

Recycle-a-rama

Increasing Waste Awareness at HSU

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Problem Statement:

Awareness of where to put potentially recyclable items is lacking at Humboldt State University.

Context:

For a “green” campus, students, staff and faculty do not divert enough solid waste from landfills. Humboldt State has a reputation of environmental awareness. For example, *U.S. News and World Report* ranks HSU as a top school for environmental majors. Some key issues pertaining to waste awareness include discarding hazardous materials (e.g. batteries), lack of awareness regarding bin locations, upcoming changes in local recycling processing, existing recycling markets not well publicized, and no current campus-wide recycling guide or website.

In addition to HSU’s reputation, state laws mandate diversion as law rather than an option. Two laws directly impact the importance and legal imperative to recycle.

1) AB 939: (1989) California Integrated Waste Management Act, created California Integrated Waste Management Board (CIWMB) and mandated hierarchy of waste disposal reference: “source reduction, recycling and composting, and environmentally safe transformation and land disposal.” AB 939 also required all city and county plans to include a plan to divert 50% of their solid waste by Jan. 1, 2000, in reference to their baseline diversion rate of 1990. Non-compliance results in fines.

2) Hazardous Materials Law (Feb. 2006): This law prohibits hazardous materials such as batteries, electronic waste and compact fluorescent bulbs from being thrown into household garbage. These materials must be recycled at a certified location.

• Diversion rates for institutions are available on the CIWMB website. Below, HSU’s diversion rates were retrieved from the State Organization and Agency Recycling Database (SOARD).

Table 1: Humboldt State University’s Diversion Rate:

2001	51.4%
2002	51.9%
2003	42.1%
2004	66.4%

The difference in diversion rates of 2003 and 2004 reflects the university’s diversion of construction and demolition waste. In 2004, the university had more construction and more diversion of waste, whereas in 2003, the university constructed little. The large amount of construction in 2004 helped HSU exceed the diversion rate mandated by AB939, but previous rates were barely in line with the law. Therefore, HSU must continue to strive for consistent, high waste diversion.

Working Within an Institution:

As a public university, HSU is ultimately accountable to taxpayers. Since we have achieved our diversion rate, our accountability in regards to waste management is maintained. However, since the university disproportionately affects the population of the area, an increased waste diversion rate could help the city of Arcata meet their diversion needs.

In order to solve this problem, a strategy would have to be approved by school administrators and disseminated by willing volunteers. For example, to distribute a recycling guide, staff, faculty and student orientation contacts would have to include the guide in their welcome materials.

Existing Projects:

We went on a discovery mission to uncover what has already been done at HSU to increase the awareness about recycling to new arrivals. We asked if there were any programs, presentations or welcome packet inserts that addressed recycling. Following is a summary of our contacts and discoveries.

Table 2: Humboldt State Contacts

Contact	Information
Sally Botzler - sjb3 Faculty Development Coordinator (Facilitates new faculty orientation)	There was a poster session 8/15/06 for new faculty that included a display by CCAT that may or may not have had recycling info.
Zach Marmel - zam2 CCAT Co-director	The poster session didn't have any recycling info, but there is one poster CRP created for residence halls (Appendix I).
Alec Cooley - anc1 Former Solid Waste Manager	There is a very old guide for recycling (Appendix II), but nothing is current. Signage in the residence halls helps students, and staff and faculty can have marked boxes for recycling in their office, but no recent guide.
Kristine Nelson - kkn7001 Assistant to the Provost and Vice President for Academic Affairs	Directed me to CRP and told me about Executive Memo P05-05 that mandated use of 100% recycled paper.
Jeff Dixon - jd71 Human Resources	Sent a link to CRP's website, which really needs updating
Also Contacted: Melissa Koval	Directed me to Jeff Dixon

Sherry Jones Deffenderfer Diane Anderson Hillary, former CRP member HOP Office for Director of Student Life	Gave a list of contacts Sent us luck Directed me to Office Manager Kelly They don't have anything They no longer have recycling inserts into the student welcome packets
CRP Office Manager Kelly Karaba Tammy Curtis Merry Schellinger	To explore CRP's standing She is responsible for new staff orientation Maintains parts of faculty handbook

During this discovery phase, two key aspects emerged. One, HSU's recycling guide is out of date and nearly useless for current university stakeholders. Second, an Executive Memorandum (P05-05) requires the use of 100% recycled paper (<http://www.humboldt.edu/~hsupres/recycledpaper.html>). This memorandum is of interest since other universities have implemented this same strategy and it relates to recycling.

Projects Elsewhere:

Most universities, like Humboldt State University, have waste reduction policies that are being implemented. These policies detail how to prevent pollution by reducing the amount of resources we use as well as reducing the flow of trash to the landfill by reusing and recycling. Many schools such as University of Vermont and University of California at Berkeley, hand out packets of information to new incoming students that go over the details of reducing waste and recycling. These packets include information about what is and what is not recyclable and how and where to bring one's waste to properly dispose of it. These packets also included details on hazardous waste disposal for students who participate in science laboratories where hazardous waste production is commonplace. Some schools such as Harvard and Princeton have taken leadership roles when greening their campuses and switched all their letterheads to 100% post consumer recycled paper, encouraging a trend in other universities and promoting an image of waste minimization.

How successful are they especially UC Berkeley?

We also found several guides online that other universities use. The University of Vermont has an extensive guide that may be viewed in Appendix III.

Problems Encountered:

Humboldt State University's Campus Recycling Program's website has several broken links and outdated information. Many other universities such as Providence College in Rhode Island (<http://www.providence.edu/recycling>) have very well designed recycling pages on their websites with information for students and faculty about what, how and where to recycle and dispose of waste. The website at Providence offers campus recycling statistics that report to the campus how much of what is being recycled, which may open students' eyes about the issue. The site also has a page with holiday season resource saving ideas that were very practical and interesting.

didn't see Alec Cooley
anybody this?

Historically, there has not been a great deal of continuity among recycling efforts at Humboldt State. Plant Operations is in charge of picking up and managing recyclables, handling cafeteria composting, in addition to educational programs; while the Associated Student club, the Campus Recycling Program, manages the Reusable Office Supply Exchange (ROSE) program, demonstration of composting, the eco-cycle, other educational programs and a newsletter. While the two groups collaborate on some projects, much of their work is independent and fragments the energy and intentions invested in recycling.

Although the Solid Waste Manager at Plant Operations was the club advisor for the Campus Recycling Program until October 2006, the two groups mostly worked independently on projects and missions, except for jobs that required a lot of manpower, like the end-of-the-year dorm move out when volunteers helped divert students' goods. With former Solid Waste Manager and CRP advisor Alec Cooley's transfer from HSU, room has been created to replace his position with a more comprehensive Sustainability Coordinator position. Also, many students are rumored to have encountered problems with previous Plant Operations Associate Vice President of Facilities Management. He no longer works for the university. These changes in Plant Operations staff are both a challenge and perhaps a blessing. While a loss of information will occur and a gap in coordination, this project may emerge "from scratch," so to speak, to redesign and re-inform recyclers at HSU. Cooley has made himself available via e-mail for questions, which is very helpful.

