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Recycling

Introduction

Recycling is one of many ways to help reduce our impact on the planet. Recycling decreases the use of natural resources by replacing virgin materials. Recycling is also important because it lessens the amount of materials destined for landfills or incinerators, some of which contain toxics such as mercury. Given that we use massive amounts of materials at Macalester, it is our duty to recycle all that we can and reduce our impact on the environment. To do this we must strive to have the strongest and most efficient recycling program possible. Our goal should be to recycle 100% of the materials we use on campus.

A second motive for achieving 100% recycling would be to save money. We are charged for waste removal based on the amount we throw away. Every item of recyclables in this waste stream represents money that could have been saved had it been placed in a recycling bin rather than the trash. For example, if our trash actually consisted of 50% recyclable materials, we would save half the money if these recyclables were not in the trash since the load would be half as much. Since we are charged by the amount they remove, it is in the best interest of the college to minimize this cost by making sure our trash contains no recyclable materials. The recycling program normally saves the school upwards of \$6,000 a year by removing materials from the waste stream. Furthermore, the waste removal company Macalester uses has recently raised the cost of removal by 50%. With this newly raised cost, recycling should be a higher priority to the administration and should receive the funding necessary to achieve the goal of 100% recycling.

Overall it would be environmentally conscious as well as financially beneficial to the school to reduce our waste of recyclables.

Current Program

In comparison to other schools, Macalester has a well-developed recycling program. Many other schools have only recently begun to implement campus wide programs and these are primarily the work of student organizations. Here at Macalester we have had an official recycling program for 34 years, since Earth Day 1970. The recycling program is centered in the Kagin basement. The room is much larger and better ventilated than its old home under 30 Mac. Student workers have responded to these better work conditions. The program currently has 26 student workers, a significant increase from just 7 a few years ago. There are bins placed in nearly every building on campus that collect paper, glass/plastic, and aluminum cans.

As a result of this infrastructure, we are recycling roughly 85% of recyclable materials on campus. An assessment conducted by Recycling Director Jim Davidson showed that roughly 10-20% of the materials in the waste stream are recyclables. The study also indicated that the higher end of the range comes from academic buildings, suggesting faculty and staff members throw away more recyclables than students in dorms.

In comparison, Ashland University, a school comparable in size to Macalester (1,950 undergraduates), conducted a thorough breakdown of all waste on campus and found that 70% of the materials in the trash was recyclable. One day's trash reduced from 48 bags to only 4 bags of waste and 37 bags of recyclables. Jim Davidson's study was not as thorough or as scientific as Ashland's, but we are clearly doing much better than some schools. While our numbers are not extremely high, they do represent money we could have saved.

Improvements

Education

Recycling Director Jim Davidson has been responsible for realizing many recent improvements and he has plans to implement more. He considers that the single largest problem he currently faces is cross contamination. Cross contamination is when non-recyclables are placed into recyclable bins; for example, a banana peel in a “Paper” bin. If it does not get caught and removed during sorting by student workers before entering the main bins, the recycling vendor will not accept the load. Student workers spend a large amount of time sorting the recycling but by eliminating the contamination at the source time and money could be saved.

Davidson already has several ideas about how to address this problem. He intends primarily to aim at educating the students, staff, and faculty as to what part they play in the problem, such as clearing or rinsing food containers before placing them in recycling bins. As a main avenue of this education, he plans to begin using the mass email system to address recycling issues. It is also a possibility to include recycling information in the ResLife booklet as well as having RAs discuss the dorm/floor recycling system during the beginning of the year.

Labeling

There needs to be clear labeling on all bins. Most people do not realize they can place plastic in containers marked “Glass” since so few state this. If asked, the average person on campus would not know they could do this. Some bins in Olin-Rice and the Campus Center do say both glass and plastic, but most on campus do not. As a result many people on campus are not aware they can dispose of their plastic in the “Glass” bins. This would be a simple but significant problem to address.

Awareness

An area of our recycling program that needs to be improved is the layout of bins. There is no uniformity of bins on campus. It is possible there are more, but the only areas with tri/quad bin placement I am familiar with are the Campus Center, Olin-Rice, and the library. Many buildings have different shapes and sizes of bins and most do not have bins of every type. Recently while in Humanities I found multiple sites to recycle paper and several for cans, but I did not locate a receptacle for glass/plastic. There may in fact be glass bins in the building, but they are not distributed throughout. Other students clearly must experience similar situations. A uniform layout of 4 bins: Trash, Paper, Aluminum, and Glass/Plastic in all current bin sites would cause higher levels of recycling.

Furthermore, these bins should be placed at all sites of trash bins. Since some people will not hold on to an item or walk further to a recycling bin when there is a trash can nearby, a sad truth, we need to accommodate this behavior. There are numerous trash cans on campus to prevent littering, and there should be just as many recycling stations to prevent putting recyclables in the trash.

This would mean outdoor receptacles as well. As of this moment there are ZERO outdoor recycling bins on campus. In the past there were outdoor bins but they were removed due to excessive cross-contamination. If the multi-bin system were implemented this could be avoided. In front of the Campus Center is a popular location when the weather is nice and anyone who sits out there and watches will see numerous people put recyclables into the trash cans. If there were recycling options adjacent to the trash cans, this could be avoided. Speaking from the experience of a student this would definitely make a difference. The Administration is responsible for the aesthetics of the campus and has stated that they find recycling bins unsightly.

I for one find it hard to believe that 3 recycling bins adjacent to already present trash bins would diminish campus aesthetics. If anything it sends the message we are an environmentally conscious institution. To gain support, a pilot study could be designed to show the value of the bins in outdoor locales and sway their views. If economic benefits could be shown, the support of administration would be more likely to be achieved. A survey would be another method to show that the Macalester community is in favor of outdoor bins and does not find them unnecessary or unattractive.

Expanding

Another improvement to our program and reducing our impacts would be to expand the types of materials that can be recycled. Jim Davidson is already looking into recycling household batteries and plastic bags since he finds them to be in abundance in dorms. Ann Esson of the Environmental Studies Department does accept transparencies and ink cartridges and recycles them, but very few people are aware of this. This information should be made known through the mass email system and/or the ResLife booklet. As of now there is not one, but if a vendor is found that accepts these and possibly other materials, there could be a central location for collection that students and staff could bring them to, such as Kagin or the Campus Center. Such a program was implemented at Carnegie Mellon University in Pennsylvania.

Conclusion

The main obstacle to improving our recycling program is individual participation. We can not *make* people recycle; we can only educate and promote recycling, as well as making it easy to recycle. Increasing communication about recycling could result in significant improvements. Also, the CEIC may become an integral part in improving campus recycling. It can serve as a forum for ideas and request more money for the program. Budget is an obvious

issue when it comes to any campus program, but in light of the savings generated from recycling there is a strong case for recycling to receive more money to become a more efficient program. Macalester could be a leader in recycling that other schools around the nation look to as an example.

Bibliography

National Wildlife Federation Campus Ecology, www.nwf.org/campusecology/index.cfm

Jim Davidson, Second Shift Custodial Supervisor, Macalester College