

Blue Ridge Neighborhood Street Tree Inventory Update and Recommendations



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Introduction

Blue Ridge is a neighborhood on the north side of Bloomington, Indiana, west of Lake Griffy, and east of Walnut Street. The neighborhood was first established in the early 1960s and grew throughout the 1980s. The Blue Ridge neighborhood association approached us about conducting an updated street tree inventory with the goal of providing recommendations for new planting sites and species selection. The results of the inventory and subsequent recommendations are summarized here.

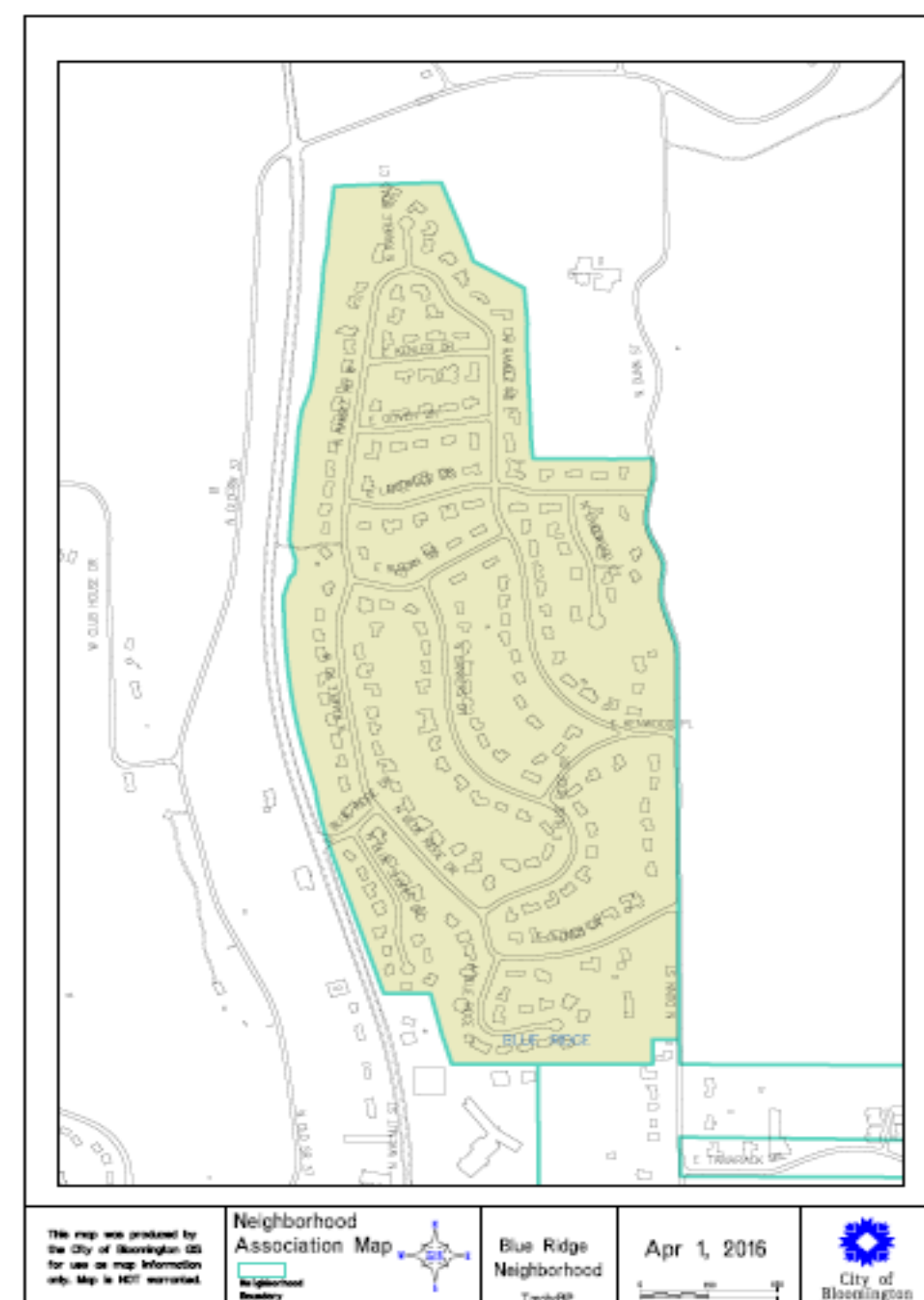


Figure 1. Map of Blue Ridge Neighborhood, obtained from the City of Bloomington Neighborhood Map Gallery

Materials and methods

Before beginning the street tree inventory, a survey was sent out to residents through email allowing them to express any concerns they may have. To conduct the street tree survey, teams walked the neighborhood recording tree species, DBH, tree lawn size, condition, maintenance, and address. Tree DBH was measured using tree and log scale sticks. This data was then recorded and analyzed in Excel.



Figure 2. Ryan Clemens Planting a tree in the Blue Ridge neighborhood

Results

The inventory revealed a relatively diverse and healthy community of street trees. Many of these trees flower and therefore make attractive street trees. Maples and Dogwoods comprised the largest portions of the street trees in the neighborhood but no other species made up a greater than 10% portion of the canopy. However, Callery Pear represent the third largest portion of the street trees in Blue Ridge (Figure 3). Since these trees are becoming less desirable as urban plantings, because of their invasiveness and tendency to split, the city and neighborhood association may consider removing and replacing these trees. In all there were over 40 different species identified.

