### KANSAS STATE UNIVERSITY

#### **RECYCLING PROGRAM**

### THE HISTORY

- The recycling program started in 1989
- We started collecting at 22 building on campus
- We collected Newspaper, aluminum cans, computer paper, and white bond paper
- One pick-up truck took the recycled material to Howie's Recycling Center

 In 1997 KSU started sorting material in the old dairy barn

 Howie's loaned KSU a baler so the recycled materials could be baled in 1998

 Also in 1998 the KSU Recycling Advisory Committee was established





## EXPANDING THE PROGRAM

1999 through 2007



- Received City/University funding of \$64,000
- Bought 69 Windsor outdoor recycling bins and put the bins in 23 locations around campus
- Received KDHE Grant for \$14,000 and bought 2 recycling trailers

# Provided by KDHE Grant







### 2000

- K-State purchases a baler
- KSU begins plastic recycling
- Received \$5,000 grant from Pepsi Vending

 Students for Environmental Action contacts KSU to start Game Day Recycling  The recycling program receives \$6,000 from the National Association for Pet container Resources

- \$23,000 is given to KSU for student wages and educational material from the City/University Funds
- Recycling Center moves from the dairy barn to the KABSU bull barn

 Baled material is being picked up by Howie's





### 2001 - 2002





- Initiated Pilot program Desk-side recycling upon receiving \$48,000 from City/University Funds
- Desk-side recycling in 3 university buildings
- Purchased a used pickup truck and fork-lift
- Expanded cardboard collection by putting 13 cardboard dumpsters around campus

#### 2004

- Desk-side recycling is expanded to most of the campus
- Received \$8,000 from the City/University Funds to purchase desk-side recycling bins
- Received \$46,900 from a KDHE Grant to purchase 3,500 desk-side recycling bins







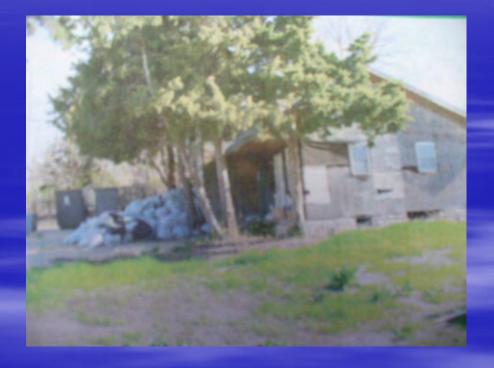


- KSU purchases a \$70,000 side load recycling truck which was funded through the City/University Funds
- 150 collection containers were bought with a \$10,500 KDHE Grant

### Recycling Center on the Move

 In 2004 the recycling center was moved from KABSU to a building at Howie's Recycling Center

 From Howie's the Recycling Center was moved to the Herdsman House in 2007



### The New Recycling Center

- On June 11, 2008 a tornado damaged numerous buildings at the university including the USDA-Wind Erosion Lab
- The Wind Erosion Lab was given to KSU for a Recycling Center later that year
- KSU received \$106,000 grant from the City/ University Funds to repair the Wind Erosion Lab

#### The Recycling Center Before Remodeling









#### 2009



 The recycling program moves into a portion of the Wind Erosion Lab

 K-State receives 300 recycling bins through an ALCOA Grant

Kansas State
University participates
in RecycleMania

# (2012 Recycle Mania in Progress)

				K-State	Totals	2011			
Weekly Updates									
	Cardboard	Mixed Paper	News Paper	Magazines/ Phonebooks	Plastic	Aluminum Cans	Weekly Total (lbs.)	Food Waste	Recycling Rate
Week 1	10,610	4,800	2,400	2,840	250	91.8	21,031.8	1,520	20%
Week 2	8,470	4,380	4,610	2,330	245	81	21,596	1,480	17%
Week 3	6,630	4,300	3,460	2,710	395	75	17,470	1,240	17%
Week 4	8,490	3,980	3,040	2,440	215	118	18,283	1,280	17%
Week 5	8,740	3,130	3,960	1,520	215	81	17,646	1,420	16%
Week 6	8,620	3,530	3,780	1,590	348	103	17,868	1,380	16.5%
Week 7	2,810	2,810	1,720	2,350	54	100	8,354	0	8%
Week 8	12,450	27,120	2,300	10,320	440	81	52,711	1,220	39%
Grand Total	66,820.0	54,050.0	25,310.0	26,100.0	2,162.0	130.8	175,172.8	9,540.0	

# The Recycling Center Day 1









- \$150,000 of City/University Funds was given to the recycling program for remodeling and equipment
- Coca Cola gave the university 60 beverage recycling bins through their grant program

#### 2010

- Engineers begin designs for the dock, the entrance road, and the electrical plans for the building
- The USDA opens up more area to house the recycling program





#### 2011

- Through City/University Funds the Recycling Department receives \$50,000 for remodeling and equipment
- K-State purchases a PTR 72HD Vertical Baler

The dock, entrance road, and electrical to be completed

## The Baler Arrives





## The Balers





### Recycling Center Future Dock and Entrance



## Loading Dock – Inside and Out





### Gravel Road Now Paved



## 24 Hour Drop Off & Sorting Bins



# Large & Small Weight Scales





# Sorting Room



# Computer Trailer



## Baled Plastic Ready for Distribution



### The Five Year Master Plan

- 2011 Better understand our current situation
- 2012 Increase recycling total to 25% of total waste
- 2013 Increase recycling totals to 30% of total waste
- 2014 Increase recycling totals to 40% of total waste
- 2015 Increase recycling totals to 50% of total waste

#### 2011 Better Understand Our Current Situation

Implement a Waste Characterization Study

- Construct loading dock and purchase one baler
- Evaluate potential buyers for recyclables
- Explore seeking funding through the KSU Foundation for naming rights for the Recycling Center

 Work with Athletics to enhance Game Day recycling efforts

#### 2012 – Increase Recycling Totals to 25% of Total Waste

- Hire additional staff to prepare contracts and grants, work with special event activities, and spearhead promotion and education within the campus community
- Develop a campus-wide recycling education program
- Implement a furniture exchange and re-use program in Recycling Center
- Consider results of the Waste Characterization Study and expand bin placement and educational outreach
- Finalize preferred strategy for collection: Source-separation or modified single stream

#### 2013 – Increase Recycling Totals to 30% of Total Waste

 Reduce reliance on volunteers at special events

Reduce waste-generating practices

#### 2014 – Increase Recycling Totals to 40% of Total Waste

Re-evaluate machine and space utilization within Recycling Center

Publicize increased recycling volumes both internally and externally

#### 2015 – Increase Recycling Totals to 50% of Total Waste

 Conduct another Waste Characterization Study

Develop a new 5 Year Plan

## Baled Aluminum Cans The First Bale



# The Day After the Game



# Earth Day





# Recycling On Campus





#### Recycling Verses Landfill (Per 2 Week Collection)

Commodity	Weight	Price Per Pound	Total	Land Fill X \$45 per Ton	
Magazines	9,088	\$ 0.04	\$363.52	\$ 204.48	
Cardboard	12,511	\$ 0.04	\$ 500.44	\$ 281.50	
Mixed Paper	9,781	\$ 0.05	\$ 489.05	\$ 220.07	
Plastic	420	\$ 0.10	\$ 42.00	\$ 9.45	
Aluminum Cans	854	\$ 0.55	\$ 469.70	\$ 19.22	
News Paper	2000	\$ 0.04	\$ 80.00	\$ 45.00	
Grand Total	34,654		\$1,944.71	\$ 779.72	

