90% agreed. In contrast, 88% of the students at Protestant colleges agreed and the national average was 88.5%. The class of 1978 saw a major drop with only 84.1% agreeing. Only 58% of the class of 1975 agreed with the statement “The Government is not protecting the consumer” while 70% of the class of 1978 agreed.

Only 30% of the Hope class of 1977 agreed that one should “be involved in environmental cleanup” while 38% of students at Protestant colleges agreed and the national average was 38.7%. All in all, the attitudes of Hope students were behind the times when it came to caring for the earth. By the time Hope integrated earth-care into the curriculum in the late 1970’s and early to the mid-1980’s, student demand had diminished. As a Christian Institution Hope should have continued to provide more opportunities for students to become good stewards of the Earth.

Case Study #1: The Process of Transformation of Liberal Arts Education

- General timeline outline
- Word count of the number of times environment is used
- The importance of outdoor education by Dr. Greij, Dr. Murray, and Dr. Winnett-Murray.

The use of the word ‘environment’ increased exponentially over the years. Used only once in the 1960-61 catalog, in today’s catalog (2015-16) -the word environment is used 245 times. The growth of the word became more prevalent in the 1980s with the addition of several new classes and then again in the 2000’s with the addition of Environmental Science in the Geology Department. In 2004 the Environmental Studies minor was offered to students for the first time thus providing another new batch of environmentally oriented courses. There are now (2016) over 40 courses from over a dozen different departments that deal in some way with sustainability.

Dr. Greij reports that students in the 1970s were super interested in learning outside the classroom on their own time. Learning outdoors was their (and his) favorite part of learning, especially along the West Michigan lakeshore. A large part of this, he believes, was motivated by the role of the space program and the Peace Corps during -this time. By the 1980s he and other professors noted a change with the students: they ceased showing up for outdoor class learning. To him, it seemed that they were only interested in getting a job, starting a family, and making money. They appeared to be truly reflecting into Reagan’s presidential culture at the time.

Biology professors Greg Murray and Kathy Winnett-Murray came to Hope in the mid-1980’s and required students to go outside for class. They made learning outside an integral part of Intro to Biology. They believed this to be especially important to pre-health students who may not see the light of day again in their professional careers. They stressed the beauty that is in West Michigan and how little students know about it. So they made sure that all of their Intro to Biology students went outside during the semester, especially given that many students grow up in cities and will later settle down in cities.

Outside the Biology Department, the Chemistry and Geology departments were also tackling environmental problems. Environmental chemistry was taught by Dr. Don Williams who would later focus his expertise on chemical clean-up of lakes, which eventually lead to current watershed cleanup efforts such as Project Clarity. While the Geology Department early on brought the environment into the

classroom through various courses, Environmental Geology began as a course in the 1973-74 school year and was taught by Dr. Cotter Tharin. This class was mostly for non-science majors and was extremely popular until its disappearance with the GEMS courses that were created in the late 1990s. The Geology Department would later add a minor in environmental science.

As environmental courses expanded into the sciences, so also ecological stewardship began to extend into the humanities and social sciences. The creation of the Environmental Studies minor in 2004 would bring together courses in Religion, Economics/Management, Political Science, English, Philosophy, History, and the Natural Sciences. But sadly many of these courses are not required for majors in their department and when professors leave the department their classes cease to exist. The next step in the transformation of Liberal Arts Education at Hope is to develop a more ecologically sound curriculum for future generations of students., e.g., by requiring a certain number of credits in environmental sustainability.

Cycles of Expansion and Stagnation (1978-will we allow another stagnation in Earth Care?)

- Oil Crisis of 1972 put economics on everyone's mind once again.
- Reagan era 1980-88
- Plastic wear replaces silverware at Kletz 1981
- Economic cycles continue after the stagnation of late 1970's into almost all of the 1980's; and again in the late 1990's early 2000's; leading to the Financial Crisis of 2008.