Another potential problem that may be resolved, making now an optimal time for recycling rejuvenation, is the upcoming opening of a new recycling facility for the county. The Arcata and Eureka recycling centers will open a new processing facility that will allow consumers to recycle all materials in a two-stream separation. This will lower the barriers to recycling and increase the availability and appeal of recycling to the masses. In reference to HSU, this processing facility will allow a higher volume of recyclables. Currently, HSU staff sort recyclables from receptacles around campus. With this new facility, two categories will ease the burden of recycling, increasing the benefits. The two categories, containers and paper, will be more efficient than the current broad array of recycling categories.

Evidence of Strategy Success:

Awareness is one of the components to increase recycling, but not the only one. Awareness alone will not solve the problem of low waste diversion, but increasing awareness is a part of the solution.

Garces et al. (2002) in "Urban Waste Recycling Behavior" for *Environmental Management*, found that most recyclers tend to already have a pro-recycling attitude, and we assert that awareness contributes to the cultivation of this attitude. They study a recycling program in Spain that collected cardboard and glass at residents' homes or at recycling sites in the community. These attitudes, however, are not acted upon unless "the conditions that let good intentions be carried out are not established," (379). Convenience can be manifested through strategic bin placement and an educational program that illuminates the necessity and convenience of recycling. While several factors interact such as distance to recycling site, space in the home, time availability, etc., attitudes do correlate to behavior. The study shows that "knowledge about environmental problems in general, knowledge about the environmental

impact of urban wastes and the perception of good program management by the local authorities exercise a positive effect on the recycling behavior of citizens" (387). An educational program, perhaps a recycling guide, can help understanding of environmental problems, can show how the impact of waste can be eased and create a positive image of local waste management.

Another article by Turlough F. Guerin discussed the implementation of new environmentally sound technology (EST) into industries, such as the minerals and energy markets in Australia. This study identified the need for environmental consultants to educate land users to implement new innovations. In observing which innovations are adopted and which are not, the researchers found that innovations were adopted because they were profitable, reduce costs, reduce operation impacts on the environment, improve social conditions or all of the above. Sustainable practices, Guerin believes, meet all three, economic, environmental and social needs. In order for EST to be adopted, "it is necessary to change the land users' negative attitudes towards an innovation," (4). The author recommends exposing users (potential recyclers) to the innovation, allowing confidence to develop, and adoption will occur in stages. He goes on to say that, "An important aspect in the adoption process is the identification and use of appropriate communication channels," (12). The hope of this project is to find the appropriate communication channel to change the attitude of non-recyclers into a pro-recycling attitude and behavior.

A study conducted on the factors that influence home and workplace recycling behavior by Lee, Young, and Marans found strong correlations between organizational commitment to recycling and individual commitment. They found that the more dedicated to waste reduction an organization is, the more likely the individuals in that organization will be dedicated to upholding those values. The study also indicated that individuals who have experience recycling paper would consistently recycle only paper, throwing aluminum and plastics in the garbage.

Therefore, a guide to recycling can make recycling easier and more convenient. Convenience can lower the barriers to recycling practically, and help change attitudes. Since HSU is a place of heightened environmental awareness, the organizational commitment to resolving environmental problems is somewhat inherent and the understanding of environmental problems required for background knowledge is more abundant than elsewhere. With this social climate as a context, and a guide to make recycling more convenient, our research shows that increasing awareness through a guide will solve the problem of low waste awareness to help increase recycling.

~~What has been done on other campuses
that would be useful here? whoops - I
skipped a page.~~

Goals and Objectives:

Goal: Ensure that our target audience receives our message about what is recyclable and where to put hard to recycle items.

Objectives: Assuming that 0% of our target audience knows about the upcoming changes in local recycling with the opening of the Samoa facility, we hope to increase awareness:

- 1) Of faculty 50%, accounting for ignoring, missed members.
- 2) Of staff 50%, due to their semi-permanent status.
- 3) Of students 10%, due to over stimulation and lack of attention.

Some relevant studies:

1) Recycling Rate of Aluminum Cans in Fiscal 2005 (April 2005-March 2006). Source: Nalk Report, vol. 188, pp. 5, July 2006

“According to data from the Japan Aluminum Can Recycling Association, recycling rate of aluminum beverage cans in fiscal 2005 (April 2005-March 2006) rose 5.6 points from the year-ago period to 91.7% and marked a level above 90% for the first time.” This increase was due, in part, to increased awareness.

2) Affiliation Cardiff School of Engineering Cardiff University, Queen's Buildings, The Parade, Source: Solid Waste Technology and Management. pp. 201-210. 2006.

“Analysis of the diversion data for the case study authority indicates that if the waste awareness campaign were to be implemented to all residents and the schools waste education programme to all school children age 7-11, there would still be a substantial amount of Biodegradable Municipal Waste (BMW) not diverted away from landfill.” We hope that our population of adults will have a greater impact, but are prepared for this gap in education to implementation.

3) Plastics recycling and waste management in the US. Source: Resources, Conservation and Recycling. Vol. 28, no. 3-4, pp. 253-263. Feb 2000.

“The increasing awareness of the environment has contributed to concerns regarding our life styles and our indiscriminate disposal of wastes...The municipal solid waste (MSW) produced annually, has begun to decrease, e.g. from 211.5 million tons in 1995 to 209.7 million tons in 1996. Recycling rates and composting rates are increasing.” We want to help further this trend.

Weighing Alternatives:

In order to uncover how to best meet our goal and objectives, we evaluated different alternative solutions. Below is a table cataloguing our evaluation.

Table 3: Weighing Alternatives

Alternative	Criteria				
Alternative	Obj.1: Faculty (3 pts.)	Obj.2: Staff (2 pts.)	Obj.3: Students (1 pt.)	Total	Constraints
Website	2	1	1	4	How will people know about it? Will people go to it? Who will update it? Will university host it?
Printed Guide Full length	3	2	1	6	Hard to fund printing. Need a host for distribution. Easily outdated.
Awareness Day/ Event	1	1	1	3	Organization, consistency, coordination. Only those present will benefit. Easily outdated.
Advertising/ Posters	2	1	1	4	Funding, approval. We're already over stimulated. Easily outdated.
Map of Bins	2	1	1	4	Consistency. Bins may move. People still need to know what to put in bins. Easily outdated.
Quick Reference Guide	3	2	1	6	May not have needed information. Easily outdated.

In examining these alternatives and the constraints, we found that the most beneficial approach may be to combine alternatives for the best cost/benefit ratio. Here, we examine them in an isolated fashion to see which can be best combined.

The scoring system illustrates how well each alternative meets our objective. Our goal is to reach our target audience with useful recycling information. We want the information to be as permanent as possible, and therefore we chose faculty to have the highest score since they are the least transitory population. Although staff, mostly janitors, are primarily responsible for the labor and implementation of recycling, their department (Plant Operations) is responsible for orientation. Since it is their job, their knowledge and resources may be assumed to be adequate. Those seeking more information may use our guide. Lastly, the student population is the largest, but has the lowest score. This is due to their transitory nature as well as the perceived motivation for sustainable behavior. Those most likely to recycle will seek out the information needed and those not likely to recycle probably will not benefit much from exposure to our guide. Also, CRP has an educational director and two educational coordinators who focus on the student population.

Sp. The constraints for our project are diverse, but those that are difficult to overcome are less valuable as alternatives. The main constraints are funding and approval within the beaucroatic system. Since funding is strained with the current budget, the hope for this project is that money already allocated may be used, such as the Campus Recycling Program's funds or money for the new Sustainability Coordinator position. Approval for the actual use of recycling information will not be difficult since recycling is not very controversial.

