



Colby College

Dining Services
Sustainability Initiatives

Colby College Overview

Colby College is a private, co-educational liberal arts college located in Waterville, Maine.

CAMPUS OVERVIEW:

Current Enrollment: 1,871



Meal Plans:

- 21 Meal Plan + 5 guest meals
- 100 Meal Plan + 2 guest meals



Student Demographics:

Female: 53.5%
Male: 46.5%

Geographic Representations:
10.6 % Maine
49.5 % New England
44-# of states, districts, territories
66-# of countries

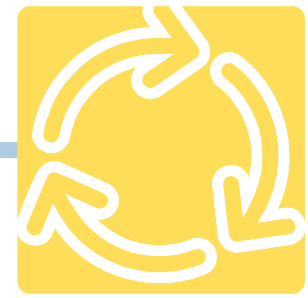
<1% American Indian/Alaskan Native
5.7% Asian/Pacific Islander
1.8% Black/Non-Hispanic
2.6% Hispanic
83% White/Non-Hispanic
6.4% International

Colby College
5460 Mayflower Hill Drive
Waterville ME
207-872-3484

For more info on the Colby Dining Services program,
please contact Joe Klaus 207-859-5486



Composting



A composting program began on the Colby campus in April of 2002. Since that time, more than 260 tons of pre- and post-consumer food waste have been composted through the 05-06 school year. Beginning in the spring of 2007, Dining Services will begin to compost all food service Paper, as well as unbleached napkins and compostable plates from Huhtamaki, as the composting program expands to include services from the catering department.



WHO? Colby Dining Services works hand-in-hand with the Colby Physical Plant Department. Through this collaborative partnership, composting is not only possible but also very successful in all three of the resident dining halls: Roberts, Dana and Foss.

WHAT? All pre- and post-consumer food waste from all campus dining kitchens during prep and after meals in the dish room is composted. Currently, the only food waste item that cannot be composted is lobster shells.

WHEN? Food waste is collected daily in kitchens and dish rooms across campus. It is put in recycled 5-gallon buckets with special after-market lids which screw on top of the buckets. Buckets are taken from the kitchens and loading docks via truck to the composting bin at the Physical Plant Department (PPD) on campus. Once emptied, the buckets are returned to the kitchens and washed in the dish machine and then the process begins again.

WHERE? Compost is picked up from the bin at PPD as needed (usually once a month) by an outside transportation firm and then taken to the Hawk Ridge composting facility in Unity, Maine.

SPECIFIC CHALLENGES:

- **Employee resistance** was an issue when the process was begun in 2002. Employees did not understand why they were separating out food waste. It's not a pleasant task to deal with food waste (smells, appearance, etc). It was much easier to simply dump it from a plate to the garbage disposal and not have to handle it. There is a learning curve for employees and success was achieved only after much positive reinforcement with the employees.
- **An additional truck** was required to transport the compost buckets from kitchens to the composting bin at PPD. Due to health department regulations, dining services could not use the same vehicle that transports foods for consumption (catering services truck). Also, side rails were added to the truck bed for safety reasons.
- **The dish room staff drains the compostable food waste and then transfers it to 5-gallon buckets.** As a result, it was necessary to retrofit garbage disposal openings with custom-made baskets to collect and drain the food waste.
- **Safety hazards** quickly became apparent when the program initially began using 20-gallon buckets to collect food waste. These were too heavy and collected too much liquid. Dining Services switched to 5-gallon buckets and trained employees to drain all food waste of liquid before dumping it into buckets.
- **Freezing compost buckets** presented a problem when employees could not get the food waste out of the buckets when delivering them to the bin at PPD. Originally, composting buckets were left on the loading dock. Dining Services then began to leave them inside or in small shacks at the loading docks. With the addition of the screw cap lids, odor is no longer a problem when the buckets are left inside.
- **Pest control** was initially a challenge as rodents repeatedly tried to gnaw through the bucket lids. This issue was resolved with a retrofitted airtight screw cap lid enabling the compost to be stored inside.
- **Odors** and maggots are occasionally an issue at the large compost bin at PPD. Plant employees sprinkle lime on the top of the compost pile as needed to control problems.



