

Sustainable Athletics Project Final Report

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I. Executive Summary

During the Fall 2012 semester, the Sustainable Athletics Team, composed of Environment 391 students, created a project to assist the U-M Athletic Department in becoming a more sustainable institution. The Athletic Department and student-athletes are an important component of U-M pride and provide a source of entertainment for many staff and students. In addition, younger fans view student-athletes as role models. The education and engagement of student-athletes will help show that the Athletic Department is committed to sustainability. To aid the U-M Athletic Department with their sustainability goals, the team developed a survey and educational presentation. Using the responses and results from these two components, the team created a set of recommendations for the Athletic Department in order to educate and engage student-athletes about sustainability in the future. The project was in response to two actions recently taken within the U-M Athletic Department:

- a. During the winter 2012 semester, a student-athlete created the student organization, Michigan Student-Athletes for Sustainability (M-SAS). The organization's mission is to educate student-athletes about sustainability and to aid the Athletic Department become more sustainable.
- b. During the 2012 summer, the Athletic Department created the Athletics Sustainability Committee, composed of administrative and operations staff. They have four objectives to improve the Athletic Department's sustainability, several of which set to be achieved by fiscal year 2014. One of these objectives is to educate student-athletes about sustainability.

The team conducted an online survey to gain an understanding of current student-athlete baseline knowledge about sustainability. The survey assessed knowledge of sustainability issues and behaviors and collected student-athletes suggestions for the Athletic Department. The full survey is included within this report, however, two main statistics are important:

- 1. 86% of student-athletes think the Athletic Department should be doing better in terms of sustainability*
- 2. 64% of student-athletes are not currently involved, but want to be involved, in environmental efforts within the Athletic Department*

These statistics showed that student-athletes want to see a change to improve sustainability in the Athletic Department, and they want to be a part of the change. In the free response portion of the survey, student-athletes showed an interest in improved opportunities for involvement.

The educational presentation developed by this group fills the current need that the Athletic Department has to educate student-athletes about sustainability. This presentation informs student-athletes about what sustainability is, issues related to sustainability, and simple behavioral changes that will increase sustainability within the Athletic Department.

The Sustainable Athletics Team recommends that the Athletic Department take this opportunity to educate student-athletes on the topic of sustainability and engage them in the process of making the Athletic Department more sustainable. To do this, the Athletic Department should create engaging opportunities, such as volunteering programs.

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I. Background

It is important for collegiate athletic programs, such as the UM Athletic Department, to increase sustainability efforts to reduce their contribution to environmental damage and help maintain the health of citizens within the community that supports them. Sustainability in sport is the “embodiment of the care, concern and actions of all parties (student-athletes, faculty and fans) in [collegiate athletics] in an effort to safeguard the natural environment” (Mallen and Chard 2011). Although collegiate athletics are not the largest contributor to environmental problems, athletic teams and events do “produce huge environmental “footprints” in terms of their use and abuse of natural resources” (Schmidt 2006). Athletics use land and resources to improve the sporting experience for athletes and fans. Using land and resources causes environmental damage that negatively impacts the health of athletes (Casper, Pfahl & McSherry 2011). Sport, and more generally a healthy lifestyle are not possible without “clean air to breathe, clean water and healthy climate” (NRDC 2012). Collegiate athletics must acknowledge the dependence that athletes have on a healthy environment to be able to perform in sports, and the dependence that every human has on the environment to live a healthy lifestyle.

Collegiate athletics provide a sense of community for athletes and fans because it facilitates an environment that often “transcend[s] political, cultural, religious and socioeconomic barriers” (NRDC 2012). With the participation of hundreds of student-athletes and attention of thousands of fans, athletic departments within the National Collegiate Athletic Association (NCAA), such as the U-M Athletic Department, should use its popularity to promote positive change within society. One important asset of societal change is promoting and practicing environmental stewardship. To make a societal change, environmental efforts must be organized using long-term planning. Recently, several collegiate athletic programs have used long-term planning to take steps to reduce their environmental footprint and spread awareness to student-athletes and fans. Some current strategies amongst these institutions include collecting information to write a mission statement to set sustainability goals, developing sustainable buildings and green operations, and involving student-athletes. According to one survey of all Division NCAA Athletic Departments, a growing number of athletic departments (68.5 percent) believe that their emphasis on environmental programs will increase in the future (McSherry 2010).

