

Black Mayonnaise: How Raking Leaves Into Waterways Hurts Flounder In The Sound

By Elizabeth Craig

Residents and homeowners in the Norwalk River Watershed, especially those living along river or stream banks, continue to play an important role in keeping Norwalk harbor and the Sound healthy, so here is your friendly fall reminder not to dump leaves into the River or storm drains and wetlands. While this leaf litter is ‘natural,’ organic and biodegradable, in excessive amounts, as it decomposes, it uses up most of the dissolved oxygen in deeper water and makes the bottom water uninhabitable for fish and other animals. Leaves and yard waste blown into the river and wetlands form a black gooey paste known to boaters as “black mayonnaise.” When black mayonnaise forms and becomes thick enough, it destroys spawning areas of bottom dwelling (benthic) fish such as flounder. Unlike many fish that spend their time swimming, benthic fish are very dense and have negative buoyancy, which allows them to lie effortlessly on the ocean floor or bury themselves, like flounders and sole who can remain hidden in sand because of their flat body shape.

Leaf litter makes the best mulch. By removing nutrient rich leaves and other organic matter from your yard as ‘waste,’ you are losing a valuable commodity. Consider simple composting instead. This fall try putting your garden beds to sleep for the winter with a blanket of leaves. Clear out any blackened stems and foliage of annual flowers and vegetables to prevent the possibility of their harboring disease pathogens and insect eggs, and then layer your beds with leaves. You can also use a light layer of finely chopped leaves to fertilize your lawn. Leaf litter is known to gardeners as “Black Gold.” Used in your garden to enrich the soil, it is black gold, but dumped into the river, these same leaves settle on the harbor’s bottom and become the notorious ‘Black Mayonnaise,’ destroying important fish habitat.

In the garden, besides providing needed nutrients, leaf litter can regulate soil temperatures. Once the soil is frozen, mulch keeps the ground frozen, allowing you to avoid the destructive freeze and thaw cycle occurring recently in New England due to changing weather patterns. Healthy woodland soil is built from layers of dead leaves, and the beneficial insects



Photograph courtesy of NOAA

Fall leaves raked or blown into the Norwalk River settle on the floor of Norwalk Harbor forming “black mayonnaise,” which threatens the winter flounders’ spawning grounds.

that live there are the primary food for many warblers and thrushes. You can help make your garden a haven for birds by mulching your beds with leaves.

After blowing their leaves, many people will then head to the store to buy fertilizer to replace the nutrients they have just throw away, mulch to protect the plant roots they have just exposed, and hoses to water the plants that have dried out after exposure. By reducing or eliminating synthetic fertilizer use on your property, you can save money and also help improve water quality in our watershed since synthetic fertilizers tend to release nitrogen too quickly, and nitrogen run-off in heavy rains contaminates the River and Sound. If you have a landscaping company providing lawn and garden maintenance, be clear that they are not to dump leaves and yard debris into wetlands and waterways. Consider inviting your neighbors to join you in managing your adjoining properties.