

Table 1. Table of hypotheses and associated specific predictions, whether each was supported ('yes'; significant at $p < 0.05$), rejected ('no'; opposite trend significant at $p < 0.05$), or found insignificant ('n.s.'; no significant correlation), and display items showing the results. 'RP' and 'DP' refer to ring- and diffuse- porous species, respectively.

| Hypotheses and Specific Predictions | SCBI | | Harvard Forest | | Results |
|--|--------------------|--------------------|----------------|-----------------|-----------|
| | RP | DP | RP | DP | |
| Warmer early springs result in earlier stem growth and longer growing seasons | | | | | |
| Day of year at which 25% of growth is achieved (DOY_{25}) is negatively correlated with early spring T. | yes | yes | yes | yes | Figs. 3-5 |
| Day of year at which 50% of growth is achieved (DOY_{50}) is negatively correlated with early spring T. | yes | yes | yes | yes | Figs. 4-5 |
| Day of year at which 75% of growth is achieved (DOY_{75}) is negatively correlated with early spring T. | n.s. | yes | yes | yes | Figs. 4-5 |
| Day of year of max growth rate (DOY_{ip}) is negatively correlated with early spring T. | yes | yes | yes | yes | Fig. 4 |
| Peak growing season length ($L_{PGS} = DOY_{75} - DOY_{25}$) is positively correlated with early spring T. | yes | n.s. | no | yes | Fig. 4 |
| Maximum growth rates are independent of early spring temperatures. | | | | | |
| Max growth rate (g_{max}) is independent of early spring T. | n.s. | n.s. | no (+) | no (-) | Fig. 4 |
| Annual stem growth responds positively to warmer spring temperatures. | | | | | |
| Annual growth (ΔDBH ; dendrobands) is positively correlated with early spring T. | n.s. | n.s. | yes | no | Fig. 4 |
| On the centennial time scale, tree ring width (RW) is positively correlated with early spring T. | mixed ¹ | mixed ² | n.s. | no ³ | Fig. 6 |

¹ One of nine species analyzed had significant positive response to April T_{max} ; one had significant negative response to March T_{max}

² One of two species analyzed had significant positive response to April T_{max} , both had negative response to May T_{max}

³ The one species analyzed had a significant negative response to April T_{max} .

Table 2. Dominant ring- and diffuse-porous species at SCBI and Harvard Forest analyzed here, along with sample sizes.

| site | xylem porosity | species | Dendrometer Bands | | Tree Cores | |
|---------|----------------|----------------|-------------------|--------------|------------|------------|
| | | | n trees | n tree-years | n cores | date range |
| SCBI | ring | Red Oak | 34 | 197 | NA | |
| | | White Oak | 35 | 229 | NA | |
| | diffuse | American Beech | 13 | 89 | NA | |
| | | Tulip Poplar | 41 | 354 | NA | |
| Harvard | ring | Red Oak | 118 | 575 | NA | 1901-2014 |
| | | Black Oak | 11 | 50 | NA | |
| | | White Ash | 9 | 27 | NA | |
| | diffuse | American Beech | 8 | 45 | NA | |
| | | Black Birch | 8 | 44 | NA | |
| | | Grey Birch | 5 | 24 | NA | |
| | | White Birch | 3 | 13 | NA | |
| | | Yellow Birch | 21 | 90 | NA | 1952-2013 |
| | | Black Cherry | 9 | 37 | NA | |
| | | Red Maple | 144 | 669 | NA | 1930-2014 |
| | | Striped Maple | 4 | 16 | NA | |

Table 3. Summary of parameters describing the phenology and rate of growth for ring- and diffuse- porous species at SCBI and Harvard Forest.

| | SCBI | | Harvard Forest | |
|---|---------------|---------------|----------------|---------------|
| | ring | diffuse | ring | diffuse |
| window over which T_{max} is most influential | 3/22-4/9 | 2/19-5/21 | 4/2-5/7 | 3/19-5/7 |
| DOY_{25} | 123 (May 4) | 154 (June 4) | 132 (May 15) | 164 (June 14) |
| DOY_{50} | 152 (June 2) | 172 (June 22) | 159 (June 9) | 182 (July 2) |
| DOY_{75} | 180 (June 30) | 190 (July 9) | 186 (July 6) | 199 (July 19) |
| DOY_{ip} | 152 (June 2) | 173 (June 23) | 161 (June 11) | 183 (July 3) |
| g_{ip} (mm/day) | 0.046 | 0.061 | 0.03 | 0.025 |
| L_{pgs} | 56.5 | 35.8 | 54.5 | 35.1 |
| ΔDBH (mm/yr) | 4.7 | 3.6 | 3.1 | 1.4 |