

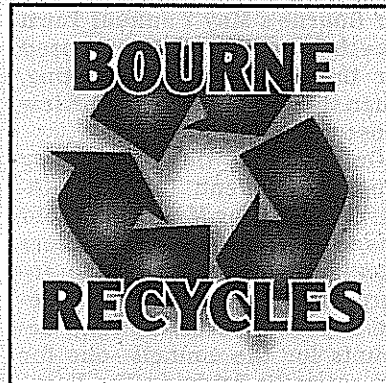
Composting: A Biological Breakdown

By THE BOURNE RECYCLING COMMITTEE

By composting, you win by turning your kitchen scraps and yard waste into a great fertilizer. You win because that fertilizer is free. And the planet wins by keeping that organic waste out of the landfill where it decomposes anaerobically, releasing methane gas. The mulch resulting from composting is truly amazing. Not only does it help soil retain moisture, nutrients and porosity, but it adds organic matter and increases biodiversity of soil-dwelling organisms. A one-time application provides continuous release of nutrients that plants need in a form they can absorb for about a year. Mulch somehow imparts disease-resisting qualities to plants. Efforts to duplicate the beneficial effects of good mulch seem to elude us. Tilling, adding fertilizer, or using pesticides bring their own problems.

Composting is a biological breakdown of organic matter into a dark, soil-like material

called humus. In nature, it takes 1,000 years to produce one inch of humus, but we can produce it anywhere from a few months to a couple of years. You can do



as little or as much work as you wish. Actually, bacteria, molds, fungi, earthworms, and insects do most of the work. They need food, air, moisture and volume. You can speed up the process by using a bin, layering, chopping,

watering, aerating and using a 3:1 ratio of browns to greens. Browns (carbon rich) include fall leaves, straw, paper, cornstalks, while greens (nitrogen rich) include pesticide-free grass clippings, weeds (without seeds or runners), fruit and vegetables. Don't add meat, fat or oils, dairy products, or diseased plants. Further information can be found at the library or on the Internet, www.mass.gov/dep/recycle/composti.html.

MassDEP started a program of offering towns a chance to purchase composting bins inexpensively in 1993. Bourne joined in 1995. The bins are made from a minimum of 50 percent post-consumer recycled plastic processed in Massachusetts. An average household can compost 500 to 1,000 pounds of organic material per year. ISWM will be offering bins for sale for \$40. Meanwhile, a 34-gallon composter can be purchased at Job Lot for \$30 (originally \$49.99). 3/29/12