

AUGUST: INVERTEBRATES

The month of August contains the third and final installment of the Compost Connection's F-B-I trilogy series which will duly address Invertebrates and their role in the compost decomposition process. The June article covered Fungi, the July article addressed Bacteria, and Invertebrates will complete our Trilogy for components in the basic decomposition process.

There are hundreds of Invertebrates, but some common ones are: sowbugs (or pillbugs, roly polys), spiders, earthworms, snails, slugs, millipedes, and whiteworms, among others. These are the ones you can see with the naked eye, and are called **Primary Consumers**. When these are present in your compost pile, it indicates good bacterial activity and the temperature isn't too high to kill the healthy bacteria. These work together with fungi to create energy to decompose. Ants and flies add to the excitement and production of the early composition process.

These primary consumers are part of the "food chain" and are themselves devoured by others in the healthy compost pile such as: springtails, some types of mites, feather-winged beetles, nematodes, protozoa, rotifera, among others, and are called **Secondary Consumers**. As each decomposer dies, or excretes, more food is added to this complex web for other decomposers.

The next level of Invertebrates include: centipedes, predatory mites, rove beetles, formicidae ants, carabid beetles, among others, and are called **Tertiary Consumers** because they eat secondary consumers. Invertebrates tunneling through compost pile help with aeration which is essential for successful decomposition.

These Invertebrates work with Fungi and Bacteria along with "browns" (e.g. leaves, small branches, twigs, cardboard) and "greens" (e.g. food scraps, peelings, and grass clippings) as well as water and oxygen. These work together to create soil magic called **COMPOST**.

See the following Cornell University site for more compost information.
<http://compost.css.cornell.edu/invertebrates.html>