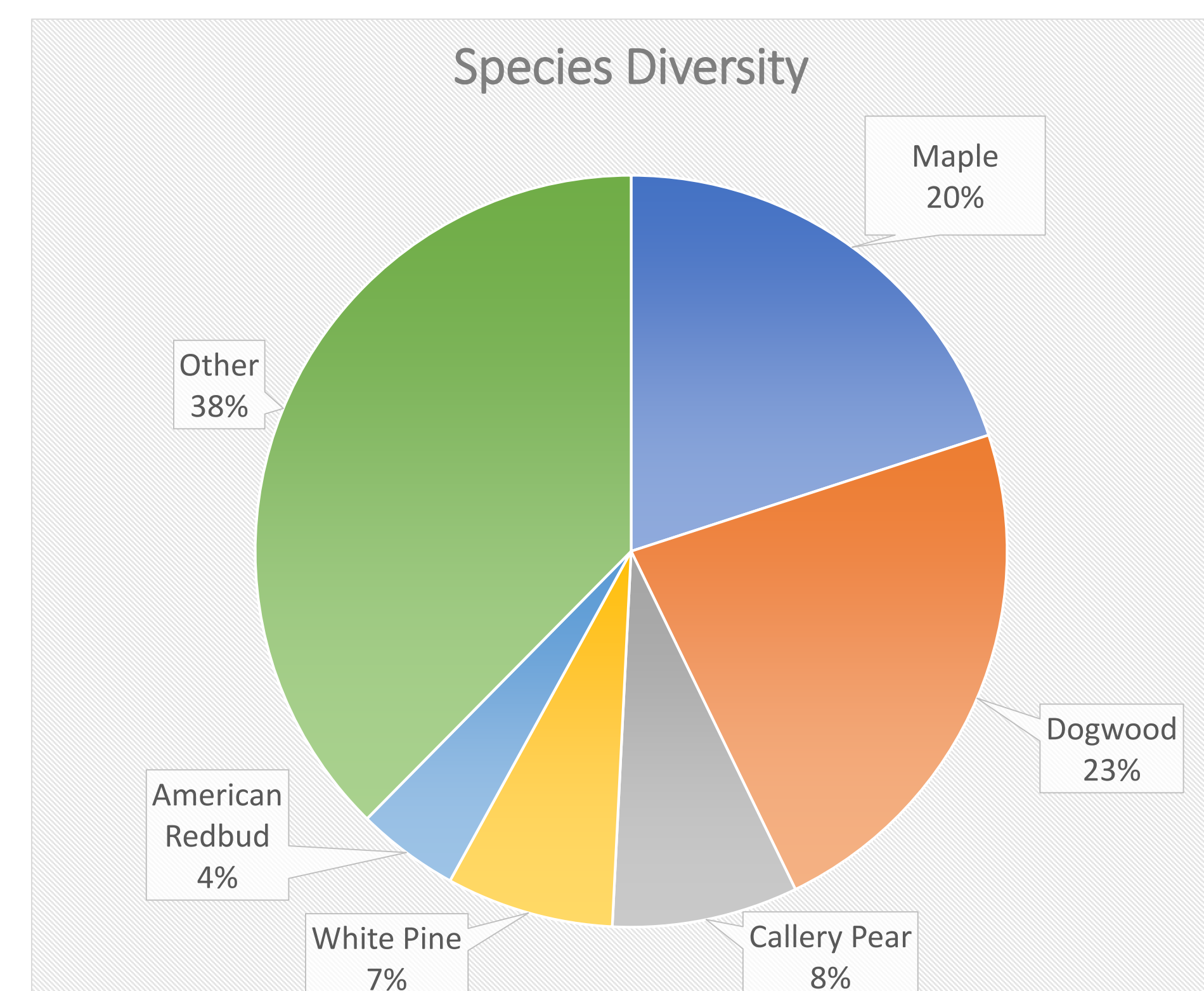


Figure 3. Species diversity in the Blue Ridge Neighborhood. The other category is comprised of over 35 different species of tree.

The street trees in Blue Ridge appeared to be in remarkably good health. Less than 1/3 of trees appeared to be in Fair, Poor or Dead condition (Figure 4). Most maintenance recommendations were therefore related to maintenance of otherwise healthy trees rather than removal (There were a handful of trees that may be very hazardous!)(Figure 5). Trees in the neighborhood displayed a typical age and size class distribution, with many trees growing rather large for street trees (Figure 6). This means that management efforts should be focused on maintaining the current canopy and planting new trees. Our inventory identified 58 planting sites in the neighborhood, but this is likely an underestimate. However, community support for our planting campaign seemed somewhat mixed.

