

Michigan Recreation Site Ash Survey

Lower Peninsula of Michigan Atlas

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Background Information

The maps in this atlas were produced from data collected during 2003 and 2004. A survey of recreation sites in Michigan's Lower Peninsula was performed to determine the extent and health of the ash resource in parks, campgrounds, rest areas, and other sites. Much of this fieldwork was preliminary site selection for plots that became part of the Michigan Ash Monitoring Plot System.

The maps show tree level measurements for the three widely-distributed *Fraxinus* (ash) species found in Michigan: black ash (*Fraxinus nigra*), green ash (*Fraxinus pennsylvanica*), and white ash (*Fraxinus americana* L).

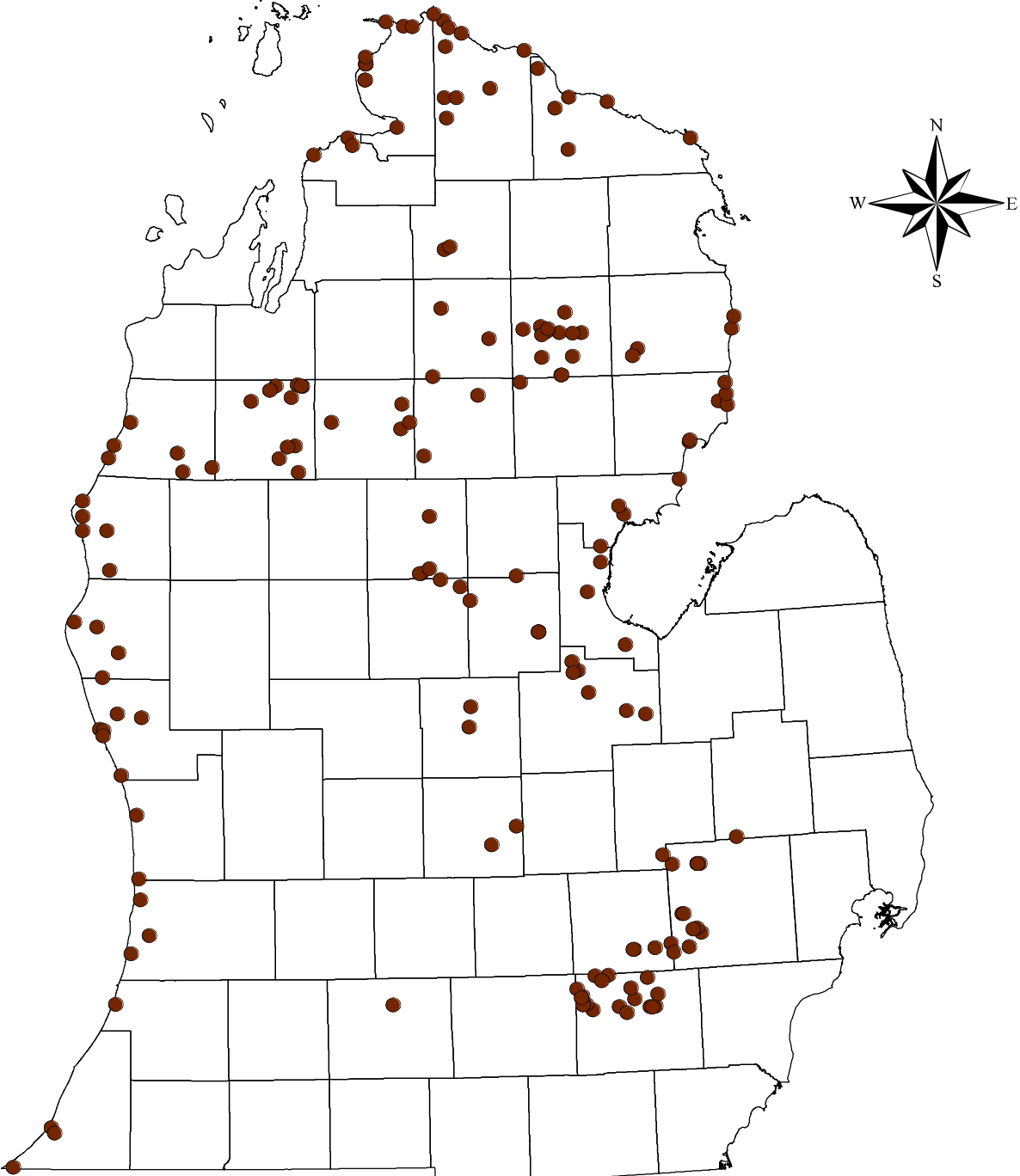
Maps include survey locations; plots with each of the three ash species present; and mean values for each plot (all ash species aggregated) showing percent crown dieback, diameter at breast height (DBH), and tree vigor.

