

# Gladiator Garbage or a Day at the Dump

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Garbage, garbage everywhere! No matter what lifestyle one chooses garbage is an integral part of it. For perhaps this reason, archaeologists look to the landfills of the past to determine past lifestyles. The first landfills of the past contained little if anything. What was killed or collected was used to its maximum potential; to be wasteful took too much energy. This type of approach to consumption has been labeled appropriately "Userism".

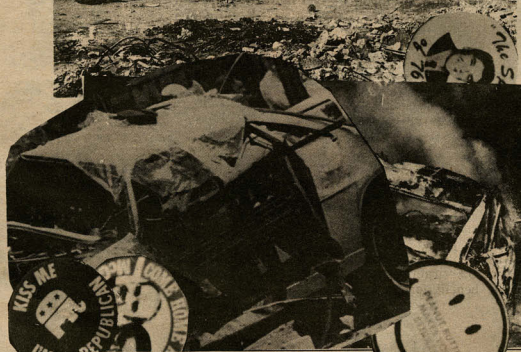
Things did not remain efficient for long. The Greeks and Romans each contributed to the evolution of solid waste production and disposal. The clustering of populations in centers had the unique effect of consolidating wastes. The Greeks started composting, while the Romans organized the garbage men. Waste thrown from the houses into the streets "au naturel" was shoveled into wagons by the sanitation Legions and taken to dumps. The dumps, then as now, were not architectural wonders and were accompanied by the appropriate smells and vectors. Carcasses became major components of the waste stream for the first time. Gladiatorial encounters produced thousands of animal and hundreds of human bodies. "Even an amateur, or a person with only a passing interest in garbage can well appreciate the problems of disposing of five thousand animals whose numbers included creatures the likes of elephants and camels. Not to mention all those used lions." (Kelly, p. 18)

In the past several hundred years, the construction of cities did not change the methods of waste disposal. The practice of ejecting objects out of the second story window or the "air mail" method remained quite popular. However, it had the unforeseen effect of producing major health problems.

In the United States during the late 1700's and 1800's, many people decided to move west for health reasons as well as to rid themselves of a cluttered feeling. This movement may have produced, unintentionally, America's first major recycling program. Many of the heavier items were given the "air mail" treatment from the wagon to the ground in hopes that someone could make good use of them.

Hold your horses! What are methods of solid waste disposal now? We have become innovative in our disposal approaches: composting, recycling, reusing, land filling and ocean dumping. Innovative? These are relics of the past used in a modernized form. Incineration, first started in the 1870's, has been modified to produce energy through steam. The present energy awareness has also led to the development of methane collection systems and localized trends in generating less overall wastes.

At a localized level, St. Lawrence County has approximately thirty-three landfill sites. Fifteen of these sites are scheduled to close in 0-5 years beginning in 1979. Why are these landfills being closed? The State of New York following national policy guidelines issued standards concerning landfill sites. These standards have focused on prevention of leachate and surface and groundwater contamination. Concern over these problems is well founded, since in St. Lawrence County few sites have the proper soil and locational characteristics for safe landfill operation. The people of St. Lawrence County, and particularly the visitors to the county, the students, must consider their waste production carefully. A rather dramatic statement of the problem is provided by Katie Kelly in her book, *Garbage*.



"We are in dark days indeed. Like a cold mouldy shroud, our garbage has piled up around us. Suddenly we have found ourselves confronted with the monster of our own makings: an ever-increasing, never-diminishing pile of garbage. It grows higher and higher, a tower of garbage, threatening to fall down on us. If today we are still searching for the mythic (sic) civilization of Atlantis, will future generations seek fruitlessly for twentieth-century America? Will they send teams of archaeologists to dig through the garbage pit of our cities? Hey — here's a wide-track Pontiac. Look — a Quasar TV." (Kelly, p. 27)

What can be done to solve the local solid waste problems? Several solutions are available. The simplest and least expensive would be to cut the overall waste production. This would prolong the life of all the remaining landfill sites as those sites in violation of the state standards are closed down. In any event, landfill sites that remain open will have to be monitored for leachate and water contamination. Many sites will have to be upgraded with impermeable layers and leachate cleansing systems. These actions will increase the costs of using landfills.

Another alternative to the solid waste problem would be the development of a centralized incineration plant. This plant would be supported by transfer stations, the old landfill sites. Glass, metals, and probably plastics would have to be sorted from the waste stream. The incineration process would generate electricity through the production of steam. However, landfills would have to be maintained for the continual disposal of unburnable wastes and for periodic shutdowns.

An alternative which can work in conjunction with, or independent of, either incineration or landfilling, is recycling. A comprehensive recycling program could redirect most wastes from landfill sites. Recyclable materials include glass, paper, metals, oil, and some plastics. Such a program would extend the life of landfill sites for use in the disposal of materials for which no other safe alternatives exist. Some materials, such as glass bottles and metals, can be reused rather than recycled. This would conserve energy and is more energy efficient than recycling.

A plan has been proposed by Richard Grover for the Potsdam area which includes a comprehensive program for solid wastes including recycling, composting, and methane generation and collection. Aluminum, metals, glass, paper and oil would be recycled. All organic waste would be composted for methane generation. Currently, the main problem is dealing with waste plastic. There are no current plans to recycle it. This plan would take care of Potsdam's current problem. The Potsdam landfill has been slated to close in the immediate future.

This program partially completes the circle. It would utilize in updated forms methods of waste control developed by past civilizations. The next step would be recreation of the "useristic" state, use everything. The achievement of this would indeed complete the circle and the problem of solid waste would be solved.

## SOURCES

Kelly, Katie, 1973. *Garbage*, Saturday Review Press, New York.

St. Lawrence County Waste Report, prepared by the St. Lawrence County Planning Board, Feb., 1980.