



4R Environment

Reporting developments in University of Toronto's waste management strategy, and offering an open forum for discussion of environmental issues

Zoology's Forest Garden

BY KATHY SAVICH

"Zoo Woods" is the name that has been given to the maple/beech forest garden surrounding the Ramsay Wright Zoological Labs, which now supports over 100 species of plants. The garden will be completed this year when

another 50 species will be added to beautify the area.

The entire replanted ecosystem of trees, shrubs, wildflowers, ferns, grasses, sedges and mosses are specific representations of the native Greater Toronto Area only, with no

"imports" from either Europe, northern or southern Ontario.

This project is experimental as it is the first time in Toronto to be attempted. The effects of downtown air pollution are not fully known. Neither are the possible consequences of changes in the original light and moisture levels, soils, diseases and pollinators.

The three large green ash and

some ornamental crab apple trees that were already on site will protect the young forest in its initial stages as nature nurtures the St. George campus biome.

Future plans include a pond, with water supplied by the storm water runoff from Zoology's roof, and a walkway to add to the visual interest and educational aspects of our forest garden. ~

It's Not "Just Paper" Anymore

BY GARY NOWER

For almost a year, the price paid for our recovered paper and cardboard has been rising. This is good news when you consider that in 1990 we had to pay to have our paper recycled. In 1995 we have seen the price paid for recovered paper rise over 200% from 1990. What has changed since 1990 that makes recovered paper so valuable, and what effect do these changes have on the purchase price of paper products?

When considering the price of a renewable resource, it is helpful to keep in mind that there is a difference between "efficient resource

price" and "market price", which may or may not be equal to the resource price. Does the market price reflect the scarcity of a renewable resource, namely pulp? Not in this case. The rising price of pulp has been influenced by factors other than scarcity, such as increased demand for paper products, decreased capacity at the mills, and labour disputes in the pulp industry.

In 1994, pulp producers began to experience an increase in the demand for pulp. This was welcome news after a lengthy recession. However, the mill owners were not prepared to meet this new demand since, as a result of the recession, many of the mills had been forced to close. Combine this decrease in available mill capacity with labour strikes and very soon there is a situation where demand for paper is outstripping supply.

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EDITORIAL

I was standing with a group of U of T environmentalists one day last year, lamenting about the loss of "wild spaces" in the urban environment. Somebody suggested that we should resurrect Taddle Creek on the U of T campus and stock it with trout. We laughed, and then sighed, each of us privately

certain in the knowledge that it could never be.

A year later, I decided to investigate just how preposterous the resurrection of the Taddle would be.

Taddle Creek flowed through the downtown campus until 1884. It entered U of T grounds from Bloor Street at Philosopher's Walk, coursing through the ravine that can still be seen

today. At Hoskin Avenue it flowed where currently sit Wycliffe College and Hart House, forming a pond where Hart House Theatre now stands. The Taddle continued south behind where now sits Sigmund Samuel Library, through the Science and Medicine Library stacks, under the present Canadiana Gallery, McMurrich

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With a short supply of pulp, premiums were being paid and this led to some very sharp price increases for pulp and, subsequently, paper products. The increased demand for pulp led to an increase in the demand for recovered paper, which is why the price paid for recovered paper has increased so dramatically.

Consider the pulp prices in December 1993:

Softwood \$500/ton

Hardwood \$400/ton

Consider the pulp prices in March 1995:

Softwood \$1,160/ton

Hardwood \$1,130/ton

The price to purchase our everyday Xerox paper has risen 44% since 1991. For the first time in five years the price of paper with recycled content is cheaper than virgin stock!

There will be continued price increases for paper over the next several months, and this represents yet another financial burden to the University. Now more than ever it is important to follow the 3R's when using office paper. Not only will you be saving your department money, but you will also be conserving a resource. ~

What is "Sustainability"?

BY DAVE TAMBLYN

Dave is an Engineering student at the masters level, specializing in Environmental Engineering. Articles from students are welcomed and encouraged.

The cry of "environmentally enlightened" economists everywhere is, "Sustainability is the answer!". What they really mean is "sustainable development". But do they really know what they mean?