The University of Michigan Athletic Department has established a foundation to become one of these athletic departments working to implement environmental programs. Its foundation includes two sustainability-oriented groups:

During the 2012 winter semester, Courtney Mercier, student-athlete alumni, made the first significant efforts to improve the sustainability of the University of Michigan Athletic Department. Courtney created Michigan Student-Athletes for Sustainability (M-SAS). M-SAS is categorized as a professional development program under the Michigan Professional and Career Transition Program (M-PACT), a career center for student-athletes to develop professional skills for future internship and career opportunities, however, their work expands beyond professional skills. The mission of M-SAS is to “*to introduce a culture of environmental sustainability into the athletics department*” (Mercier, 2012). To do this, M-SAS has fixed low-hanging fruits, brought in Planet Blue to complete audits of the Ross Academic Center and began brainstorming

methods to educate student-athletes about sustainability. Because M-SAS is composed of student-athletes, the group works with members of the Student Sustainability Initiative and the Office of Campus Sustainability to develop ideas about how to increase sustainability within the Athletic Department.

U-M Athletic Department staff members are also working to improve the institution's sustainability. During the 2012 summer, the Athletic Department created the Athletics Sustainability Committee. This group is composed of administrative and operations staff. The department has outlined four objectives:

1. Reduce energy usage
2. Reduce chemical and water usage
3. Reduce waste
4. Enhance sustainability education and awareness

To accomplish the fourth objective the Athletic Department will target fans, staff and student-athletes. To educate fans, the Sustainability Committee will develop a "sustainability" link on the U-M Athletic Department's website, "MGoBlue.com," explaining their environmental efforts. Methods to educate staff and student-athletes have not yet been determined. Our team took the opportunity to focus on student-athlete sustainability education in order to help the Athletic Department achieve their fourth objective.

Student-athlete sustainability education is important to create a permanent culture of sustainability within the Athletic Department, however, not many athletic departments have adopted this method. McSherry's study (2010), found that only 6.3 percent of athletic departments have student-athletes engaging in green programs. However, 40.3 percent of the athletic departments believe that it is "slightly important" or "very important" to have student-athlete engagement in the department's environmental programs (McSherry 2010). The U-M Athletic Department is representing that they are one of the athletic departments dedicated to implementing an environmental program—and that a future program will focus around student-athlete education. NCAA Athletic Departments that have created environmental programs are useful examples of how to effectively educate and engage student-athletes, administration and use external resources.

1. Yale University: The Athletic Department formed "Bulldog Sustainability." The team is a joint force between the Athletic Department and the Office of Sustainability. One educational tool that the Athletic Department utilizes is signage. Signs within athletic facilities remind student-athletes to participate in environmentally friendly behaviors, such as turning off the lights when leaving a room. To become engaged in sustainable initiatives, student-athletes partnered with engineering students to develop and install machines onto work-out equipment that uses the work-out energy to charge small electronics, such as Ipods and phones. The team has also presented during half-time shows of athletic events, challenging audience members to different sustainability games and giving away free t-shirts. By partnering with the Office of Sustainability, the Athletic Department has the knowledge base and informational resources to make larger scale changes. For example, environmental concerns influenced the Athletic Department to use organic fertilizer, reduce pesticide usage, and use eco-friendly laundry

detergent. Currently, the team is creating a best-practices database for other NCAA athletic departments to follow—a document that would be of great value to the U-M Athletic Department. (Bulldog Sustainability)

2. University of Washington (U-W): In 2010, the Athletic Department founded an environmental program with the slogan, “Go Purple. Go Gold & Green.” The sustainability committee, “Green Team,” includes members from across the University campus and within the Athletic Department. Although student-athletes are not as involved as at Yale University, the UW Athletic Department administration and operation staff are engaged in the process of becoming a more sustainable institution. The committee has created methods for waste diversion in the football stadium, created a new green logo, added in-game video messaging and green minute promotions, added composting bins, and participated in the EPA Game Day challenge. To engage student-athletes, the committee incorporated volunteer hours related to environmental activities for athletes to participate in. Therefore, these hours count towards the athletic teams competitions for most-volunteer hours. (Husky Green Team)

Key lessons learned:

1. It is important to engage student-athletes through hands-on activities that provide incentive for involvement
2. It is important to engage administration and operations staff to implement sustainability initiatives
3. It is important to engage outside sources, such as the Campus of Sustainability, to have access to greater knowledge and resources

II. Goals

As previously discussed, Athletics are an integral part of the University of Michigan and its image. The department as well as its student-athletes represents the University on the field, on campus, and across the country. The Athletic Department is working to become a more sustainable organization through groups including M-SAS and the Athletic Sustainability Committee. The Athletic Department currently has four main objectives driving its efforts in regards to sustainability. These objectives are set to be publicly available by spring 2013 and will be implemented by fiscal year 2014.

