REUSABLE SCHOOL NEWS
CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD
SPRING 1996

Worm Workshops Wiggling Into Your Region Soon

Many schools throughout California are using worm composting as an educational tool for teaching students about a broad range of subjects. The California Integrated Waste Management Board (CIWMB) is sponsoring a statewide series of workshops on school-based worm composting programs. Worm composting is becoming more and more popular with schools. The workshops will be a good source for lots of valuable information.

These workshops will be perfect for teachers and school staff interested in establishing a worm composting program. Local government representatives interested in learning more about vermicomposting in order to support local school programs are invited as well. Workshop participants will receive a worm bin and a new guide entitled "How to Worm Compost in Your School." Speakers will include teachers and experienced worm composters who will present their ideas on ways to introduce worm composting into the classroom. Information on educational tools, case studies, and how to obtain program financing will also be presented.

The workshops will take place in April and May. the schedule includes:

April 29 - Riverside

April 30 - San Diego

May 1 - Los Angeles

May 2 - San Luis Obispo

May 3 - Fresno

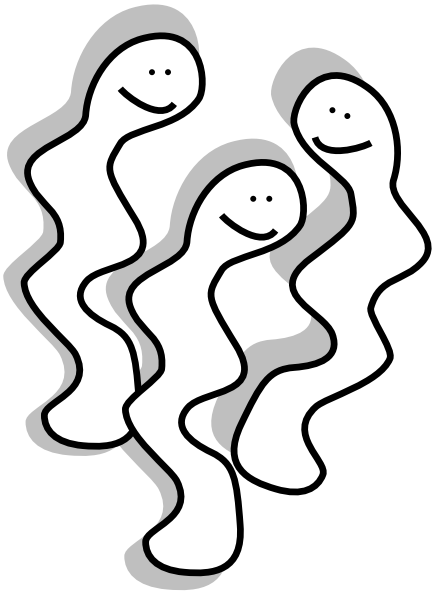
May 7 - Sacramento

May 8 - Chico

May 9 - Eureka

May 10 - San Francisco

An informational flyer with a registration form will be mailed out in March, so watch your mailbox and share it with a colleague.



Reusable School News (the News) is published by the California Integrated Waste Management Board (CIWMB), the agency responsible for overseeing the development and implementation of a statewide integrated waste management program. CIWMB provides technical assistance and resource information to school districts in developing waste prevention and recycling programs. The News highlights case studies showcasing the economic and environmental benefits of establishing a district-wide waste reduction program. It is being sent to local governments, school districts, schools and other interested parties. For more information, call the Public Education Section at (916) 255-2385.

Worms Teaching In Cupertino

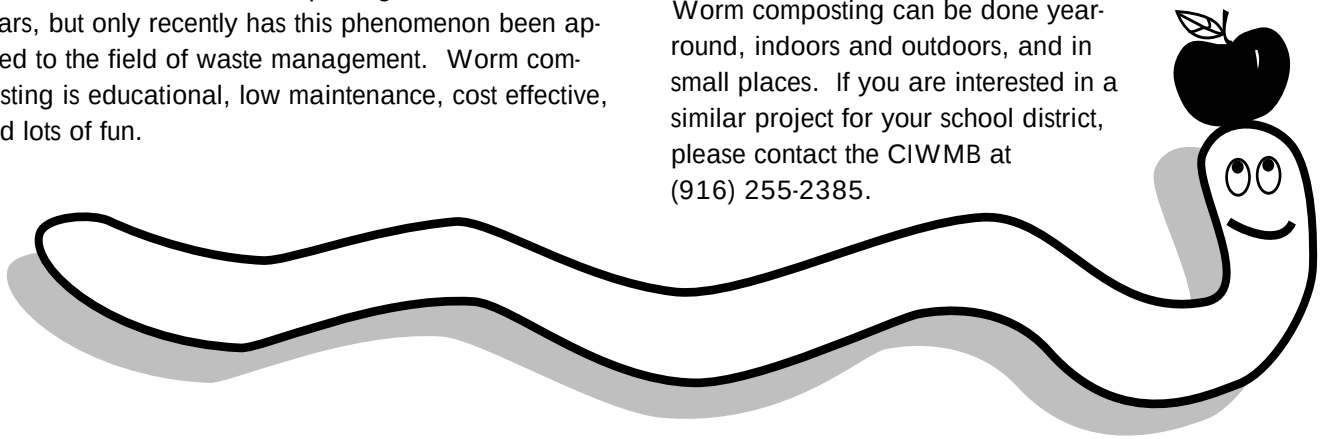
Worm composting will now be a part of Cupertino Unified School District's (CUSD) second-grade life sciences curriculum. Designed to be fun, this program will also give the students hands-on learning experience about reducing waste and preserving natural resources. Each school in the district will be participating.

