

VILLAGE OF LOMBARD
REQUEST FOR BOARD OF TRUSTEES ACTION
For Inclusion on Board Agenda

_____ Resolution or Ordinance (Blue) _____ Waiver of First Requested
 X Recommendations of Boards, Commissions & Committees (Green)
_____ Other Business (Pink)

TO: PRESIDENT AND BOARD OF TRUSTEES

FROM: David A. Hulseberg, Village Manager

DATE: December 14, 2009 B of T January 7, 2010

SUBJECT: Recycling Education Grant

SUBMITTED BY: David P. Gorman, Assistant Director of Public Works *DEL*

BACKGROUND/POLICY IMPLICATIONS:

A recommendation from the Environmental Concerns Committee to approve a Recycling Education Grant for Montini High School in the amount of \$2,500.00.

FISCAL IMPACT/FUNDING SOURCE:

\$2,500.00 Community Recycling Fund 2790.777500

Review (as necessary):

Village Attorney X _____ Date _____

Finance Director X _____ Date _____

Village Manager X _____ Date _____

NOTE: All materials must be submitted to and approved by the Village Manager's Office by 12:00 noon, Wednesday, prior to the Agenda Distribution.



MEMORANDUM

TO: David A. Hulseberg, Village Manager

THROUGH: Carl S. Goldsmith, Director of Public Works *cy*

FROM: David P. Gorman, Assistant Director of Public Works *DPG*

DATE: December 14, 2009

SUBJECT: **Environmental Concerns Committee Recommendation for a Recycling Education Grant**

The Environmental Concerns Committee meeting recommended approval of a Recycling Education Grant application at their November 24, 2009 meeting. The request is as follows:

Montini High School \$2,500.00
For the purchase of vermicomposting units.

Please present this item for consideration by the Board of Trustees at their next meeting.

DG:dg

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revised 4/07



Village of Lombard Recycling Education Grant Program APPLICATION

PART 1 - GENERAL INFORMATION

Name of institution: MONTINI CATHOLIC HIGH SCHOOL
Address: 19-WEST-070 16th STREET LOMBARD, IL 60148-4797
Name and title of person to contact: BROTHER THOMAS HARDING, FSC
Number of students: 702 Number of students residing in incorporated Lombard: 175 (estimate)

PART 2 - AMOUNT REQUESTED & PROJECT DESCRIPTION

- a. Amount of grant request: \$ 2,500
- b. How many students will the grant funds help to educate? roughly two-thirds the student-
population
- c. Has the institution received prior grant money from the Village of Lombard? YES NO
- d. Provide a clear, concise description of the proposed project. Indicate how the project promotes enthusiasm to learn more about the environment, how the project fits into your organizations curriculum and how it will enhance environmental education or outreach.
- e. Provide detailed descriptions of items requested and costs. If the grant involves commodity purchases, provide three quotes including vendor name and prices. If recycled products are being purchased, list what percentage of product is made from recycled materials.

PART 3 - CURRENT PROGRAM (RECYCLING, ENVIRONMENT, CONSERVATION)

- a. Has your institution earned the Earth Flag? YES NO
(for information on earning the Earth Flag visit www.bookrescue.org/scarce/default.asp?page=Searchflag)
 - b. Does your institution have an environmental club? YES NO
 - c. How many students participate in recycling/environmental/conservation efforts? about three-fourth
of the student bo
 - d. How many students are being taught about recycling/environment/conservation? 100% overall-see
 - e. How are environmental programs emphasized in your classes? see attached atta
-
- f. In your typed report, explain your current recycling/environmental/conservation program and past accomplishments. How long have you had this program? What does the institution do for the environment other than recycling? How has the program helped people in the Village of Lombard?
see attached report

Office use only

Approved by: _____ Date: _____
Chairperson, Environmental Concerns Committee

Part 2: Amount Requested and Project Description

d. This grant requests the purchase of vermicomposting units and accessories to help educate our students about the proper ways of recycling organic waste generated at Montini Catholic High School-Lombard IL.