As previously mentioned, the four objectives established by the Athletic Sustainability Committee are to reduce energy usage, reduce chemical and water usage, reduce waste, and enhance sustainability education and awareness. To aid the department in their development of more sustainable practices and behaviors, this team developed the following goals:

- Conduct a survey that delves into student-athlete’s knowledge of sustainability as well as their current behaviors as they relate to sustainability.
- Develop an educational program to increase knowledge and conscious awareness of sustainable behaviors among student-athletes.
- Compile collected survey results and our experience with our educational component to create a set of recommendations for the Athletic Department moving forward with their sustainability goals

These goals allowed our team to gain a better understanding of the current knowledge of student-athletes, involve student-athletes in the process of developing recommendations, eliminate future tasks for the Athletic Department, and work in tandem with their objectives to further their efforts in sustainability.

III. Methodology

The Sustainable Athletics Team conducted a survey to the entire student-athlete body to gather information about their baseline knowledge of sustainability, sustainable behaviors, and advice for the Athletic Department. The survey was distributed to the entire U-M student-athlete population (approximately 880 students) through an email from Shari Acho, the Director of M-PACT. The survey was online, using Qualtrics, to provide student-athletes with easy access and took about five minutes to complete. The questions used for this survey as well as the results are included in Appendix A. Survey participants total 77, or 8.75% of the total student-athlete population. Since it is against NCAA rules to offer incentives to student-athletes, only student-athletes who took the initiative to read the email and take the survey of their own accord are included in these results. This could result in some data bias, however for the purposes of this report we will assume that this bias is negligible.

Our survey included verbatim questions from an earlier survey conducted throughout the whole University. This survey was sent out to 36,000 undergraduate students at U-M in March 2011. This survey was a part of an independent study performed by three undergraduate students as a follow up to a previous Environment 391 project about the possibility of establishing a green fee on the U-M campus. Using the results of this survey in conjunction with the results from our survey allowed us to make some comparisons between the population of U-M undergraduates and U-M student-athletes to see if there are any noticeable differences across these two groups. Our entire survey can be found in Appendix A with the questions for comparison from the all campus survey in Appendix B.

The demographics of the survey results distributed to student-athletes were appropriate for our purposes and do not present any reason to expect extreme bias in the results. Slightly less than two thirds of respondents ($n = 46$) were female. The distribution among year in school was not equal. Thirteen percent of respondents were freshman, 19% were sophomores, 43% were juniors, and the remaining 25% were seniors. Fourteen teams out of twenty-seven teams were represented in the survey.

The educational component was a short, 5-minute verbal presentation for athletic teams. The Sustainable Athletics Team used methods to share information learned from Professor De Young's course, Environment 360, "Behavior and the Environment." Professor De Young's guidelines for sharing information include:

1. Start where the audience's knowledge begins
2. Provide a variety of concrete examples
3. Do not overwhelm the audience
4. Provide a structure that makes sense

5. Encourage active processing and engagement.

We were able to start where the majority of our audience's knowledge began based on the survey results. The survey showed that many student-athletes do not know about the basics of sustainability and sustainable behaviors—so we provided simple a definition of sustainability and simple behavior changes. We also brought a poster board with these five behavior changes written down, brought a Gatorade water bottle and related the sustainability behaviors to everyday behaviors at athletic events to provide concrete examples. The presentation was limited to five minutes so as to avoid overwhelming the student-athletes with information. The structure flowed from an introduction of sustainability, to sustainability behaviors, to opportunities for engagement in other sustainability activities (for example, joining M-SAS). We used questions to engage the student-athletes. At the beginning of the presentation we asked the student-athletes what sustainability meant to them and encouraged the student-athletes to ask questions at anytime during the presentation. After the presentation we asked for their advice on how to help the Athletic Department become more sustainable.

The Sustainable Athletics Team met with four varsity athletic teams. The teams included men's gymnastic, women's tennis, men's tennis, and women's crew. To engage the student-athletes, humor and interactive activities were used, such as telling jokes and guessing which athletic items are recyclable or reusable. Being humorous showed that our group of "experts" was not trying to lecture the "novices." Instead, the humor showed that we just hoped to catch their attention and would like them to become involved in what we are passionate about. We believe that these educational presentations will influence student-athletes to make small changes and become more aware of small changes that can make a difference within the Athletic Department. The general outline for our verbal presentation is below.

