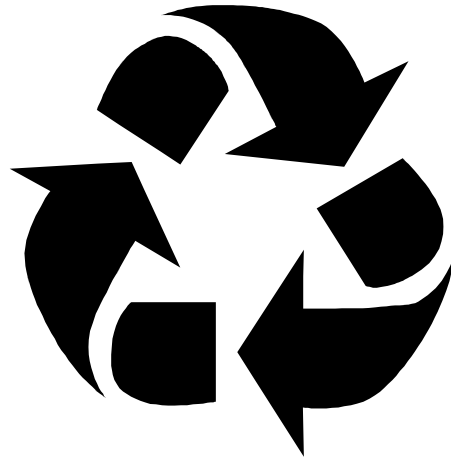


Warren Wilson College
Recycling & Solid Waste Report
For Fiscal Years 2005-2011



Submitted FY 2010-2011
By
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Supervisor, Recycling & Solid Waste

Introduction

Warren Wilson College's waste management program began in 1982 with one student who was concerned about the campus waste stream. This concern fueled a program called GAIN--Glass Aluminum Including Newspaper--and resulted in a ten-percent reduction in waste during its first year. In 1987, following a model developed by urban communities, students in an environmental policy class created a Solid Waste Management Plan that was subsequently adopted by the College. The centerpiece of the Plan was the creation of a Waste Management Crew (incorporating the existing trash collection crew and the GAIN recycling crew), thus integrating the academic plan of action into the school's work program. Today, a crew of 23-28 students is responsible for collecting and managing over 25 recyclable materials, operating a FreeStore and WoodShop, composting campus food waste, disposing of solid waste, researching and implementing new waste reduction programs, and educating the campus about waste-related issues.

This is the 10th Annual Solid Waste and Recycling Report. Since 2000, both our ability to capture data and the accuracy of our data have greatly improved. This document provides a look at data for the past 6 years. It is possible to arrange and analyze the data in a variety of ways. We have chosen only a few methods of data presentation here to provide the reader with an overall look at the College's waste stream and the Recycling Crew's activities. The Recycling Crew utilizes this data to set waste reduction goals and monitor progress.

If you have any questions about the data or need a more detailed analysis, please feel free to contact the Recycling Office.



RECYCLING AND SOLID WASTE DATA

FY 2010-2011

MATERIAL	TONS 05-06	TONS 06-07	TONS 07-08	TONS 08-09	TONS 09-10	TONS 10-11
Trash	279.5000	255.1500	257.5598	259.1100	283.9900	231.0600
Recycling	134.9127	163.5872	181.1936	142.8292	147.2755	124.0769
Compost	32.5100	21.2700	31.6800	24.8500	33.3300	34.7200
Reusables	2.1081	3.0193	4.8773	3.4418	9.4698	11.1057
TOTAL WASTE STREAM	449.0308	443.0265	475.3107	430.2310	474.0653	400.9626

MATERIAL	TONS 05-06	TONS 06-07	TONS 07-08	TONS 08-09	TONS 09-10	TONS 10-11
Trash	279.5000	255.1500	257.5598	259.1100	283.9900	231.0600
Diverted Materials ¹	169.5308	187.8765	217.7509	171.1210	190.0753	169.9026
TOTAL WASTE STREAM	449.0308	443.0265	475.3107	430.2310	474.0653	400.9626
Diversions Rate	37.75%	42.41%	45.81%	39.77%	40.09%	42.37%

¹ Diverted Materials includes Recyclables, Compost, and Reusables.