Early on in the 1970s, the oil crisis occurred. This had both a positive and negative impact of the environmental movement. The oil crisis caused people to pause and think about the role energy plays in their lives. It was no longer a nice commodity to have but actually something that created a need to understand global events. For some reason though it sparked the realist worldview that would stifle ecosystem care for almost a whole decade. A realist worldview in politics sees no supranational authority to enforce rules in the international political arena. This causes states to act in their own self-interest and preservation. This causes the election of world leaders, many of whom failed to address the growing numbers of ecological problems. There is not any single world leader to blame for such little interest in earth care during these years, but as leaders, their views impacted many other people. As mentioned above, however, there were some positive changes at Hope during the 1980s, especially in the Biology Department. In general, however, it was still a time of little positive ecological action.

At this point in Hope history, there was the switch from silverware and china to foam and plastic utensils. There were no economic reasons for this switch other than that it was easier to throw things away than pay someone to clean dishes. There was, however, some dissent, as one person put it: "As an institution of higher education it seems we should also be a people of higher awareness". This story does have a more positive ending since Hope eventually switched to a bio-recyclable or biodegradable utensils and supplies.

The 1980's was not the only time there was a loss of interest among Hope students in caring for the earth. This also happened in the late 1990's and early 2000's. The reason for this is unclear but it is most likely had to do with student turn-over. Though it may also have been influenced by the large technology boom that occurred, opening up new tech jobs, less time outdoors, and way more screen time. Another period in which student interest shrunk occurred after the Great Recession of 2008, which is quite disappointing since it seemed like West Michigan and Holland had a lot going on in terms of ecological importance right before this. In this case, the economy once again trumped ecology even though many of the problems are linked, and you need both to build a community.

Cleaning House (1988-2010)

- Rio Earth Summit and Kyoto Protocol
- EIG group begins
- Recycling on campus begins
- The start of major infrastructure changes on campus
- Course curriculum overhaul

The 1990s brought a new message for the world with the Rio Earth Summit and the Kyoto Protocol. World leaders were committing to climate policy and action. This mirrored the changes Hope was making even if the large ones were behind the scenes. During this decade there were many changes with infrastructure, e.g., printing, grounds-keeping, and dining. These changes happened because leaders simply saw the benefits the changes would bring. It was about saving money, but this led to a more Earth-friendly Hope College, showing that smart change can be ecologically friendly.

Recycling on campus began in January of 1988. It was small at first and would not take off till the 1990s thanks to the Environmental Issues Group (EIG). The EIG began when 4-5 students who traveled with Dr. Stephen Hemenway in the summer of 1989 to the Vienna Summer School heard about all the European Union was doing to deal with environmental issues. These students saw the Green Movement in action. Once back on campus, they began the EIG. In their first year, they grew to 40-50 students whose main focus was improving recycling on campus since the physical plant staff had not taken over the removal of recyclable goods even though it began three years before. The EIG also started Earth Week and Earth Jam on campus during April.

In 1990 Hope organized the first of four Critical Issues Symposia on topics that relate to ecological awareness. These four topics were Lifeboat Earth: Decisions for Tomorrow (1991), Earth Matters: Daily Decisions, Environmental Echoes (2001), At Water's Edge: Complacency, Thirst, Action (2009), and Good Food for the Common Good (2010). Curriculum changes were also made to add many courses that dealt in some way with sustainability. But membership in EIG waxed and waned over the coming years. In 2010 the EIG joined with several other groups to create Hope United for Justice. In 2014 the Eco-Agent student group was formed by the Green Team and in 2015 a student group named GreenHope was formed to replace the EIG.

Case Study #2: The Power of Groups

- Story of EIG and Green Team
- Recycling efforts
- Earth Week, Eco-Olympics and other events on campus
- Educational research and the Integration of science

Groups have played a large role on campus. It is difficult for one person to tackle all of the ecological problems that confront the campus let alone come up with a plan that moves the college in a sustainable direction and encourages an Earth-friendly curriculum. Groups can make real change by giving voice to members of the community, but in order for the transformation to be resilient, it must gain the backing of the community. If such change is successful, education can make communities safe, smart, and strategic. As an educational institution with a strong religious identity and moral mission, Hope College is in a great position to use the power of groups to make positive change happen.