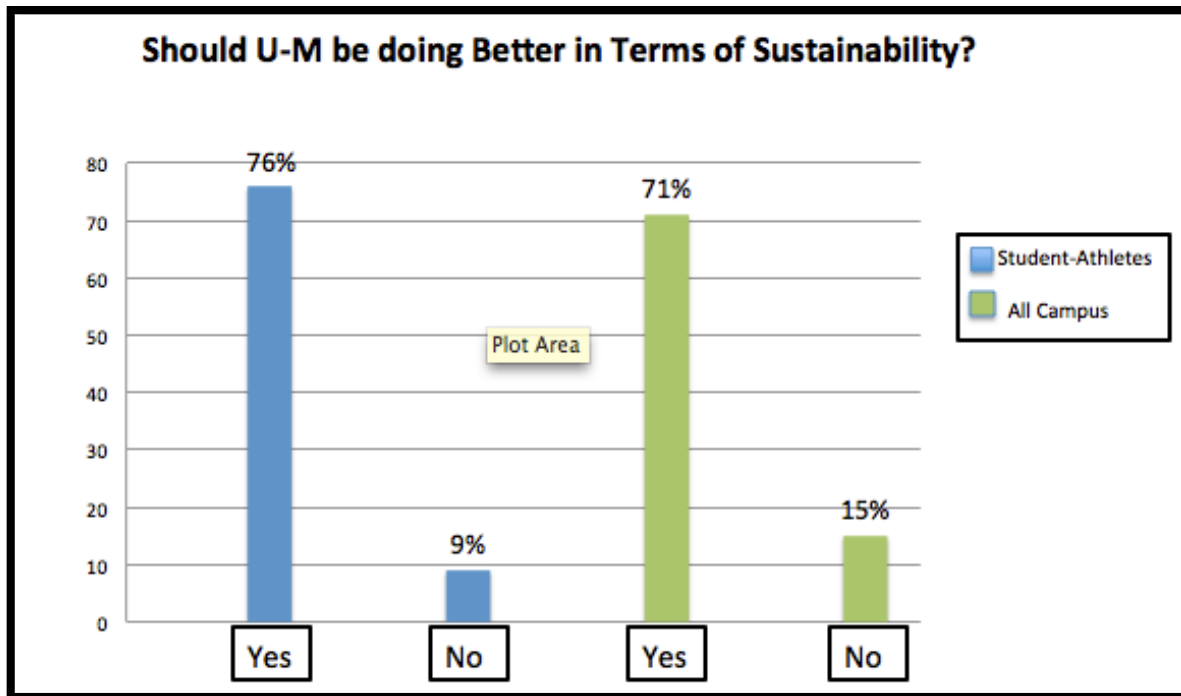
Our final task was to assemble a set of recommendations for the Athletic Department Sustainability Committee moving forward.

IV. Findings

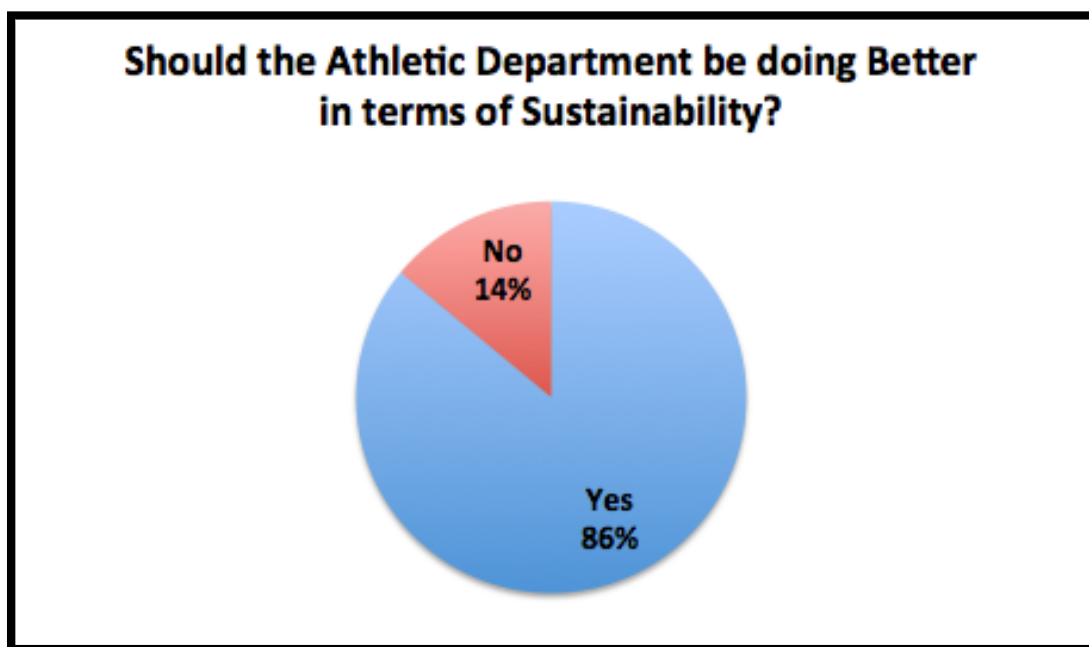
A majority of respondents (66%) either agreed or strongly agreed to having a strong knowledge of environmental problems. Additionally, 39% of respondents did not agree to having a strong knowledge of sustainable behaviors. These results are important for our project because it shows that while athletes know there is a problem, many of them are not sure what to do about it or how they can help.

