

TREND IN FOREST CONDITION

North American Maple Project (NAMP) Plots

Sugar Maple Health

Sugar maple condition on NAMP plots improved in 2007, with the decline of forest tent caterpillar populations. Over 92% of overstory sugar maple trees had healthy crowns (Figure), average foliage transparency (19.9%) and dieback (7%) improved (Figure) and the percent of trees with high foliage transparency decreased to 8.3% (Figure). The Crown Condition Index, a composite of crown health measurements, also reflected an improvement, but still indicates that tree recover and/or stress agents are affected sugar maple trees (Figure). Mortality was 1.6% of overstory sugar maples.

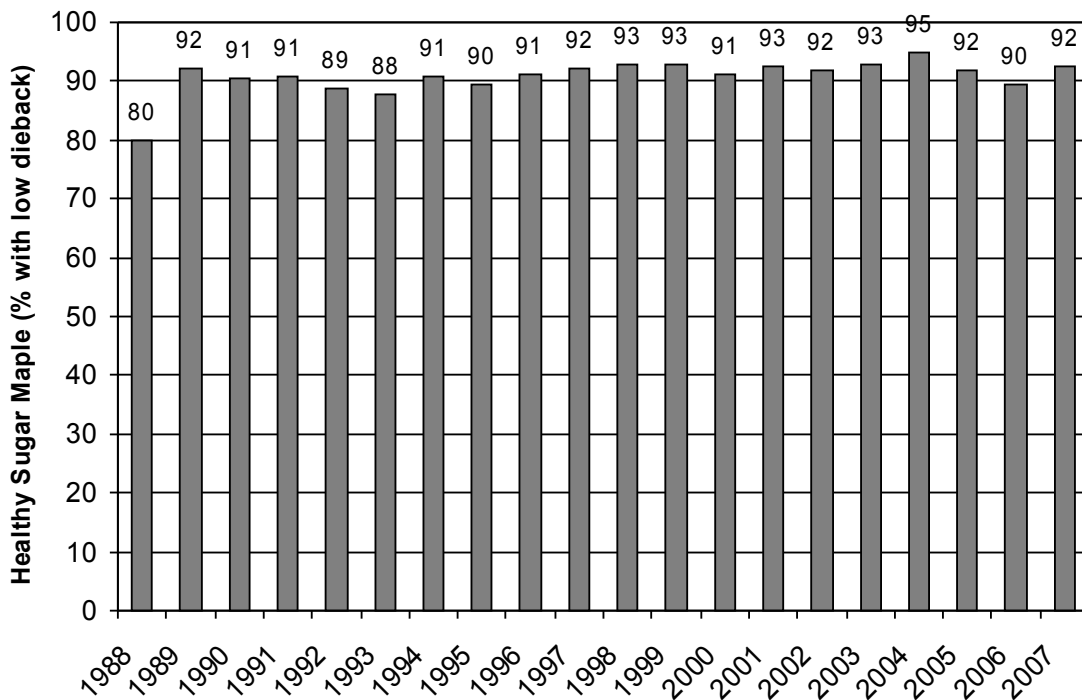


Figure 1. Trend in healthy overstory sugar maple trees on NAMP plots. Health based on trees with less than 15% dieback.