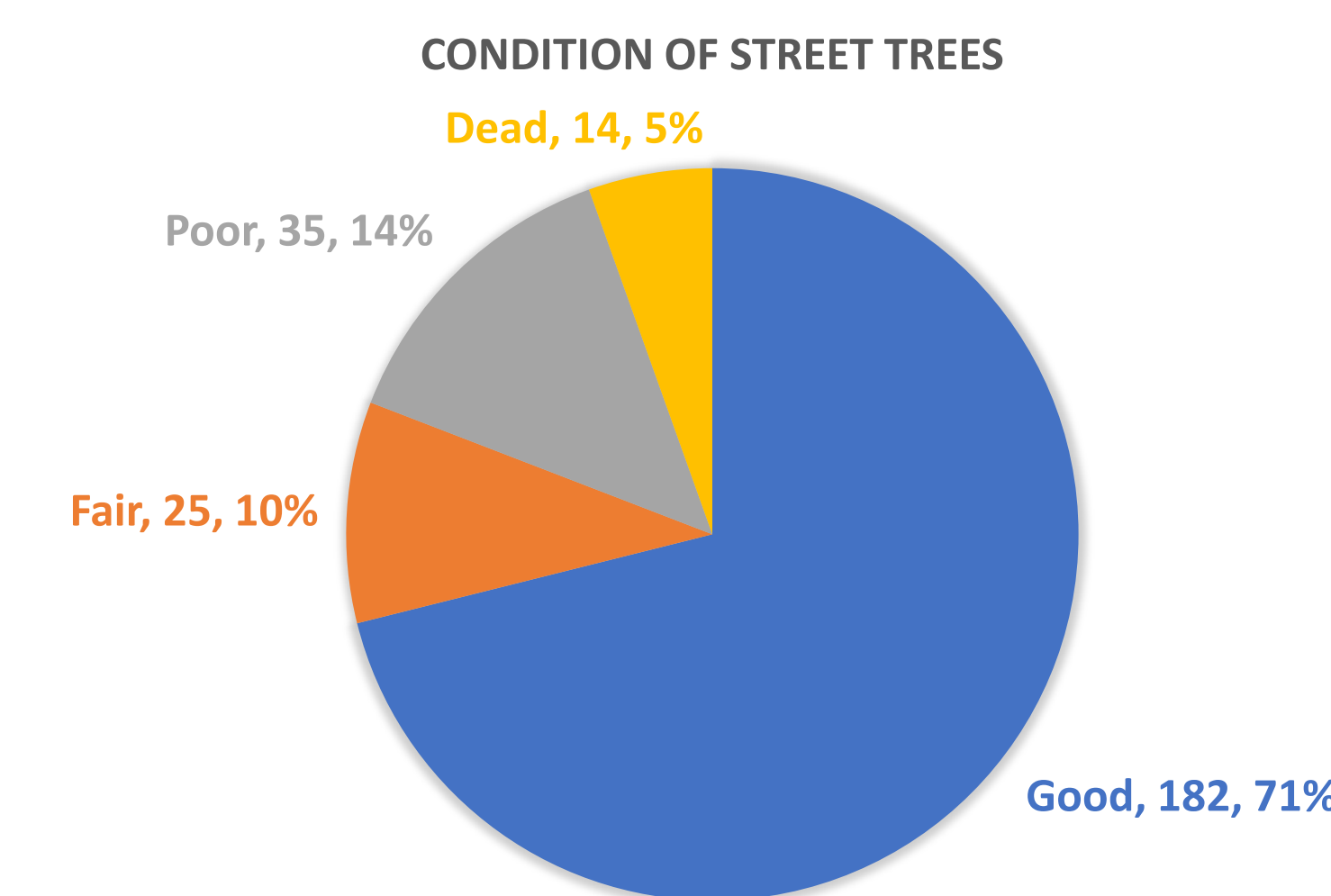


Figure 4. Condition of Blue Ridge Neighborhood street trees.