Ninety two percent of athletes surveyed are between somewhat and extremely concerned about the environment. This statistic matches exactly the percentage of the general student body answering the same question. This is where our educational component can capitalize on the results provided by our survey.

The results between the two groups are, for the most part, strikingly similar. In both surveys, respondents rated the University's efforts as being moderate. Seventy six percent of student-athletes felt that UM should be doing better in terms of sustainability while 71% of the general student population felt this way. This difference is most likely not significant given that the vast majority of the surveyed population answered in the same way in both instances.



The Athletic Department rated much worse than UM in terms of perceived environmental efforts with 55% of student-athletes describing the departments' efforts as between poor and moderate (only 7% of the general population felt this way about UM). Paired with the statistic that 86% of athletes think the athletic department should be doing better in terms of sustainability, this data shows that there is a gap in the department's programming that can be filled with the educational program developed by this group.



Fifty one percent of athletes are not currently involved in environmental efforts on campus but want to be (as compared to 42% of the general student population). An even higher 64% of student-athletes want to be involved with environmental efforts within athletics. The free response question elicited a lot of comments about the Gatorade cups that are used at practice. Comments were also made about energy usage, excess lights being left on, and a lack of opportunity for student-athletes to be involved in sustainability. One student suggested the Athletic Department “Provide more opportunities for student-athletes to get involved in beneficial activities (e.g. plant trees, pick up trash, etc.)”. Another student suggested that they “have more opportunities to make the campus more eco friendly”.

Additionally, student-athletes offered ideas as a part of our educational component. Ideas discussed in the four presentations include competitions between teams to see who can recycle the most, volunteer hours that focus on sustainability, and a program for varsity student-athletes to teach school aged children about sustainability. These ideas all increase student-athlete awareness, knowledge, and involvement.

V. Recommendations

The previous president of M-SAS, Courtney Mercier, envisioned “an athletic department that truly embodies the concept of the “leaders and the best” both on and off the field and is committed to embracing and institutionalizing a culture of sustainability” (Mercier 2012). While the work of M-SAS and the Athletic Sustainability Committee established the groundwork for fulfilling this expectation of being the leaders and the best in embracing sustainability, there is still work to be done.

Overall, the survey results in Appendix A provided both this group and the Athletic Department with a good overview of student-athlete’s baseline knowledge of sustainability and environmental efforts. These data clearly showed that while student-athletes know environmental problems do exist and they want to get involved, they don’t know how to help or get more involved. These data also showed that there is a large interest in the student body for the Athletic Department to become more sustainable and catch up to its peer institutions in this area.

The data found in Appendix A as well as the analysis provided above, argue a strong case for the education of student-athletes. To fill this current need, the project group created an educational program to educate student-athletes about why sustainability is important, ways in which they can help, and the role they play on campus. The script for this program can be found in Appendix C.

The educational presentation is an example for the Athletic Department to have a method of educating student-athletes about sustainability. At the beginning of every school year the Athletic Department holds seminars for student-athletes to learn about a variety of important life-skills, such as time and stress management and the effects of alcohol consumption. Our educational component is suitable for one of these seminars. Expanded to twenty or thirty minutes, the educational component would provide student-athletes with valuable information, a video, and/or hands-on activities. Living sustainably is an important aspect of healthy living—for oneself, other people, and the environment. In addition, student-athletes would learn about opportunities to become involved in sustainability early in the semester. For example, student-athletes could learn about M-SAS, other sustainability-oriented organizations, and classes taught in Program in the Environment. By using a member of M-SAS to lead these lessons, the Athletic

Department avoids financial costs of hiring an employee and gives a student the opportunity to participate in a leadership position.

Displaying signage is another method to educate student-athletes about sustainable behaviors. Signage throughout athletic facilities could influence student-athletes to make small changes throughout their daily activities at athletics and the academic center, and possibly carry these habits home. Signage could be used to save water-- signs placed in shower stalls to remind student-athletes to take short showers and by sinks to remind student-athletes to turn off the faucet when not in use. Signage could be used to save electricity—signs placed by light switches would remind student-athletes to turn off the lights. Signage could be used to promote recycling—signs should include which items are recyclable. These small reminders give student-athletes knowledge about what behaviors are more sustainable than alternative behaviors.