Composting *continued*



FINANCIAL IMPLICATIONS:

In 2005, cost savings totaled \$22,500. This figure includes

- \$2,000 in electrical costs for running garbage disposals
- \$10,000 in water use
- \$10,500 in sewage fees.

Versus the cost of composting: \$12,000

Composting costs include

- Labor for dish room employees to separate and collect food waste in the dish room and to collect buckets and transport and empty them in the composting bin at the Physical Plant Department (PPD) on campus
- A transportation fee to pick up compost at the Colby Physical Plant Department (PPD) and bring compost to the Hawk Ridge Facility in Unity, Maine
- A composting fee from Hawk Ridge facility

These costs do not include the cost of maintaining and operating a vehicle to transport the compost on campus from Dining Services to PPD.

**Net Annual Savings
in composting
vs. using garbage disposals \$10,500**

Recent History of Sodexo's Achievements at Colby:

- Dining Services and Physical Plant Department won state governor's award for composting efforts in 2004
- The Colby Campus Dining composting program was included in a presentation to state planning office by New England Organics at Bowdoin
- The Composting program has come full circle as Colby buys back the compost for use on the campus grounds for landscaping.
- Won 3rd place Recyclemania Award for total amount of compost collected among all NES-CAC schools, after Connecticut College and Middlebury College

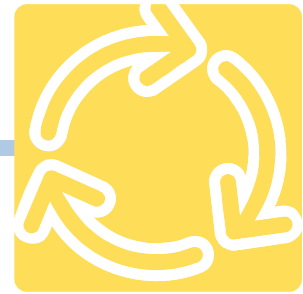
Value of Composting to Colby:

- Financial Savings—garbage tipping fees avoided, waste water and sewage savings
- Waste Reduction— tons of food waste not going into the waste stream
- Waste Prevention— many gallons of water conserved by not using garbage disposals
- Meet Client Expectations
- Student Satisfaction
- It's the right thing to do

Resources:

- Chris Bales, Earthlife products, 1- 800-933-6474 or christopher.bales@casella.com
- New England Organics, www.newenglandorganics.com
- Hawk Ridge Compost Facility
RFD 1 Box 1682, Unity, ME 04988-1682
Harris Whitehead 207-846-3737

Recycling



A recycling program began on the Colby campus in 2000.

All soda, alcohol and juice bottles as well as all office paper and corrugated cardboard has been and continues to be recycled.

The team is looking at single stream recycling which entails one compactor that accepts glass, plastic, paper, cardboard and metal cans. This should take place in mid-February 2007 when Casella expects to complete construction of their Waterville recycling transfer station.

WHO? Colby Dining Services works hand in hand with the Colby Physical Plant Department and their vendor FCR Recycling, a Casella company. Through this collaborative partnership, recycling is not only possible but very successful in all three of the resident dining halls: Roberts, Dana and Foss, as well as in the retail outlet, the pub and catering services.

WHAT? All soda, alcohol and juice bottles from catering events and retail outlets, as well as all office paper and corrugated cardboard, are recycled.

WHEN? Paper and corrugated cardboard that are recycled are picked up on a regular basis by Colby's Physical Plant Department (PPD). Bottles and cans are picked up weekly by an area recycling company.

WHERE? Items for recycling are picked up from the Dining Services Offices (office paper), and the Dining Services loading docks campus-wide (bottles and cans, corrugated cardboard).

SPECIFIC CHALLENGES:

There is a learning curve with the employees necessitating training and follow-up by managers to show employees how to rinse, sort, flatten and store items to be recycled.

FINANCIAL IMPLICATIONS:

With recycling, there is a reduction of these items as they are eliminated from the waste stream so there is a financial savings in the number of pick-ups of full dumpsters by Waste Management (W.M.) In addition, Dining Services gets back the 5¢ or 15¢ for each bottle and can recycled.

Value of Recycling to Colby:

- Financial Savings—garbage tipping fees avoided
- Waste Reduction— tons of waste not going into the waste stream
- Meet Client Expectations
- Student Satisfaction
- It's the right thing to do!