Worm composting, or vermicomposting, is using worms and microorganisms to convert organic waste, such as bread, coffee grounds, vegetable and fruit peelings into a rich fertilizer—ready to use in the garden! Worms have been composting for millions of years, but only recently has this phenomenon been applied to the field of waste management. Worm composting is educational, low maintenance, cost effective, and lots of fun.

This program, made possible by joint partnerships between CUSD, the City of Cupertino, and the California Integrated Waste Management Board, began with a teacher training session. The teachers learned how to build and maintain worm bins and then, in turn, taught their students. The students prepared their bins with a bedding of shredded, moist newspaper and a handful or two of soil. This bedding provides microorganisms needed for the worms to better digest food. The students then added their worms (red wrigglers) and buried food scraps in the bedding.

Students are also involved in maintaining the bins. They are assigned certain tasks such as weighing the food, measuring the temperature changes, and calculating the amount of compost produced. After waiting a few months, the students harvest the compost and make new bedding.

Worm composting can be done year-round, indoors and outdoors, and in small places. If you are interested in a similar project for your school district, please contact the CIWMB at (916) 255-2385.



Los Angeles Unified is Closing the Loop

The Los Angeles Unified School District (LAUSD) is the nation's first school district to buy food trays made with recycled content. With over 800 sites, over 65,000 school children and 56,000 employees, LAUSD coordinates perhaps the largest school recycling program in the country. The district's decision to recycle and to buy recycled-content food trays is an important step toward improving recycling markets for polystyrene. With improving markets comes more opportunity for recycling and a reduction of solid waste going to the landfill.

The food tray contains 25 percent recycled polystyrene. "What makes (LAUSD) significant is that it represents the purchase of the first school lunch tray with recycled, postconsumer material. This is the first time that the Food and Drug Administration has given its consent to using postconsumer material in food-contact foam packaging," explains Larry Rembold, President and CEO of Dolco Packaging Corporation, manufacturer and supplier of the food trays. The recycled content comes from used food service products recycled from restaurants and school cafeterias. At LAUSD, the material is collected and transported to the National Polystyrene Recycling Company's (NPRC) processing plant in Corona, CA. Processing includes washing, drying, and melting. Molten polystyrene is then extruded into pellets which NPRC sells to plastic manufacturers as a raw material for new products.

(Los Angeles continued)

Besides polystyrene food trays and utensils, LAUSD recycles any material for which there is a market. Over one million pounds of polystyrene was recycled in 1995, a significant portion of the more than 10,000 tons of total materials recycled for that same year.

Phil Fusco, NPRC Sourcing Coordinator, says that his company would like to see more school districts recycling polystyrene food trays. NPRC operates the Corona processing plant and is looking for additional sources of used polystyrene, and is available to help your school district start a polystyrene recycling program.
For more information on this effort, call any of the contacts below.

Warren Lund, Director of Food Services, LAUSD (213) 633-7064

Phil Fusco, Sourcing Director, NPRC (909) 736-7046

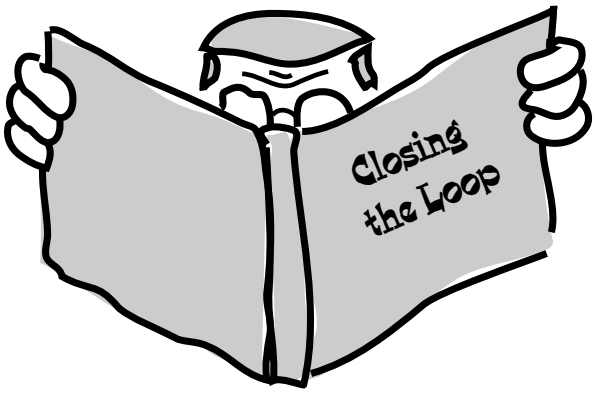
Larry Rembold, President, Dolco Packaging Corp. (818) 752-0131

Hey, Teachers!!!

Don't forget our curriculum *Closing the Loop*

You can receive a copy of *Closing the Loop* at no cost by attending one of our training workshops or inviting us to your school or district's inservice day. There is no charge for our workshops and we would be happy to train teachers using this 40 lesson hands-on curriculum. *Closing the Loop* is also available in Spanish.