Crown dieback is indicated by the percent of dead branch tips found in the upper portion and outer edges of the live crown. A large amount of dieback is an indication that the tree is under stress.

Diameter at breast height (DBH) is the diameter of the tree in centimeters measured at 1.37 meters (4.5 feet) above the ground.

Tree vigor is a rating of the overall health of a tree. Values range from 1 to 8, depending on the amount of dead wood in the crown. A ranking of 1 would indicate a healthy, vigorous tree; a value of 5 indicates a crown more than half dead; and values of 6-8 indicate a dead tree in various stages of decay.

Emerald Ash Borer Survey Locations 2003-2004



Key

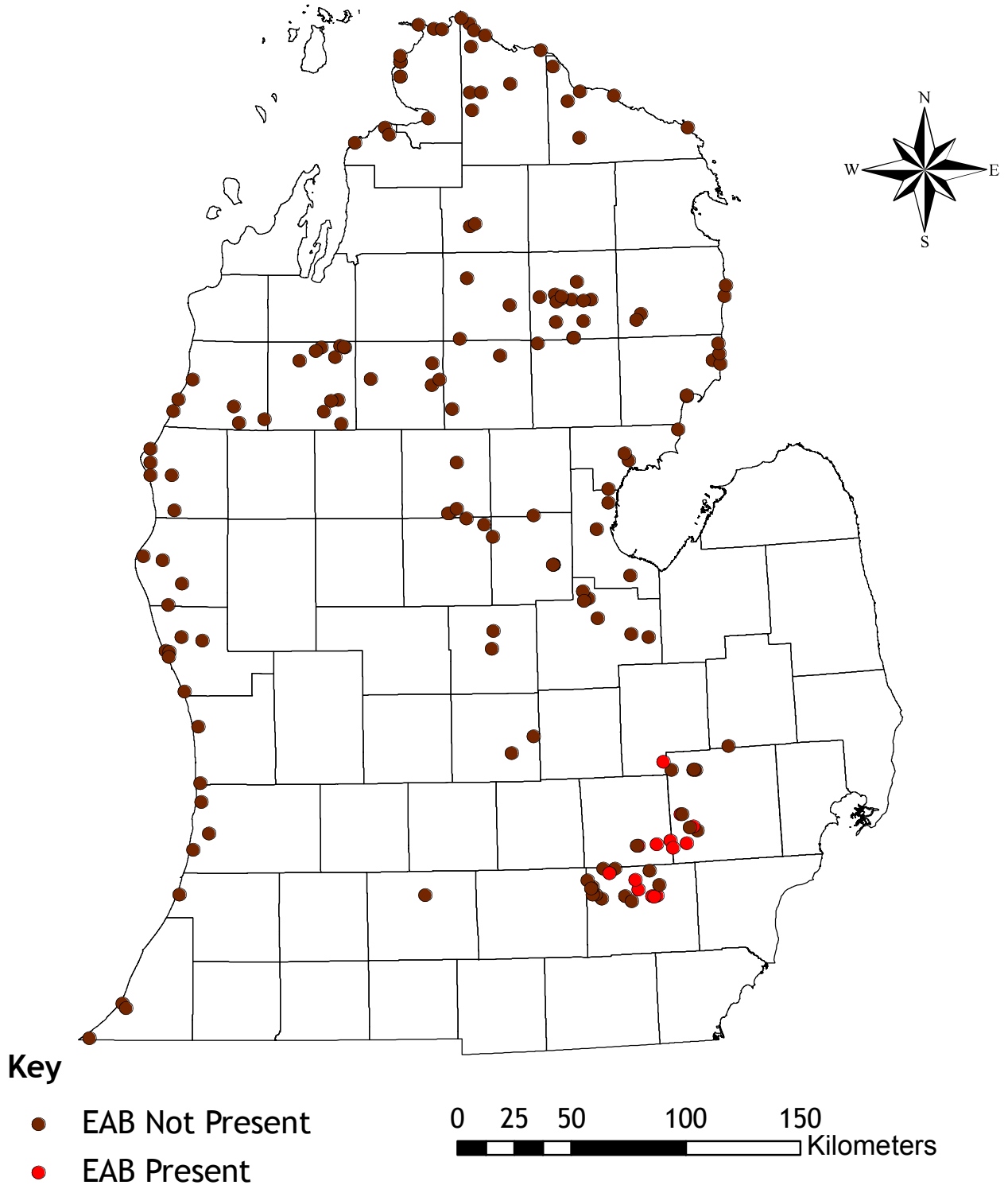
● EAB survey location

0 25 50 100 150 Kilometers

Source: Michigan Geographic Data Library
U of M School of Natural Resources and Environment

NDW May 2009

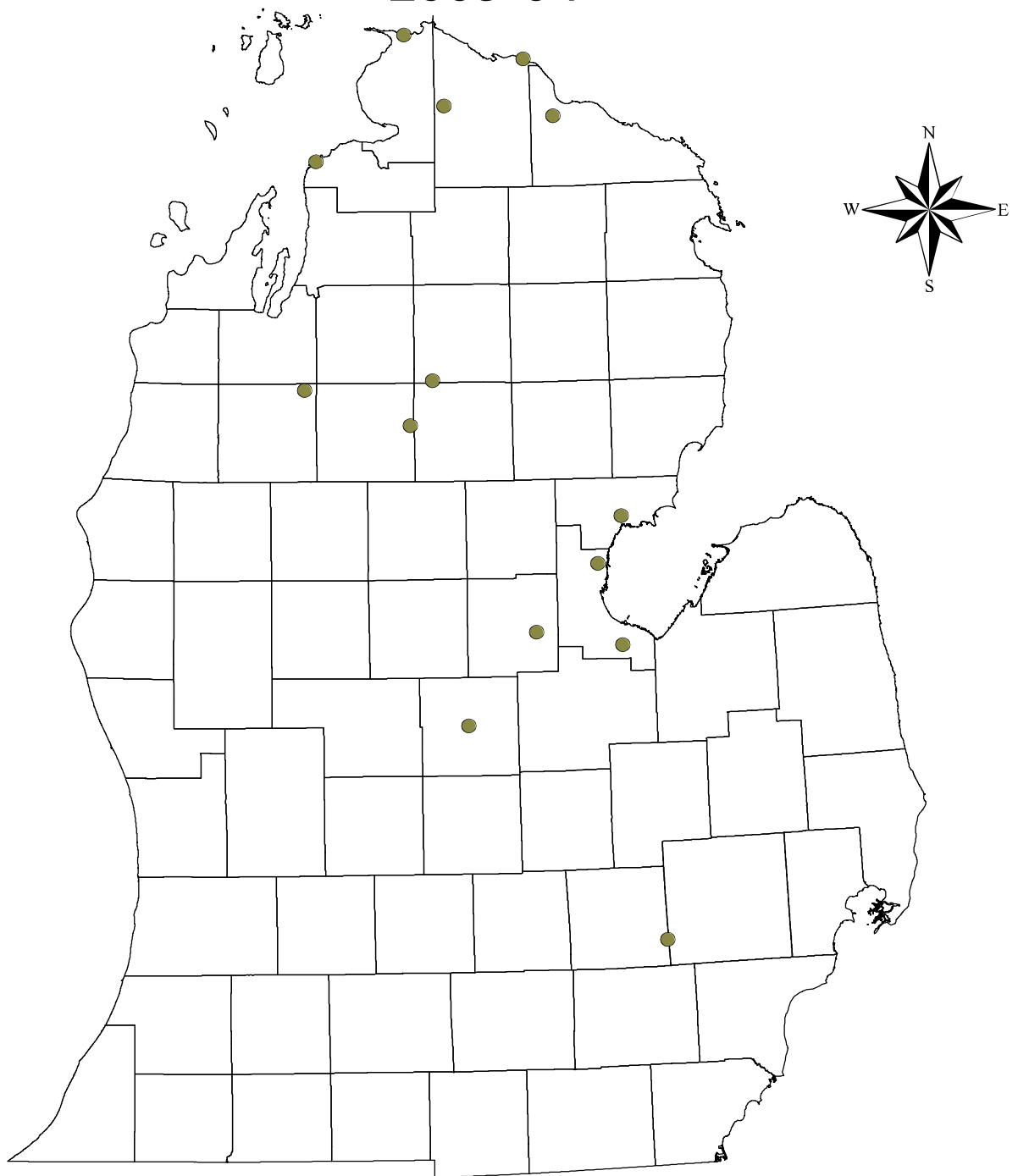
Presence of Emerald Ash Borer at 2003-2004 Survey Sites



