

A Walk in the Woods with Dr. Charles Canham

By Gordon Douglas

A week ago last Sunday, I joined 35 other hikers on a two-hour educational walk led by forest ecologist Dr. Charles Canham through the beautiful woods of the Cary Institute in Millbrook. Canham, who works in forests all over the world, told us that our local forests are the most pleasant forests in the world. However, he also noted that this was the worst September for mosquitoes in memory, a fact soon confirmed by the hikers.

Most readers know that the forests of New York State were cut down for farming by the early 19th century. At the low point only 16% of New York remained forested. I was surprised when Canham told us that most of New York's forests were clear-cut as early as 1650 by the first European settlers. Over a century later the farms of New York fed the Revolutionary War's armies. Today 60% of Dutchess County is forested; a recovery process that moved rapidly after 1825 when the Erie Canal opened and farmers left our poor local soils for the richer bottomlands of the Ohio Valley. Current Metropolitan sprawl has stopped further forest recovery at this time.

None of the trees in the forest that we walked through was of great age. Long ago the farmers not only cleared the valleys for crops and pasture but they also cut the trees on the steepest slopes for firewood and other uses. If the reader wishes to see some wonderful, very old trees Canham suggests visiting historic Montgomery Place's South Forest on the Hudson in Red Hook.

Fortunately, clear-cut forests recover well, although the new forests, while healthy, are not necessarily of the same composition as the old ones. Forests that grew from abandoned pastures will vary from those that grew from formerly cultivated fields. Because of man's activities every forest is different - which makes them more interesting. In the latter part of the 19th Century regrowing forests faced new challenges from invasive trees and tree pathogens arriving from other continents. Around 1900 the beloved and enormously valuable American chestnut fell victim to an oriental blight. By mid-nineteenth century the American elm was killed by a Dutch blight. Today the Japanese adelgid is decimating hemlocks and ash are facing the dire threat of a new beetle. Overarching all these problems is the arrival of global climate change. Dr. Canham pointed out that in the coming decades Dutchess County will have the climate of Richmond, Virginia. The trees in our forests, he told us, are resilient and tolerant to a wide range of weather conditions. He thinks that our forests will survive a climate like Richmond's although the trees may be weakened. Canham's view on climate change in general is that mankind will not address the problem adequately for some decades and that by then it will be harder to cope with. However, he urges us not to give up the fight.

As we headed back to the parking area Dr. Canham commented on today's forest lumbering practices. Years ago clear-cutting was not liked by the lumber industry because demand for different species varies with the fashion and too many trees were wasted. Thirty years ago logging shifted to selective cutting, which seemed more sensible. However, selective cutting resulted in damage to neighboring trees, causing them to get root rot and be useless as lumber. Today we have huge machines, which can go up steep slopes and harvest selective trees without any collateral damage.

Recently there has been a lot of interest fighting climate change by burning biomass from our forests rather than using fossil fuels. Dr. Canham and his associates were asked to study this idea. They found out that while there is enough biomass in the forest for this industry, in reality much of the wooded acreage in Dutchess is not available for biomass harvesting because too many forest landowners prefer not to cut their trees. Hopes for this industry had been high, so Dr. Canham's report led to much disappointment.

Learning about our local forests was fascinating and the two-hour woodland stroll on this lovely property was highly pleasurable. I urge readers to check the Cary Institute's website for future walks. One couldn't have a better guide than Charles Canham.