In addition to education, the engagement of student-athletes in sustainability-related activities is important to implement within the U-M Athletic Department. Exemplified by the University of Washington and Yale University, engagement of student-athletes goes a long way to integrate a culture of sustainability within an institution. Engagement provides student-athletes with the opportunity to explore sustainability and expand their knowledge. Our survey shows that 64% of student-athletes want to become involved in sustainable efforts. Engagement is possible through many avenues within the U-M Athletic Department and the entire U-M community. Within the U-M Athletic Department, student-athletes can become involved in M-SAS. In addition, the Athletic Department should reward points for the Rachael Townsend competition. Rachael Townsend is a yearly competition between the athletic teams to earn the most volunteer points. In previous years, winning has been a bragging right within the Athletic Department—showing the success of this rivalry. M-SAS is in the process of creating a point system for counting hours that are related to sustainability. Volunteering may include sorting trash after athletic events, helping M-SAS, or joining campus sustainability organizations such as Student Sustainability Initiative, Planet Blue Ambassadors or Take Back the Tap. Ideas provided by the student-athletes may also be used, such as educating elementary students about the environment and counting what team produces the least amount of trash. Lastly, if zero-waste is in the future of the “The Big House”, many student-athletes would be needed to sort trash, direct fan compost and recycling, and participate in half-time zero-waste promotions. Engaging student-athletes would not only make a small environmental change, but also teach the student-athletes about how to leverage change and the importance of being involved in community.

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**The survey was sent to me via e-mail. McSherry is a credited researcher and is the founder of ProGreenSports.



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Appendix A: Student-Athlete Survey Results

1. Gender:

#	Answer		Response	%
1	Male		29	39%
2	Female		46	61%
	Total		75	100%

2. Year in school:

#	Answer		Response	%
1	Freshman		10	13%
2	Sophomore		14	19%
3	Junior		32	43%
4	Senior		19	25%
	Total		75	100%





3. What sport do you play?

Text Response
Swimming
Football
Soccer
WTF
diving
Field hockey
Swimming
Soccer
Women's Gymnastics
Cross country and track
swim
Swimming
Cross Country and Track
w track and field
softball
Field Hockey
cross country
Wrestling
Water Polo
Track
Soccer
swimming
Cross Country and Track & Field
cross country
Diving
golf
rowing
Rowing
basketball
rowing
gymnastics
soccer
Rowing




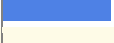
w. rowing
Wrestling
field hockey
Soccer
Field hockey
Soccer
wrestling
Soccer
Wrestling
Wrestling
Tennis
Mens Gymnastics
Wrestle
Wrestling
Wrestling
Soccer
soccer
football
Soccer
Soccer
soccer
Wrestling
Soccer
soccer
women's soccer
swimming
Soccer
Swimming
Cheerleading
Basketball
Baseball
Wrestling
Water Polo
Ice Hockey
Football

Football
gymnastics
Baseball
Softball
Baseball






4. I have strong knowledge about environmental problems.

#	Answer		Response	%
1	Strongly Agree		7	9%
2	Somewhat Agree		42	57%
3	Neither Agree nor Disagree		18	24%
4	Disagree		7	9%
5	Strongly Disagree		0	0%
	Total		74	100%



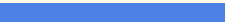


5. I have strong knowledge of what sustainable behaviors are.

#	Answer		Response	%
1	Strongly Agree		12	16%
2	Somewhat Agree		34	45%
3	Neither Agree nor Disagree		12	16%
4	Disagree		17	23%
5	Strongly Disagree		0	0%
	Total		75	100%

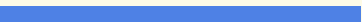


6. How concerned are you about the environment? (1 = not concerned at all; 3 = somewhat concerned; 5 = extremely concerned)

#	Answer		Response	%
1	1		1	1%
2	2		5	7%
3	3		30	40%
4	4		34	45%
5	5		5	7%
	Total		75	100%






7. How would you rate U-M's environmental efforts? (1 = Poor; 3 = Moderate; 5 = Excellent)

#	Answer		Response	%
1	1		1	1%
2	2		5	7%
3	3		35	47%
4	4		30	41%
5	5		3	4%
	Total		74	100%

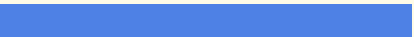

8. Should U-M be doing better in terms of sustainability?

#	Answer		Response	%
1	Yes		56	76%
2	No		7	9%
3	NA		11	15%
	Total		74	100%





9. How would you rate the Athletic Department's environmental efforts? (1 = Poor; 3 = Moderate; 5 = Excellent)

#	Answer		Response	%
1	1		2	3%
2	2		24	32%
3	3		30	40%
4	4		17	23%
5	5		2	3%
	Total		75	100%




10. Should the athletic department be doing better in terms of sustainability?

#	Answer		Response	%
1	Yes		64	86%
2	No		10	14%
	Total		74	100%



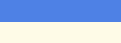
11. As a student, do you feel you have the opportunity to be involved in environmental efforts at U-M?

