

## Class 1. Canopy is full and healthy



## Class 2. Canopy has lost some leaves (thinning), but shows no die-back (top canopy twigs without leaves)



Ash tree crown health classification was developed by Smith (2006): Effects of community structure on forest susceptibility and response to the emerald ash borer invasion of the Huron River watershed in southeast Michigan. Columbus, OH: The Ohio State University. 122 p. M.S. thesis.

Images were copied with author permission from Knight, K. S.; Flash, B. P.; Kappler, R. H.; Throckmorton, J. A.; Grafton, B.; Flower, C. E. 2014. Monitoring ash (*Fraxinus* spp.) decline and emerald ash borer (*Agrilus planipennis*) symptoms in infested areas. Northern Research Station, US Forest Service, USDA.

## ASH CANOPY HEALTH CLASSES

### Class 3. Canopy has die-back, but less than 50%



### Class 4. Canopy has at least 50% die-back but still has some leaves



### Class 5. Canopy has no leaves, although epicormic shoots may be present on the trunk

