



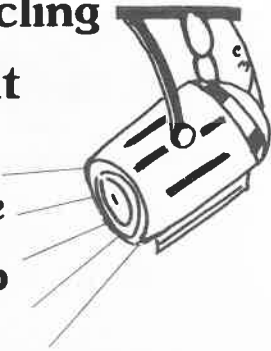
MORRIS COUNTY Resource Recovery Report

Volume 2, No. 2

Spring, 1983

Recycling Spotlight

Mt. Olive Township



For some people, recycling is a difficult subject to become enthused about. But the spirit and involvement with recycling in Mount Olive Township has quickly established a successful program.

Program Development: On September 1, 1982, Mount Olive residents began separating their newspapers and yard wastes under a municipal ordinance. By December, they had collected 30.7 tons of newspaper and experienced an increase in separation of yard wastes for collection. In addition, three volunteer organizations collected 208.5 tons of newspaper throughout 1982.

Tom Craig, the Township's Health Administrator, has a very optimistic outlook for the future of recycling in Mount Olive. "The cooperation we've had from our residents is outstanding," Craig reports. "We plan to add glass to our collection sometime in 1983."

In an effort to receive a substantial rebate from the State's Recycling Grant Program, Craig solicited local business establishments for recycling records. This enabled the Township to add 97.5 tons of corrugated, 108 tons of recycled food wastes, and 6.5 tons of used motor oil to their tonnage grant application.

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On the last Monday of every month, the Mount Olive Township's newspaper recycling truck is loaded with correctly prepared newspapers.

Tonnage Grants Pour In

Twenty eight of Morris County's 39 municipalities met the February 15 deadline for submittal of Recycling Grants (tonnage rebates).

Frederick W. Knox, chairman of the Freeholders' Planning and Development, said \$3.1 million is available for the formula grants, which represent 45% of the total 1982 Recycling Fund. Every municipality has contributed to the fund in the form of a landfill tax, but only those documenting tonnage recycled during 1982 will have tax money rebated.

The dollar-per-ton amount is calculated by dividing \$3.1 million by the total number of documented tons

Cont'd. on Page 6, Col. 1

Implementation Grants Awarded

In mid-February, announcements were made by the New Jersey Office of Recycling regarding recipients of State Program Planning and Educational grants.

In Morris County, which fared above average in comparison with other counties, five municipalities and two volunteer groups were awarded funding. Seventeen groups had originally made application.

Lincoln Park, Rockaway Township, Roxbury Township and Wharton will receive money for developing and implementing educational programs. Mountain Lakes and Wharton will be awarded program planning funds to

Cont'd. on Page 6, Col. 2

SWAC Tours Recycling Plant

On May 2, members of the Solid Waste Advisory Council and the County Recycling Coordinator visited the Intermediate Processing Facility (IPF) in Islip, Long Island.

Islip's IPF accepts mixed recyclables which are collected at curbside on a weekly basis and separates the materials for marketing. Materials recycled at the plant are newspaper, glass, aluminum, metals and plastic. By only requiring one container for disposal of these recyclables, and providing a weekly service, Islip has simplified source separation and thereby increased the amount of recovered material.

Islip calls their IPF the WRAP Center, to remind residents that "Wednesdays Recyclables Are Picked-up." Islip's municipal landfill is closed to municipal waste traffic on Wednesdays, when all haulers must dispose of the recyclables at the WRAP Center only. The Center accumulates income in addition to material sales, through a \$10 per ton tipping fee, the same fee charged for waste at the landfill.

Islip, unlike any Morris County municipality, has over 300,000 residents and a population density of 2,728 people per square mile. The entire County of Morris has 400,000 people, and an overall population density of 835 people per square mile.

Population density, participation, and efficient system design have all worked to make the Islip, Long Island WRAP facility a forerunner in successful implementation of an Intermediate Processing Facility.

Buy-Back Centers

Two new regional buy-back centers for all-aluminum cans will help increase recycling in Morris County. The Dover center, opened April 16 at the Town garage on North Sussex Street, pays 20¢ a pound for aluminum cans from 3 p.m. to 5 p.m. Wednesdays, and 10 a.m. to noon, Saturdays. A similar operation is being installed at the Florham Park Environmental Center which, when completed, will purchase aluminum cans from 9 a.m. to 3 p.m. on the second and fourth Saturdays of each month.