The fundamental issues for long term ecological sustainability are:

- ~ intensity of resource use
- ~ rising human populations
- ~ stock of resources
- ~ maintenance of the

environment's assimilative capacity

~ waste management

~ diverse and healthy ecosystems

Our present rate of resource extraction is not sustainable. Nor is the planet's capacity to absorb the waste that this extraction generates.

We must use renewable resources, such as our forests, efficiently to avoid depleting our current stocks. For many resources, we need to invest in additional stock because we have already seriously depleted our reserves (remember the Northern cod?).

We must realize that non-renewable resources, by definition,

"The last fish caught in the ocean will still be a dollar added to our GNP." - Louis Lapierre, Moncton University

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Building, Medical Sciences Building, and then to its namesake, Taddle Creek Road. Here it twisted to the west,

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flowing under today's Rosebrugh Building before crossing under College Street, ultimately emerging into Lake Ontario near Parliament Street.

It's demise can be most succinctly communicated with a quote from the Varsity in 1881: "The stench arising from the Taddle is very pronounced. The prevalence of so much fever in the city is surely a good reason for the prompt abatement of this long-standing nuisance."

Although the rest of Taddle Creek was already encased in a sewer, the portion that ran through the University of Toronto remained above ground until 1884: Notwithstanding the "stench", a dunk in the Taddle

was the favourite initiation rite for freshmen, putting students at risk of contracting disease, which may have been why the University finally conceded to bury it.


Taddle Creek as it runs through the University today contains combined sanitary and storm water. Until 1947, it serviced the area north of Bloor Street as well as U of T, but has since been blocked and now receives only water and sewage from the Royal Ontario Museum, the Royal Conservatory of Music, and University buildings along its route.

The idea of resurrecting Taddle Creek is not new. In 1991 the University's Planning Office produced a discussion draft of U of T's Campus Master

Plan, which proposed changes to Philosopher's Walk:

"The underlying goal is to retain and strengthen the essential nature of the area as a quiet respite and to recreate Philosopher's Walk as an important circulation space within the University and as a link to the city. An essential part of the concept to refurbish Philosopher's Walk is to return Taddle Creek, many years since lost, to the University and to the City."

Clearly, the resurrection of the Taddle is not simply an off-the-wall notion of a handful of naive environmentalists. We may yet enjoy the opportunity to sit on its banks, or perhaps dunk a frosh or two. ~

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are being constantly depleted. This means that the sustainable rate of extraction of resources such as fossil fuels, metals, diamonds, etc. is zero. In the long term, there can be no mining, no oil extraction. Reusing and recycling what is already removed is the only way to "sustain" non-renewable resources.

We must organize our waste management systems to minimize wastes and match those remaining wastes to the assimilative capacity of their receiving environment. For example, if the assimilative capacity for persistent, bioaccumulative toxics is zero, then the sustainable production rate for those substances is zero. Any level is too high.

Many lifestyle and attitude adjustments will be required to

achieve a sustainable society. We must free ourselves from dependency on non-renewable resources. We must transform our "throw-away" mentality. And we must learn to do without products that produce toxic wastes. These adjustments are inevitable, and we have no right to push them onto future generations.

Optimists may respond to the above arguments by saying that human ingenuity has overcome "impossible" problems in the past, and will continue to do so in the future. Perhaps. But the idea that the solution to a problem created by a technological society is blind faith in technological advancement appears tenuous, and risky. Do we want to, and do we have the right to, take that risk? ~

Waste Basket Switcheroo Sees Mixed Reactions

By the beginning of the summer, all the offices on the St. George campus will be equipped with a desk-side recycling container for paper and a small "waste pitcher" that hooks onto its side for garbage. This unit is replacing the basic metal waste basket that has serviced the University community for so many years, and many people are asking why. Here are some answers to the most commonly asked questions.

Why are we making this switch?

Because this system has proven to be the most effective method for diverting the most amount of paper from the waste stream.

What about the waste created by "junking" the old waste baskets?

They are being offered first to people to take home, and those that are left are either taken to the Swap Shop or recycled as scrap metal. The amount of waste that the unit can potentially divert is far, far greater than that generated by replacing the old containers.

Isn't replacement expensive and unnecessary, especially during times of restraint?