“Each year, the typical American family throws out 2,460 pounds of paper, 540 pounds of metals, 480 pounds of glass and 480 pounds of food scraps.

At Montini, each classroom/office already has a recycling bin in order to offset the ever increasing amount of paper sent to our landfills. Our students, faculty and staff help to recycle all types of paper products. We would like to take recycling one step further and implement a vermicomposting project. We will begin this project in all of the science classes and hopefully extend to other academic departments within the school.

Hot composting vs. Vermicomposting:

Hot composting is the type of composting with which most people are familiar. This type of composting typically follows the ‘batch’ model - that is to say- all the materials for the compost are piled up at one time into a large heap and no more is added. Microorganisms would then break down the organic matter within the compost heap. Unfortunately, there are many disadvantages to using this method for educational purposes. A large amount of room is required and the hot compost is only suitable for outdoor maintenance. Additionally, there are offensive odors, such as ammonia, associated with the hot composting process.

Vermicomposting is somewhat similar to hot composting in that it involves the breakdown of organic wastes. It involves, however, the joint action of earthworms and microorganisms as opposed to sole use of microorganisms. Vermicomposting may be kept outdoors, but can be, and for our purposes would be kept in the classroom due to the absence of offensive odors and its compact size.

These vermicomposting units will help the students of Montini Catholic High School in their education as well as aiding the Montini community at large in the following ways:

1. They can be utilized for an added lesson to each science discipline including biology, earth science, environmental science, chemistry and physics. Students will learn the recycling process of organic waste, worm anatomy and behavior, chemical aspects such as pH, acidity and basicity, and the worm's niche within the food web to name just a few.
2. They can be used year round, as an educational tool, in the classroom
3. They reduce the amount of organic waste, not just paper waste sent to landfills.
4. They create “Liquid Feed” which is an organic fertilizer for house plants, outdoor plants and gardens.
5. The worms will be thought of as “pets” in the classroom as the students care for them.
6. Vermicomposting will create a sense of accomplishment for doing something for the community.

Our goal is to educate all Montini students about the importance of recycling all materials. Hopefully, our students will want to begin a vermicomposting system in their own homes. This program will help add to the well-rounded education of our students at Montini Catholic High School.

The attached documents detail information regarding three vendors, their pricing, and ordering information.

We require 15-20 units at a cost of \$155.00 each. This includes the vermicomposting unit, worms, and bedding for each unit.

Part 3: Current Program (Recycling, Environment, Conservation)

e. & f. The environmental and conservation program emphasis begins at the freshman level and continues through senior year. Most freshmen are enrolled in an Environmental Science class. This course is the introduction to science at Montini Catholic High School. It is an overview of all the sciences emphasizing the interrelationship of organisms and their environment. The honors students at the freshman level, and all sophomores are enrolled in biology. This course examines environmental issues first at the cellular level then moves on to plant and animal structure and function. In chemistry, lessons on acid rain, water and air pollution are a part of the curriculum. Energy production is included in both the Chemistry and Physics courses. Earth Science examines the production of soil, as well as weather changes on a global scale. Further, several of the classes have internet projects that incorporate ideas for improvements in environmental areas, such as pollution reduction, recycling and energy alternatives. The use of recycling bins in all classrooms/offices, along with teacher encouragement and support, aids the Science Club which regularly collects the bins.

Currently, the Science Club has members from all four academic classes. Members of the Science Club are responsible for collecting recycling bins from every classroom and they also work to beautify the school grounds. Their landscaping work is located near the entrance of the school grounds and is passed by the students each day as they enter the school. Yearly, members of the student body join others in the Lombard area to work at the Lombard Recycling Extravaganza, and have been involved in the Nike Shoe Collection for recycling. Annually, there is a recycling competition among the grade levels to recycle pop tabs that are donated to the Ronald McDonald House. At the end of the school year, students collect used books and workbooks. The used books are sent to the missions or are sent to a recycling plant.

