



Habitat Connectivity of Buckthorn and Burdock plants in DuPage County

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Introduction

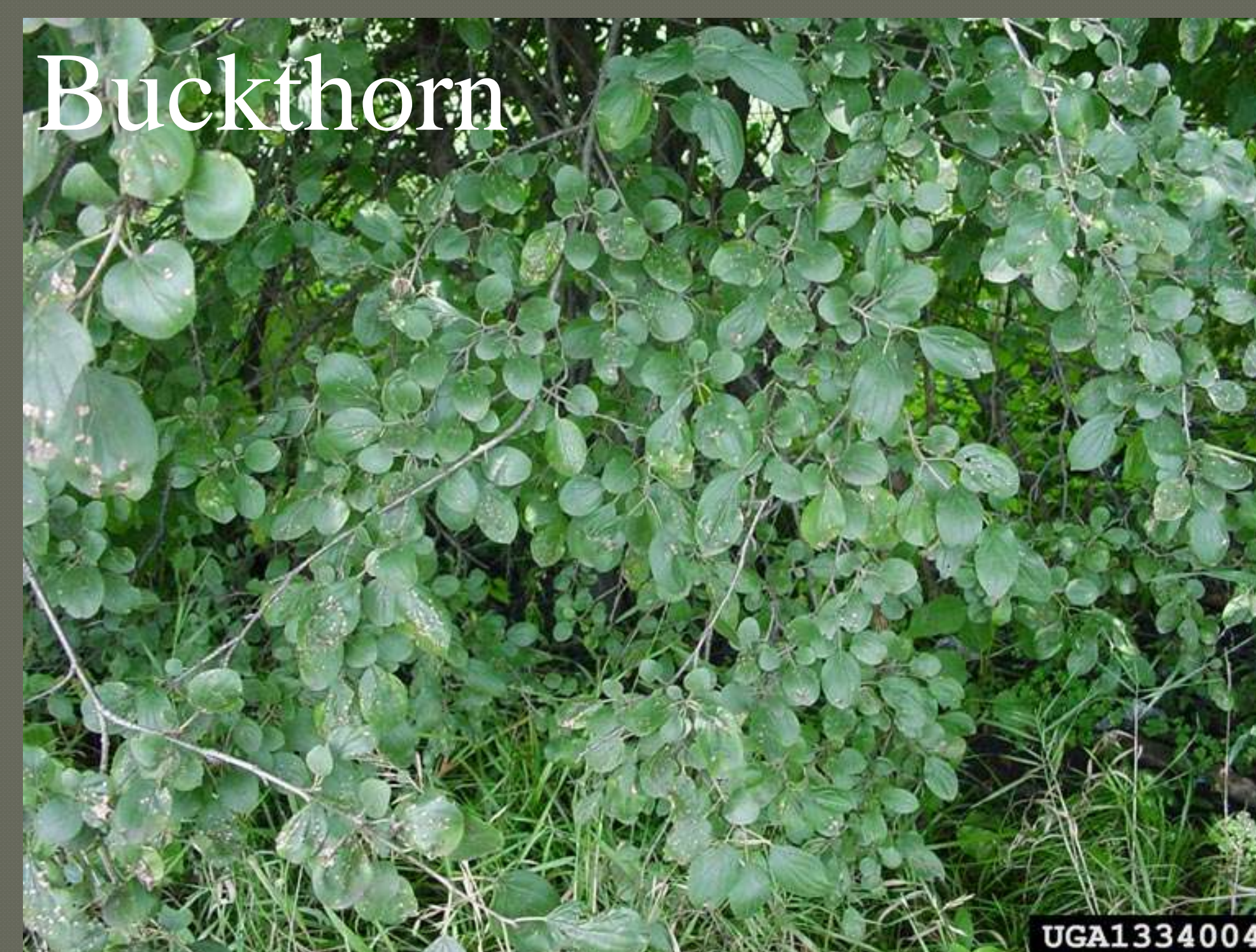
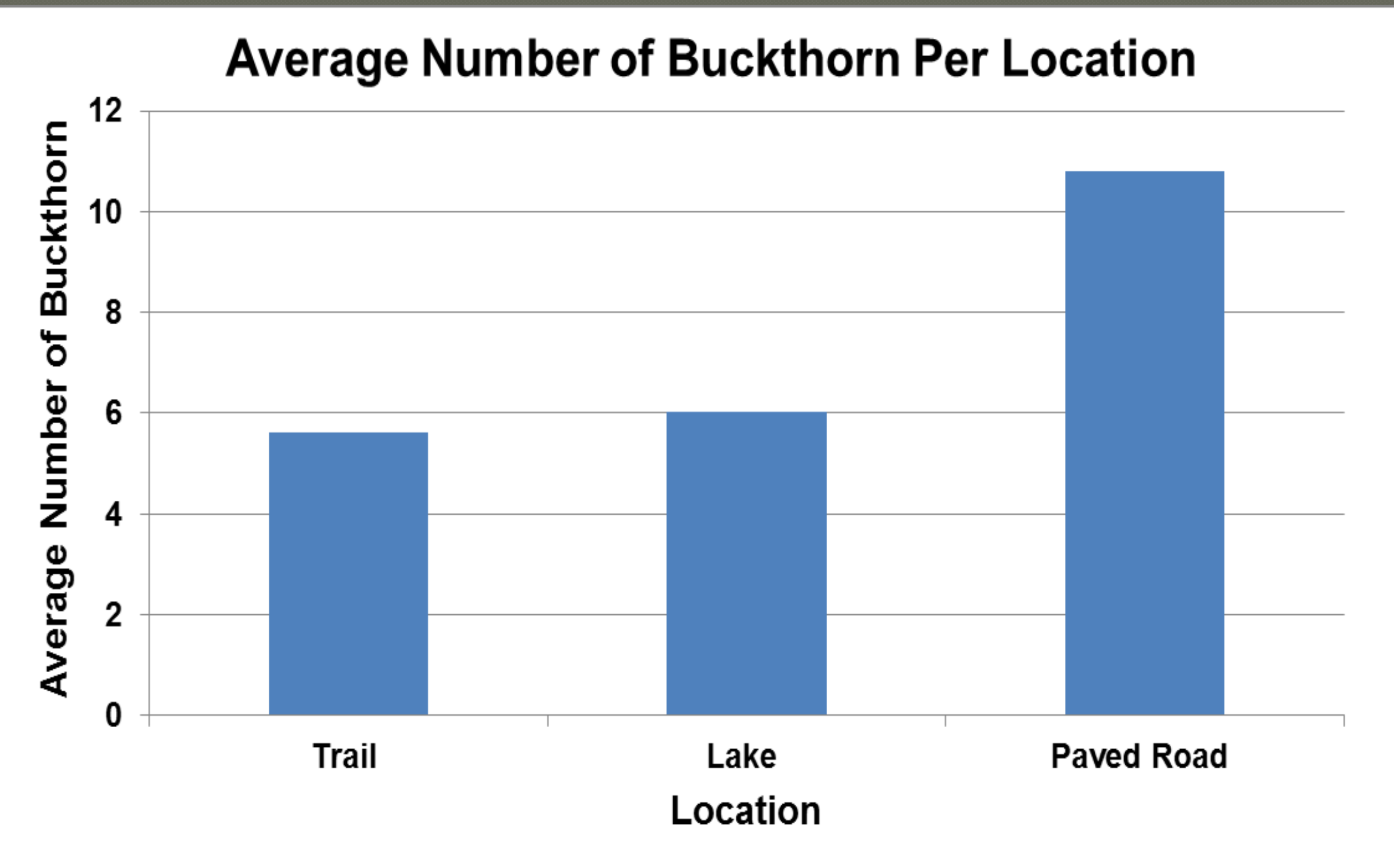
Habitat connectivity is the degree to which the landscape facilitates animal or plant movement and other ecological flows¹. Well connected populations have a greater opportunity for dispersal, lower risk of extinction, and increased species colonization². Invasive species replace native species and colonize new areas. Two invasive species, Buckthorn and Burdock plants, were surveyed to identify woodland habitat connectivity in Herrick Lake and Blackwell forest preserves.