While a full-length guide and the quick-reference guide received the highest scores, the full-length guide has larger constraints. CRP is willing to fund the printing of a one-page, quick-reference guide. This alternative also meets the heart of intention for the project. To minimize paper, we will implement a quick-reference guide along with a website to fill the gaps of those sectors that do not have access to the printed guide. Users can also print the guide from the website if they chose.

While this guide and website are easily outdated, they are also easy to update. A full-length guide would be more difficult and also be less convenient for users. Kelly Karaba, office manager for CRP, also said that a full-length guide would meet more resistance from users. She said that people will not typically read a book. She liked the guide as a step to institutionalize recycling through faculty and staff. Also, she confirmed that CRP will host the website and pay for printing.

Implementation Plan:

In weighing the alternatives, we valued objectives differently. Faculty is our target audience, with staff and students following respectively. The degree to which these objectives were met determines its worth as an alternative.

Our first idea was a full-length printed guide. However this cumbersome document would probably lack the convenience that our target audience is likely to desire. As an educated, but busy population, members of academia need fast, digestible and thorough information. Although a full-length book would be the most thorough, few people would look through the material to peruse the entirety.

Other spot approaches like a recycling event or poster wouldn't be as far reaching as a continuous campaign or a permanent document. Although an awareness day or posters on campus could reach those who attended or read them, they reach fewer people than a website especially, and the quick reference guide too.

A quick-reference guide could contain a link to a website and commonly needed references for any quick questions. The website could contain more exhaustive information for specialized questions. The two together would be accessible for two sectors of media-users, informative but not intimidating and continuous. While this alternative cannot alone promise that education leads to action, or that the waste diversion rate will increase, it is a step to get recycling embedded in the institution as a standardized act of protocol.

Strategies for Convincing:

During our scoping process, we met a receptive audience. Those involved with the faculty handbook, staff orientation, Plant Operations and the Campus Recycling Program were all supportive of a recycling guide. Since this project is informational and voluntary, we do not foresee many problems in convincing people to use our product. Those who want the information will seek it out. Those who do not, will not. For those who are less likely to recycle, we have chosen alternative that make it easier, and less laborious to figure out the system of recycling. Since the changes in local recycling will make it easier to recycle, with less sorting, the guide will be as simple as possible and less complicated than locals are accustomed to. Below is a table illustrating our timeline for completion.

Is there a way to change this attitude?

Table 4: Time Line:

Task	Done by this Date	Responsible Party
Meet with ACRC to confirm changes in recycling	Nov. 14	Cindy
Meet with HSU Plant Operations to discuss their plans and new sustainability coordinator position.	Nov. 14	Adam
Consult with Haz. Mat. Coord. To discuss batteries, CFLs, etc.	Nov. 14	Cindy
Create a draft quick reference guide	Nov. 27	Cindy
Create website	Nov. 27	Adam
Review mock-ups with ACRC and HSU Plant Ops.	Dec. 1	Cindy
Review with CRP -get tips, review budget, confirm printing, catalogue for reference	Dec.1	Cindy
Make changes to drafts and finalize	Dec. 7	Cindy & Adam
Finalize survey for implementation and give packet with human subject's form to CRP educational staff	Dec. 10	Cindy
Submit copies to department offices, faculty handbook, HOP, staff orientators	Dec. 10	Adam
Present copy to Plant Ops. For new Sust. Coordinator	Dec. 10	Cindy

Monitoring and Evaluation Plan:

To monitor the effects of our project we will use a short survey every semester to generally gauge how much the average HSU student or staff or faculty member knows about recycling on campus. We must have at least 100 randomly selected HSU members that represent a wide diversity of members of the university. The survey will be distributed in a way that will not be biased towards students, staff or faculty in one department or another, for example, random people on the quad.

Evaluation will entail tallying results of the surveys and observing changes in the results from surveys over time. If the surveys show awareness about campus recycling, we have met our goal. In order for this program to work, evaluation must be incorporated into the job title of an appropriate campus staff. The CRP education staff will administer the survey. Since we are assuming a baseline knowledge level of zero, a preliminary survey is not necessary. The packet for CRP staff is Appendix IV, including instructions, the survey and the human subjects form.

References:

Garces, Conchita et al. *Urban Waste Recycling Behavior*. Source: Environmental Management, Vol. 30, pp. 378-390, 2002.

Guerin, Turlough F. *Why sustainable innovations are not always adopted*. Source: Resources, Conservation and Recycling, Vol. 34, No. 1, pp. 1-18, December 2001

Lee, Barry et al. *Affiliation Cardiff School of Engineering Cardiff University, Queen's Buildings, The Parade*. Source: Solid Waste Technology and Management, pp. 201-210, 2006.

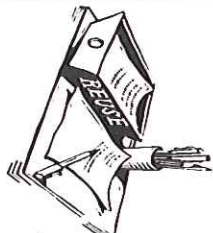
Recycling Rate of Aluminum Cans in Fiscal 2005 (April 2005-March 2006). Source: Nalk Report, vol. 188, pp. 5, July 2006.

Subramanian, P. M. *Plastics, recycling and waste management in the US*. Source: Resources, Conservation and Recycling, Vol. 28, no. 3-4, pp. 253-263, February 2000.

Appendix I:
Residence Hall Recycling Guide

THE RECYCLING CHALLENGE

PAPER



Sort your paper into three categories: office paper, newspaper and magazines. It is important to sort properly, so please take the time to learn the list below. Specific questions can be answered by calling the Recycling office at 826 5920.

RECYCLE	DO NOT INCLUDE
OFFICE PAPER <ul style="list-style-type: none"> • Letterhead Stationary • White Copy Paper • Pastel/Colored Paper • Off-White Recycled Paper • NCR (carbonless) Forms • Semi-Glossy Paper • Envelopes (windows OK) • Junkmail (no product samples) 	NO FLUORESCENT or BRIGHT COLORS! NO PLATES OR CUPS NO FOOD WRAPPING NO PAPER TOWELS NO TISSUE PAPER NO DRINK CARTONS NO BOOKS NO CHIPBOARD
MAGAZINES/ GLOSSY CATALOGS	NO NEWSPRINT (MUST BE GLOSSY)
NEWSPAPER <ul style="list-style-type: none"> • Inserts are OK 	NO OTHER PAPERS

The 125 tons of paper HSU recycles each year is enough to save over 2,000 trees.

CARDBOARD

Breakdown all cardboard boxes and place in the dumpsters outside. Chipboard (six pack containers, cereal boxes, etc.) are O.K.



No egg or milk cartons.
 Please remove all packing materials.
 No coated food packaging.
 Boxes must be flattened

BEVERAGE CONTAINERS



ALUMINUM & STEEL CANS
 Please empty aluminum and steel cans. You can also recycle aluminum foil, pie plates and TV dinners trays. Please rinse out food containers.



GLASS BOTTLES
 Please rinse out any food jars.
 No window glass, light bulbs, glass cooking ware.



PLASTIC BOTTLES #1-#7
 Includes any rigid container with the numbers 1 through 7 printed on the underside. Please remove lids.
 No plastic bags, polystyrene or plastic films!

HSU saves over \$50,000 in garbage costs each year by recycling, composting and reducing solid waste!

Appendix II:
Outdated Recycling Guide

FOR YOUR INFO.

THE CHALLENGE

California generates 45 million tons of garbage per year; that's more than one ton of trash every second of every day. At HSU we produce over 1,200 tons of solid waste a year, and use the equivalent of 6,222 trees in paper.