Resources:

- Beth Young, Recycling Sales, FCR Recycling, 1- 207-883-4600 ext 110, beth.young@casella.com
- Susan Millet, Regional Sales Manager, FCR Recycling, 1-207-883-4600, susan.millet@casella.com
- www.casella.com

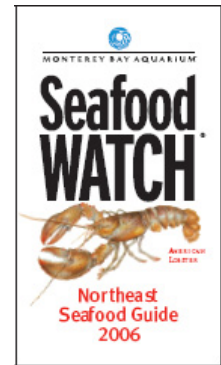
Sustainable – Seafood Choices



Since 2003 Colby Dining Services has followed the 'fish list'. The list is a Seafood Watch guide which promotes making choices in menu offerings based on choosing fish and seafood that are abundant, well managed and caught or farmed in environmentally-friendly ways. The list avoids choices that are over fished and/or caught or farmed in ways that harm other marine life or the environment.

WHO? The Colby chefs look to the Seafood Watch Guide when creating menus for their dining halls. The entire Dining Services team also works hard to educate the customers on why seafood and fish choices are offered and why others are not. Catering Services promotes offering only fish from the guide and works to educate customers on alternative selections when they request a species on the avoid list.

WHAT? The Seafood Watch Guide offers Best Choices (abundant, well managed, caught or farmed in environmentally friendly ways); Good Alternatives (ones that come with some concerns over how they're caught or farmed, or with the health of their habitat due to other human impacts); and finally, the Avoid list as these come from sources that are over fished and/or caught or farmed in ways that harm other marine life or the environment.



FROM WHOM? There are many fisherman in the state of Maine and it is large part of the local economy. Not only does Dining Services follow the Seafood Watch Guide but they also look to source their choices from the local area. All fresh fish and seafood is purchased from the vendor Maine Shellfish.

SPECIFIC CHALLENGES:

Students and catering customers don't always understand why the choices Dining Services offer for fish and seafood are limited. With continuing education, Dining Services realizes ever increasing understanding and acceptance from students and catering customers.

FINANCIAL IMPLICATIONS:

Following the list does at times come at a price. In the case of offerings for Catering and Retail, the menu items should be right priced so the financial impact is cost neutral. In the case of resident dining, the choices of seafood and fish offerings are made in order to fit the cost per meal budget.

Recent History of Sodexo's Achievements at Colby:

- Colby Dining Services is recognized by the National Fish and Wildlife Foundation as a college which follows the responsible choices for seafood offered

Value of Sustainable Seafood Choices to Colby:

- Sustainable practice that supports the local and state fishing economy
- Educates students, faculty, staff and visitors about making the right seafood choices
- Ensures sustainability of seafood species for future generations
- Meet Client Expectations
- Student Satisfaction

Resources:

- For free copies of the Northeast Seafood Watch Guide please visit www.seafoodwatch.org
- For more information about making smart choices in seafood go to <http://www.seafoodchoices.org/smartchoices.php>

Local Foods



Since 2000, Colby Dining Services has been making a concentrated effort to purchase locally grown and produced foods. This effort began with Colby Dining Services defining what constitutes a locally grown and/or produced food. The Colby definition is a supplier and producer within the state of Maine.

For example, Shain's of Maine ice cream is made with dairy (milk, cream) from Maine farms but the almonds for Butter Almond Ice Cream may come from out of state.

Beginning in February 2007, Colby Dining Services will offer sustainable choices on their catering menu. With the completion of the Pulver Pavilion in the Fall 2007, the new coffee / smoothie bar will feature organic, sustainable and fair trade offerings.

WHO / WHAT? Dining Services works with Sodexo's prime vendors to source items locally wherever possible. In addition, purchases are also made directly from local vendors including

- Farm Fresh Connections - for produce
- Maine Organic Farmers and Gardeners Association (MOFGA)
- The Apple Farm in Fairfield
- Shain's of Maine - Ice Cream
- Dole & Bailey Inc. - Meats
- Maine Shellfish
- Oakhurst Dairy - featuring 100% hormone free milk, 80% of which is produced locally



WHEN? All year long as available

HOW MUCH? Approximately 20% of all of Dining Services purchases are from local vendors and that percentage is increasing each year.

SPECIFIC CHALLENGES:

The growing season is short in Maine and many local farms cannot support the volume that is needed to feed the students in three dining halls.