Source: Michigan Geographic Data Library
U of M School of Natural Resources and Environment

NDW May 2009

Presence of Black Ash at Survey Sites 2003-04



Key

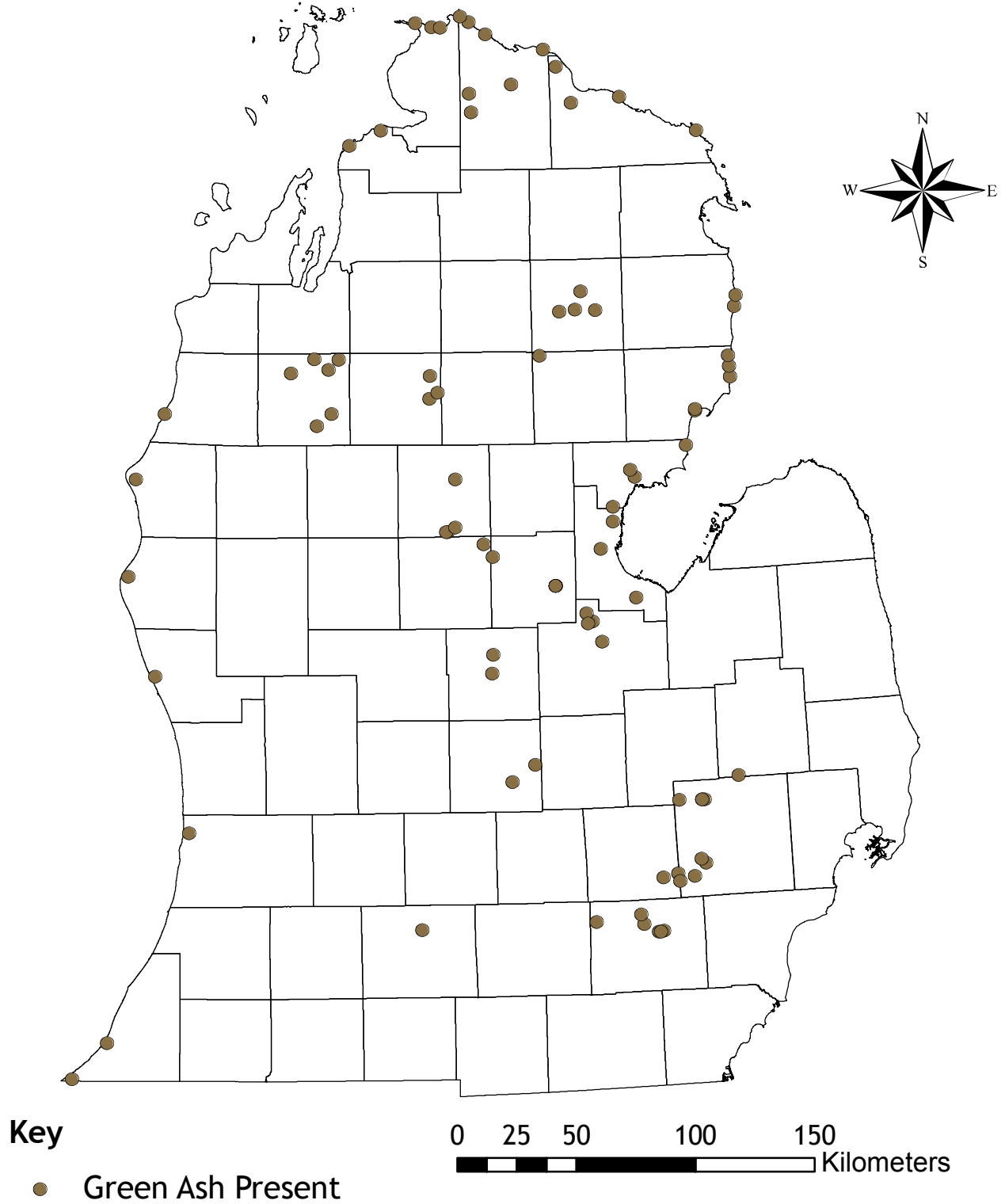
● Black Ash Present

0 25 50 100 150 Kilometers

Source: Michigan Geographic Data Library
U of M School of Natural Resources and Environment