#	Answer		Response	%
1	Yes		28	37%
2	No		8	11%
3	Neutral		24	32%
4	I don't know		15	20%
	Total		75	100%

12. What is your level of involvement as a student in environmental efforts on campus?

#	Answer		Response	%
1	Currently involved		8	11%
2	Not currently involved but want to be involved		38	51%
3	Don't want to be involved		28	38%
	Total		74	100%

13. What is your level of involvement as an athlete in environmental efforts in athletics?

#	Answer		Response	%
1	Currently Involved		8	11%
2	Not currently involved but want to be involved		48	64%
3	Don't want to be involved		19	25%
	Total		75	100%

14. Click to write the question text

#	Question	Always	Sometimes	Rarely	Never
1	Turn electronics off when not in use.	20	46	8	1
2	Use public transportation.	22	44	8	1
3	Walk to class/campus.	21	47	4	3
4	Bike to class/campus.	12	25	5	33
5	Turn the water off when not in use.	64	9	1	0
6	Drive to class and/or practice.	15	37	7	14
7	Unplug appliances when not in use.	8	32	25	10
8	Recycle cardboard, paper, or plastic.	35	33	5	2
9	Limit time in the shower.	15	37	20	3
10	Use a reusable bottle, or coffee mug.	35	34	3	2

15. What would you like to see the Athletic Department do to be more environmentally friendly?

Text Response

Turn the screens off and more lights off in the big house when not in use

Turn off the AC lights after hours

Use cups at practice that can be recycled

Do more with recycling paper, tape, etc. at various buildings

There need to be recycling bins in the track.

Not sure

More recycling bins on campus: we have a million cardboard shoe boxes and we use a lot of paper, but there are almost no recycling bins around the athletic campus

Yes

More recycling efforts; hand out more water bottles during the year (reusable ones); limit electricity use

Be involved with going green concepts all throughout the practice facilities.

I would like to see more signs for environmentally friendly acts!

less paper printed

Recycle cups/ reusable cups

Something besides disposable Gatorade cups that get thrown away (so many every single day). Renewable energy to power athletic buildings - solar/wind are available. (spin bikes and treadmills generating electricity as the resistance?)

Focus on recycle. For example the cups we use for Gatorade somehow

figure out a better system for towels

Around the ac have recycle bins for plastic bottles, be sure students aren't overprinting, be more green at games and use green resources such as popcorn boxes and what not.

Turn the lights in the AC/other buildings off on weekends and at night. I walk by and see all the lights on sometimes when I know a building is closed.

educating people

maybe change consumption practices

Better recycling at the AC, making sure packaging from new issued gear is recycled

sustainable bathrooms, lighting, sustainable materials

Turn off the lights in the buildings and at the big house when not in use

recycle

Use recyclable cups

Nothing

Provide more opportunities for student-athletes to get involved in beneficial activities (e.g. plant

trees, trash pick up, etc.)
make events so athletes can get involved to clean up
Provide just as many receptacles for recyclables as for waste. Deciding not to recycle is mor often a matter of ease or access than overt apathy.
Do something with the gatorade cups!
yes
Free rechargeable batteries
Install a water fountain to fill water bottles, turn off electronics when not in use, advertise recycling more
Turn off the lights
it doesn't really bother me and i dont have an opinion
Nothing, it's not the athletics dept. job
More events to reduce waste
Offer more opportunities
We need to know what we can and can't recycle
Have more opporutnities to make the campus more eco friendly
We use too much paper and leave the lights on too much. Like the christmas lights are a waste
Call in the liberals

Appendix B: Campus Wide Survey Results

20. What is your level of involvement as a student in environmental efforts on campus?

#	Answer	Response	%
1	Currently involved	666	17%
2	Not currently involved but want to be involved	1,678	42%
3	Don't want to be involved	1,684	42%
	Total	4,028	100%