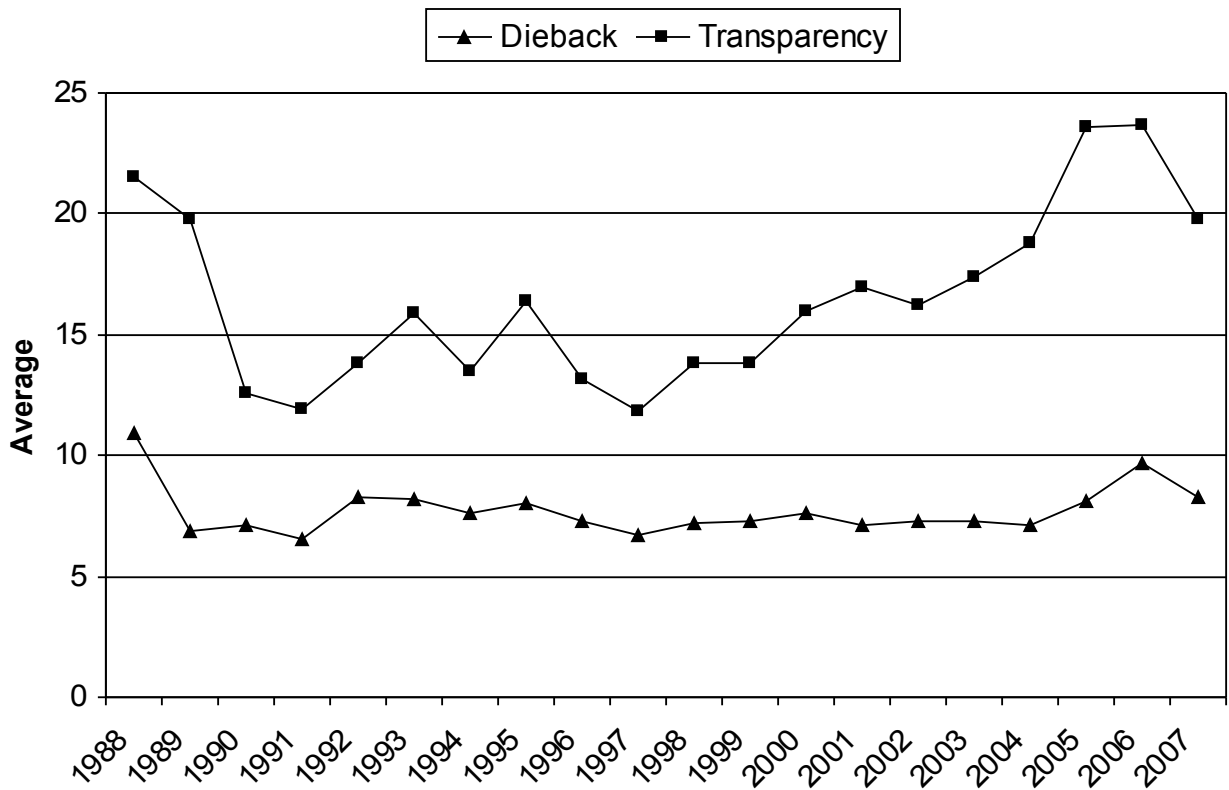


Figure 2. Trend in overstory sugar maple tree condition from 1988 to 2007, showing some improvements in average foliage transparency and dieback in 2007.