What can we do about it? The most environmentally sound and cost effective solution is to create less waste in the first place. The choices we make today affect our environment tomorrow. Simple decisions we make every day can conserve natural resources and reduce waste.

Waste is just a resource out of place.

What's in the Garbage Can?

Model Program

Humboldt State University is a model waste reduction and recycling program to many universities and colleges across the nation. The following is a brief list of projects we have implemented on campus.

- ◆ **Award Winning Video** - We produced an instructional video to assist other campuses in implementing effective recycling programs. The video is available in the library.
- ◆ **Residence Hall Recycling** - We collect for recycling all glass, steel & aluminum cans, plastic bottles # 1 & 2, mixed paper, and newspaper. That's over 225,000 lbs/yr.
- ◆ **Move-out in the Residence Halls** - Each year we collect from the residents household products, clothes and non-perishable food items. These products are donated to a local homeless shelter. In 1996, we collected over 35 cubic yards of materials.
- ◆ **Recycling in Dining Services** - We collect for recycling cardboard, mixed paper, steel cans, aluminum cans, glass and plastic bottles # 1 & 2. *That's over 140,000 lbs/yr.*
- ◆ **Food Waste** - We send over 25 tons/yr. of food waste to a local composting facility.
- ◆ **Yard Waste** - Over 70% of our yard waste is composted. *That's about 330 tons/year.*
- ◆ **Chip and Mulch Wood Waste** - Woody debris is chipped and used as a mulch to control weeds around campus.
- ◆ **Compost Demonstration Site** - Each month our master composters teach workshops on backyard composting and vermiculture (composting with worms). Since 1992, we have taught over 500 people to compost. The demonstration site is located next to the Buck House. #97.
- ◆ **Phone Books** - Each year when you receive your new phone book, we recycle the old ones. *Over 2,000 books per year.*
- ◆ **Confidential Paper Destruction** - We now offer special pick-up of confidential paper. Store paper in boxes labeled confidential. Contact CRP when you have 2 or more

Over the past 10 years, landfill costs in Humboldt County have increased over 800 percent!

Did you know that the benches on the U.C. Quad and in front of Founders Hall are made from recycled plastic milk ' 's?

BUY RECYCLED

If you're not buying recycled products, you're not recycling!

Closing the Loop: Why Buy Recycled Products?

In order for recycling to really work, there needs to be a market for the recycled products. Recycling glass and aluminum is profitable enough that chances are any glass or aluminum containers you use contain some recycled content. Unfortunately, the same is not yet true of paper - recycled paper must be actively sought out. The good news is that with increasing environmental awareness and the high quality that has been achieved by recycled paper manufacturers, paper recycling is on the rise. Not all recycled paper products are created equal, however. Different products have different amounts of recycled content. To complicate matters further, there are two different types of recycled fibers:

- ◆ **Pre-consumer** recycled material is generally scraps from the mill which have always been used in paper manufacturing. This is material which has not yet been used by consumers.
- ◆ **Post-consumer** recycled material has already been used; it is the paper you put in your recycling bin. It is post-consumer waste content which keeps paper out of landfills and "closes the loop" in recycling.

When purchasing products that contain recycled content, choose the item with the highest post consumer content. This will help to secure and create new markets for materials we recycle at HSU.

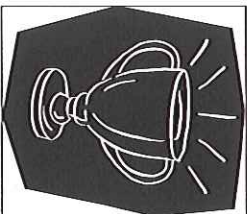
Producing one ton of paper from post consumer recycled paper instead of virgin pulp uses half as much energy and water, produces three-quarters less air pollution and one-third less

The Garbage Guide

The main objective of the HSU Solid Waste Reduction Program is to educate the campus community about how to send less waste to the landfill. This means getting individual faculty, staff and students to reduce the amount of waste they generate. So what's the most effective way to reduce trash? Most people would say "Recycle." While recycling is the most discussed, most obvious of the ways to keep materials out of the landfill, it is only one means and not the primary one. This Garbage Guide will introduce you to many of the ways.

HSU Program To Be Proud Of

HSU has won national, state and local awards for its recycling program.



*1992 & 1994 County Waste Reduction Award
1995 California Resource Recovery Association Award
1995 National Office Paper Recycling Program Award*

REDUCE REFUSE RECYCLE RE-BUY

The basics of waste reduction can be condensed into four small words: **reduce, refuse, recycle, and re-buy.** The philosophy is quite simple: reduce the use of materials as much as possible. For materials which are absolutely necessary, reuse them and get the most out of them. When reuse isn't possible any more, recycle it! (And make sure it's recyclable before you buy it). Finally, seek out products that contain recycled content. Many recycled products are now available, everything from office paper to plastic

HSU is diverting over 50% of it's waste from entering the landfill. Keep up the good work!

WASTE PREVENTION

"Waste prevention is to garbage what preventative medicine is to health: a means of eliminating a problem before it can happen."

Reduce Paper Use

- ◆ Make your next report or memo two-sided and set an example.
- ◆ Route memos instead of making multiple copies or create a reading file.
- ◆ As much as possible, edit documents on the computer and use page preview before printing.
- ◆ Use electronic mail instead of copied memos.
- ◆ Save documents on floppy disks instead of making hard copies.
- ◆ Eliminate unnecessary forms. Double-side forms or redesign them to fit on a half sheet.
- ◆ Order supplies in bulk to reduce excess packing.
- ◆ Buy durable, repairable, reusable high quality products.
- ◆ *Rethink, Do I really need this item?*

To Reduce Junk Mail

To avoid annoying junk mail, tell the company not to sell your name when you order merchandise from a catalog. Or request to have your name removed from mailing listings by writing:
Direct Marketing Association
Mail Preference Service
P.O. Box 9008
Farmingdale, NY 11735-9008

FORMerly Paper

Purchasing requests, petty cash, or even job descriptions, all of these forms can now be completed electronically. The Staff Council has gathered approved computerized forms for your convenience. For a free diskette, call University Stores

Junk mail accounts for more than one third of all mail sent by the U.S. Post Office. That's about 77 billion pieces per year.

RECYCLE

Beverage recycling containers are located at the main entrance of most buildings on campus.

Recycle Cardboard Only corrugated cardboard is recyclable, no waxed cartons. To recycle cardboard, *flatten* and *stack* boxes in the hallway at the end of the day. Please remove all packing materials.

Recycle Glass
 Please empty glass bottles and jars, remove lids and place inside appropriate container. No ceramic mugs, window glass or light bulbs.

Recycle Aluminum & Steel Cans
 Please empty aluminum and steel cans. You can also recycle aluminum foil, pie plates, TV dinners trays, and metal lids. Place inside the appropriate container.

Recycle #1 & #2 Plastic Bottles
 Please remove lids, empty contents and place inside appropriate container. Look for the #1 (PETE) & #2 (HDPE) symbols on the bottom of the bottles. *No plastic bags!*

Yard and Food Waste Composting
 Composting is nature's way of recycling. To learn more, visit the HSU Compost

Recycling one aluminum can saves enough energy to run your TV for three hours!

RECYCLE

If you're not recycling, you're throwing it all away!

Recycle Paper

Sort your paper into three types: **white, mixed, and newspaper.** All faculty and staff will be supplied, on request, a desk-side tray for office paper recycling. When full, these trays are to be emptied into the red-top paper recycling containers nearest you. To request a desk-side recycling container, call CRP. For *confidential paper pickups*, store paper in boxes labeled confidential. More than 2 boxes, call CRP.