All Measured Waste Types

MATERIAL	TONS 05-06	TONS 06- 07	TONS 07-08	TONS 08-09	TONS 09-10	TONS 10-11
Trash	279.5000	255.1500	257.5598	259.1100	283.9900	231.0600
Paper	32.4000	50.5900	57.5500	41.9600	40.5465	37.7255
Compost	32.5100	21.2700	31.6800	24.8500	33.3300	34.7200
Cardboard	27.6000	29.2000	26.8000	24.2455	25.0450	26.6450
Glass	36.4550	38.5600	37.7700	36.4870	27.2550	23.4480
Scrap Metal	24.3715	20.1770	29.7830	15.4370	18.0848	18.2475
FreeStore Reusables	-	-	-	-	4.5300	5.5529
Clothing & Household Goods donated locally (reusables) ²	2.1081	3.0193	4.8773	3.4418	3.5398	5.2928
Plastic	4.1300	4.4600	3.7125	3.9575	3.6773	4.2798
Steel Cans	3.5400	3.5350	3.5325	3.8200	3.4700	3.6900
Computer Components	2.7210	4.0630	2.6455	3.4473	5.1295	1.8918
Aluminum	1.8400	2.1365	2.0550	1.9020	2.0000	1.8675
Wood Waste from Construction Projects	-	-	-	-	5.9600 ³	1.6255
Concrete / Rubble	0	2.7700	12.6200	5.0000	10.5063	1.0715
Pallets ⁴	.5688	4.0950	3.2305	1.9793	1.4105	1.0000
Sheetrock / Drywall	0	0	0	0	1.8500	.7600
Tires ⁵	.8095	3.0800	.6845	.8030	.6440	.5260
Cassette Tapes & Cases, CD's, Jewel Cases, Videos, 3.5" Diskettes	.1753	.3368	.2393	.2615	.1315	.3490
Batteries (Rechargeable & Non-rechargeable)	.1376	.1666	.1833	.6190	.3460	.2911
Fluorescent Bulbs ⁶	.1415	.3643	.2405	.5743	.1996	.2774
Reusable Structures from Construction Projects	-	-	-	-	1.4000	.2600
Carpet	0	0	0	2.1105	.3700	.2400
Printer Cartridges	.0225	.0530	.1470	.0878	.1205	.1953
Mattresses ⁷	0	0	0	.1375	.5290	0
TOTAL	449.0308	443.0265	475.3107	430.2310	474.0653	400.9626

² Reusable clothing is donated to local shelters.

³ This is our first year for weighing wood waste. Wood waste is either reused in our wood shop, cut and placed at fire circles around campus, or chipped into mulch for campus. This wood waste is only from large construction projects, and does not include wood recycled from smaller campus projects, the art building, or other sources which may also be recycled.

⁴ Averaged weight. These weights do not include a number of pallets which are taken from our facility and reused by community members.

⁵ Averaged weight.

⁶ Averaged weight.

⁷ Buncombe County banned mattresses from the landfill & implemented a recycling program for them in 2009.

SUMMARY

TRASH

General trash decreased significantly this year. We believe that the unexplainable significant increase the previous year was due in part to incorrect weights or scale malfunctions. Still, when compared to earlier years, FY 10-11 marks a noticeable decrease. The Bulk / Construction Waste dumpster stayed almost the same as the previous year. However, the Special Clean-ups weight includes 9.75 tons of waste from the Vining roof remodeling project. A separate dumpster was used for this project due to the weight of the material. The local construction waste recycling company shut down this year, so we were unable to continue recycling sheetrock and carpet. The landfill also discontinued their mattress recycling program. The amount of food waste that we had to landfill this year decreased because we were able to contract with Danny's Dumpster to haul any excess food waste to a compost facility in Asheville. While composting off-site is not ideal, it is an improvement over landfilling the excess food waste that we aren't able to compost ourselves.

RECYCLING

The overall amount of material diverted decreased. We think this is a good trend, as it means we are producing less waste. The majority of the decrease seems to be from the decrease in rubble and wood waste recycling. All of these materials were still recycled -- there was just less of this material produced this year.

Weights for glass and paper recycling continue to decrease. Since we are also seeing a decrease in general trash, we believe the recycling decrease does not mean that these materials are being thrown in the trash. We think there is just an overall decrease in use of these materials.

Plastic recycling increased slightly due to the addition of #5 plastics and bulky rigid plastics to our recycling program. Next year, we should be able to recycle #1-#7 and will most likely see another increase in plastic recycling weights.

In addition to our regular End of Year MoveOut program, we held another **Free Give-Away** open to the community. We gave away 5,576 lbs (2.79 tons) of clothes.

COMPOST AND FOOD WASTE

Total food waste from the cafeterias decreased this year. The Recycling Crew maintained charts in both dining areas tracking the food waste each week. We hope that this raised awareness and contributed to less waste being generated in the cafeterias. The amount of food waste landfilled decreased because we were able to contract with Danny's Dumpster to compost our excess food waste off-site. The cost of sending food to an off-site composting facility was \$1,080. The amount of food waste actually composted on-site decreased, in part because we tried to limit the amount processed each day to 300 lbs. This helped us to maintain better temperatures in the drum.

We also began composting at staff & faculty housing this year and expanded our dorm composting program to all dorms.