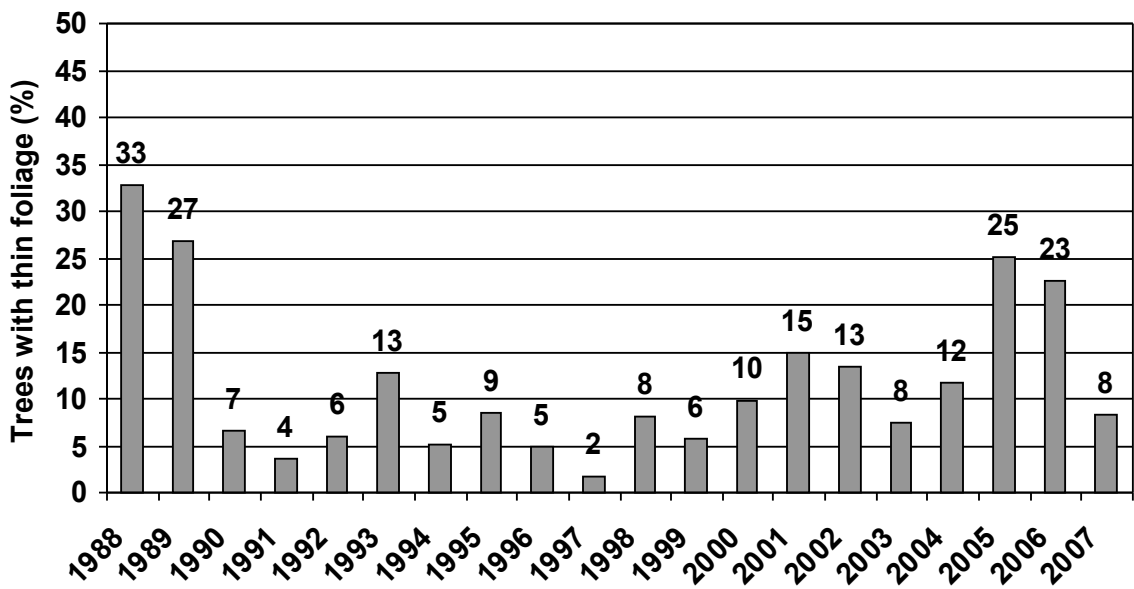


Figure 3. Percent of overstory sugar maple trees with thin foliage (foliage transparency >25%) showing improvement in 2007 following 3 years of forest tent caterpillar defoliation.

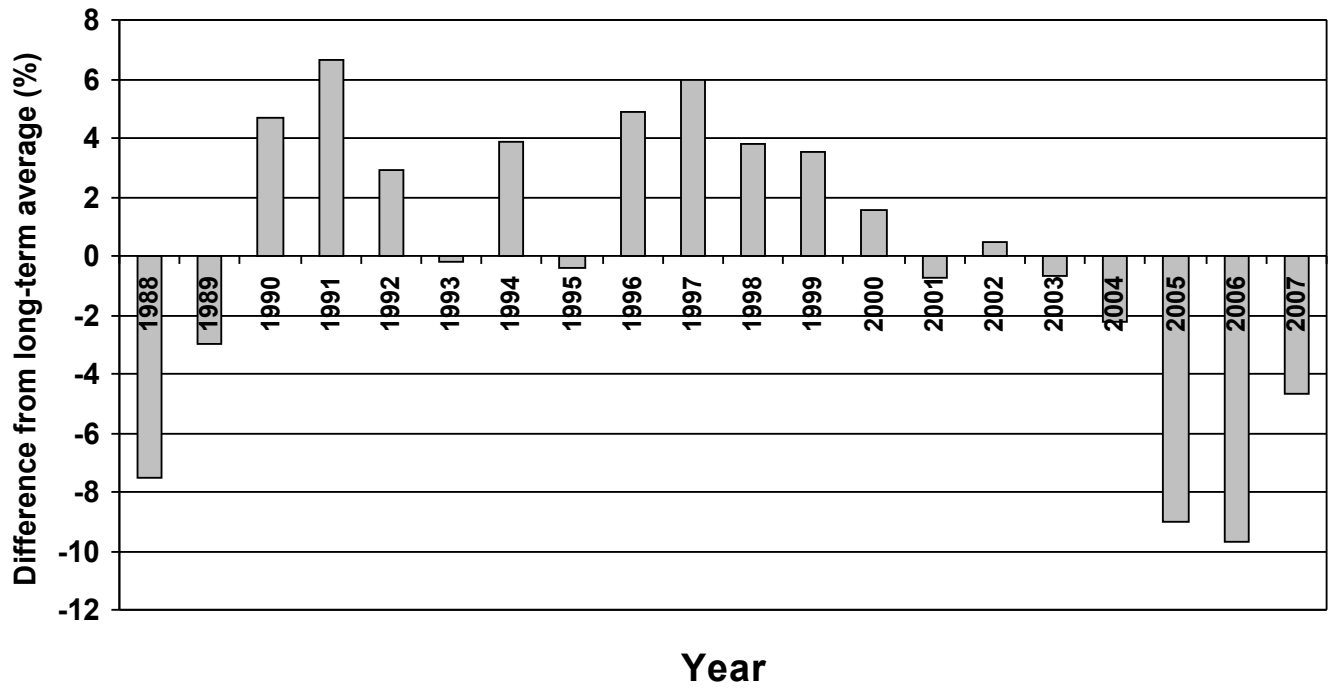


Figure 4. Crown Condition Index showing the percent difference from the long-term average for overstory sugar maple trees.