RECYCLE

WHITE PAPER

- Letterhead Stationary
- Copy Paper
- Lined Composition Paper
- CPO (blue/green stripes)

MIXED PAPER

- All Colored Paper
- Off-White Recycled Paper
- NCR Paper
- Magazines & Catalogs
- Envelopes (junk mail)
- File Folders (post-its OK)
- Bound Documents
- Ream Wrappers
- Construction or Art Paper
- Chip Board (i.e., cereal boxes/six-pack containers)

NEWSPAPER

- Inserts are OK

DO NOT INCLUDE

- NO OFF WHITE PAPER
- NO COLORED PAPER
- NO ENVELOPES
- NO METAL FASTENERS (STAPLES ARE OK)

- NO PAPER PLATES
- NO PAPER CUPS
- NO FOOD WRAPPING
- NO PAPER TOWELS
- NO TISSUE PAPER
- NO WAXED PAPER
- NO JUICE OR MILK CARTONS
- NO HARD COVER BOOKS
- NO CARDBOARD
- NO PLASTICS
- NO OTHER PAPER

WASTE PREVENTION

Minimize Packaging (Foam Peanuts)

Ask your vendors to minimize unnecessary packaging for deliveries, and to take back the packaging for reuse. Many companies are now covering return postage for reusable packaging materials. To reuse packaging peanuts, simply store in a bag and call the Reusable Depot for collection at 822-4542.

Donate Your Books

Please donate all unwanted **books** and National Geographic Magazines to the *Read Project*. This nonprofit organization makes books available to individuals living in rural parts of the North Coast. Drop-off or send your books via campus mail to: CRP, Warren House #53.

Paper Versus Plastic Bags

Paper and plastic bags both have environmental shortcomings. Most brown paper bags are made from virgin wood materials, their advantage is that they are recyclable and biodegradable. Most plastic bags are made of petrochemical resins and are not biodegradable. A better alternative than either of these is a cloth or string bag which can be used over and over.

Donate Unwanted Office Supplies

Manila folders, binders, office paper, etc. should be reused or taken to the Campus Recycling Program for reuse. All materials are donated to local non-profit organizations (elementary schools, art collectives, community groups). Stop by or send your unwanted office supplies via campus mail to: Warren House #53.

About 50 percent of all the paper in the United States is used solely for packaging!

For every ton of paper we recycle, we save 17 forty foot Douglas Fir trees!

REUSE

"Once is not enough."

Turn your scrap paper into scratch pads

You can take your one-sided paper to University Graphics to have scratch pads made. The service is free for faculty and staff, and some one-sided paper pads are available at University Stores. Also reuse one-sided paper for notes and draft copies.

Reuse Envelopes

Reuse envelopes by placing a new label over the old one. Have graphic services print some mailing labels with your department name and address. Create a box for the reusable envelopes and keep your mailing labels near by.

Use a Durable Mug

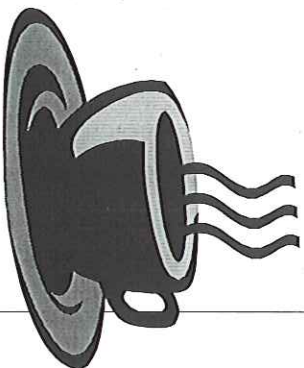
Instead of a Disposable Cup

Pledge to stop using disposable cups and start refilling, not landfilling.

Lumberjack Enterprises is selling durable refillable mugs at cost.

Whenever you use a refillable mug,

you receive a 25% *discount* off the price of that beverage at each of their food service areas.



From Birthday Parties to Conferences - Choose to Reuse

For birthday parties, meetings, or special events, consider investing in reusable dishware for your staff. A few cups and plates go along way. Request caterers to use reusables rather than disposables and ask that leftovers be donated to charities.

Use Rechargeable Batteries

The dry cell (household) batteries make life convenient, and everywhere you look you can see them in use. However, batteries are difficult to recycle. So, why not try reusing them.

5

By using a refillable mug, you will help to reduce the 200,000 disposable paper cups HSU generate each year!

REUSE

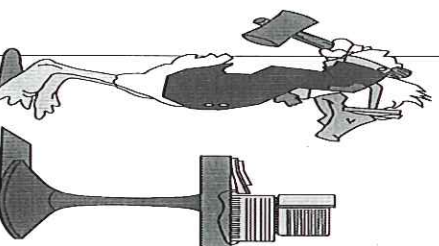
Reuse Toner Cartridges

There are two ways of recycling toner cartridges: return to the manufacturer for disassembly and reuse or recharge by a toner cartridge recharging service.

◆ **Return to Manufacturer:** Many companies ask their customers to return used toner cartridges. They will provide a UPS shipping label and will pay shipping costs. Contact the manufacturer for more information about their recycling program.

◆ **Toner Cartridge Recharge:** The only company in the area providing toner cartridge recharge is CartriCharge West. They can recharge cartridges for several different models of printers as well as some copiers. In reconditioning the cartridge, the photoelectric drum of the original cartridge is replaced with a "High Tech Drum," enabling the cartridge to be recharged at least 5 times. The company offers free pick up and delivery service, making it easy to reduce waste while improving print quality and saving money. For more information on this service and a list of machines which can be serviced, call: CartriCharge West at 822-9212.

Material Exchange Program (Property Office)



Don't trash it, donate it! If you have equipment you no longer use, contact the Property Office. You can donate any office or lab equipment to them and it will then be available for use by other departments at HSU. Contact them if you are in need of equipment, they may have something you can use. To donate non-state owned property, contact:

- ◆ The Reusable Depot 822-4542 (ex.19)
- ◆ TRI-CITY WEEKLY 443-5672
- ◆ CALMAX 916-448-1198 (State wide list)

Each of these services are free. Call to donate a product or find something you might need.

6

Six billion disposable pens are thrown away in the US every year! Help reduce waste; buy a refillable pen.

Appendix III:
University of Vermont Recycling Guide

Welcome Students!

The University of Vermont is proud to be a leader in environmental awareness and sustainability. The natural beauty of Lake Champlain, the Green Mountains and the Adirondacks serves as constant reminder of why we should be good environmental stewards. This guide provides tips for you to reduce your environmental impact and help to protect the beauty and integrity of Vermont. If we all do a little we can achieve a lot!

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- Recycling.....4
- Taking Care of Hazardous Materials
and Special Wastes.....5
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- Compost Your Food Waste.....8
- Eating with the Earth in Mind.....9
- Shopping With the Earth in Mind.....10
- Get Involved.....11

Green and Groovy Places to Explore

Looking to escape from campus for the afternoon? Burlington is full of great places to explore.

Centennial Woods: With a network of trails, it's the perfect place to take a relaxing break from your stressful schedule. To get there, cross East Avenue to Catamount Drive and look for the trailhead on your left just past the library annex.

Waterfront Park: Take the free College Street Shuttle Bus down to Burlington's Waterfront. With a boardwalk and large green space looking out on the lake and the Adirondacks, the Waterfront is a popular hang out spot.

Burlington Bike Path: From the Waterfront you can also get to the bike path, a 7-mile paved trail along the Lake Champlain shoreline. This path runs from Oakledge Park on the south end of Burlington to the Winooski River on the north end. Cross the bridge to connect with the Colchester Bike Path. The path will also take you past Burlington's Skate Park, North Beach and Leddy Beach (beach admission is free for walkers and bikers).