The real impact, though, comes from the message sent to all students, faculty and their families and that is the importance of reducing our wastes and reusing materials, instead of just throwing them into a landfill. Since the school uses the same recycling bins that the Village of Lombard uses, it thereby helps reinforce the message. Each week, residents of Lombard put out their recycling bins and the idea of recycling isn't just "the school's thing", but becomes the Right Thing. While the school has recycled since the 1980's, the Science Club was organized in 1990.

Additionally, Montini Catholic has its own power plant on-site for the production of electricity, which is used to power a portion of the school. This plant is a Total Energy Plant, and rated "green" by State of Illinois standards even today! Built in the mid-1960's the power plant utilizes natural gas to produce electricity. Natural gas is the most abundant energy resource in the United States. Most recently, the additional construction on the west-side and the north-side of the campus added eight new lecture classrooms, six new science demonstration labs/classrooms, a new 50,000 sq ft field house, a library, with a learning resource center and all new administrative and guidance/student services office-suites to the school. These additions, and the school's enhancement of computer technology, audio-visual technology and Smart Boards have all together resulted in the use of Commonwealth Edison to supplement the power plant installation.

Finally, the Environmental Science classes have spent several days in the field in order to analyze pond water from the surrounding area flood detention ponds nearby the campus. The Park District pond (Knolls Park) along 16th Street, has been found to be suitable for aquatic and other wildlife.

090676



MONTINI CATHOLIC HIGH SCHOOL

19 W 070 16th Street—Lombard, Illinois 60148-4797
Telephone 630.627.6930—Fax 630.627.6965—info@montini.org

November 10, 2009

VILLAGE OF LOMBARD
Office of David Gorman, PE
225 East Wilson Avenue
Lombard, IL 60148-3931

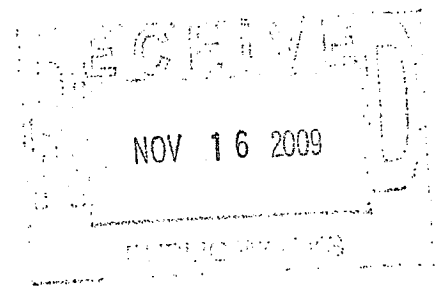
Dear Mr. Gorman & Members of the Lombard Recycling Grant Committee:

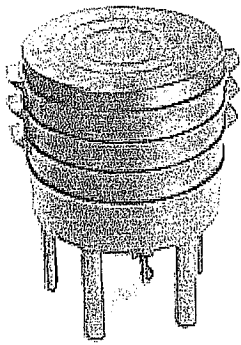
As you prepare for the November 24th Meeting of the Grant Committee, I would like to address the three questions and concerns raised by the Committee in response to our Grant Request for the Fall Grant Cycle. I want the Committee members to visualize how the Vermicomposting Bins will be utilized and how the compost resulting from their introduction in the science program will be utilized.

1. Between fifteen and twenty units will be needed because we do have seven instructors in our Science Education Department. Each instructor has six classes with three preparations for each days' lessons. This will require one unit per classroom per preparation per the instructor. In other words, each Science Laboratory/Classroom would have two-to-three units, one for each type of class assigned to that instructor. This will amount to between fifteen and twenty units overall.
2. The placement of these Vermicomposting Units will be in each of the six Science Laboratory/Classrooms and then integrated into the specific science class curriculum throughout the year.
3. The compost as product of these Vermicomposting Units will be utilized in a variety of ways: 1. Utilized in the Montini Garden located in front of the school's newly constructed Academic Center; 2. Presented to other instructors and staff members of Montini Catholic High School for their own plants and gardens at their residences; 3. A give-away at Open House programs and programs of any academic nature hosted at Montini as a kind of premium or gift for parents' and families' gardens. There will undoubtedly be other uses for the compost and, be assured, it will not go to the so-called "waste-cycle" !