Composting display at the New Jersey Flower and Garden Show.

Recycling Education At Flower Show

By invitation of the Morris County Soil Conservation District, the County Solid Waste Department was able to participate in a Conservation Education Booth at the 1983 Flower and Garden Show.

The exhibit, which demonstrated urban conservation techniques, featured soil testing and soil conservation information, and a model backyard with a compost bin and area for separation of aluminum cans and glass. Over 4000 pieces of information relating to recycling were distributed throughout the week-long show.

The booth was entered into competition for awards which are distributed each year at the show. The "Urban Conservation" theme at the District's booth was awarded a silver medal for education.

Baler Information

A directory of baler manufacturers, including addresses, specifications and baler application for recycling programs will soon be available. Contact the County Recycling Coordinator at 285-6183 for information.

Municipal Composting Seminar Slated

On May 24, 1983 the New Jersey Cooperative Extension Service and Cook College will sponsor a Municipal Leaf Composting Program.

Subjects to be presented at the conference will include the economics, principle, and applications of leaf composting on the municipal level, as well as facility siting and licensing in New Jersey.

Participants in the conference will include NJ DEP representatives, Cook College faculty members, and officials in charge of active New Jersey composting programs.

For more detailed information, contact Mrs. Dorothy Shalayda at 932-9443.

Pull-Out Composting Guide in this Issue

Spring is the time of year when we anxiously await the first buds and blossoms on flowers and trees, and prepare our gardens for a fruitful summer season. The most important component of any garden, whether a flower bed or vegetable patch is, of course, the soil your plants will grow in.

The most effective, inexpensive and environmentally sound way to condition your soil is by adding compost. To find out why, and how you can have your own compost pile, read the special section that has been included in this issue.

Note: Additional copies of the *Compost Guide* are available upon request.

Buy-Back Centers Raise Prices

The Morris County Recycling Center in Cedar Knolls, and the Rockaway Valley Paper Recycling Center in Wharton are now paying \$20 per ton (\$1 per 100 lbs.) to individuals delivering newspapers to the centers. This is a significant increase over the previous price of \$16 per ton.

Composting

Questions and Answers

What is composting? — Composting is nature recycling itself. The plants and fruits that once grew strong, pass their vitality onto coming generations. Composting is mixing organic materials under the proper conditions, so that they will decay and become compost.

How can compost condition my soil? — Compost holds 9 times its weight in water, enhances root growth, and improves soil structure.

How will compost fertilize my soil? — As compost decomposes, it releases a continuous and gradual supply of nitrogen. Commercial fertilizers are water soluble and quickly leach from the soil.

How does compost offer my plants better nutrition? — Compost contains both colloids and chelates. Colloids are sticky substances which hold nutrients and water in soil. Chelates are special ions which hold minerals in soil.

Why is composting so important? — Disposing of our organic wastes, from either our kitchens or our yards, in containers which cannot decompose (such as plastic bags) does not represent a sound, natural practice. We must return to the earth what the earth provides in a way that nature is able to recycle all of the goodness it gives us every day.

