Maple Syrup Production
A Sustainable Industry

• Native Americans have collected sap and made sugar for centuries
• Height of US maple production was in the 1800s with 6,613,000 gallons produced
• Current US production is 3,100,00 gallons with 5-10% increase annually
• Sugar value helped “save” maple trees from harvesting
Maple Production
Sustainable Practices

Tapping Rules

• Cornell Sugar Maple Research and Extension Program
  – 10” diameter – 1 tap
  – 18” diameter – 2 taps
  – 25”+ diameter - 3 taps

• Tap location
  – Taps must be distributed evenly on the trunk
  – At least 6” left or right from prior year’s tap hole
  – At least 1 foot above or below the prior year’s tap hole

• Remove taps at the end of the sap season
Maple Production
Sustainable Practices

Production

• Variable Frequency Drives installed on all large motors to conserve energy, **providing 30-50% energy savings**
• Reverse Osmosis removes approximately 75% of the water from the sap, **reducing energy usage by 70% over open pan evaporation**
• Permeate (maple water) is extracted from sap and used for cleaning equipment
• Excess permeate returned to forest via retention ponds
• Evaporator Steam-Away (sap pre-heater) maximizes efficiency and **increases production by 60-65% with no increase in energy usage**
Maple Production
Sustainable Practices

Maintain sugarbush using a state approved Forest Management Plan

• Maintain forest biological diversity (minimum of 20% non-sugar maple species)
• Whole tree harvest techniques prohibited
• Required regeneration plan in order to maintain or achieve a mixed age forest
• Address habitat for wildlife species, including amphibians, birds, aquatic life and mammals.
• Ecologically sensitive areas must be identified and protected
Crown Maple Environmental Initiatives

• Conservation efforts on Madava Farms
  – Trout Streams
  – Bird Habitat
  – 800 acre “wildlife refuge”

• Community outreach
  – Conservation of the Great Swamp
  – Identify and respect NY DEC wetlands