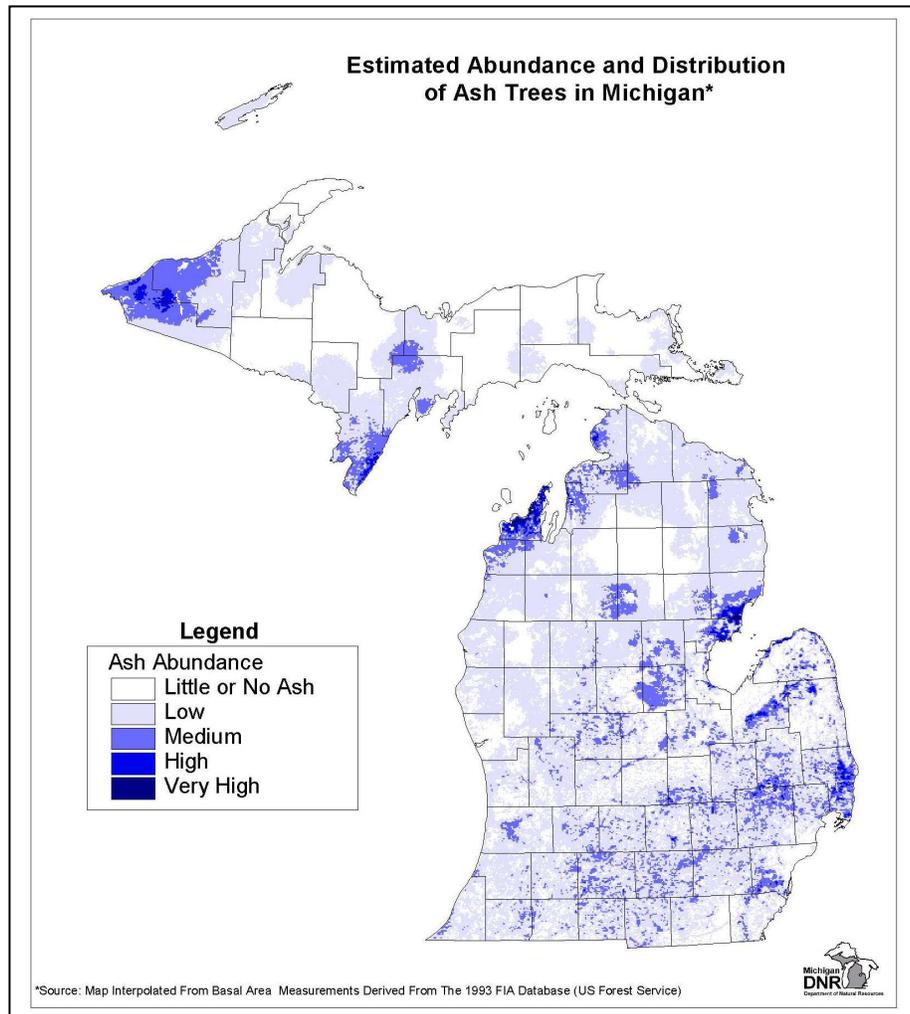


# Michigan's Ash Resource

## 2011 Great lakes Restoration Initiative Grant

### Silvicultural Guidelines for Reducing Ash in Upland Hardwood Stands



As the emerald ash borer (EAB) outbreak spreads through various Michigan Counties, landowners are advised to prepare by working with forestry professionals to obtain a forest management plan that prescribes harvest practices designed to reduce but not eliminate the ash component of their upland hardwood stands. The following is an outline of recommended practices for EAB readiness:

- Reduce stand vulnerability to EAB by removing ash phloem
- Create a more diverse forest resource that is resistant to catastrophic changes affecting a single species or genera.
- Do not eliminate ash
  - Reduce the ash component to a maximum 10% of total stand basal area
  
- For ash resources within 10 miles of EAB:

- High risk of decline and mortality within 10 years
  - Reduce ash if greater than 10% of trees in a given stand
    - Upland hardwood stands
      - Keep BA 70-80 sq. ft. or above
      - Remove largest ash first
      - Limit canopy gaps to <60 ft. in diameter
    - Lowland or wetland ash options
      - Salvage and pre-salvage often not practical
      - May have to allow EAB mortality to run its course on wet sites
      - If possible, convert stand to other species
      - Alter management to non-timber objectives
      - As is often the case, harvest timber from fringes of wetland stands where soils and volumes are still operable
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- The objective is to create a stand that will maintain a minimum basal area of at least 70 sq ft in the event that all ash is eventually lost to EAB.
  - After pre-salvage and salvage harvests...
    - Restore productivity
    - Improve tree species diversity
  - EAB impacts and/or ash harvests may lead to:
    - under stocking
    - conversion to undesirable tree species
    - areas of non-forest cover
  - American beech & ash in the same stand creates greater challenges in maintaining minimum stocking levels, restoring stand productivity and improving tree species diversity.
  - Treatment of ash regeneration via cutting and/or herbicide application may be necessary for promoting tree species diversity and restoring productivity of desired tree species.
  - Planting canopy openings to attain the desired mix of tree species may be necessary. The Landowner Incentive Program (LIP) provides tree planting assistance for these situations.
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- EAB attack does little to degrade ash wood products
  - Quickly detecting ash dieback related to EAB attack greatly improves the opportunities to minimize losses