Cycle the City: A 10-mile bike loop that takes you past a number of Burlington's historic, cultural and natural landmarks. For more information, visit www.localmotionvt.org.

ECHO Museum: (Ecology, Culture, History, Opportunity) Also located on Burlington's Waterfront, this museum is a fun way to learn about the community and ecology of Lake Champlain and Vermont.

The Intervale: Ride your bike north on Prospect Street down the hill to the entrance of the Intervale — 700 acres of farms and hiking and biking trails in the floodplain of the Winooski River. You can visit the compost facility which processes all of the food waste from UVM dining halls. Visit www.intervale.org for more information.

Beyond Burlington: Want to take a ski trip, climb Mt. Mansfield or try your hand at rock climbing? Check out the offerings of UVM Outing Club for trips, gear rental, and expert advice on where to go and what to do.

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Getting Around

There are so many great things to do and see around the Burlington area without a car!

Walk, Bike, Bus



Most of Burlington can be easily accessed on foot. Walking is a great way to get around campus as well as downtown.



Burlington is a bike-friendly town, with many bike paths and designated lanes. When riding your bike please remember to obey all traffic laws, wear a helmet and always lock your bike securely to a rack.



Getting around Campus:

Free campus shuttle buses (CATS) run daily throughout the campus. Buses run every 10-15 minutes most days. Pick up a current schedule and route map on the CATS bus or on the web at www.uvm.edu/tps.



Getting around Burlington:

UVM Off-Campus Shuttles are available from 6:30 pm-12:30 am, 7 nights a week. Visit the Transportation and Parking Services webpage for details: www.uvm.edu/tps.



UVM students, staff and faculty can ride the local city buses for FREE! Bus service on the CCTA (Chittenden County Transportation Authority) can get you downtown, to the Mall and to the Airport. Simply swipe your UVM I.D. to board the bus. Bus schedules are available at Waterman Building, at most residence complexes, at www.cctaride.org or by calling (802) 864-2282.

Please note: To reach certain destinations, a transfer is necessary. Simply ask the driver for a transfer as you board the bus. UVM is billed every time you swipe your card, so please be conscious and ask for a transfer.

Recycling

It costs almost \$200,000 per year just to pay the landfill bill for the University. Recycling is an easy way to reduce this cost and help the earth at the same time. Please use the recycle bins that are provided and separate recyclable materials from your trash.

Recycle this all together	Put this stuff in the trash
Glass bottles & jars Metal food cans Soda and beer cans Plastic bottles and jugs Plastic laundry soap jugs Newspapers and magazines Printer paper Envelopes & junk mail Cardboard shipping boxes Cardboard pizza boxes Dry cereal boxes *No cardboard beverage cartons!	Plastic bags, cups and utensils Plastic "take-out" containers Plastic marked #3-7 Refrigerated/frozen foods boxes Paper milk cartons Juice boxes Candy & food wrappers Used paper towels and tissues 6-pack, 12-pack and 24-pack beverage containers

Before Recycling, please empty all containers and remove caps.

Did You Know...



Used Ink Cartridges can be recycled through the Geography Department in Old Mill.



Enough energy is saved by recycling one aluminum can to run a TV set for three hours or to light one 100 watt bulb for 20 hours.



By purchasing products made with recycled materials you are creating a demand and "closing the loop" on the recycling process.



Check out the Magazine Exchange Racks!

Most res halls now have a rack near the front desk to encourage the reuse of magazines. Please drop off old magazines you have read to share with others.

Taking Care of Hazardous Materials and Special Wastes

UVM generates hazardous chemical and biological wastes through various activities such as teaching, research, fine arts, maintenance operations and health care services. You can help minimize the use of hazards in the first place and help properly dispose of them.



In classroom laboratories, please prepare all chemical waste for disposal as per instructions of the lab technician or instructor.



In art classes, try to use non-toxic or biodegradable art supplies whenever possible.

Avoid toxic cleaning products in your room. Use mild soap and water to clean most things.



Bring used household batteries to collection buckets located at the front desk of each residence hall, the Bookstore or the Bailey-Howe library. Batteries contain heavy metals, mercury and other harmful substances. Do not put these in the regular trash.



Computers and electronic waste should not be dumped in the trash. UVM sends these out to a special recycling facility. Please email recycle@uvm.edu to arrange for proper disposal.



Do not throw hypodermic needles and syringes directly in the trash as these pose hazards to the workers who collect the trash. Instead, place used syringes in a clear plastic bottle, screw top on tightly and then discard in the regular trash.

For tips on hazardous waste minimization and working safely with chemicals, contact the UVM Environmental Safety Facility at 656-5400 or on the web: <http://esf.uvm.edu>

Saving Energy

UVM spends more than \$5 million for electricity and \$3 million for natural gas and heating oil each year for campus buildings. Here are ways you can help keep costs down and reduce pollution.

Tips on conserving energy



Choose energy efficient products labeled with the "Energy Star" rating when purchasing items such as refrigerators and microwaves. (The UVM Bookstore sells Energy Star refrigerators)



Program your computer to enter sleep mode when you are not using it. Screen savers do not save any energy.



During the winter, keep your thermostat at 68 degrees and turn it down to 55 degrees when going away for a longer period of time, such as Thanksgiving break.



Close the windows in winter. Not only will this reduce the heating bill, but it will also help avoid frozen pipes and floods. (Students are responsible for damage caused by their negligence.)



Always turn your lights off when you leave your room. During the day, try and take advantage of natural sunlight.

Did You Know...



Compact fluorescent light bulbs use 75% less energy and can last 10 times longer than a regular light bulb.



Using Sleep mode for all 8,000 UVM computers would avoid 1.6 million kWh every year, equivalent to taking 150 cars off the road for a full year.



Many appliances (TV, VCR/DVD, stereo) use power even when they are off. To reduce unnecessary power use, plug them into a power strip and turn the strip off when not in use.

The Water You Drink

Clean, fresh water has become one of the scarcest natural resources on earth. Here in Burlington, we are fortunate that Lake Champlain provides us with clean, healthy drinking water. It is important to conserve this resource to make sure that it is protected and available for future generations to use and enjoy.

Help Conserve Water



Do not leave the faucet running while brushing your teeth or shaving.



Report leaky faucets/toilets to your Residence Hall Complex front desk. A leaky faucet that drops one drop per second can waste up to 165 gallons of water, which is the average amount that a person uses in 2 weeks.



When doing your dishes fill the sink rather than keep the water running.



Keep your showers as short as possible. If every student shortened their shower time by one minute, UVM would save 2.9 million gallons of water each year.



Don't use the toilet as a trash can: don't flush Kleenex, paper towels, cigarettes etc. as they take longer to break down and can overload the system.

Drink it Up

Lake Champlain provides us with exceptional quality drinking water. Rather than wasting your money and creating waste by buying bottled water, use the tap or water fountain to refill a water bottle. For more information on Burlington water quality, visit www.dpw.ci.burlington.vt.us.

Help Keep It Clean

Rain water and melting snow pick up contaminants from the streets and carries them to Lake Champlain. Do not dump anything into storm drains or onto the street, as these flow directly to the Lake. If you're walking a dog, please scoop the poop!