6. How concerned are you about the environment? (1= Not concerned at all; 3=somewhat concerned; 5=extremely concerned)

#	Answer	Response	%
1	1	84	2%
2	2	227	5%
3	3	1,193	27%
4	4	1,797	41%
5	5	1,111	25%
	Total	4,412	100%

8. On a scale of 1 to 5, how would you rate U-M's environmental efforts? (1=Poor; 3=Moderate; 5=Excellent)

#	Answer	Response	%
1	1	40	1%
2	2	303	7%
3	3	2,055	47%
4	4	1,719	39%
5	5	283	6%
	Total	4,400	100%

9. Should U-M be doing better in terms of sustainability?

#	Answer		Response	%
1	Yes		3,130	71%
2	No		649	15%
3	N/A		635	14%
	Total		4,414	100%

19. As a student, do you feel you have the opportunity to be involved in environmental efforts at U-M?

#	Answer		Response	%
1	Yes		2,321	58%
2	No		310	8%
3	Neutral		860	21%
4	I don't know		537	13%
	Total		4,028	100%

Appendix C: Educational Component

(2 people will present)

Person 1: Hi my name is Emily (or whoever is presenting) and I am a senior on the soccer team.

Person 2: Hi my name is Hannah (or whoever is presenting), I am a sophomore...

We are here to talk about sustainability and how we, as student-athletes, can help make the Michigan Athletic Department the leaders and best in sustainability.

Person 1: Currently, the Ohio State Athletic Department is the leader in sustainability. During the past few seasons, they have made their football program zero-waste. This means that football game days produce minimal amounts of trash because most items are recycled or composted.

Person 2: While we may not make our football stadium zero-waste—we can make many small changes that have a large impact on the environment!

Person 1: The idea of sustainability is that you will leave the world in as good a shape as you found it. Your kids and grandkids will have a clean and healthy environment—so that they can drink clean water, breathe clean air and have adequate land to play sports! Nicely put.

Person 2: U-M does not necessarily need to target the Big House to catch up with OSU because there are many areas of the Athletic Department that could be improved in terms of sustainability. Again, this seems very awkward. Currently, U-M Athletic Department has made strides to decrease their environmental impact. For example, student-athletes have created an organization called Michigan Student-Athletes for Sustainability. They are working to educate student-athletes about sustainability and to make small changes within the Athletic Department, such as putting in more recycling bins. Also, administrative and operation faculty have put together an Athletic Department Sustainability Committee—so there is work being done from the people really in power! But these are examples of committees or organizations, not real work!

Person 1: We have one idea about how to help the U-M Athletic Department in their efforts: educating student-athletes. So we are here to talk to you about a couple of ways to live more sustainably. There are five simple behaviors that can be changed at practice, games or in the academic center to improve our sustainability:

1. Throwing away trash. Everyday we throw away our food wrappers, water bottles and papers. Instead, recycle what you can! You can recycle drafts of your essays, plastic and aluminum and water bottles!

Person 2:

2. Drinking out of many Gatorade cups.

At practice, we are supplied with a limitless number of small Gatorade cups. During each water break we use a new one. These Gatorade cups are not recyclable. Try to only use a

couple of Gatorade cups every practice – or better yet bring out your Gatorade water bottle and refill that!

Person 1:

3. Taking long showers

We all love a long and relaxing shower after tough work-outs. However, remember that you are using up one of Earth's most precious resources-- water. Try to reduce the time that you're in the shower. You can even share a shower with your teammates or significant other ;)

Person 2:

4. Driving to practice

It is a rush to get to practice everyday after class. When you have time—try biking or walking to practice. Take the bus! Carpool with teammates! These transportation methods will not only reduce carbon emissions, but will also keep a couple extra dollars in your pocket.

Person 1:

5. Leaving the lights on in our locker rooms when we are not using them

Lights use up energy! When you are leaving the locker room—just flip off a switch!

Person 2:

These small behaviors may not seem like a big deal—but added together, they have significant negative impacts on our world. For example, they use up natural resources, and pollute our air.

Person 1: Adopting sustainable behaviors will benefit everyone. Even if you are not entirely interested in the environment, it is a part of and incorporated into our everyday lives. Everything we interact with and do affects and becomes a part of our environment. Therefore, the cars we drive, the energy that we use, will all affect rather or not our environment is healthy and suitable to live in.

Person 2: As a team you are an important influence on the social atmosphere here on campus and can create/set a new standard. By joining the Michigan Student-Athletes for Sustainability (M-SAS)—an Athletic Department supported student organization. Or by promoting sustainable behaviors you can help not only the athletic department, but facilitate the progression of sustainable behaviors on the entire campus.

Person 1: Being green isn't just for hippies! It's the accepted thing to do now. The Athletic Department has recognized this and is working to make the Athletics more sustainable; by letting us speak to you today, and by promoting the establishment of M-SAS, but they can't achieve change without your help. You represent the University of Michigan on campus, on the field, and when you travel as a team. OSU is currently ahead of us in regards to their efforts in maintaining a sustainable program—and we need your help to make sure that we are the Leaders and the Best in everything we do.