Objectives

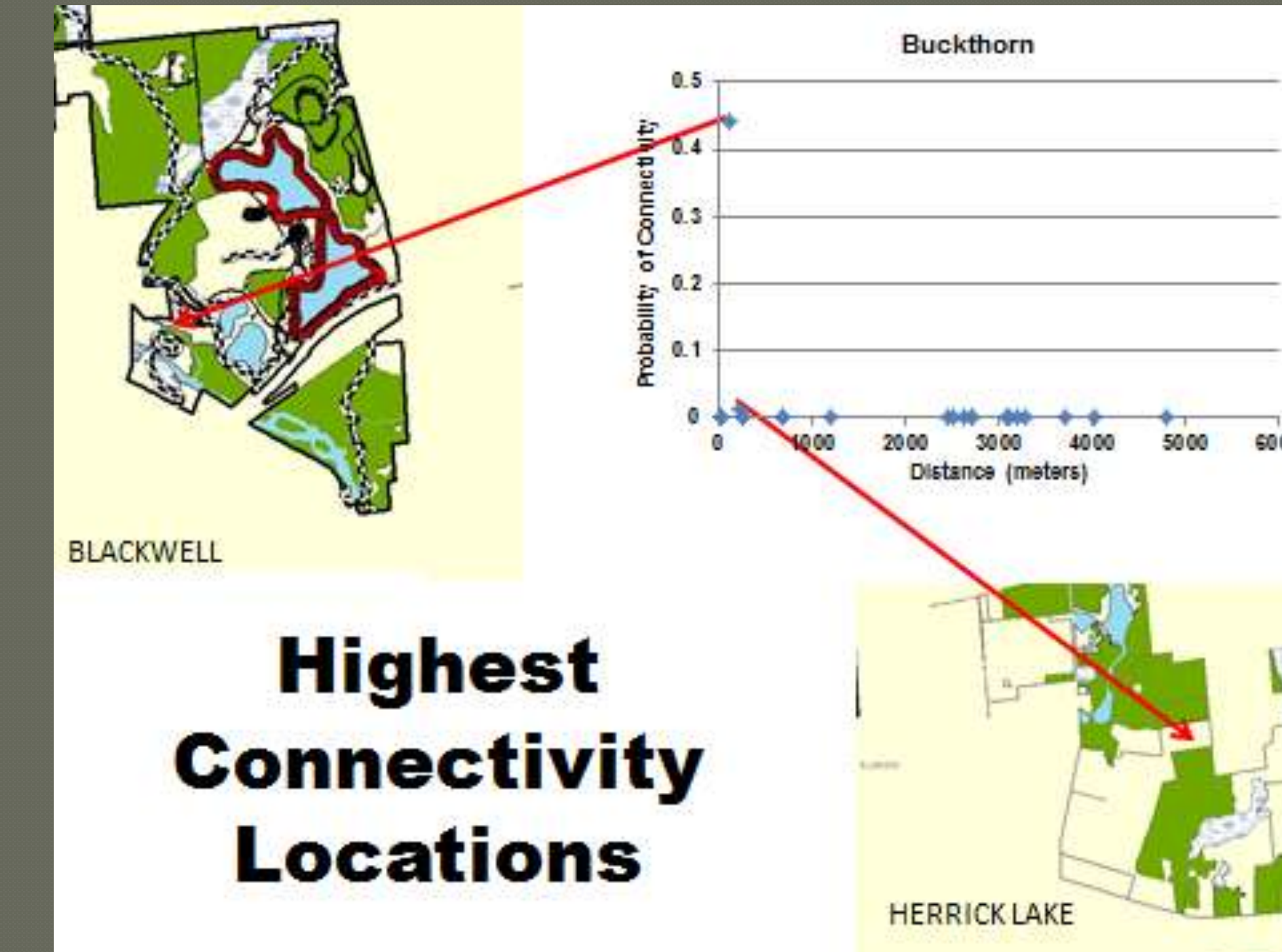
Our objectives were to identify where invasive plants are most common between trails, paved roads, and around lakes in Herrick Lake and Blackwell forest preserves. We are also going to determine how fragment size and isolation may impact plant connectivity.