If you are interested in holding a *Closing the Loop* workshop or would like to be added to our mailing list to receive notification of upcoming workshops, please contact the CIWMB Public Education Assistance Section at (916) 255-2385. If you are unable to attend a workshop, you can purchase *Closing the Loop* for $17.50. Please send checks along with your name and address to California Integrated Waste Management Board, School Section, 8800 Cal Center Drive, Sacramento, CA 95826.



Sierra Elementary Takes Recycling One Step at a Time

Placerville's Sierra Elementary School has come a long way in developing a comprehensive school recycling program. Since the program's inception three years ago, this K-5 school has built a model recycling program that recycles aluminum, glass, yard waste, food waste, and even leftover milk! Approximately 450 students and 40 teachers work together at Sierra to effect this successful program that has reduced the waste generated at their school by 50 percent. How did they make this happen? By working cooperatively, networking where possible, and by taking recycling one step at a time.

The first step was to approach the school board to receive support for their recycling efforts and to get authorization for the school to retain revenues saved from avoided disposal fees. Since the school's recycling efforts would result in reduced waste to be hauled to the landfill, the school should be able to keep the dollars saved to use for other education-related purchases and activities. This form of revenue generation works as an incentive for schools to continue recycling. Sierra Elementary's recycling program has reduced their waste disposal from three yards per day down to 1/2 yard per day.

With this success in hand, Sierra decided to take additional steps to reduce waste. By purchasing a commercial chipper, they now chip and compost all of their

(Sierra continued)

yard waste and no longer need to purchase deco-bark (for school flower gardens (another savings). In addition, milk cartons are recycled—a big savings—and all leftover milk is sent to duck and pig ranchers.
This practice not only results in avoiding food waste, it also prevents the milk cartons from turning sour, avoiding contamination of the cartons before recycling.

The final step towards a comprehensive program was worm composting (vermicomposting). Sierra is particularly proud of the unique worm bins they designed for recycling food and yard waste. These bins facilitate inward flow of oxygen, which shortens the time for waste decomposition and provides the free flow of air to the worms themselves. Not only does this form of composting further reduce waste disposal, it also helps make money since Sierra is now selling some of the worms from these bins.

Recycling is most effective when it is a phased-in process. There is no need to employ all strategies at one time; it is best implemented as Sierra Elementary has done—a comprehensive effort instituted one step at a time.

For more information, or to receive Sierra Elementary's monthly newsletter, call T. Booloot ian or J. Brabrook at (916) 622-0814.

CIWMB Enters the Information Superhighway

Have you ever needed information or resource materials on a waste management or resource conservation topic? Well, the CIWMB has now made it easier to access these resources by linking up with the World Wide Web (WWW). Just opened for business, the CIWMB Home Page offers a one-stop shop for access to information on a variety of topics ranging from waste prevention strategies to waste management economics, composting, and waste disposal. By being online, anyone with WWW access can instantaneously view text and graphics that can be downloaded, copied, or saved. One of the most resourceful sites is the CIWMB Info Exchange which contains over 1500 samples of brochures, copies of reports, articles, clip art, and more on topics relating to waste prevention.

Coming soon will be a hypertext button specifically for the CIWMB Schools program. Resources and information regarding program assistance, education materials, and teacher workshops can be accessed at this site. Not only will these resources help supplement

FYI...Other Interesting Web Sites for your perusal:

Energy Quest, California Energy Commission:
A compilation of energy related activities for students.
http://www.energy.ca.gov/energy/education/eduhome/html

California Environmental Resources Evaluation System (CERES):
Lists home pages of state environmental or departments and boards under the California Resources Agency.
http://www.ceres.ca.gov/

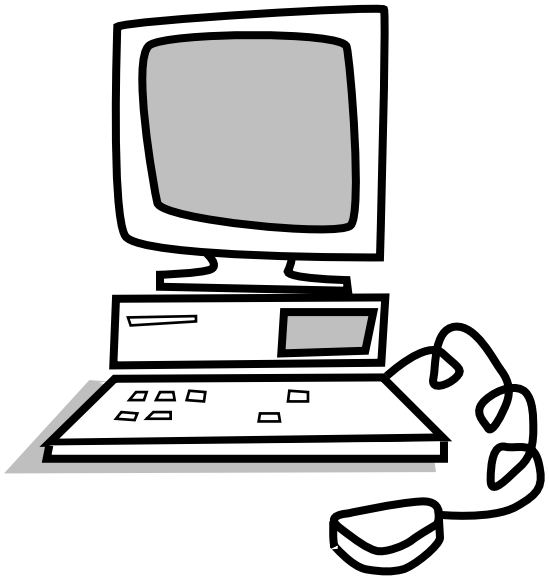
Envirolink:
A national clearinghouse for environmental or education materials.
http://www.envirolink.org/enviroed/