EXPENSES/REVENUES

Trash costs decreased by approximately \$3,000 due to the decrease in general trash, and recycling related expenses decreased again by approximately \$1,000 due to a decrease in recyclables generated. All glass colors can now be mixed together, which allows us to fill the dumpster for longer before it needs to be hauled, reducing overall costs. We incurred costs of \$1,080 to have Danny's Dumpster haul our excess food waste to a local composting facility.

Revenues increased again over \$2,000 this year due to increases in the value of materials, most notably for plastics.

WASTE REDUCTION GOALS FOR NEXT YEAR

Attain / maintain an overall diversion rate of 50%. This is our overall waste reduction goal. The main area in which we can continue to improve is construction waste recycling. We can also continue to improve our tracking systems so that we can include diverted materials that are not currently included in our waste measurements. Surplus remains an area in which we can improve tracking. This year, we tracked many items that we donated or sold, but did not include them in our weights.

Increase composting capacity. Our current GreenDrum cannot process all of the food waste from the cafeterias and still operate effectively and legally. In order to compost all food waste from the cafeterias, and possibly re-start our dorm and housing compost program, we will need to increase our composting capacity. This year, we purchased and refurbished a used GreenDrum to help us achieve this goal. We hope to have it in operation by 2012.

Re-design Gladfelter trash/recycling area and remove 8-yd overhead dumpster. This will reduce costs, give us more oversight of what is being thrown away, and give us more accurate weight data. It currently costs over \$5,000 to have a separate dumpster at Gladfelter. We estimate that we could save around \$3,000 annually by redesigning the area and removing the dumpster. (The Gladfelter weight data in this report is an estimate based on a 2 week garbology study conducted in October 2009. It is important to note that we previously used estimates provided by the EPA, which were twice what we actually measured in our own dumpster. We changed the data from an estimate of 62.4 tons/yr to 31.2 tons/yr.) This was a goal for last year that was not reached.

Conduct garbology studies in dorms and buildings to determine where to focus educational efforts.

In a garbology study, we can evaluate several aspects of waste and then implement reduction programs where they are most needed. Aspects we consider are:

- a. Recyclables that people are throwing into the trash
- b. Recyclables that are being recycled, but that could possibly be eliminated (ie, single serve water bottles)
- c. Trash that is being generated that could be eliminated (ie: plastic bags)

Continue Junk Mail Project and evaluate efficacy. We removed at least 1,656 individuals from specific mailings. We hope that continuing this project will reduce paper waste.

Increase diversion rate for large unwanted items by making better use of Freecycle and Craigslist. Specifically, we can market slightly damaged goods for free to the community for creative uses instead of sending them to the landfill. This year, we gave away over 100 items, ranging from hardback book covers to grills to furniture.

Create and review 6 month reports on waste trends. This will keep us aware of our progress and highlight any areas of concern as we work towards our waste reduction goals.

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Sources of Trash

SOURCE	TONS 05-06	TONS 06-07	TONS 07-08	TONS 08-09	TONS 09-10	TONS 10-11
Main Trash Compactor	111.82	114.62	134.20	131.04	153.95	99.37
Bulk / Construction Dumpster	109.15	90.20 ⁸	77.20	74.48	77.12	75.36
Gladfelter Dumpster ⁹	31.20	31.20	31.20	31.20	31.20	31.20
Landfilled Food Waste	0	5.93	6.20	13.45	13.41	10.32
Special Clean-ups	5.88	0	0	1.26	5.00	10.03
End-of-Year MoveOut	5.85	13.20	8.57	7.68	3.31	4.78
FMTS Dumpster ¹⁰	15.60	0	0	0	0	0
TOTAL	279.50	255.15	257.37	259.11	283.99	231.06

Yearly Comparisons of Total Trash Costs

BY SOURCE	FY 05-06	FY 06-07	FY 07-08	FY 08-09	FY 09-10	FY 10-11
Compactor	\$7,031.80	\$6,735.56	\$7,420.29	\$8,289.54	\$10,271.38	\$7,140.00
Bulk / Construction Dumpster	\$8,485.94	\$7,078.60	\$6,527.17	\$6,049.79	\$6,253.90	\$5,821.68
Gladfelter Box	\$4,293.81	\$4,483.08	\$4,573.08	\$5,371.56	\$5,630.33	\$5,437.02
Miscellaneous	\$1,835.40	\$2,441.60	\$1,835.60	\$1,626.47	\$1,267.22	\$1,369.30
FMTS Box	\$1,265.24	0	0	0	0	0
TOTALS	\$22,912.19	\$20,738.84	\$20,356.14	\$21,337.36	\$23,422.83	\$19,768.00

