

EQIP Conservation Innovation Grants



Natural Resources Conservation Service
New Hampshire

CIGs stimulate the development and adoption of conservation approaches and technologies related to agricultural production and environmental enhancement. Grants are awarded competitively to non-Federal governmental or non-governmental organizations, Tribes, or individuals.

The Maple Guys – Conservation Innovation Grant (Environmental Quality Incentives Program -- EQIP)

The CIG program promotes innovative conservation approaches and technologies and supports environmental enhancement. It also enables the Natural Resources Conservation Service (NRCS) to accelerate technology transfer and adoption of promising technologies and approaches to address some of the nation's most pressing natural resource concerns.



This CIG project, funded by a \$10,534 grant from the NRCS and matched equally by The Maple Guys, introduced and promoted a clean-burning gasification wood burning evaporator, the first of its kind to be used in New Hampshire, to improve the maple sugaring operation by decreasing its environmental impact and increasing safety.

The Maple Guys purchased and installed the clean-burning wood-fired evaporator which they use in their maple sugaring operation. This new technology uses a gasification process which burns all wood gases while providing constant, even heat to the evaporator pans. Because all the gases are burned, there is very little

wasted energy which means less wood is used to power the evaporator (about half as much as a traditional wood-fired evaporator). The increased efficiency also means fewer greenhouse gas emissions. In addition, there is no soot or creosote build-up and no sparking, making the sugaring process much safer. Compared to traditional wood-burning evaporators that have to be fed wood every five minutes, the Hurricane Force Five evaporator improves efficiency to a 45 to 60-minute-firebox load time -- a decrease in wood consumption from 1 cord wood per 1 gallon of syrup produced to 1 cord per 20 gallons of syrup, a 40 percent decrease in wood consumption.

Many maple producers have switched to evaporators powered by fossil fuels due to their improved efficiency over traditional wood-fired evaporators. However, The Maple Guys strongly believe that the sugaring industry shouldn't rely so heavily on oil and gas, but more on local, sustainable fuel sources, like wood, particularly because of global warming's negative effect on maple trees and the future of the sugaring industry. They have shared this new technology with other maple producers by holding workshops (live and online) in hopes that others will be able to return to using wood to power their maple syrup production. The Maple Guys of Lyndeborough, NH are two-time winners of the "Carlisle Trophy", New Hampshire's recognition for the best maple syrup in the state.