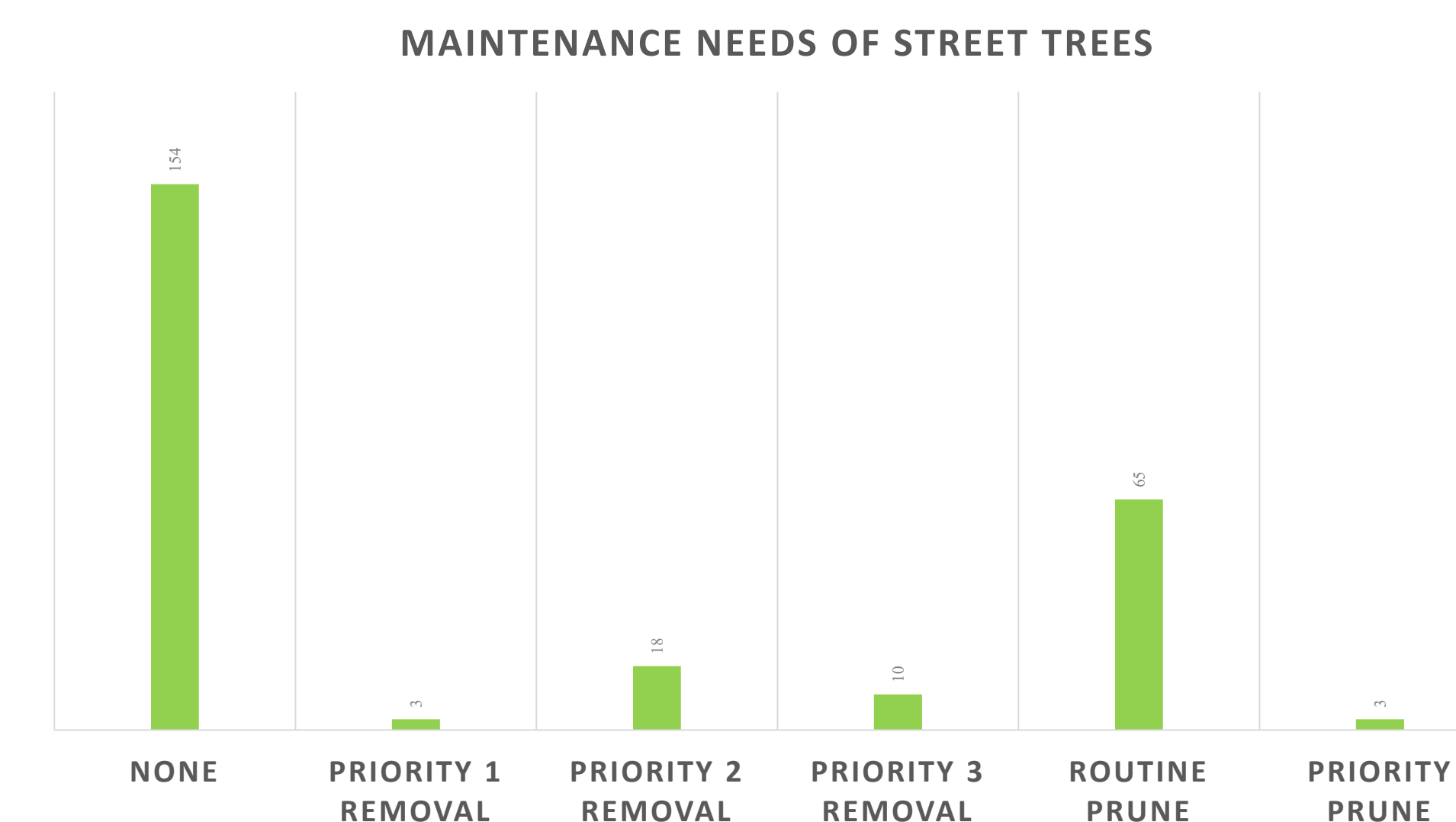


Figure 5. Maintenance recommendations. Note that planting recommendations for the 58+ planting sites inventoried are not displayed here.