(Superhighway continued)

lessons found in the CIWMB's curriculum *Closing the Loop,* but accessing the information electronically will help prevent the generation of waste by eliminating hard copies of order forms and requested materials. The target date for completion of this Schools site is April 1996. But for now, please explore the existing information available at the CIWMB WWW site. CIWMB is constantly adding new information to its site and any comments or suggestions for improvement are welcomed.

You may access CIWMB's home page at the following address:

http://www.ciwmb.ca.gov/
(click on Waste Prevention World)



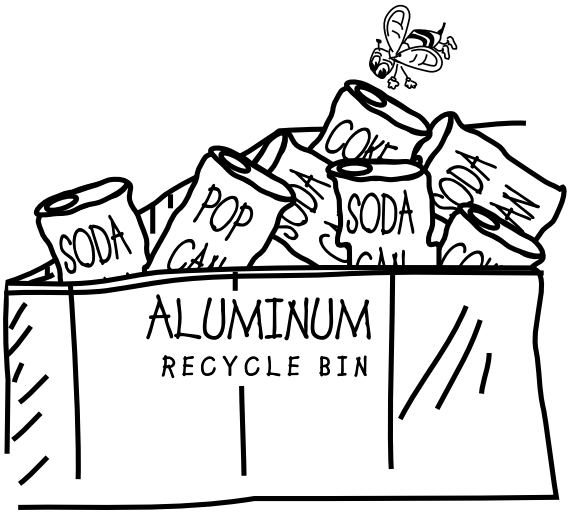
City Partners With Schools to Educate Community

The City of Los Angeles' Integrated Solid Waste Management Office (ISWMO) is working with local schools in a pilot program to offer recycling services for residents of multi-unit dwellings. Historically, people living in multi-unit dwellings, with five or more units, have not been able to participate in the city's curbside recycling program. The ISWMO wants to change this situation, since multi-unit dwellings make up 45 percent of all households in Los Angeles. Thus, participation in recycling programs will greatly reduce the amount of solid waste currently sent to landfills.

The pilot is focused on a two-square-mile area in the City of Los Angeles. In addition to providing recycling services to the residents of this area, the ISWMO initiated a partnership with local schools as a way of providing quality education services to the residents through the children in the community. Carmen Navarro, representing ISWMO, makes presentations at school faculty meetings to inform teachers about the pilot program and offers teachers an opportunity to receive curriculum materials and training in integrated waste management concepts.

Working with school administrators and representatives from the CIWMB, curriculum workshops have been conducted using the Closing the Loop curriculum. These workshops are activity-based and provide teachers with an opportunity to engage in a number of waste management activities and also interact with city and state waste management representatives to learn more about waste management programs. Ms. Navarro believes that through this partnership, students will acquire positive waste management practices and will take this knowledge and understanding home to their parents and other family members. The workshops are benefiting everyone: teachers receive training and a free high-quality curriculum, students develop an understanding of local waste management issues, and the city acquires a partner in providing education to the community about local waste management issues and services.

For more information, contact Carmen Navarro, City of Los Angeles, (213) 237-1444.



District Saves Money By Recycling

Atsuko Michael, Business Manager with Weaver School District in Merced County, was looking for ways to save her district some money. After reading a brochure on school recycling programs, she initiated a comprehensive district-wide recycling program and hoped that this effort could reduce waste disposal costs. The result has been not only reduced costs, but also a bonus of a little cash!

In this Merced County district program, all K-8 students take part in recycling and learn how important it is economically and environmentally. Ms. Michael explains, "this is not only saving cost and waste, we are also teaching children to recycle. We are educating and saving money at the same time."

USA Recycling, a company that buys reusable paper wastes, furnished the district with containers, collects the paper and pays the district any revenues that exceed the company's costs. Through this arrangement, the district reduced its collection fees by approximately $500 per month, and district officials hope to put the extra money toward buying more classroom supplies and instructional materials.

