DID YOU KNOW……. EARTHWORMS

Earthworms can produce more compost, in a shorter time, than any other method. Worm castings (the odorless excrement of the earth worm) in the soil are five times as rich in available nitrogen, seven times as rich in available phosphorus, three times as rich in available magnesium, two times as rich in available carbon, one and one half times as rich in available calcium and eleven times as rich in available potassium as anything else in the upper six inches of soil. One thousand earthworms and their descendants, under ideal conditions, could convert approximately one ton of organic waste into high yield fertilizer in one year.

However, the importance of earthworms is not a very modern phenomenon. The Ancient Greeks considered the earthworm to have an important role in improving the quality of the soil. The Greek philosopher Aristotle (384 – 322 B.C.) referred to worms as "the intestines of the earth".

Did you know the ancient Egyptians were the first to recognize the beneficial status of the earthworm? Cleopatra (69 – 30 B.C.) recognized the earthworms' contribution to Egyptian agriculture and declared them to be sacred. Removal of earthworms from Egypt was punishable by death. Egyptian farmers were not allowed to even touch an earthworm for fear of offending the god of fertility. A 1949 study by the USDA confirmed that the great fertility of the soil in the Nile valley was due in large part to the work of earthworms.

Charles Darwin (1809 –1882) studied earthworms for more than forty years and devoted an entire book (The Formation of Vegetable Mould through the Action of Worms) to the earthworm. Darwin said, "*It may be doubted that there are many other animals which have played so important a part in the history of the world as have these lowly organized creatures*."

Did you know that worms perform several functions in your garden soil?

1. Their tunneling activity helps aerate the soil. The channels they make as they move through the soil allow rain to enter the soil more rapidly, reduce water runoff, and reduce the potential for erosion. This also helps improve soil structure by creating a loose soil that is easily penetrated by roots.
2. Earthworms neutralize soil pH. Their castings are always closer to neutral than the original soil. The pH in acidic soils is lifted, and the pH in alkaline soils is reduced.

3. Earthworms gradually deepen the topsoil layer by burrowing into the sub-soil and translocating fine mineral particles to the surface in the form of castings.
4. Earthworms solve waste problems by composting organic matter. Composting with worms occurs four times faster than normal composting.
5. High earthworm populations contribute to biological pest control as soils with earthworms has been shown to have far fewer parasitic nematodes than soil without earthworms. Many other soil borne diseases also appear to be reduced.

WORM FACTS

SMALLEST
Less than an inch

LARGEST
22 Foot found in South Africa

An earthworm has a brain, five hearts, and "breathes" through its skin

An earthworm produces its own weight in casts everyday

There are over 1 million earthworms in one acre of soil

Earthworms can burrow as deep as fifteen feet

Earthworms are 82% protein and are a food source for many people around the world

Eating earthworms can reduce cholesterol, as the basic essential oil of earthworms is Omega 3

Earthworm castings are a sterile, odorless means to condition your soil and an organic and natural way to provide your plants with the nutrients they need, when they need them. Scientists have shown that castings work extremely well in promoting lush plant growth, but they are not exactly sure why they work as well as they do. It just goes to show that Mother Nature knows best.

With their mixing, digging, burrowing, fertilizing, and humus-making activities, earthworms have an immense impact on the soil, its texture, its fertility, and its ability to support everything that lives in or on it, especially plants that form the basis of our food supply. But worms must be fed as they proliferate in direct proportion to the amount of organic matter incorporated into the soil. So what do earthworms eat?

Earthworms eat dirt! The earthworm is specially adapted for eating and digesting decaying leaves and other organic material in the soil. Animal manures are an important food source for earthworms. They eat living organisms such as nematodes, protozoans, bacteria, and fungi in soil. Worms will also feed on the decomposing remains of other animals .

Did you know that you can create your own worm farm?

For more information, visit http://www.deq.state.la.us/assistance/recycling/school/wormfarm.htm.