Compost Your Food Waste

Food scraps and leftovers are collected from several dining spots on campus. These are sent to "Intervale Compost Products" facility, combined with other organic wastes such as leaves and grass, and composted to create a nutrient-rich soil. The University uses this compost as a natural fertilizer for campus flowers and trees.

Composting is a great way to recycle food waste that would otherwise be sent to a landfill. A 2005 audit found that almost 12% of the waste coming out of the dorms was food and liquid that could have been composted. Please participate and help us keep food waste out of the landfill.



Okay to Compost

Meat, fish and dairy
Fruit/vegetable peels
Coffee grounds and tea bags
Breads, cereals and grains
Noodles and pasta
Leftovers

Not Okay

Non-food items
Paper cups and plates
Milk/soy milk cartons
Ice cream cartons
Plastic bags



In the Dining Halls:

Please dispose of food waste in the designated containers in the following dining halls: Simpson, Harris-Millis, Cook Commons, The Round Room and Living Learning Marche



In Your Residence Hall:

To collect food scraps for composting in your room, pick up "Amazing Food Cycler" bio-degradable bags at your complex front desk. Bring your full bag of food waste to one of the loading docks where food waste is collected:

Billings/Cook Commons
Living/Learning
Harris/Millis Dining
Marsh Hall
Simpson Hall

Eating With the Earth in Mind

Choices you make about what to eat and how food is prepared and packaged have a significant impact on the environment. Here are some tips to eating green on campus and about town.



At the dining hall, be conscious of portion sizes that best suit you in order to reduce waste.



Carry your own mug or cup for beverages purchased in the dining facilities. Students receive a discount when you bring your own.



Try eating "lower on the food chain" and sample some vegetarian options. Meat production can be energy, resource and pollution intensive. Eating a diet rich in fruits, vegetables, grains and legumes is healthier for you and easier on the planet.



Look for the Vermont symbol in dining facilities which identifies foods that are produced, processed or distributed by Vermont based companies. Buying locally supports the local economy and cuts down on energy for shipping.



Choose the "Fair Trade" coffee option which is offered at all dining locations. Choosing Fair Trade coffee is more environmentally friendly and socially conscious.



Carry your own fork, spoon and cloth napkin for eating on the go.

Did You Know...

Roughly 30% of Sodexo's purchases are Vermont products, including meats, dairy and salad dressing and produce in season.

Cooking Oil from the dining halls is picked up by a local company and converted into biodiesel, which can be used as a fuel for heating and transportation.

Shopping with the Earth in Mind

To reduce our environmental impact, it is important not only to recycle, but also to reuse products as much as possible and reduce the amount of stuff that we purchase in the first place. When you do need to make a purchase, always look for the most eco-friendly choice.



Support Vermont agriculture by shopping in locally owned shops by buying locally produced products.



When shopping, reduce waste by bringing a cloth bag or used plastic bags. Some grocery stores provide a 10¢ discount for every bag you reuse.



Choose durable reusable products rather than single-use disposable ones. For example, refillable pens and razors, silverware and rechargeable batteries are preferable.

When possible, purchase items in bulk and choose products with minimal packaging.



Support local "repair" businesses. Don't toss out an item just because it is broken or torn. Consider repairing or fixing items instead.

Rather than purchasing new products, check out Burlington's second-hand and "thrift" stores.

For Clothes:

Battery Street Jean Exchange
Classy Closets
Clothing Line
Greener Pastures
Salvation Army
Second Hand Roze Thrift Shop

Household Items & Furniture:

Recycle North
The Salvation Army
Bushey's Used Furniture
Myers Used Furniture

Athletic Equipment:

Outdoor Gear Exchange
Play It Again Sports
Replay Sports

Books and Music:

UVM Bookstore
Bookworm Exchange
Crow Bookshop
North Country Books
Downtown Discs
Pure Pop Records

Get Involved!

Many of the programs listed in this guide have been created, maintained and supported by students and student organizations. It is important to participate in helping to minimize the environmental impact of our campus. To learn how you can get involved, contact one of these student organizations:

Vermont Student Environmental Program (VSTEP):

www.uvm.edu/~vstep
VSTEP is an organization of concerned students dedicated to coordinating environmental activities on Vermont campuses and throughout the general public.

Consortium for Ecological Living (CEL) :

www.uvm.edu/~ecoliving
CEL provides ecological design resources and design intelligence for projects that take place at the University of Vermont and in the greater Urban Ecosystem.

Student Environmental Educators Doing Service (SEEDS):

www.uvm.edu/~service/programs/seeds/
SEEDS works with local elementary schools to provide environmental education to students in the Burlington community in an after-school setting.

ECO-REPS:

www.uvm.edu/recycle/ecoreps
The Eco-Rep Program is coordinated by the UVM Recycling Office and the UVM Environmental Council. The Eco-Reps are student employees working to promote environmental stewardship in the UVM residence halls by raising awareness about ecological issues and encouraging environmentally conscious behavior.

The Outing Club:

www.uvm.edu/outingclub
The Outing Club is a student-run group offering trips of all types, at levels from beginner to expert. They provide all the equipment and instruction you need for an afternoon trip or weekend adventure.

Further Information

Resources:

UVM Environmental Council: www.uvm.edu/greening

UVM Eco-Reps: www.uvm.edu/recycle/ecoreps

UVM Physical Plant: www.uvm.edu/~uvmpppd/

UVM Recycling: www.uvm.edu/recycle

CCTA (Chittenden County Transportation Authority):
www.cctaride.org

CSWD (Chittenden Solid Waste District): www.cswd.net

Burlington Dept. of Parks and Recreation:
www.enjoyburlington.com

"WE CAN NEVER KNOW HOW WIDE A
CIRCLE OF DISTURBANCE WE PRODUCE
IN THE HARMONIES OF NATURE WHEN
WE THROW THE SMALLEST PEBBLE INTO
THE OCEAN OF ORGANIC LIFE."

- George Perkins Marsh
1801-1882
*native Vermonter and namesake
for several UVM buildings*

Appendix IV:
Survey Packet for CRP

CRP Educational Staff:

In fall of 2006, a quick-reference recycling guide was created for HSU. In addition, the Recycling link on your website was updated. In order to monitor the success of these projects, as well as your own projects, here is a survey. Following is instructions and necessary forms.

To monitor the effects of our project we will use a short survey every semester to generally gauge how much the average HSU student or staff or faculty member knows about recycling on campus. We must have at least 100 randomly selected HSU members that represent a wide diversity of members of the university. The survey will be distributed in a way that will not be biased towards students, staff or faculty in one department or another, for example, random people on the quad.

Evaluation will entail tallying results of the surveys and observing changes in the results from surveys over time. If the surveys show awareness about campus recycling, we have met our goal. In order for this program to work, evaluation must be incorporated into the job title of an appropriate campus staff. The CRP education staff will administer the survey. Since we are assuming a baseline knowledge level of zero, a preliminary survey is not necessary. Also, the survey is short so more people will be willing to participate. Please print on half, or quarter pages.

The packet for CRP includes instructions, the survey and the human subjects form. Before the survey, please complete the human subjects form protocol. Request Form 3: Request for Exemption for Survey. Submit to the request and cover letter to: Research & Graduate Studies. If you have any questions, contact Donna Schafer, Siemens Hall 212, call (707) 826-3949 or e-mail schafer@humboldt.edu. You'll need a faculty advisor, so the new CRP advisor could be the person to fill this requirement.

Thank you for your time and work.