BY FEE	FY 05-06	FY 06-07	FY 07-08	FY 08-09	FY 09-10	FY 10-11
Tipping Fees	\$12,750.54	\$13,074.84	\$12,950.40	\$14,327.02	\$16,635.38	\$14,684.03
Hauling Charges	\$5,590.00	\$5,060.00	\$5,100.00	\$4,420.00	\$4,490.00	\$3,765.00
Gasoline Surcharges	\$1,037.55	\$989.00	\$1,450.74	\$1,847.34	\$1,844.45	\$1,266.22
Rental Fees	\$3,534.10	\$1,615.00	\$855.00	\$743.00	\$453.00	\$52.75
TOTALS	\$22,912.19	\$20,738.84	\$20,356.14	\$21,337.36	\$23,422.83	\$19,768.00

⁸ Decrease in Bulk / Construction dumpster weights began after moving the container to the Recycling Center where it could be monitored.

⁹ Averaged weight/year is 31.2 tons. Anything over that is non-composted food waste we weighed and disposed of in dumpster.

¹⁰ FMTS dumpster removed in 2006.

Major Trash Expenses

FY 10-11	RENTALS	TIPPING FEES	HAULING FEES	GASOLINE SURCHARGES	TOTALS
Compactor	0	\$5,069.91	\$1,560.00	\$510.09	\$7,140.00
Bulk / Construction	0	\$3,843.36	\$1,690.00	\$288.32	\$5,821.68
Gladfelter Box	0	\$5,037.85	0	\$399.17	\$5,437.02
Miscellaneous	\$52.75	\$732.91	\$515.00	\$68.64	\$1,369.30
FMTS Box	0	0	0	0	0
TOTALS	\$52.75	\$14,684.03	\$3,765.00	\$1,266.22	\$19,768.00
FY 09-10					
Compactor	0	\$7,634.45	\$1,820.00	\$816.93	\$10,271.38
Bulk / Construction	0	\$3,809.52	\$1,950.00	\$494.38	\$6,253.90
Gladfelter Box	\$228.00	\$4,962.60	0	\$439.73	\$5,630.33
Miscellaneous	\$225.00	\$228.81	\$720.00	\$93.41	\$1,267.22
FMTS Box	0	0	0	0	0
TOTALS	\$453.00	\$16,635.38	\$4,490.00	\$1,844.45	\$23,422.83
FY 08-09					
Compactor	0	\$6,027.04	\$1,560.00	\$702.50	\$8,289.54
Bulk / Construction	0	\$3,244.02	\$2,210.00	\$595.77	\$6,049.79
Gladfelter Box	\$228.00	\$4,662.60	0	\$480.96	\$5,371.56
Miscellaneous	\$515.00	\$393.36	\$650.00	\$68.11	\$1,626.47
FMTS Box	0	0	0	0	0
TOTALS	\$743.00	\$14,327.02	\$4,420.00	\$1,847.34	\$21,337.36
FY 07-08					
Compactor	0	\$5,313.18	\$1,600.00	\$507.11	\$7,420.29
Bulk / Construction	0	\$3,022.94	\$2,850.00	\$654.23	\$6,527.17
Gladfelter Box	\$180.00	\$4,237.20	0	\$155.88	\$4,573.08
Miscellaneous	\$675.00	\$377.08	\$650.00	\$133.52	\$1,835.60
FMTS Box	0	0	0	0	0
TOTALS	\$855.00	\$12,950.40	\$5,100.00	\$1,450.74	\$20,356.14
FY 06-07					
Compactor	\$600.00	\$4,355.56	\$1,540.00	\$240.00	\$6,735.56
Bulk / Construction	\$210.00	\$3,427.60	\$2,970.00	\$471.00	\$7,078.60
Gladfelter Box	\$180.00	\$4,165.08	0	\$138.00	\$4,483.08
Miscellaneous	\$625.00	\$1,126.60	\$550.00	\$140.00	\$2,441.60
FMTS Box	0	0	0	0	0
TOTALS	\$1,615.00	\$13,074.84	\$5,060.00	\$989.00	\$20,738.84
FY 05-06					
Compactor	\$1,200.00	\$4,171.80	\$1,430.00	\$230.00	\$7,031.80
Bulk / Construction	\$420.00	\$4,094.94	\$3,410.00	\$561.00	\$8,485.94
Gladfelter Box	\$180.00	\$3,996.90	0	\$116.91	\$4,293.81
Miscellaneous	\$503.50	\$486.90	\$750.00	\$95.00	\$1,835.40
FMTS Box	\$1,230.60	0	0	\$34.64	\$1,265.24
TOTALS	\$3,534.10	\$12,750.54	\$5,590.00	\$1,037.55	\$22,912.19