NDW May 2009

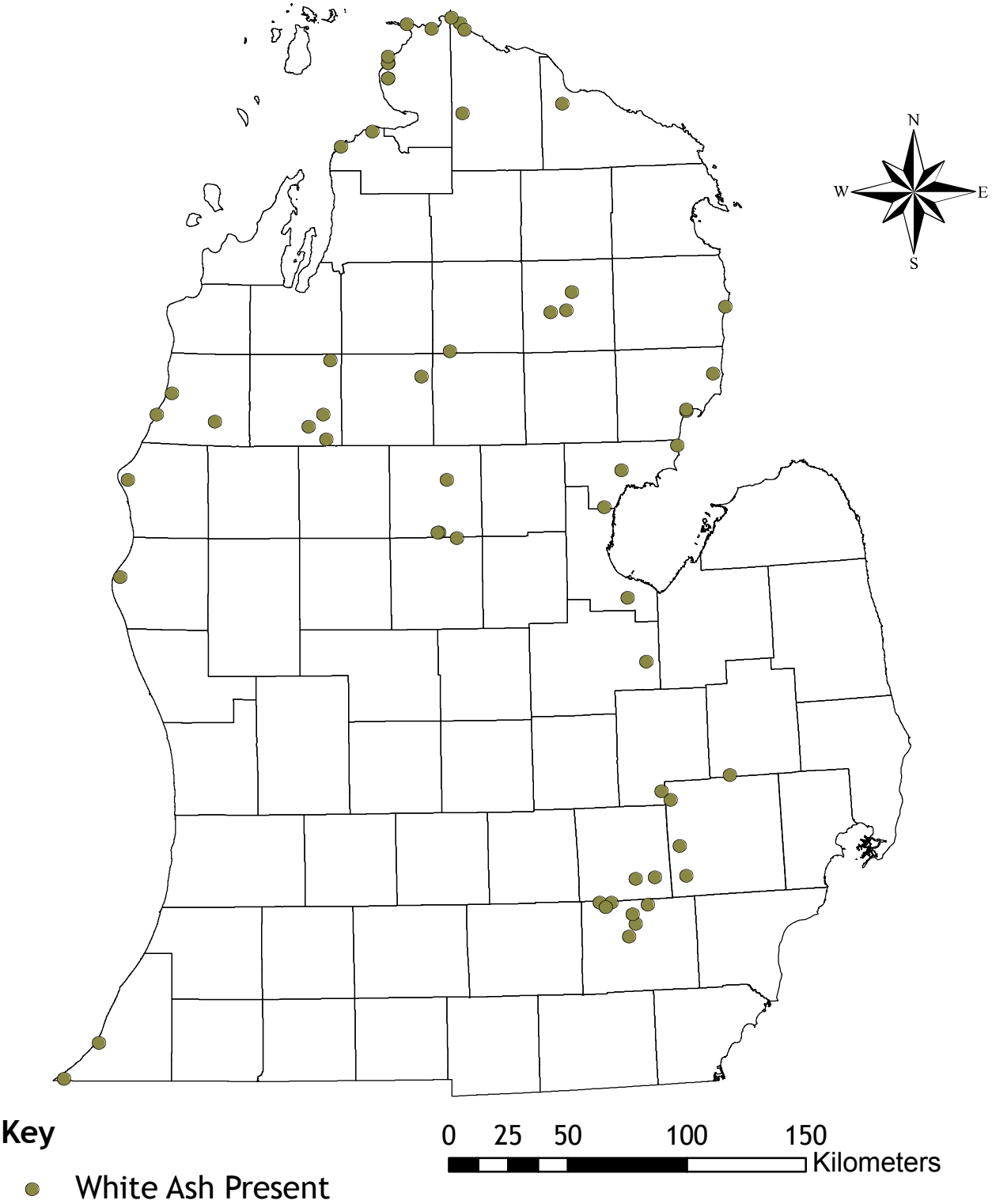
Presence of Green Ash at Survey Sites 2003-04



Source: Michigan Geographic Data Library
U of M School of Natural Resources and Environment