Value of Local Foods to Colby:

- Supports local economy
- Local products are often fresher
- Supports the environment because local items don't have to travel as far
- Meet Client Expectations
- Student Satisfaction

Resources:

- Farm Fresh Connection - The Farm Fresh Connection is a program of the Maine Sustainable Agriculture Society that is working to build relationships between Maine farmers, students, food buyers in health and educational institutions and local communities, thereby sustaining Maine farms, boosting local economies, and nurturing community. Farm Fresh Connection is currently working to market local farm products. The Farm Fresh Connection acts as the broker to between local farms and institutions. They coordinate a weekly list of available products and enable purchasing of farm products from local farms.

Organic



Since 1997, Colby Dining Services has offered organic items. These organic offerings have increased each year and now include over 27 items that are offered on a consistent basis. One dining hall on campus, Foss, is known for its organic, vegetarian and vegan offerings. In addition, Dining Services has offered several specialty organic menus in both resident dining, as well as at catered events. This past Fall, a Harvest Dinner was held in each of the resident dining halls. The Harvest Dinner Menu featured both local and organic menu items. Colby Dining Services worked closely with MOFGA (Maine Organic Farmers and Gardening Association).

Adzuki Beans	Green Lentils	Short Grain Brown Rice
Arborio Rice	Jasmine Rice	Soy Milk
Basmati Rice	Long Grain Brown Rice	Stonyfield Yogurt
Black Beans	Mung Beans	Sweet Rice
Buckwheat Soba Noodles	Pinto Beans	Tofu
Bulgar	Quinoa	Udon Noodles
Couscous	Red Lentils	Wheatberries
Granola	Sesame Seeds	Yellow Lentils
Great Northern Beans	Sheffields OG Seitan	

WHAT? Dining Services works with vendors to source organic items. Currently, 27 different organic items are offered on a consistent basis.

WHEN? Year round, campus wide

HOW MUCH? Approximately 2% of all of Dining Services food purchases are organic

FROM WHOM? Organic food purchases are from United Naturals, PFG Northcenter, MOFGA and Native Maine.



SPECIFIC CHALLENGES:

With some, customer acceptance is low. There is a difference in the taste of organic items. For example, at an Organic Earth Day Dinner in a resident dining hall, organic free-range beef was served and most students didn't appreciate or understand the difference in taste versus traditional grain-fed beef.

FINANCIAL IMPLICATIONS:

Due to the fact that the majority of organic items offered are grocery items, the impact is fairly cost neutral. As the Colby Dining Services team looks to expand the organic offering in the future, their research has shown that non grocery items are more expensive than traditional items:

- Organic Produce is up to 3 times more expensive
- Organic Meat and Dairy is up to 3 to 6 times more expensive

Value of Organic Foods to Colby:

- Answers student desire for food that is free of additives, hormones, pesticides and GMO's
- Meet Client Expectations
- Student Satisfaction
- Helps to sustain resources for future generations

Resources:

- Maine Organic Farmers and Gardeners Association— <http://www.mofga.org/>

Fair Trade



Colby Dining Services has been serving Fair Trade coffee selections to their customers since September of 2001. Today, Fair Trade coffee selections are offered at several locations on campus and from several coffee vendors.

WHAT BRAND / WHERE? Starbucks Fair Trade selections are offered at the Coffee Cart in the location affectionately known by the students as 'the street'. 100% Fair Trade Coffee from Equal Exchange is offered at the retail location, The Joseph Family Spa, currently closed for renovations and scheduled to reopen in a new location in the Fall of 2007.



FINANCIAL IMPLICATIONS:

Fair Trade coffee selections are a bit more costly than the regular coffee selections. However, with right pricing in place at retail locations the financial impact is cost neutral.

Value of Fair Trade to Colby:

- Answers the Colby community's desire for coffee selections that are economically just and environmentally sound
- Meet Client Expectations

Resources:

- Equal Exchange - <http://www.equalexchange.com/>
- Starbucks - <http://www.starbucks.com/aboutus/fairtrade.asp>
- Green Mountain Coffee Roasters - <http://fairtrade.greenmountaincoffee.com/index.html>



Biodiesel



Colby Dining Services was approached by an employee of Colby College, Cindy Wells, who inquired about the possibility of her husband Butch, a local farmer, picking up the used fryolator oil from the kitchen to be recycled and used as biodiesel fuel to power his farm equipment.