MATERIAL	TONS 05-06	TONS 06-07	TONS 07-08	TONS 08-09	TONS 09-10	TONS 10-11
Trash	279.5000	255.1500	257.5598	259.1100	283.9900	231.0600
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Recycling Expenses

Expenses for Plastic, Paper, Glass, and Scrap Metal Containers

EXPENSE	FY 05-06	FY 06-07	FY 07-08	FY 08-09	FY 09-10	FY 10-11
Hauling Fees	\$4,180.00	\$4,510.00	\$4,980.00	\$4,810.00	\$4,290.00	\$3,510.00
Gasoline Surcharges	\$614.80	\$717.00	\$993.59	\$510.64	\$371.41	\$258.83
Rentals	\$1,680.00	\$840.00	0	0	0	0
TOTALS	\$6,474.80	\$6,067.00	\$5,973.59	\$5,320.64	\$4,661.41	\$3,768.83

Other recycling expenses include shipping and processing costs for:

ITEM	FY 05-06	FY 06-07	FY 07-08	FY 08-09	FY 09-10	FY 10-11
Computers, Electronics & Bulbs	\$2,297.47	\$2,773.78	\$1,191.26	\$1,188.72	\$368.07	\$456.92
Glass Bottles	0	0	0	0	\$385.53	\$374.24
Other Misc. Recyclables	\$162.47	\$318.75	\$216.67	\$238.11	\$186.69	\$181.96
Batteries	\$266.00	\$318.00	\$318.00	\$53.00	\$0	\$138.84
Sheetrock	0	0	0	0	\$300.70 ¹¹	\$38.00
Carpet	0	0	0	0	\$18.50	\$12.00
Mattresses	\$0	\$0	\$0	\$55.00	\$230.00	0
TOTALS	\$2,725.94	\$3,410.53	\$1,725.93	\$1,534.83	\$1,188.79	\$1,201.96

Recycling Revenues

SOURCE	REVENUE 05-06	REVENUE 06-07	REVENUE 07-08	REVENUE 08-09	REVENUE 09-10	REVENUE 10-11
Scrap Metal	\$1,472.80	\$1,994.94	\$7,857.30 ¹²	\$2,581.78	\$3,333.21	\$4,152.95
Aluminum & Steel	\$1,560.20	\$2,197.31	\$2,580.40	\$1,441.32	\$1,820.50	\$1,854.50
Paper	\$115.93	\$132.76	\$691.57	\$661.32	\$1,050.07	\$1,689.34
Cardboard	\$1,731.13	\$1,234.40	\$1,638.00	\$591.86	\$1,015.99	\$1,320.04
Plastic	0	0	0	\$104.46	\$394.15	\$1,169.51
Printer Cartridges	\$200.59	\$303.69	\$913.65	\$599.10	\$397.40	\$271.05
Other	\$180.00	\$191.00	\$85.00	\$202.70	\$180.00	\$270.01
Surplus Sales	\$634.00	\$955.99	\$1,656.26	0	0	\$200.00
TOTAL	\$5,894.65	\$7,010.09	\$15,422.18	\$6,203.36	\$8,191.32	\$10,927.40

¹¹ Actual cost for recycling sheetrock was \$56.50. Spent \$244.20 for a dumpster (rent, delivery, haul) for one large project. Generally, we will haul sheetrock to CDR ourselves at minimal cost.

¹² Large increase due to Jensen renovation and clean up of the Fortune property on Work Day.