NDW May 2009

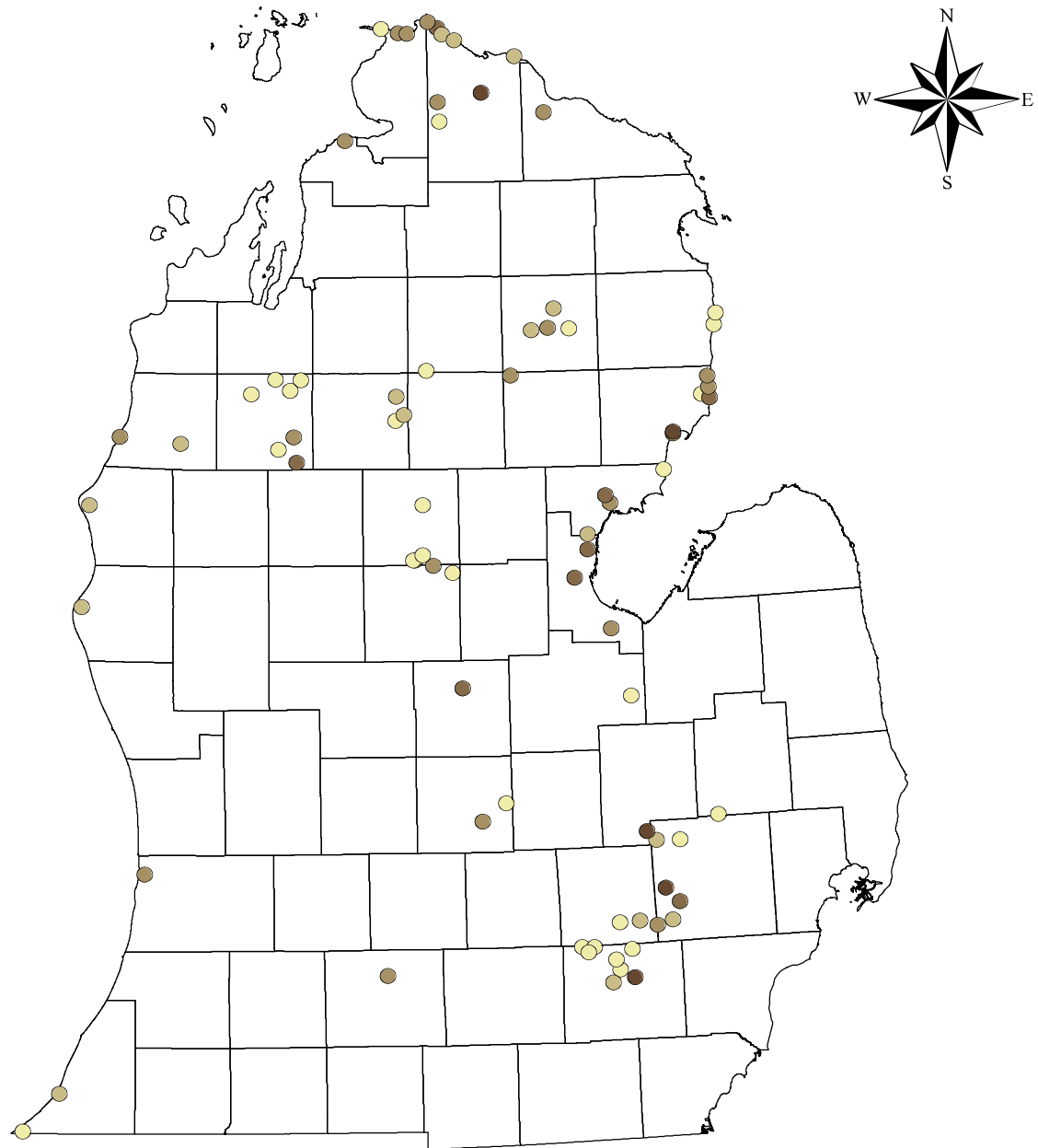
Presence of White Ash at Survey Sites 2003-04



Source: Michigan Geographic Data Library
U of M School of Natural Resources and Environment

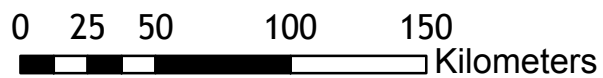
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Crown Dieback of All Ash Species at Survey Sites, 2003-04