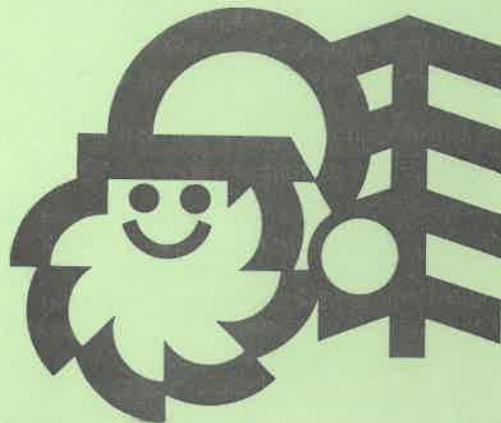
Do's and Don'ts of Composting

Do

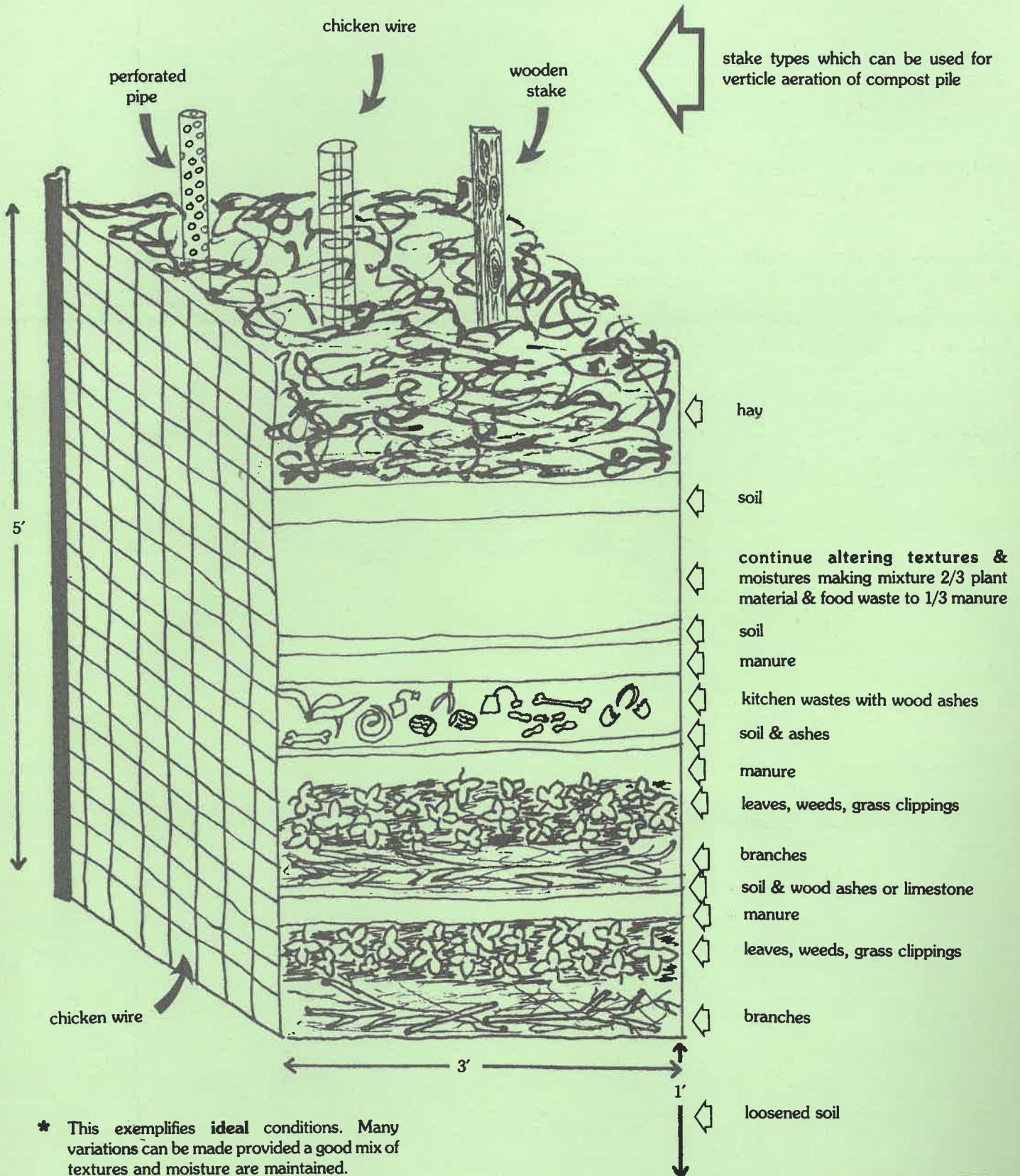
- * construct your bin out of wood, haybales, wire or cinderblock, providing spaces for air to enter the heap.
- * make the bin at least 3' x 3' at the base.
- * mix different types of materials in your heap.
- * use kitchen wastes, high in vitamins and minerals. These can be stored in a tight plastic container (i.e. a diaper pail) in the kitchen until ready for use.
- * add ashes or lime to the kitchen bucket to eliminate odor.
- * keep the heap moist, like a wrung out sponge.
- * turn the pile as often as you wish.
- * make sure there is sufficient nitrogen in the heap by including manure, grass clippings, young weeds.
- * add wood ashes, lime or potash rock when composting a lot of leaves or using acidic soil.
- * leave tea in bags, and use vacuum cleaner and dust pan dirt.