WHO? Butch Wells, a local farmer uses the bio-diesel to power his farm equipment

WHAT? 100% of the used fryolator grease from the campus kitchen is recycled as biodiesel

WHEN? The grease is picked up weekly at no charge to Dining Services. The grease has been picked up since Spring 2006.

HOW MUCH? Approximately 21,000 lbs (100%) of grease each year is picked up and used as biodiesel.

SPECIFIC CHALLENGES:

- At times, rain water leaks into to the secondary containment bins (required by law). The Colby Physical Plant Department built stalls to house the containment bins and eliminate the rain water problem.
- Dining Service employees needed to be trained and reminded that only oil and not sediments may be dumped into collection bins.

FINANCIAL IMPLICATIONS:

Prior to recycling the fryolator oil, Colby Dining Services paid Baker Commodities to pick it up at an annual cost of \$2000. Butch Wells supplies the barrels for grease storage and also picks the barrels up on a weekly basis at no charge.

Net Savings
\$2,000 per year

Value of Recycling Fryolator Grease to Colby:

- Supporting local farm
- Cost savings with free pick up of grease
- Use of biodiesel replaces the use of non renewable fossil fuels
- Client / Campus Relations

Resources:

- Biodiesel emission on line, national biodiesel board <http://www.biodiesel.org>
- Biodiesel on-line, Department of Environmental Protection <http://www.state.me.us/dep/air/mobile/biodiesel.htm>



Green Chemicals



Currently all chemicals used by Dining Services for cleaning are Green Seal Certified. The new Apex ware-washing program provides an ability to improve efficiency to reduce water and energy consumption. The program will move toward a more environmentally friendly, sustainable and non caustic formulation

WHERE?

The new program is in place at all locations including Foss, Dana and Roberts Dining Halls as well as the facilities at Pulver Pavilion.

HOW MUCH SAVED?

Based on the current campus population, the following annual population, the following savings will be realized with the program:

Net Savings
49,275 gallons of water per year
27,584 kilowatt hours of electricity

Value of Green Chemicals to Colby:

- Reduction of water and electric usage
- Cost savings for utilities
- Reduction of carbon footprint
- Client / Campus Relations

Resources:

- <http://www.ecolab.com/MarketsServed/Solutions/Apex.asp>



Waste Reduction & Prevention



Colby Dining Services works hand-in-hand with Colby College in putting green dining practices in place. These sustainable practices touch many areas of conservation including waste reduction, as well as waste prevention including:

Energy Conservation
Water Conservation and Waste Water Prevention
Food and Paper Waste Reduction and Prevention
Renewable and Recycled Materials Use

ENERGY CONSERVATION

- All garbage disposals permanently turned off
- Timer installed on hall exhaust hoods and fans in kitchen
- Dimmers / timers installed on some lights in Dining Services areas

WATER CONSERVATION AND WASTE WATER PREVENTION

- All garbage disposals permanently turned off
- All previously water-cooled refrigeration has been replaced with air-cooled systems to reduce water usage

FOOD AND PAPER WASTE REDUCTION AND PREVENTION

- Use only linen table cloths NO paper
- All paper cups removed from Resident Dining halls for a savings of 154,000 going into waste stream each year
- Just in time cooking practices employed in all dining halls resulting in 80% less food waste
- Just in time production in all dining halls reduces pre-consumer food waste by up to 80%
- All un-served food donated to local hunger organizations in Waterville
- Reusable mug campaign – retail outlets offer a discount on refills with the mug, also 15 cents of each mug sold is donated to National Fish and Wildlife Foundation

RENEWABLE AND RECYCLED MATERIALS USE

- Wood selections at the new Roberts Dining Hall were from renewable certified wood sources
- Carpet selections for the Roberts Dining Hall were chosen from carpet that had at least a 30% recycled fiber content
- After the demolition of the old Roberts Dining Hall, the demolition debris was carefully sorted and recycled
- All equipment from the existing dining hall was either refreshed for reuse or donated to charitable organizations.

