



Worms and Vermicomposting

by Glenn Dembroff

Composting with worms (vermicomposting) has gained a lot of interest in the last few years. Newsweek magazine recently published an article saying that "...having worms under the kitchen sink was the trendy thing to do." Worms have made it into plots of T.V. shows like E.R. and some sitcoms as well. Some of you have probably heard about growing worms for profit or know of someone who has, or is, growing worms.

Recycling waste into wonderful fertilizer called worm castings is a very "green" thing to do. Imagine, using worms to change "garbage into goodness"... Now it has become easier than ever with commercial worm composting bins such as the Can-O-Worms vermicomposting system.

Worm growing has been a commercial business for years. The industry started out for the fisherman but has since evolved for supplying worms to individuals who want to recycle their wastes to fertilizer. The booklet *Exploring Profits in Worm farming* is a good resource to bring you up to speed on both the history of growing worms as a commercial venture and the possibility of generating income in the venture.

For those of you who don't know the first thing about worms, there are 2 main categories that earthworms are placed in: earthmovers and composters. Most people think of night crawlers when they think of worms. Night crawlers are an earthmover worm. These worms are usually found by themselves, not in groups, and ingest soil to extract their nutrients. They are great for aerating soil.

Composting worms, such as the redworms, swarm onto organic matter and work as a group in turning the organic waste into vermicompost and worm castings. Worm castings have nutrients need by plants plus compounds to control plant pathogens. Castings are also coated allowing the nutrients to time release to your plants. Unlike chemical fertilizers, you cannot burn your plants by using too many castings. It's been said that worm castings are like caviar, you use as much as you can afford!

Even if you have no interest in raising worms for profits, vermicomposting is a beneficial activity to get involved with whether you are an individual homeowner, a teacher or student, or

even a business owner. It is because of this benefit that worm farms like the Happy D Ranch Worm Farm were started.

As you know, household kitchen waste can be disposed of in a wide variety of ways. Obviously, one option is to use your trash can and ultimately throw it in your local landfill. This option is undesirable for several reasons: 1) we are running out of landfill space, 2) precipitation and runoff through landfills creates a liquid called "leachate" which carries various contaminants from the landfill to other areas, and 3) several municipalities have enacted regulations mandating a reduction in the amount of waste going into landfills.

Another option used in getting rid of household kitchen waste is your kitchen garbage disposal which grinds the material for ultimate disposal through pipes to your local sewage treatment plant or septic system. As cities and suburbs continue to grow, these additions put an added demand on water treatment plants and can minimize the effectiveness of the sewage treatment.

The folks at the Happy D Ranch Worm Farm feel that a dramatic change can be made if we can divert waste from landfills and sewage treatment plants and educate homeowners to the benefits of utilizing castings and vermicompost. They feel that the best way to do this is through a decentralized process - namely bringing the whole process down to the individual and the individual dwelling. With the recent interest in being "eco-minded" and "green", the time may be right to get composting with worms, or vermicomposting, in many homes and businesses in the U.S. and around the world.

By promoting in-home vermicomposting and educating people about using worms to compost, we can make a difference. Let's look at how. As an example, let's take a city like Visalia, California. Visalia is a city of approximately 90,000 people. We will approximate that there are 30,000 domiciles in the town.

An average family may generate as little as 1 pound of kitchen waste per day. This doesn't sound like much, does it? But let's look at the numbers. We are talking about 30,000 pounds (15 tons!) per day or 5,475 tons per year! But let's say that we can only realistically assume that 5 to 10% of the homes will vermicompost. We are still talking about approximately 250 to 500 annual tons of waste diverted from landfills and sewage treatment facilities.

Let's look at it another way. Again, we'll use our family disposing of 1 pound of kitchen waste per day but this time with the garbage disposal. Assuming a use of 32 ounces of water to use the disposal and evacuate the piping, we have a water usage of 7,500 gallons of water per day or 2,700,000 gallons of water used per year. Even using the 5 to 10% vermicomposting targets we would still see a net savings of approximately 200,000 to 275,000 gallons of precious groundwater resources.

The above numbers illustrate what can be done if we successfully promote vermicomposting as a viable alternative for the disposal of these kitchen wastes. The Happy D Ranch Worm Farm is involved in selling the Can-O-Worms in-home vermicomposting system, as well as worms and teaching materials, to schools as a tool in educating the youth of today and leaders of tomorrow. They also sell to solid waste municipalities who distribute the Can-O-Worms systems to homeowners and provide training on its use. And lastly, they sell products and provide educational materials to the homeowner. Their business is 100% internet based (<http://www.happydranch.com>) and they ship to all 50 states in the U.S.

If you are a worm enthusiast or are a proponent of minimizing waste to landfills and saving precious groundwater resources, you need to ask yourself, "What am I doing to help?" If you are not vermicomposting in your home right now - this is the time to start. The time is now for reaching that 5 to 10% goal for in-home vermicomposting. Only when we hit that goal (and go beyond) will we all know that we are doing our part.

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