Don't

- * use only one type of material. Leaves or grass alone will mat down and decay very slowly.
- * overwater your heap so that nutrients leach out the bottom.
- * forget to turn the heap every 2-6 weeks.
- * use meat scraps. These will attract animals and insects.
- * be afraid to compost!!!
It's easy and it is good for you and your garden.



Sample* Compost Bin



* This exemplifies **ideal** conditions. Many variations can be made provided a good mix of textures and moisture are maintained.

scale: 1" = 1'

Mt. Olive...Cont'd. From Page 1

Education: In order to adequately inform every resident about the new recycling program, the Mount Olive Solid Waste Advisory Council (SWAC) designed an informational flier. Four thousand of the fliers were handed out home-to-home during the 1982 dog census. This method saved \$800 in postage costs. As an educational reinforcement, the Township prints reminders every Thursday in the **Mount Olive Chronicle**.

The SWAC included all the Township's students in the new program by running a logo contest. A \$100 prize was awarded to Lisa Marie Kann for designing this logo:



The \$50 award for second place went to Jill Hackenberg for her logo entry.

Mt. Olive's recycling activities demonstrate a conscientious effort toward municipal waste stream reduction which will prepare the Township for future solid waste problems. By examining existing solid waste practices, and municipal resources, municipalities can work toward meeting County and State goals for 25 percent waste stream reduction through recycling.

Cash for Trash in Washington Township

Township residents must go to the Board of Health to purchase tickets for clean-up disposal. The tickets range in price from \$3 to \$10, depending on the size of the load.

To increase participation at Washington Township's recycling depot, a system has been arranged whereby residents can get a discount on their clean-up costs through recycling.

For every four bags of glass and/or aluminum delivered to the depot, a hole is punched in an index and with the recycler's name on it. For every two holes, residents receive a 50¢ ticket which can be used for clean-up disposal. As a result, conscientious recyclers are collecting plenty of tickets for a free clean-up disposal this year.

Engineers Hear County Solid Waste Coordinator

The following was excerpted from an article by Ruth Faulkner in the 3/23/83 issue of The Chatham Journal.

Members of the N.J. association of Professional Engineers, meeting on March 15th, heard Kenneth G. Gallagher, Solid Waste Coordinator for Morris County discuss state-of-the-art in resource recovery technologies.

Gallagher said the most widespread technology, used to produce steam in hundreds of localities in Europe and Japan, is the mass burning of solid waste in water wall incinerators.

The European incinerators, often

government owned, are located in cities such as Paris and Hamburg which contain areas rebuilt after World War II, where steam is used for district heating.

The incinerators consist of water-tubed furnace walls and boilers, and have air-cleaning devices to bring emissions into compliance with clean air laws.

About eleven incinerators, capable of handling 160 to 1600 tons of waste per day are now in use in the United States. One in Nashville, Tennessee has a downtown steam loop used both for cooling and heating.

Smaller modular combustion units, capable of handling 25 to 300 tons per day use different burning technologies. They are popular with the military, for heating college buildings, and in New England and other parts of the country where steam customers exist.

But for Morris County, which produces 1,000 tons of waste per day, and may generate 1,200 per day by 1992, Gallagher considers the smaller unit less than optimal.

Other questions concern private versus public ownership of an incinerator. The private sector can do the job more cheaply than a government agency because a private owner would be eligible for investment tax credits, while a municipal authority would not. "We are looking for a full-service contractor to operate the facility for 25 years," Gallagher said.

An energy customer is essential to the successful operation of an incinerator, and at present there is one prime customer, Jersey Central Power and Light. While there may be others in the future, Gallagher says the power company, as a guaranteed customer, would save time and money.

In summary, Gallagher said that the key to solid waste disposal is volume reduction, best achieved by burning, and that recycling of glass, paper and aluminum should continue, as it increases the heat content of the waste stream.

Educational Materials

★ A new publication (November 1, 1982) entitled *Worms Eat My Garbage* by Mary Appelhof is now available. This 110-page paperback provides complete instructions on how to set up and maintain a home system which uses earthworms to recycle organic kitchen waste to produce plant fertilizer and fishing worms.

