

Oyamel Fir Trees and Milkweeds at Risk

By Kim Smith

“Man and his needs are filling up the world... Those needs are important, but there is also room for beauty, for the bounty of nature itself is one of the deep needs of mankind.”

~ Lady Bird Johnson

Growing in the misty, cool forests of the Transvolcanic Mountains of central Mexico, evergreen oyamel fir trees tower 50 meters overhead. Filtered light through thickly-needled drooping boughs creates interludes of spangled sunlight. The limbs emerge some distance up the trunk, allowing one to stand tall beneath the branches. So named *Abies religiosa* by the 19th-century German naturalist Alexander von Humboldt, oyamel fir forests reminded von Humboldt of Christian cathedrals and were once used by indigenous cultures for ceremonial purposes. At one time extending from the Gulf of Mexico to the Pacific coast, during the presidencies of Porfirio Diaz (1876-1880 and 1884-1911), American and British companies were allowed to strip Mexico of the majority of oyamel fir forests.

The ongoing depletion of the last remaining stands of the sacred fir is only one of several potentially devastating agricultural threats to the Monarch butterfly. Twenty million acres, approximately twenty-five percent of America's corn grown for food, is planted with Bt corn. *Bacillus thuringiensis*, a bacterium, is spliced into the corn's genome. Bt corn not only kills the larvae of the European corn borer moth, it is deadly to all other Lepidoptera. Milkweed, the Monarch caterpillar's only food source, grows along the edges of cornfields and is exposed to, and dusted with, pollen from the Bt corn. Genetically engineered transgenic corn, developed by the agribusiness firms Novartis, Monsanto, and AgrEvo, are now widely planted throughout the American Midwest.

One hundred million acres of cornfields are planted as a food crop. Imagine increasing that number tenfold to manufacture fuel. Poisonous pesticides poured into the earth to maintain vast monocultures leech into our drinking water, pollute waterways, and destroy native flora and fauna. Repeatedly growing the same crop in the same location depletes the soil of nutrients, which then requires more chemical additives to maintain viability. Hybrid technology is here and readily available. Wind and solar energy need only harnessing. Proponents of the use of corn as an alternative source of fuel are agribusiness and government looking for a politically correct band-aid to sooth an unwitting American electorate.

Conservation Link: The Michoacan Reforestation Fund works to protect Monarch butterfly habitat and improve the well being of Mexican communities through reforestation. In the past nine years over two million pine and oyamel fir trees have been planted. For more information contact butterflies@michoacanmonarchs.org.

Kim Smith is an interior and garden designer residing in Gloucester with her husband and two children. Preorders for her forthcoming book, *Oh Garden of Fresh Possibilities! ~ Notes from a Gloucester Garden*, are available through her website at www.kimsmithdesigns.com and Toad Hall Bookstore at www.toadhallbooks.org. Kim will be happy to respond to readers' questions and comments at kimsmithdesigns@hotmail.com.

Monarch Caterpillar and Common Milkweed



Monarch Butterfly and Marsh Milkweed