Metro Toronto landfill sites have banned fine paper from institutions such as ours, and can impose a fine on the University

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Community Gardening Comes to U of T

BY EVAN FRASER

Community gardening projects are an innovative and creative means of addressing some environmental and social problems associated with city living, and with care and patience can be a rewarding and enjoyable endeavour.

Due to a current trend at U of T to change some of the green turf into areas with greater biodiversity, the administration has allowed a parcel of land to be used for student-run garden plots. Presently this plot is very small and poorly situated (sandwiched between 215 Huron Street and a parking lot), but it is hoped that if this year proves to be a success, better land will be forthcoming. Ideally these plots would be available free of charge to any student, staff or community member interested in having a small vegetable garden in downtown Toronto.

Ideologically, small-scale agriculture can answer a number of problems inherent with the current system of food

production. Many of the businesses which provide our cities with food are unconcerned about the negative impact that they are having on the environment. Growing your own vegetables, therefore, can provide an alternative to supporting the multi-national food grower while creating a small level of independence for the individual. Furthermore, it is becoming increasingly apparent that the way which most of our food is grown (in large single-strain fields that are ploughed every year and sprayed with a variety of chemicals) is unsustainable. With community garden plots, the diversity of plant species is high, the soil is healthier, and there is less likelihood of needing to use chemical sprays.

The troubles of this world will not be solved by small vegetable gardens. They will, however, provide people with a fun and rewarding alternative to the current unsustainable system. ~

Announcement

Old U of T telephone directories with the spiral binding can now be recycled, separately. Please collect your old directories, and other spiral-bound documents, and call 978-7080 to arrange for a special pick up.

360 billion pounds of car waste is produced each year and 80% of this waste is landfilled. About 37% of this waste is plastics.

Take the Environmental Challenge

BY TULLIO BUGADA

How well does your office perform from an environmental point of view? Well enough to compare to the Utilities Division of Facilities and Services on the 5th floor of 215 Huron Street?

Our day begins at 7:00 a.m. when early-birds **Ted** and **Ed** come in for work and turn on the energy-efficient T-8 lights and energy-consuming office equipment (that had been turned off for the night). The day progresses with business as usual - coffee and tea are sipped from reusable mugs and all our staff pitch waste paper into their desk-side recycling bins as a matter of course. **Elsbeth** sifts through her blue box salvaging one-sided photocopy and print

job mistakes, which she uses as scrap paper for drafts and notes.

The washroom has been retrofitted with compact fluorescent lighting, water restrictors on faucets, and motion detectors that trigger urinals to flush (avoiding 24 hour 365 days per year automatic flushing).

By the time lunch rolls around, the real fun happens. Coffee grinds, apple cores, yesterday's fresh flowers from that secret admirer - you name it - fill up the composting bucket, which I empty twice a week into our cedar Bio Bin composter located at the back of the building. Try to visualize **Derek** with a mug in his left

hand, scorching tea bag in the other, attempting to open the compost bucket with one foot.

copier, kitchen and bathroom lights as part of his end of the day routine, saving countless

... attempting to catch co-workers with lights or computers left on in vacant offices.

This composting mania reaches its most exaggerated dimensions when **Attila** (the office joker and Resource Management Engineer) devours every consumable portion of his afternoon pear and chucks the remaining seeds and stem into the composting bin.

Bob is our dedicated Environmental Coordinator, informing us of environmental news by posting minutes on the bulletin board. He changes the cloth towel (no paper towels here!) in the coffee room when the roll is used up. **Ken** includes turning off the printers, photo-

kilowatt hours, as well as dollars and the environment.

This energy-conservation crowd has been known to spy on each other, attempting to catch co-workers with lights or computers left on in vacant offices. To further impress his colleagues, **Attila** has been known to work in the dark to save energy!

The Utilities Division challenges other offices to an environmental duel! Report your office or division's environmental achievements and innovative ideas in the next issue of this newsletter. ~

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(WASTE BASKET SWITCHEROO continued from previous page)

every time paper is found. If this law becomes strictly enforced, the cost to the University could be enormous.

Also note that the new unit is the most convenient system for people with a small office space. It is also much lighter than the metal waste baskets and therefore easier to empty, possibly resulting in fewer back injuries for maintenance staff. ~

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