Worms Eat My Garbage will be of interest to gardeners, worm growers, recyclers, and teachers.

Among those who will benefit from reading this book are:

- the householder who wants to save energy by refraining from the use of an electric garbage disposal;
- the would-be worm grower;
- the gardener who wants a steady source of nutrient-rich, non-polluting material for garden and houseplants;
- the high school student in search of a science project;
- the elementary school teacher who would make good use of a worm bin in the classroom to accept the leftovers from 26 lunches; and,
- the librarian who has been waiting 20 years to offer readers an up-to-date book on how to raise earthworms.

Information on obtaining *Worms Eat My Garbage* is available from the County Recycling Coordinator.

★ A classroom papermaking demonstration guide is available from the County Solid Waste Department.

Prepared by Franklin Associates Ltd. for the Kansas City Department of Public Works, the easy-to-do instructions may be used for a classroom demonstration or a science project. For your copy, call Lauren Roman at 285-6183.

Tonnage Grants...Cont'd. From Page 1 reported. According to the N.J. Recycling Act, this amount shall not exceed \$25 per ton.

A total of 27,724.84 tons of material were reported recycled by Morris County municipalities. This figure represents recycling conducted by volunteer organizations, municipal programs, businesses and industries. The recycled materials which comprise this figure were: 11,245.53 tons of newspaper, office paper and cardboard; 852.65 tons of glass; and 15,626.66 tons of aluminum, metals, yard wastes, scrap, tires, food wastes and motor oil. The average documented recycling rate for Morris County municipalities was 990.17 tons.

Money rebated to municipal applicants may be used for any municipal purpose. However, the Act has a built-in incentive program to encourage municipalities to reinvest money in recycling. In 1983, in order to receive a rebate or Recycling Grant, a municipality must report recycling of more than one material, and show an increase in tonnage of each material recycled in 1982. If in 1982 a municipality recycled 100 tons of newsprint, for example, and in 1983 recycles 150 tons of newsprint and 10 tons of aluminum, it will be eligible for credit for 50 tons of newsprint and 10 tons of aluminum.

All municipalities are encouraged to investigate local businesses and industries to track down recycling activities. Volunteer groups are encouraged to supply their municipality with records that will lead to a rebate.

Impl. Grants...Cont'd. From Page 1

purchase equipment and expand existing programs. Of the three volunteer group applicants, the Junior Women's Club of Mountain Lakes will receive funding for recycling, education, and Morristown Beautiful for litter abatement.

The County Solid Waste Department also made application and was awarded funds for maintenance of a County Recycling Coordinator, and for educational costs incurred in the printing of this newsletter.

Because only 25% of the Recycling Fund is designated for Implementation Grants, only \$740,000 were available at the end of 1982. Over \$3,000,000 in grant requests competed for funding benefits. Morris County alone submitted grant requests totaling half of the entire amount of the grant fund. As a result, many municipalities throughout the State had to be denied grants.

We look optimistically toward the coming years for increased recycling in Morris County municipalities as a result of the grant program. The experience incurred in the first year of the Recycling Act will surely improve the viability of State, County and municipal projects.

Mailing List

If you would like to be on our newsletter mailing list, call the County Planning Board at 285-6183.

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Rockaway Township Students Get Grant

The Rockaway Township Health Department and Public Schools have been selected as recipients of the 1982 Eastern Community improvement Youth Grant for the development of a recycling education program.

The \$250 grant, awarded by the Metropolitan Life Insurance Company, will be used to involve the Township's 7th and 8th grade students in a Student Recycling Committee (SRC). The SRC, under the supervision of the Township Departments of Health and Education, members of the Environmental Commission and a student supervisor, will plan and implement a recycling promotion campaign for youths.

Recycling Course Set

From May 4 through June 15 the New Jersey Office of Recycling will conduct a course entitled, "Materials Recycling: A Dollars and Sense Course." The course will be held at Brookdale Community College in Monmouth County for seven consecutive Wednesday evenings from 7 p.m. to 9 p.m.

Topics to be covered throughout the course include development and expansion of recycling programs, materials, success stories, and collection and processing options.



SOLID WASTE STAFF

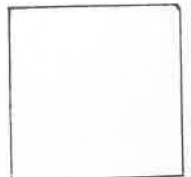
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