Mean Crown Dieback (%) of All Ash Species

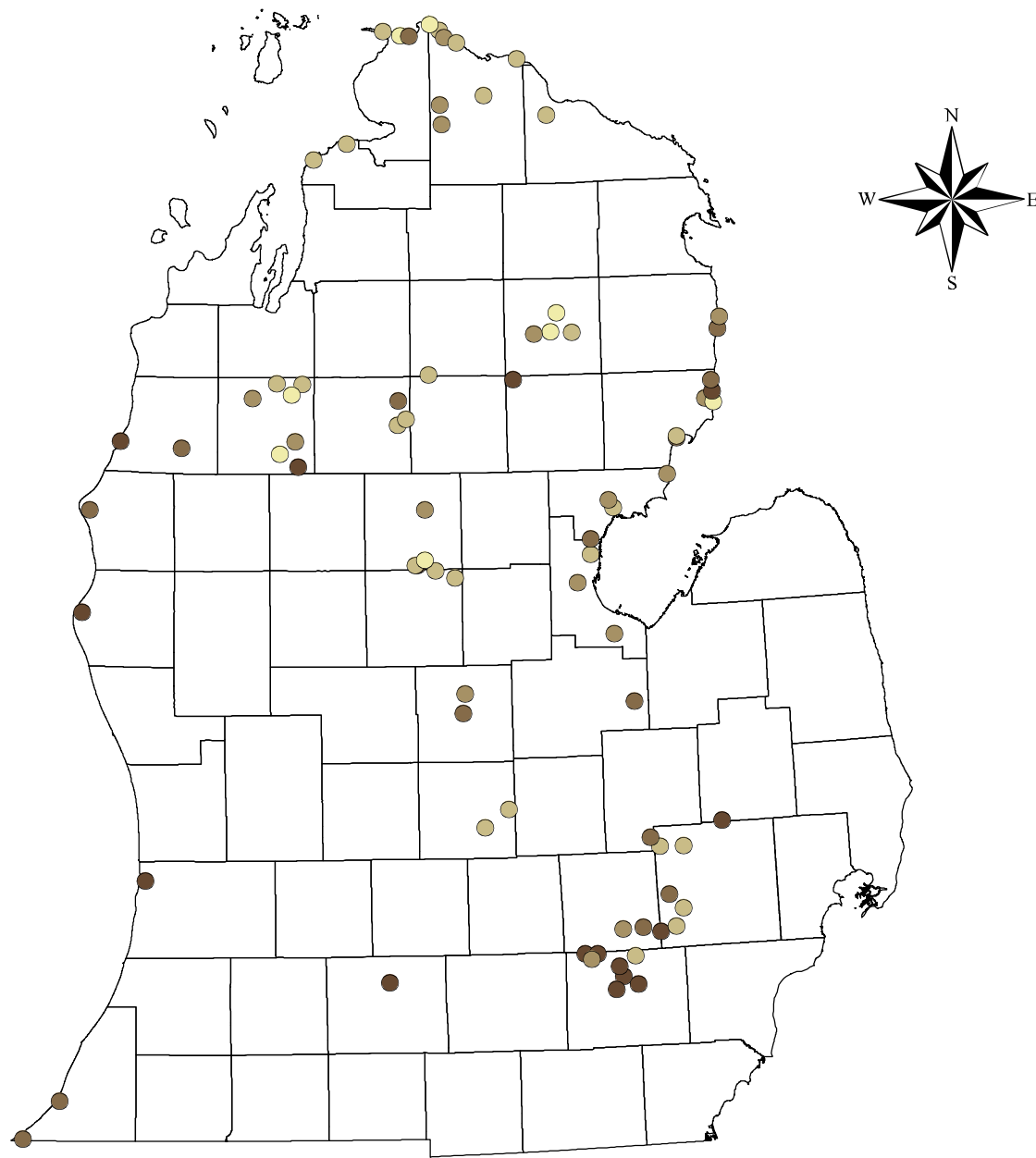
- 1-2 ● 9-17
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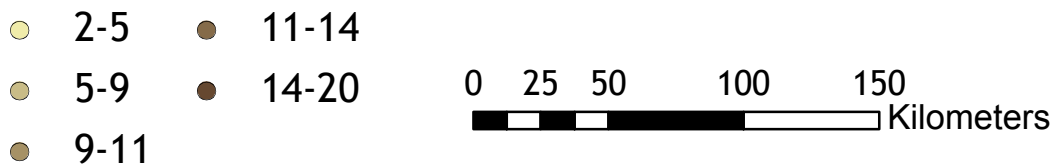
Source: Michigan Geographic Data Library
U of M School of Natural Resources and Environment

