



Figure 3: False springs depend on the interaction of climate and species' diverse tolerance and avoidance strategies. Here we show differences in spring phenology and false spring risk across two species --- *Ilex mucronata* (L.) and *Betula alleghaniensis* (Marsh.) --- by mapping a hypothetical false spring event (based on historical weather data and long-term observational phenological data collected at Harvard Forest, O'Keefe, 2014). In this scenario, *Ilex mucronata*, which budbursts early and generally has a short period between budburst (light green squares) and leafout (dark green triangles), would be exposed to a false spring event during its duration of vegetative risk (i.e. from budburst to leafout), whereas *Betula alleghaniensis* would avoid it entirely (even though it has a longer duration of vegetative risk), due to later budburst.