It is my hope this set of responses will satisfactorily address the matters raised by the Committee at their first meeting of October 27th, at which time, they together initially reviewed the Grant Request presented by Montini Catholic High School and those from other agencies in the Grant Area of the Village. Please do know of my own appreciation for the time and service of the Committee members to the goals of this worthy Village program. We are truly grateful! I am, truly yours,

Bro. Thomas Harding, FSC
Brother Thomas Harding, FSC
Assistant to the President





Finally... A Can-O-Worms Worth Opening!

The Can-O-Worms is an odorless, user-friendly worm composting system that allows anyone to participate in recycling and garden enrichment through composting. Whether you live in an apartment or have a backyard, you can provide organic fertilizer for indoor plants and your garden. Stacked ring-upon-ring, each section of this worm condo can house thousands of worms for composting year round. Each unit features a tap drain on the lowest ring to collect compost tea directly from the source. Harvesting of castings (worm manure) is easy because the worms eat their way up, leaving their rich castings behind which are readily removed, free of worms. The **Can-O-Worms stands on five sturdy legs, approximately 29" tall x 20" wide.** Made from durable 100% recycled plastic to give many years of vermicomposting success. Worms can be purchased separately. Be sure to use only special composting redworms for best composting results (you may order these below).

Can-O-Worms Worm Composter \$119.95 \$104.95 On Sale!

1  

1-lb of Redworms for Worm Compost \$29.95

1  

2-lbs of Redworms for Worm Compost \$59.90

1  

Box of 6 Organic Coconut Coir Worm Bedding Blocks \$34.95

1  

Can-O-Worms Extra/Replacement Working Tray \$44.95

1  

Can-O-Worms Replacement Spigot \$15.95

1  

Can-O-Worms Replacement Lid \$34.95

1  

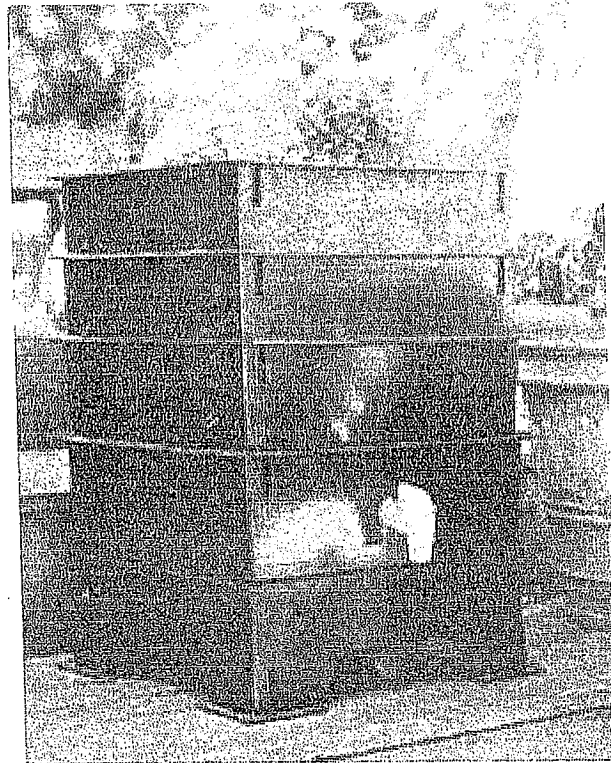
Can-O-Worms Replacement Collector (bottom) Tray \$44.95

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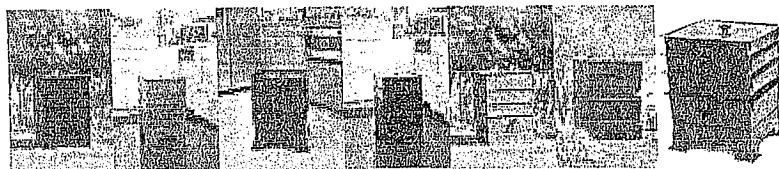
Can-O-Worms Replacement Legs (5 Legs Included) \$44.95