For more information, contact:

Bob Carry, USA Recycling (209) 722-3877

Jerry Lawrie, Integrated Waste Management Coordinator, Merced County (209) 385-7388

Save Money by Buying Remanufactured Laser Toner Cartridges

Did you know that laser toner cartridges (the part of your laser printer that prints the document) can be recycled and that purchasing recycled cartridges can save you money? Purchasing remanufactured laser toner cartridges (LTC) for most common makes of computer printers and fax machines can save you about $60 (66 percent) per cartridge compared to the cost of new ones. These "new," recycled LTCs produce clean, crisp printing, guaranteed quality performance, and more prints than a new LTC.

Most empty LTCs can be remanufactured. They are disassembled, cleaned, and inspected. Worn parts are replaced with quality components, they are refilled with quality toner and then carefully repackaged for shipment to the customer. If an LTC cannot be remanufactured (refilled) due to damage or some other reason, the plastics and metals that it contains can be recycled.

The State Department of General Services (DGS) recently awarded State of California Master Contract IS6-4004 for the purchase of recycled LTCs. The Service Agreement was competitively bid and meets all California State bidding requirements. The contract provides an easy way for State agencies, local governments, and schools to recycle spent LTCs and to save money by purchasing remanufactured cartridges.

For information on purchasing and recycling laser toner cartridges, or to obtain a Laser Printer Toner Cartridges User Guide, contact the State's contractor, Landmark Laser, at 1-800-404-5687.

Elk Grove Teacher Wins Recycling Award

Usually, teachers are recognized for help and guidance they provide to students. However, in Elk Grove, it is the students who helped the teacher win an award. Reynolds Aluminum Co. has named Janice Scheeler, a teacher at Joseph Kerr Middle School, 1995 "Recycler of the Year." Through Mrs. Scheeler's recycling program, students brought in aluminum cans and products that they could recycle for cash. Students would put on their "recycling" gloves, go through garbage cans on campus and fish out aluminum cans that would translate into money for classroom activities and outings. Given that the students are developmentally disabled, the recycling program has had an added importance for them.

"By teaching the students about recycling, I've been able to teach them many skills," says Scheeler. "They learn about responsibility and cooperation...also, by keeping an account of the money they've made and spent, they use real-life math skills..."

Reynolds pays schools for all aluminum they recycle. The company also pays bonuses to schools, adding as much as five cents per pound to what it normally pays the public for recycling aluminum.

For more information about the Reynolds school recycling program, call (800) 595-8550.

School District Waste Reduction Questionnaire

On April 1, 1996, the CIWMB's Public Diversion Assistance Section will mail a waste reduction questionnaire to all school districts. Data acquired through the questionnaires will be compiled into a directory of school district waste reduction programs and mailed to school districts in August 1996. The purpose of the questionnaire is threefold: (1) obtain baseline information regarding school district waste reduction programs, (2) determine how and where the CIWMB should assist school districts, and (3) provide school districts with a networking tool.

In order for the CIWMB to provide assistance to school districts, it is very important that this questionnaire be completed and returned. If you receive the questionnaire and you are not the person responsible for your school district's waste reduction program, please forward it to the appropriate person.

The waste reduction assistance program is now being implemented by the CIWMB's Public Diversion Assistance Section. Questions or requests for waste reduction information can be directed to this section at (916) 255-2385.

Environmental Education Summit to be Held in California

"Environmental Education for the Next Generation" is the theme set for the 25th Annual Conference of the North American Association for Environmental Education (NAAEE). Scheduled to be held between November 1-5, 1996 in the San Francisco Bay Area, the conference program will place special emphasis on professional development and training. In addition, an Environmental Education (EE) Summit will be held simultaneously, where participants will discuss the growth and maturation of environmental education as a field during the nearly 30 years since the term was coined. You can join the deliberations on the future of EE, discuss learner outcomes and standards for materials and other topics.

If you would like conference registration information, contact Janet Thoreen, NAAEE, PO Box 400, Troy, OH 45373 or phone (513) 676-2514. Scholarships will be available for California teachers who are actively involved in environmental education.

For more information, contact Kay Antunez, Dept. of Forestry and Fire Protection, (916) 653-7958.

The California Integrated Waste Management Board (CIWMB), as a recipient of federal and state funds, is an equal opportunity employer/program and is subject to Section 504 of the Rehabilitation Act and the Americans with Disabilities Act (ADA). CIWMB publications are available in an accessible formats upon request by calling the Public Affairs Office at (916) 255-2296.

Persons with hearing impairments can reach the CIWMB through the California Relay Service, 1-800-735-2929.

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