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Diameter at Breast Height of All Ash Species at Survey Sites, 2003-04



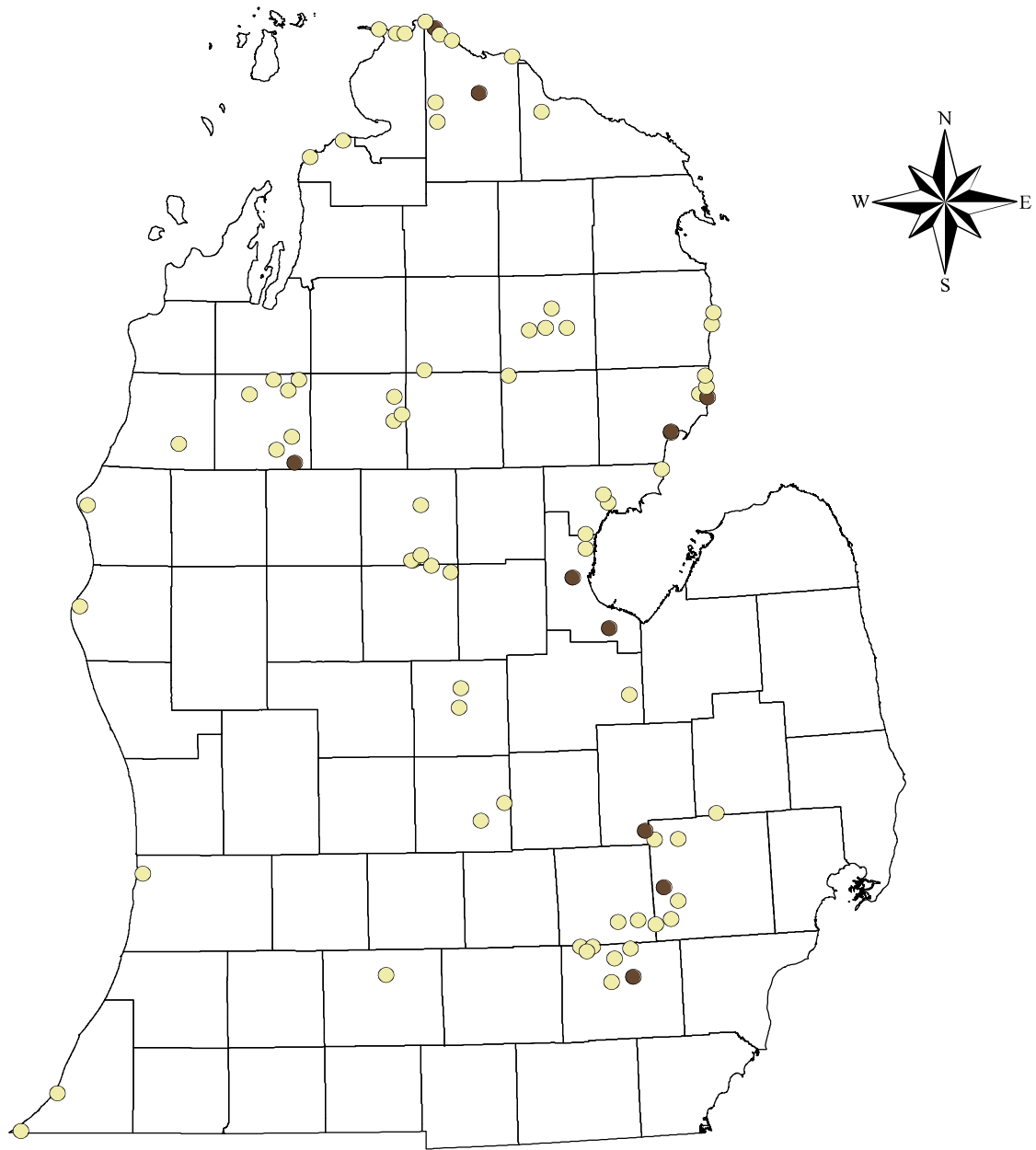
Mean DBH of All Ash Species



Source: Michigan Geographic Data Library
U of M School of Natural Resources and Environment

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Vigor of All Ash Species at Survey Sites 2003-04



Mean Vigor of All Ash Species

Vigor

● 1

● 2

0 25 50 100 150
Kilometers

Source: Michigan Geographic Data Library
U of M School of Natural Resources and Environment

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