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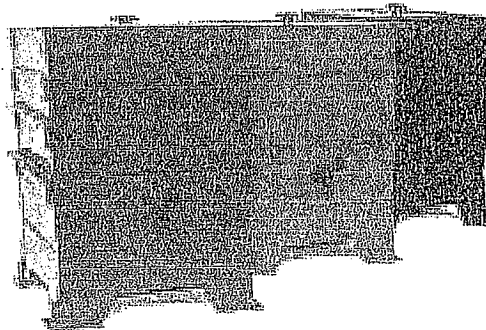
The Worm Factory



Worm composting is an incredibly efficient way to convert kitchen scraps into nutrient-rich compost for your garden. Most 'Master Gardeners' consider worm castings to be the very best compost available. Your plants will thrive with this all-natural compost.

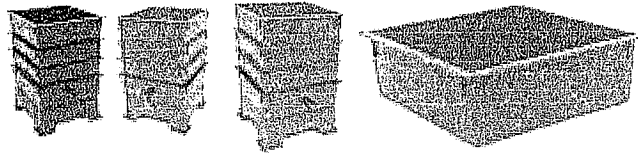


Click on photos to enlarge



Composting made easy! Sorting out the undigested scraps can be a messy, inconvenient chore with ordinary worm composters. The Worm Factory automatically separates food scraps from

finished compost. Simply fill the bottom tray with red wiggler worms, bedding and food (i.e. newspaper, junk mail, vegetable trimmings, fruit peels, egg shells, coffee grounds, paper, cardboard, etc). As the worms finish digesting, they will migrate upward into the tray above, leaving rich castings behind. The concentrated liquid created from the worm castings, also known as worm tea, can be effortlessly drained as liquid fertilizer from the spigot at the bottom of The Worm Factory. It couldn't be easier or cleaner. No mess. No unpleasant odors. The Worm Factory can be placed indoors or outdoors for home owners and apartment dwellers alike.



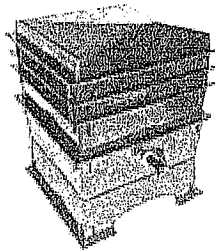
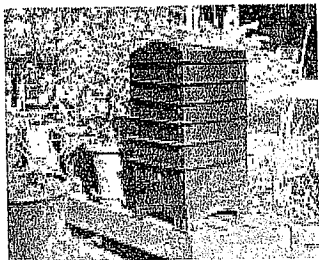
Worm Factory 3 Tray System

An army of worms working just for you!

In full operation, the Worm Factory houses 10,000 to 12,000 worms, consumes 5 to 8 pounds of food a week, allowing you to harvest a full tray of nutrient rich castings every month. Measures 16" x 16" x 21" for a 3 tray system, 3.5" higher for each tray added. Weighs approx. 15 lbs with 3 trays.

Worm Factory Complete 5 Tray System - \$109.95

The Great Patent Pending GUSANITO Worm Bin Farm with weather resistant ROOF. Works Greats Indoors or outdoors.



With our many years of experience, we created this design because the other bins did not have a Weather resistant ROOF with ventilation. Worms thrive in dry beddings. This new Roof will also fit on the thousands of USA made Worms_Wrangler Factories that we have sold over the years. This Gusanito Brand and Patent Pending Design is sold exclusively by Wormswrangler.com and Sandalwood Enterprises (our wholesale company). Natural convection VENTED ROOF. Recycled plastic. Made in the USA. This is the ORIGINAL Gusanito Worm Bin Farm design.

BEWARE of the falsehoods that copycat worm farms try and tell about poor ventilation. Those copycats have a cheap flat sheet of plastic laying directly on the worms blocking natural convection airflow. Our great design has the best proven airflow system for the worms health and well being. Our system works great indoors or outside.

All of our staff have our worm bins at their homes to learn to educate our customers on how to use "GUSANITO Brand Worm Bin Farm. ASK OTHER SELLERS IF THEY HAVE AND USE A Gusanito WORM BIN (with roof) AT THEIR HOME.



Gusanito Worm Composter Bin 5 Tray Garden Worm Bin Gr

5 Tray: \$103.95 + \$20.95 S&H

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