A few groups on campus that play into the history of sustainability at Hope are the Environmental Issues Group (EIG) and the Green Team. The EIG's history was mentioned above. A take away from the history of this group is that student turnover can cause groups to be unsustainable over time. The Green Team has so far shown to be more sustainable since it contains long-term employees as well as students. The history of the Green Team arises out the 'green' wave that was sweeping the first decade of the 21st century. Some environmental groups were doing research into what college campuses were doing that was sustainable. When these groups looked online to discover how sustainable Hope was, they found that little was being done. But as the story told so far makes clear, this was clearly not true. So when The Sustainable Endowment Initiative (SEI) gave Hope a D-, that got the attention of President James Bultman. Hope is not a school that gets below average on anything. Of course, the real reason for the low rating was that virtually nothing that Hope was doing was discoverable on Hope's website, which was the means of research by the researchers at SEI.

In 2008 President Bultman created a task force that was to investigate and compile all sustainability efforts at Hope and make such information available not only for those in the Hope community but for outside environmental rating agencies. In April of 2009, after one year of work, the Task Force made 8 recommendations. One recommendation was that a Campus Sustainability Advisory Committee (aka the Green Team) be created to replace the Task Force as a more permanent solution. Since its creation, The Green Team has grown in numbers to include faculty, administrators, staff, and students. It has continued to initiate and promote various sustainability efforts on campus and now conducts its own research. Other initiatives on campus that the group has helped create with student groups have been Trayless Tuesdays, Eco-Olympics, Eco-House, and Earth Week.

The power of groups is evident when one looks at the range of issues addressed by the Green Team under the term sustainability or idea of Earth Care. Every issue is interdisciplinary. Thus planning sustainability, conducting environmental research, and creating reliant policy are never done well by employing only one discipline. Such activities must use and integrate many disciplines and fields of study. An example of this is the summer research done in the summer of 2016. The Green Team created 5 positions that brought students from multiple backgrounds to conduct research that has never been done on campus before. The Chemistry, Geology, and Biology departments all have conducted research that in some way has a very strong environmental focus. But in the past, there has been too little talk or awareness between groups on campus even though each student researcher has something strong to bring to the table of Earth stewardship. Scientists sometimes forget to cross disciplines, but in this case, they don't have to! The environment is already in their field. All they need is to communicate with one another. Imagine if this kind of interdisciplinary research spilled over into the arts and humanities disciplines. The potential could expand like crazy and word would quickly reach more people, especially through the arts. We all have benefited from the strong environmental research that Hope has conducted so all that remains is to educate those who know nothing about its potential.

Orange and Blue Leading Green? (2000-Today)

- 9/11, Great Recession, Obama Elected
- Environmental Studies/Science become minors
- Hope College goes trayless in 2009
- Green Team and Bultman Years
- Lake Clean-up events
- Outdoor Discovery Center
- Hope-Holland Sustainable Institute

- Environmental Dashboard and Research

In 1996-97 the Geology Dept. created and had approved a minor in Environmental Science. This marked the beginning of official majors and minors in academic fields associated with sustainability. In 2000 Dr. Steven Bouma-Prediger attended a workshop at Macalester College for college faculty on how to build an Environmental Studies program and that is exactly what he did in the next few years. By 2004 Hope College had both an Environmental Science minor and an Environmental Studies minor. For each of these programs only a few new courses were created, thus showing that there were already enough Earth friendly courses being taught on campus. Since 2004 this number has tripled to over 40.

The next part of Hope's history occurs in 2008. This year was a big year not only West Michigan but the world. The recession by now was in full swing and Barack Obama was set to become the 44th president of the United States. At Hope, the Environmental Studies minor received changes that made it easier for more students to take and complete the courses required. In the fall, as mentioned previously, Hope received a D- minus report card from the SEI and this appeared on the front page of the Anchor. This spurred the creation of the Task Force that would assess the College's efforts to be sustainable. Along with this came the creation by a student of the Sustainable Hope website so that all the good things Hope was already doing would be more accessible to both those inside the Hope community and to those on the outside. The Task Force recommended the creation of what became the Green Team.

Some of the first work of the Green Team included determining how green Hope College really was at the time of the D- minus report. Once the data was compiled and sent back in we received a B-. How accurate this was up in the air, but it was a far more accurate estimate of what Hope was doing at the time. Every year since 2009 the Green Team has provided internships for students. These students have accomplished many things for the campus, such as energy competitions between cottages, a 'Caught Being Green' campaign, and Earth Week events. Interns have also educated students through stickers and most notably the RAs on campus. Interns were also responsible for figuring out Hope's carbon footprint. The Green Team has even helped start a Green Cottage where students try to live in a more environmentally sensitive way. All and all, the Green Team has created a real transformation on campus.