Methods

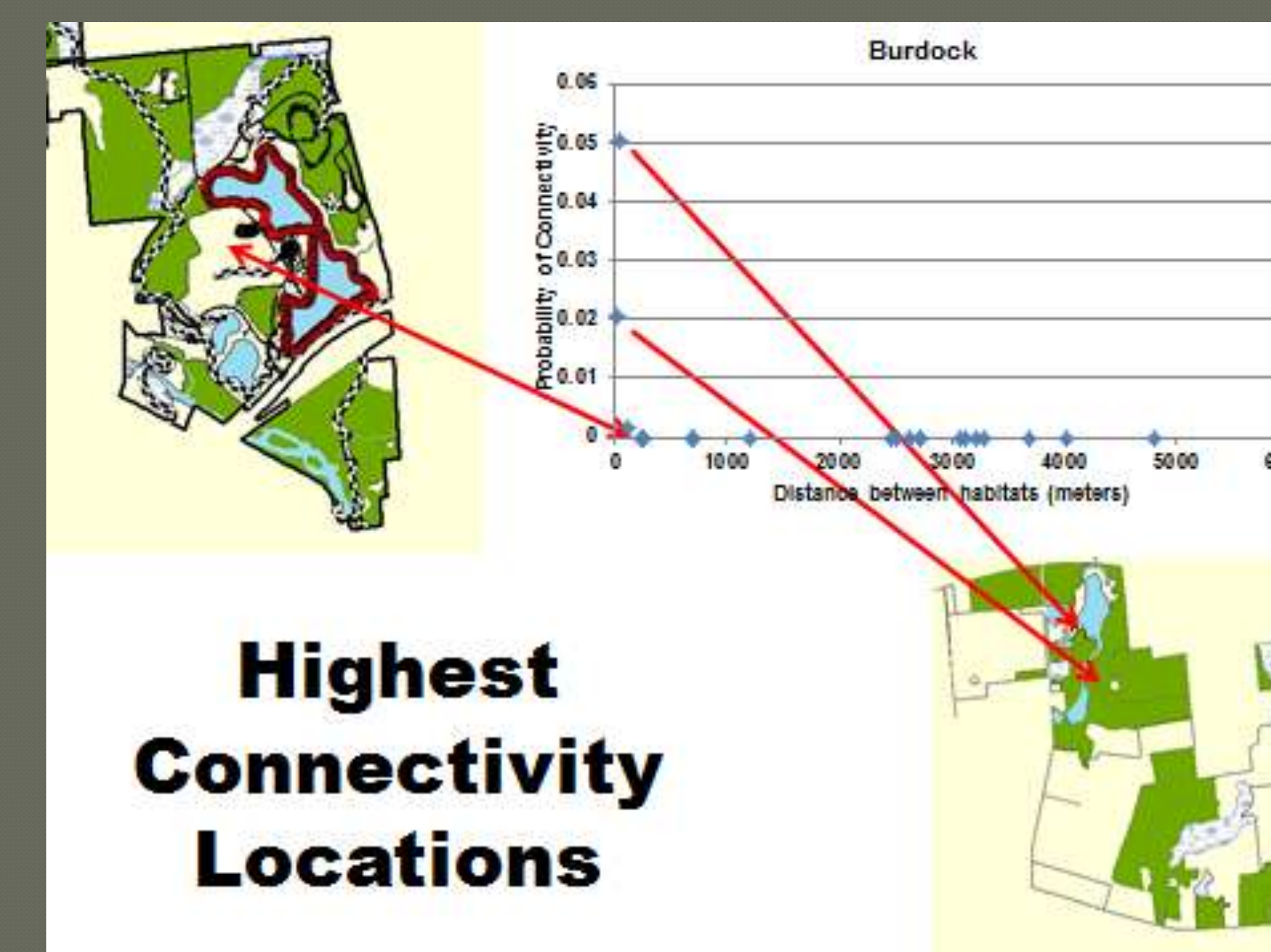
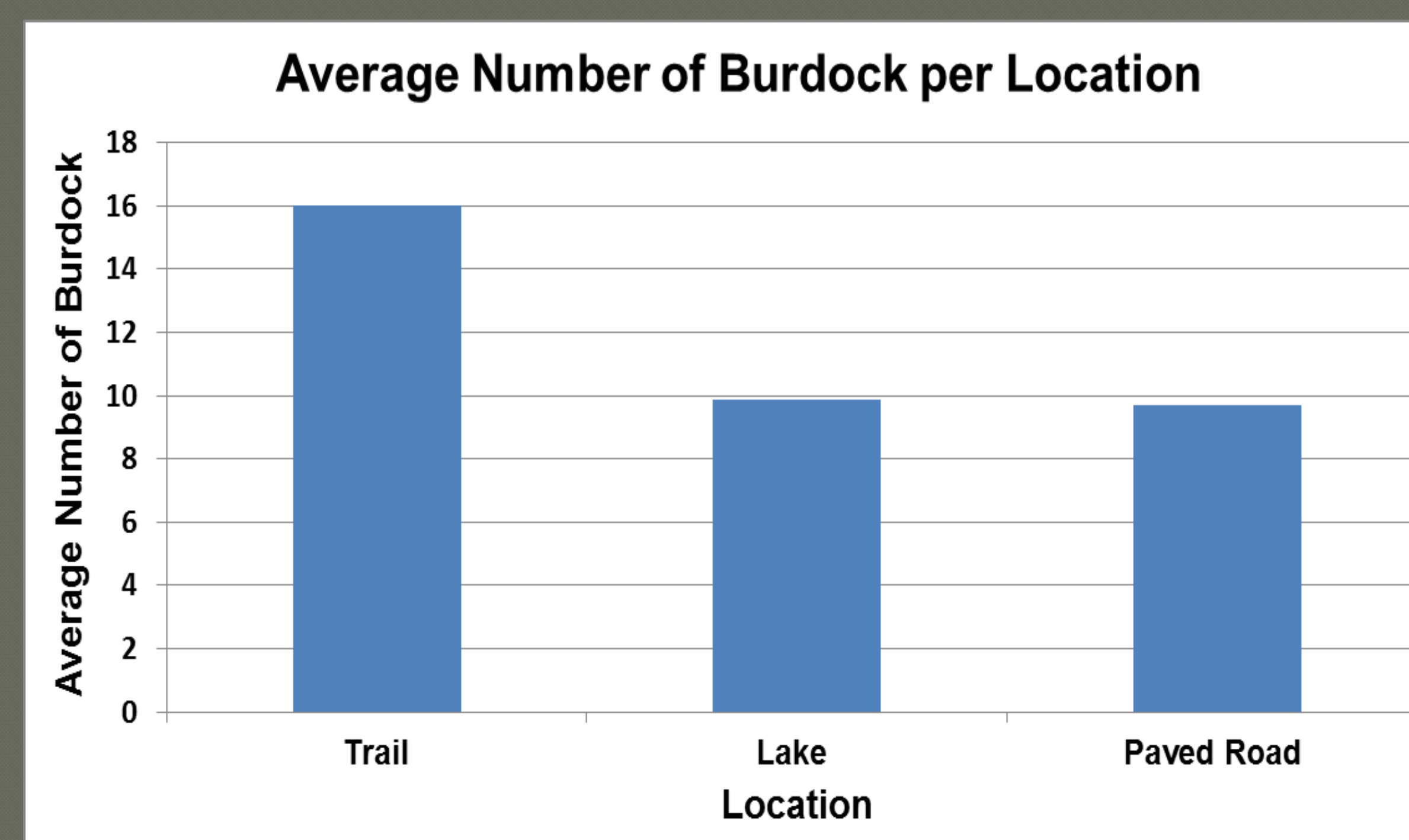
To identify habitat connectivity of invasive species we made transects of 100 m and surveyed the populations of Buckthorn and Burdock within each transect. GPS coordinates were taken at the start and end of each transect. All transect are 100 m apart from another.



Buckthorn



Burdock



Conclusions

In conclusion, more Buckthorn was found by paved roads, while more Burdock was found by trails. Probability of connectivity (PC) allowed to identify critical areas for control of these invasive species. The PC suggest that there is more Buckthorn and Burdock plants in areas that are closer to each other than farther away.

Future Research

- Determine growth rate of Buckthorn from removal sites
- Identify seed dispersal of Burdock in DuPage County

Acknowledgements

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References

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