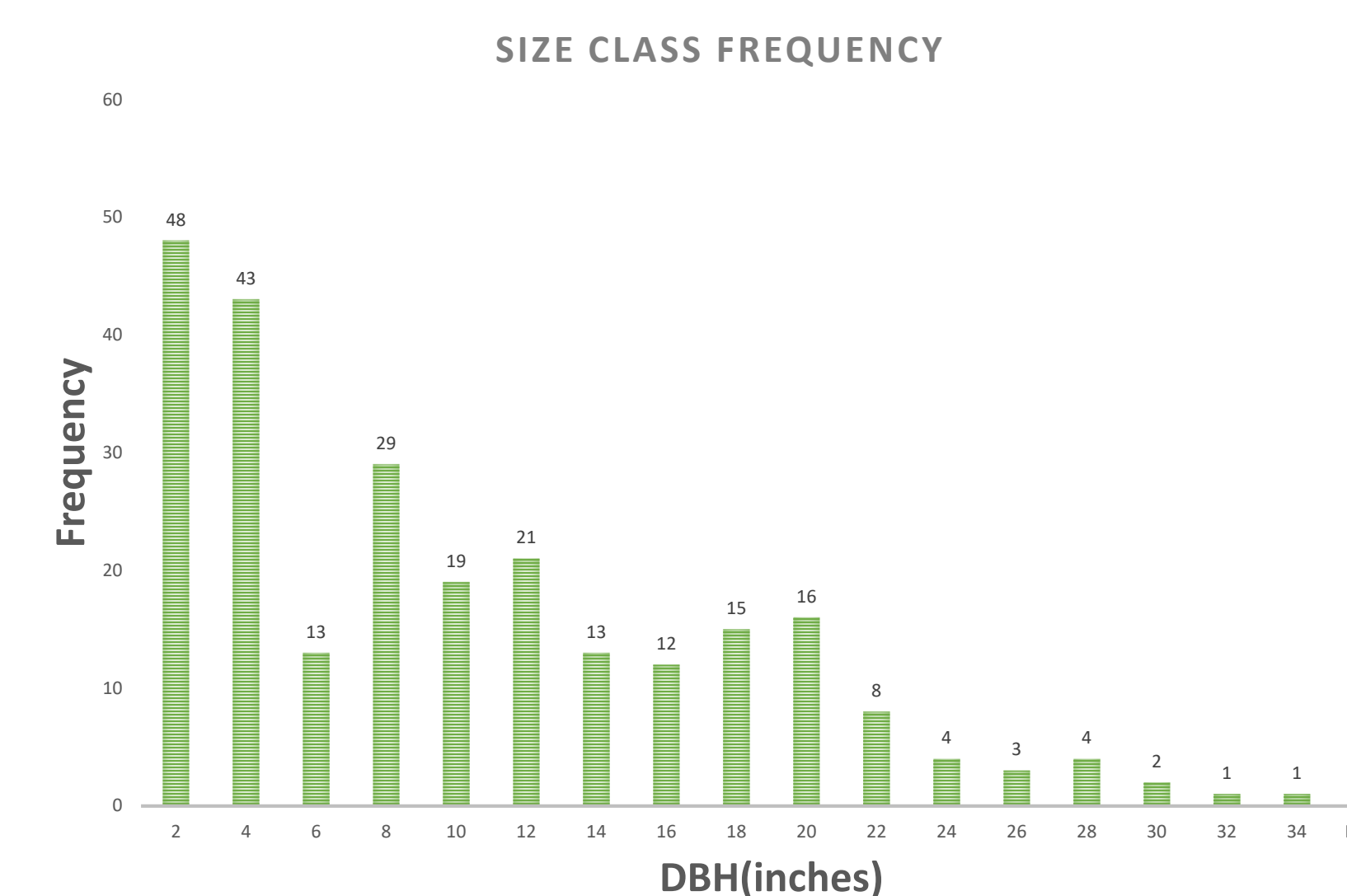


Figure 6. Size class histogram of Blue Ridge Neighborhood street trees. Tree diameters were measured at breast height and sorted into 2 inch size classes.

Conclusions

There are many different species types in the Blue Ridge Neighborhood, but a vast majority of the trees fall into only two types. We recommend that more emphasis be placed on species diversity and avoiding maples and Callery pears in future plantings. We advise following routine care (mainly pruning) for these trees while the focus shifts to planting more trees in the many open planting sites. It is essential that the older trees be maintained so that the neighborhood can receive the most benefits possible from their trees. Additionally, the continued planting of new trees in every available planting site will ensure that the neighborhood will have a well rounded group of size classes and maximize their benefit potential.

Following these results our recommendations for maintenance of these street trees can be summarized in three goals:

1. Plant more trees in the available open planting sites
2. Avoiding planting species like Maple and Callery Pear, focus on adding diversity and
3. Continue routine maintenance on existing street trees and if possible continue to update the inventory.

Literature cited

Northeast Neighborhoods: Blue Ridge [A street map of Blue Ridge Neighborhood via the City of Bloomington]. (2016). Retrieved April 24, 2017, from https://bloomington.in.gov/documents/viewDocument.php?document_id=1833

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Acknowledgments

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