During these years two of the annual Critical Issues Symposia were devoted to environmental topics: water in 2009 and food in 2010. Both of these helped change the student body culture and inform students about important global issues. Evidence from this is that many projects began, e.g., Green Cottage and some groups got involved in sustainability activities.

This century so far has seen much progress at Hope when it comes to caring for the Earth. Many clean-up events with the lakes and dunes have gained popularity. A large piece of land was set aside to become the Outdoor Discovery Center (ODC). The ODC is run by a Hope alumnus Travis Williams and does many projects with Hope students along with educating a new generation who will hopefully search for schools that match their love for the environment. Hope can be one of those schools if it continues to promote caring for the Earth. Hope's most recent effort was to partner with the City of Holland and the local Board of Public Works to create in 2014 the Holland-Hope College Sustainability Institute (HHCSI). The HHCSI is working to foster collaborative efforts to infuse sustainability into the minds and practices of the greater Holland community. The first LEED certified gold building on campus will be completed in 2017.

Case Study #3: Dining Services

- Change from Silver and China ->Plastic and Foam -> biodegradable and recyclable products (though still not sure where to put these products).
- Story of Trayless Tuesdays-

As mentioned above the story of how Hope College switched to using plastic and foam is not happy. Redemption has since occurred and the lesson has been learned. But there is still much to be done to improve the environmental impact of campus activities. One of these initiatives that reduced the environmental impact while saving money along the way is the story of how Hope went trayless.

The idea for Trayless Tuesdays came about from Bob VanHeukelom and Steve Bouma-Prediger. Bob had the idea for a while but was unsure of how to start it. Steve, while at a conference at a college in North Carolina, noticed that the lunch he ate did not allow him to take a tray. This got him thinking as to why Hope did not do away with trays. After meeting with Bob, the Green Team and the EIG came up the idea of Trayless Tuesdays for the start of the new year. Each Tuesday they would encourage students to go trayless and then they would compare how much water, energy, detergent, and food waste was saved.

The results were astonishing. In a single semester alone they cut water by 60,000 gallons, reduced chemical detergents and rising agents by 1,500 pounds, reduced food waste in landfills by 38 tons, and conserved 532 kilowatts of energy. The numbers proved without a doubt that Hope should go trayless. In 2009-2010 Hope went trayless and it has remained that way ever since.

At first, there was some resistance from the student body, but the savings were worth the few voiced complaints. Now no current student at Hope knows the difference between tray or no tray. For them, there is only trayless dining and a well-designed dining hall around the concept of not having trays.

Concluding thoughts:

This humble story of Hope College's sustainability history has been a joy to research and tell. As we have seen, ecological sustainability is not explicitly included in the College's mission statement but it has been an integral part of campus throughout its history. It is time for the story of the greening of Hope College to be told and embraced so that we may continue to grow in this area and someday be a leading example of a Christian liberal arts college that promotes care for the Earth, whether in the Holland community, West Michigan, our fine state of Michigan, our nation, or the world.

As with any story, this is just one view and an incomplete one too. It captures almost all of the main elements of Hope College's green history, but there are pieces missing, such as environmental care early on in the history of the college, events that happened from the opening of the 20th century to the 1960s, and some key voices that I was unable to reach. Some modern pieces of the history may have been lost too since I did not make it through every edition of the Anchor and my keyword searches did not bring up every event that included elements of Earth-care. Despite these shortcomings, others can expand upon this history for there are many voices in this narrative but only one story: the story of sustainability at Hope College.

In conclusion, it is clearly evident that Hope College has the potential to be a Christian leader in Earth stewardship. Whenever Hope's history is looked at, leadership potential is always there. We can create a community that thinks before acting, communicates and educates generations, and leads West Michigan to be a bright green spot on the map. I cannot think of a greater pathway for this resilient

conservative community than to look what we can do with smart and strategic planning when we come together. So, Hope College, are you ready to answer this call?