Donna Schafer, Dean
Research and Graduate Studies
Siemens Hall
Humboldt State University
1 Harpst Street
Arcata, CA 95521

Dear Dr. Schafer,

The Campus Recycling Program (CRP) would like to administer a five-question survey to 100 randomly selected campus members on the quad. The survey will take place during (XXX insert dates here XXX). Faculty, staff and students will be targeted and results will be used to assess the level of recycling awareness on campus.

The survey will be anonymous and confidential. Results will be catalogued for use to target CRP's educational campaigns and to monitor the success of recent projects. Your approval would be greatly appreciated.

Sincerely,

Name (s)

COMMITTEE FOR THE PROTECTION OF HUMAN SUBJECTS

FORM 2: STUDENT COVER LETTER

TO: Chair, Committee for the Protection of Human Subjects
c/o Dean, Research and Graduate Studies

FROM: Student:

Faculty Sponsor:

Department:

SUBJECT: Review of enclosed research proposal by the Institutional Review Board

DATE:

PROJECT TITLE:

The faculty committee listed below has reviewed the attached proposal:

Name: Signature

Name: Signature

Name: Signature

Date:

On behalf of the student, we request:

- Expedited review (no more than minimal risk)
- Full review process (More than minimal risk)
- Exempt Status and expedited approval*

Please outline risks, benefits, and risk management procedures:

HUMBOLDT STATE UNIVERSITY

CRP Survey

Please rate your answers on a scale of 1 – 10 with 1 being never, definitely not and 10 being always, definitely.


- 1) How often do you recycle items as opposed to throwing them in the trash?
- 2) Do you throw used batteries in the trash?
- 3) How often do you hang on to your recyclable waste when a recycling bin is not nearby?
- 4) Do you know what hazardous waste is?
- 5) Do you know what items are not recyclable?


Appendix V:
Final version of Recycling Guide

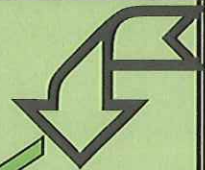
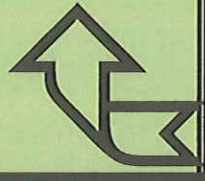
AFTER YOU REDUCE AND REUSE, BE A PART OF...

HSU RECYCLING


PAPER


- Yes** 
- Newspaper
 - Cardboard
 - Magazines
 - Office Paper
 - Binder Paper
 - Phone Books

- No** 
- *Egg cartons
 - Waxed milk/juice cartons
 - Aseptic containers (soy milk)
 - Ultra-bright, neon paper
 - *Used paper plates
 - *Used napkins
- * = compostable



CONTAINERS

- Yes** 
- Cans — Aluminum
 - Steel
 - Glass — Jars
 - Bottles
 - Bottles
 - Bowls
 - Jugs
 - Jars
 - Plastics #s — Bags (bundled)

- No** 
- Window glass
 - Broken dishes
 - Mixed material containers
 - Styrofoam
 - Coated containers (wax or foil)

FREQUENTLY ASKED QUESTIONS

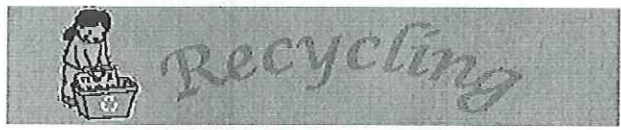
- Q:** Where can I take my old computer?
A: Call Tom Manoli to pick up the monitor and take the remaining components to ACRC.
- Q:** Where can I take batteries?
A: Package and send inter-campus mail to Health and Safety.
- Q:** Where can I take my compact fluorescent bulbs?
A: Take small bulbs to clubs' office or housing. For large bulbs, call Tom Manoli.
- Q:** Where can I take CDs, cell phones and printer cartridges?
A: Take CDs to ACRC where you can pick up a postage-paid envelope to send cell phones to recycle. Envelopes to mail ink cartridges are available in the CRP office.
- Q:** Where can I take reusable school and office supplies?
A: Use campus mail or take them to the ROSE storehouse in House 53, or pick some up.
- Q:** Where can I take food waste?
A: Compost food waste, except meat and dairy, in CRP buckets on the quad and around campus.

LOCAL CONTACTS

- HSU Enviro. Health and Safety Coordinator: Tom Manoli: 826-5711
Campus mail: EH&S, SBSB 413
- Campus Recycling Program and Reusable Office Supply Exchange (R.O.S.E.), House 53, 826 - 4162
www.humboldt.edu/~recycle/
- Arcata Community Recycling Center
1380 Ninth Street in Arcata
www.arcatarecycling.org



Appendix VI:
Final version of Recycling Website



FREQUENTLY ASKED QUESTIONS

- **What is and what is not recyclable here?**
- **Where can I take my old computer?** Call Tom Manoli and he will pick it up the monitor. Take the computer to ACRC at 1380 9th Street in Arcata.
- **Where can I take old batteries?** Package and send via intercampus mail to Health and Safety.
- **Where can I take old fluorescent bulbs?** Campus residents or employees can take small bulbs to the housing or clubs' offices. Custodians change large bulbs. Call Tom Minoli for disposal.
- **Where can I take plastic bags, CDs, cell phones, and ink cartridges?** Take CD's to ACRC. Get postage-paid envelope to send phones to be recycled. Envelopes to mail ink cartridges can be picked up at the CRP office.
- **Where can I take reusable office supplies?** Use campus mail to send them or just take them to the ROSE office at House 53.
- **Where can I take my food waste?** Compost food waste, except meat and dairy.
- **What should I do with anything else?**

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AFTER YOU REDUCE AND REUSE, BE A PART OF...

HSU RECYCLES

PAPER		CONTAINERS	
Yes ♪	No ?	Yes ♪	No ?
Newspaper Cardboard Magazines Office Paper Binder Paper Phone Books	*Egg cartons Waxed milk/juice cartons Aseptic containers (soy milk) Ultra-bright, neon paper *Used paper plates *Used napkins * = compostable	Cans — Aluminum Steel Glass — Jars Bottles Plastics — Bottles Bowls Jugs Jars Bags (bundled) #s	Window glass Broken dishes Mixed material containers Styrofoam Coated containers (wax or foil)

FREQUENTLY ASKED QUESTIONS

Q: Where can I take my old computer?
A: Call Tom Manoli to pick up the monitor and take the remaining components to ACRC.

Q: Where can I take batteries?
A: Package and send inter-campus mail to Health and Safety.

Q: Where can I take my compact fluorescent bulbs?
A: Take small bulbs to clubs' office or housing. For large bulbs, call Tom Manoli.

Q: Where can I take CDs, cell phones and printer cartridges?
A: Take CDs to ACRC where you can pick up a postage-paid envelope to send cell phones to recycle. Envelopes to mail ink cartridges are available in the CRP office.

Q: Where can I take reusable school and office supplies?
A: Use campus mail or take them to the ROSE storehouse in House 53, or pick some up.

Q: Where can I take food waste?
A: Compost food waste, except meat and dairy, in CRP buckets on the quad and around campus.

LOCAL CONTACTS

●HSU Enviro. Health and Safety Coordinator:
Tom Manoli: 826-5711
Campus mail: EH&S, SBSB 413

●Campus Recycling Program and Reusable Office Supply Exchange (R.O.S.E.), House 53, 826 - 4162
www.humboldt.edu/~recycle/

●Arcata Community Recycling Center
1380 Ninth Street in Arcata
www.arcatarecycling.org