Construction Waste Data

2010-2011

Project (Tons)	Trash	Recycling	Total Waste	Diversion Rate
St. Clair	0.1635	0.5645	0.7280	77.54%
114 Cabin Hill	0.3105	0.3435	0.6540	52.52%
110 B Cabin Hill	0.2175	0.2263	0.4438	50.99%
Mitchell	2.3383	1.7000	4.0383	42.10%
Devries	3.1265	2.2680	5.3945	42.04%
108 SW Lane	0.6233	0.3170	0.9403	33.71%
R & R Office	0.6610	0.3263	0.9873	33.05%
Holden - behind building	1.7945	0.4605	2.2550	20.42%
Vinings	1.2851	0.2003	1.4854	13.48%
Health Center	0.5105	0.0453	0.5558	8.14%
Morse	1.0335	0.0255	1.0590	2.41%
White Barn	1.5663	0.0145	1.5808	0.92%
TOTAL	13.6304	6.4915	20.1219	32.26%

This is the second year we have included detailed construction waste data in our report. The weights are all included in the Total Waste Stream data. Waste coming from construction sites is pre-sorted by work crews, and then further hand-sorted and weighed by the Recycling Crew. As we continue this process, data collection will improve.

Finding recycling vendors for construction waste has been difficult. Our main goal for next year is to find ways to divert more of the wood waste that we currently can't recycle.

Trash	FY 09-10 (% of total trash)	FY 10-11 (% of total trash)
Wood	41.24%	40.31%
Shingles	2.54%	31.54%
Sheetrock	19.43%	8.02%
Mixed/Other	21.11%	8.16%
Carpet	9.63%	2.30%

Recyclables	FY 09-10 (% of total recyclables)	FY 10-11 (% of total recyclables)
Metal	16.75%	43.30%
Wood	23.99%	25.04%
Rubble	41.94%	16.51%
Sheetrock	8.77%	7.26%

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The FreeStore

Since its inception in 2000, the FreeStore has grown from one rusty shelf of items to an ever-expanding sea of treasures! The FreeStore is stocked with items collected from the trash as well as with community donations of reusable items. You can find CD's, clothes, furniture, books, office supplies and more on any given day in the FreeStore. We track materials taken from the FreeStore by asking people to fill out the "Sign-Out Sheet" with the amounts and types of items they take.

Starting in 09-10, we calculated average weights for our FreeStore Items (excluding 'Other' and 'Furniture') and included them in the Reusables portion of our weight data. We did not reconfigure past data.

	FY 05-06	FY 06-07	FY 07-08	FY 08-09	FY 09-10	FY 10-11
ITEMS	TOTALS	TOTALS	TOTALS	TOTALS	TOTALS	TOTALS
Articles of Clothing	2,980	3,581	4,347	5,348	5,272	5,876
Office Supplies	934	1,190	1,161	1,591	1,876	2,634
Kitchen Supplies	1,004	1,469	1,390	2,414	1,995	2,549
Accessories	549	943	1,088	1,608	1,364	1,935
Books and Magazines	754	721	1,158	1,307	1,364	1,371
Craft supplies	407	582	643	941	967	896
Appliances/Electrics	296	394	468	699	682	893
Food	191	407	367	680	538	845
Bed Stuff/Rugs/Etc	225	353	339	503	492	801
Baskets/Bags	331	279	392	593	598	669
Music/Videos	364	517	626	850	534	660
Beauty Products	368	593	563	847	921	611
Toys	217	262	329	430	413	478
Other	384	243	316	845	568	450
Gardening Supplies	115	119	138	221	172	295
Cleaning Products & Chemicals	121	72	87	165	142	132
Furniture	183	186	185	130	111	116
TOTAL ITEMS	9,423	11,911	13,597	19,172	18,009	21,211

Other Items Recycled

Packing Peanuts	7 large bags
Surplus	Donated various items through FreeCycle, Craigslist and on campus

MATERIAL	TONS 05-06	TONS 06-07	TONS 07-08	TONS 08-09	TONS 09-10	TONS 10-11
Trash	279.5000	255.1500	257.5598	259.1100	283.9900	231.0600
Recycling	134.9127	163.5872	181.1936	142.8292	147.2755	124.0769
Compost	32.5100	21.2700	31.6800	24.8500	33.3300	34.7200
Reusables	2.1081	3.0193	4.8773	3.4418	9.4698	11.1057
TOTAL WASTE STREAM	449.0308	443.0265	475.3107	430.2310	474.0653	400.9626

Food Waste & Compost Data

TOTAL CAFETERIA FOOD WASTE GENERATED / COLLECTED

Fiscal Year TONS	Gladfelter	CowPie	Total Cafeteria Generated	Residential	Dorms	Campus Buildings	Total Other Collected	TOTAL FOOD WASTE
10-11	33.54	9.96	43.50	1.12	.40	.05	1.54	45.04
09-10	35.71	10.53	46.24	0	.50	0	.50	46.74
08-09	No data	No data	38.12	0	0	0	0	38.12
07-08	28.69	9.38	38.07	0	0	0	0	38.07
06-07	22.12	5.08	27.20	0	0	0	0	27.20

