

PLENARY SESSION CLIMATE SOLUTIONS March 12, 2014, SUMMARY

Richard Nelson lobsterman from Friendship, described how warmer and more acid ocean waters off Maine are changing lobsters life cycle timing and locations. Lobster catches peaked 3 weeks earlier in 2013 than in previous years, before the market was ready for them, thus driving prices down. Lobsters sought deeper waters to avoid the warmer in-shore ocean temperatures. Richard had recently been to Washington D.C. with an Island Institute leader, Nick Battista, to lobby for better coordination among state and federal regulators to better listen to fisherman, who are observing and adapting to these rapid changes in their fisheries resources.

Si Balch, forester, spoke of the effects of warmer conditions on tree health, and the importance of maintaining Maine's large forest base, 75% of Maine lands, to continue taking carbon out of the atmosphere into the trees and soils. Major Forest composition will continue to change, with warmer conditions from coastal to central Maine and up to Houlton increasingly favoring hardwoods and pines, and the northern boreal spruce fir forest receding northward to only Aroostook County. Immediate causes of tree death, particularly affecting young trees, will be disease and new insect pests such as the hemlock wooly adelgid. Maine's maple syrup industry will be decreased in south central Maine, although older trees will be the last to die.

Sally Stockwell, Maine Audubon wildlife biologist, spoke of the corresponding change in animal populations as these forest ecosystems move northward. New species of mammals including cottontail rabbits and opossums and birds including turkey vultures, snowy egrets, higher numbers of cardinals and tufted titmice, have moved into Maine. Some of these species, such as robins and bluebirds, can now survive more moderate Maine winters, and are becoming more abundant. Invasive species such as barberry, autumn olive, multiflora rose, Japanese knotweed, and purple loosestrife are reducing the quality of hayfields, and replacing more nutritious cattails in wetlands. Sally recommends maintaining protected land corridors between habitat types throughout Maine, to allow wildlife to move into more favorable habitats as conditions change. Supporting your local land trust is one way to do this, suggested Farmer Nancy Chandler.

Nancy Chandler described changes in length of growing season in the 9 years she has farmed in Monmouth, increasing the frost free season by 2 weeks in the spring and up to 6 weeks in the fall. Springs have been warmer, but rainfalls are larger and more unpredictable, giving a 2 week drought last July but extremely wet May and August. Nancy added organic fertilizers and planted cover crops to build healthy organic soil, & planted 40 different vegetables, fruits, flowers and herbs. This built diverse populations of predator birds, parasitic wasps to control cabbage larvae, yet Nancy saw increases in warm weather pests such as tomato hornworm, Japanese beetles and late blight disease which in 1990 destroyed all central Maine tomato plantings for the first time ever.

Climate Change has brought opportunities to Maine farmers of longer crop seasons, milder winters have allowed year round hardy greens production in solar greenhouses, a large increase in number of new farmers, and longer grazing seasons for grass fed beef, sheep and chickens. Nancy encouraged listeners to buy local vegetables, fruit, meat and eggs through Farmers Markets, Community Supported Agriculture, farm stands, through cooperatives, and the Hannaford grocery stores, which have made a commitment to buying local foods.

Nancy B Chandler, NChandler51@comcast.net