TOTAL FOOD WASTE COMPOSTED & LANDFILLED

Fiscal Year TONS	Composted On-Site	Composted Off-Site	Total Composted	Total Landfilled	% Food Waste Composted
10-11	20.80	13.92	34.72	10.32	77.09%
09-10	32.83	0	32.83	13.41	70.24%
08-09	24.67	0	24.67	13.45	64.72%
07-08	31.68	0	31.68	6.39	83.22%
06-07	21.27	0	21.27	5.93	78.20%

GreenDrum Composting Data (Food Waste Composted On-Site)

Fiscal Year TONS	Food Loaded	Amendment Loaded	Total Input	Total Harvest
10-11	20.80	17.10	37.90	24.96
09-10	32.83	26.67	59.90	40.13
08-09	24.67	18.96	43.63	27.32
07-08	31.68	22.75	54.43	40.83
06-07	21.27	16.14	37.41	27.30

Amendment: Woodchips + Sawdust

Input: Food + Amendment put into Drum

Harvest: Compost produced before woodchips are sifted out. Woodchips are sifted out and reused before application of compost.

Daily Averages of Food Waste Generated in the Cafeteria during Academic Year only

Dates	# Days	Food Waste Ave (lbs/day)
10-11 Academic	227	333
09-10 Academic	225	349
08-09 Academic	236	275
07-08 Academic	236	278

Cob Building

Geneva Bierce-Wilson, a 4-year Recycling Student, continued work on Warren Wilson's first cob building project this year. Cob is a millennia old material made from clay, sand and straw that is built without using forms and can be sculpted to form curves, archways, niches and just about anything else you can imagine. Cob structures can literally be built for free and if well protected with a good foundation, roof and plaster finish, they can easily last centuries. Geneva was the sole leader for this project and went through a long process of planning, design, siting, budgeting and negotiating. She worked with supervisors on campus as well as engineers and architects to finalize the plans before breaking ground.

Several crews helped to get the main structure of the cob building in place. The Forestry Crew provided timbers for the posts and beams and R&R and Campus Support put them in place. Landscaping provided reclaimed rocks and led us in building the stone wall foundation. The cob building has a green roof installed by Living Roofs Inc of Asheville, NC.

The cob building is located adjacent to the composting area and will be used as a base for compost operations, with room for a small desk/office area and storage for tools, scales, and data logs. It will be included as part of the Green Walkabout tour and will serve as another example of sustainable building on campus.

We hope the cob building will be complete by the end of the next Fiscal Year.



Various Activities & Accomplishments

1. Outreach, Inreach & Tours

- a. Student presented waste data at the FMTS winter retreat
- b. Provided a worm compost bin to MACFC and educated staff and children on how to use it
- c. Gave numerous Composting Tours and GreenWalkabouts
- d. Gave a tour for an ENS class
- e. Continued a compost awareness campaign with data and posters in Glad & CowPie and Echo articles

2. Events

- a. Held the Annual Give Away after Move Out and gave away 5,576 lbs of clothes to the local community
- b. Participated in RecycleMania

3. Education and Classes

- a. Attended the 4-day Biocycle Global 2011 Composting, Renewable Energy, and Organics Recycling Conference in San Diego with 2 students
- b. Attended the Carolina Recycling Association Annual Conference & Trade Show

4. Operations

- a. Refurbished a used GreenDrum for future use on campus
- b. Continued work on the cob building at the compost site
- c. Conducted a detailed campus-wide garbology study
- d. Created reusable bags for paper recycling out of scrap material and started using them in select buildings on campus to reduce plastic bag use
- e. Continued Office Paper project to decrease costs & increase revenues
- f. Continued Junk Mail Project; removed 1,656 people from various mailings
- g. Continued Craft Kingdom projects, providing jewelry, journals, notebooks, bags, hats, and other items crafted from trash through the Campus Bookstore and at special events. Volunteer Ginny Levi instructed the crew on sewing projects.
- h. Cleaned out all dorm storage rooms at end of year
- i. Ran another successful End Of Year MoveOut program, collecting tons of reusable items from the dorms and minimizing landfilled waste