Appendix 1.

Fig S1. Design and spatial arrangement of manipulated plots at the Henry Buck Trail. Removals and additions took place in 2010, 2011, and 2011. This myrmecochore-dominated site occurred at the margin of a rocky slope and riparian corridor (41.9384, -73.0125) located in American Legion State Forest (Barkhamsted, CT, USA). April 2010 surveys at this site (Fig S2) occur on line transect approximately 50 meters from the top right sub-plot.

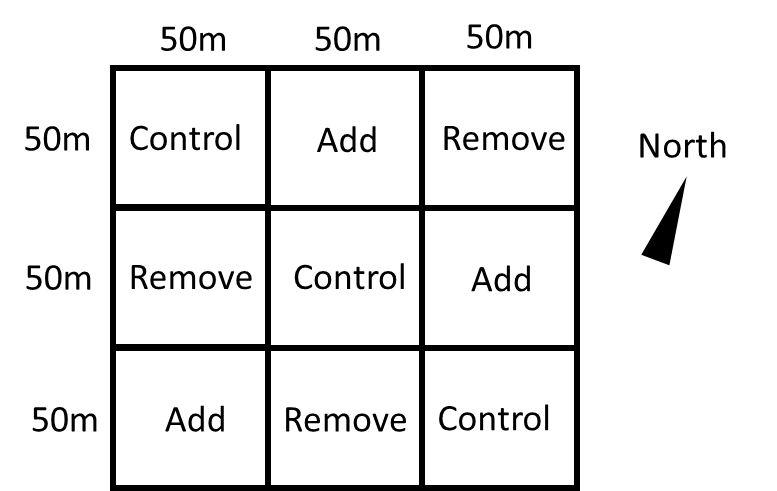


Fig. S2. Species richness at preliminary 150m transect at Henry Buck Trail (41.9428, -73.0158), American Legion State Forest, Barkhamsted, CT. This transect was completed on April 20, 2010. Ant-dispersed species identified in the herbaceous layer during this transect included Spring beauty (*Claytonia virginica*), Trout lily (*Erythronium americanum*), Red trillium (*Trillium erectum*), Duchman’s breeches (*Dicentra cuccularia*), Wood anemone (*Anenome quinquefolia*), Blunt-lobed hepatica (*Anenome americana*), Bloodroot (*Sanguinaria canadensis*), and Sweet white violet (*Viola blanda*). Additional species were found sampling plots and adjacent in 2017, including Downy yellow violet (*Viola pubescens*), Painted trillium (*Trillium undulatum*), Common blue violet (*Viola sororia*), and Canadian wildginger *(Asarum canadense*). This figure shows the species accumulation curve at this location, with the estimated error converging due to high confidence in the estimated species richness. The species richness was 15, with an estimated species pool of 26.7 ± 16.1 (*Chao1* and *Chao1* standard error).

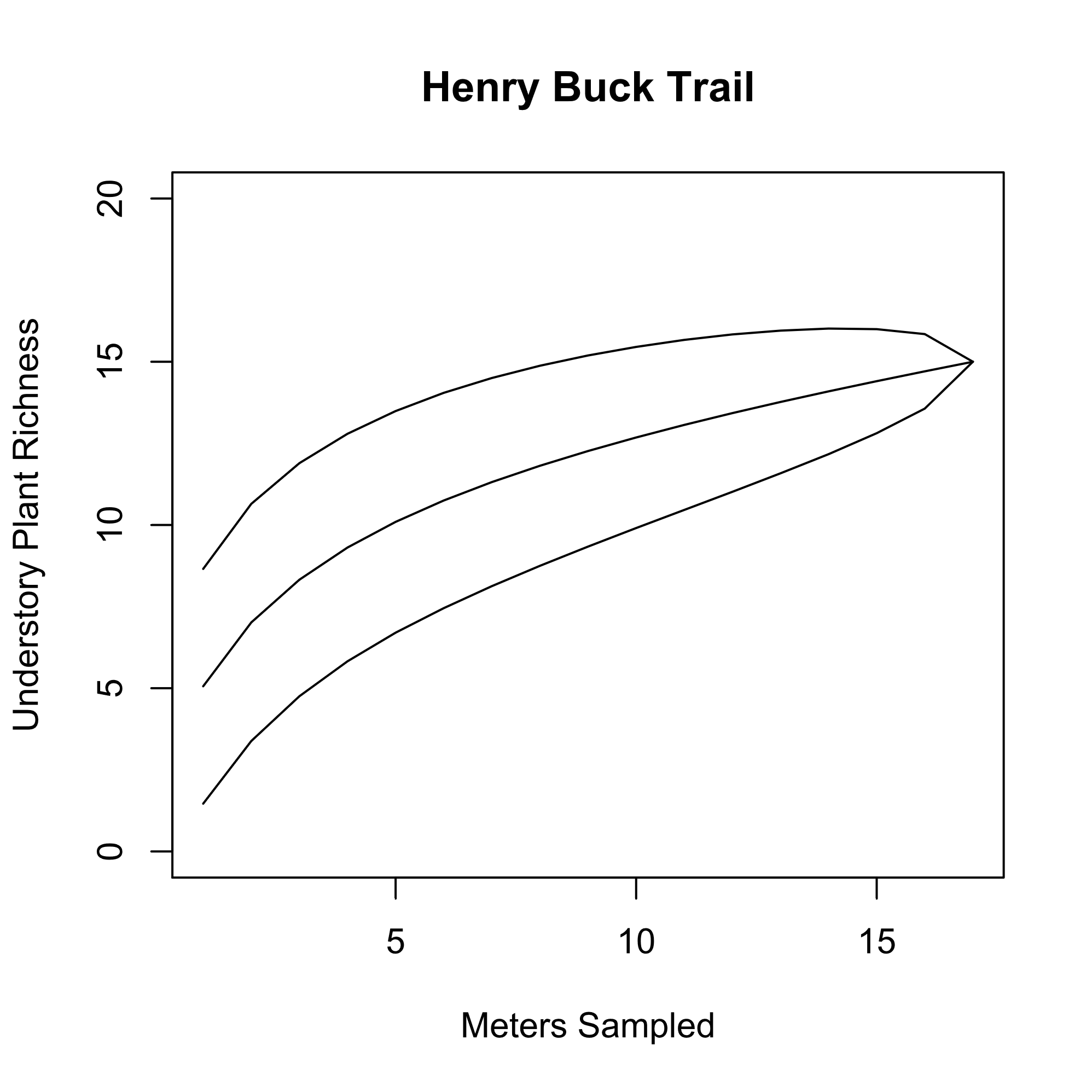


Fig. S3. Species richness at Galko Farm Preserve. Site located in Wallingford, CT (41.4651 -72.8628) and was sampled in May 2009. This site represents a forest fragment recently recovered from small-scale agricultural production. Although this site had the highest species richness and estimated species pool, it had fewer myrmecochore species at lower density then Henry Buck. Several invasive shrubs dominated transects including Burning bush (*Euonymus alatus*) and Asiatic bittersweet (*Eleagnus umbellata).* Ant-dispersed plant species included Bloodroot (*Sanguinaria canadensis*), Trout lily (*Erythronium americanum*), and Red Trillium (*Trillium erectum*). Rue anemone (*Thalictrum thalictroides*) was found at this site, but there is no literature evidence that it presents an elaiosome consumed by ants. This figure shows the species accumulation curve at this location. The species richness was 19, with an estimated species pool of 30.6 ± 12.5 (*Chao1* and *Chao1* standard error).

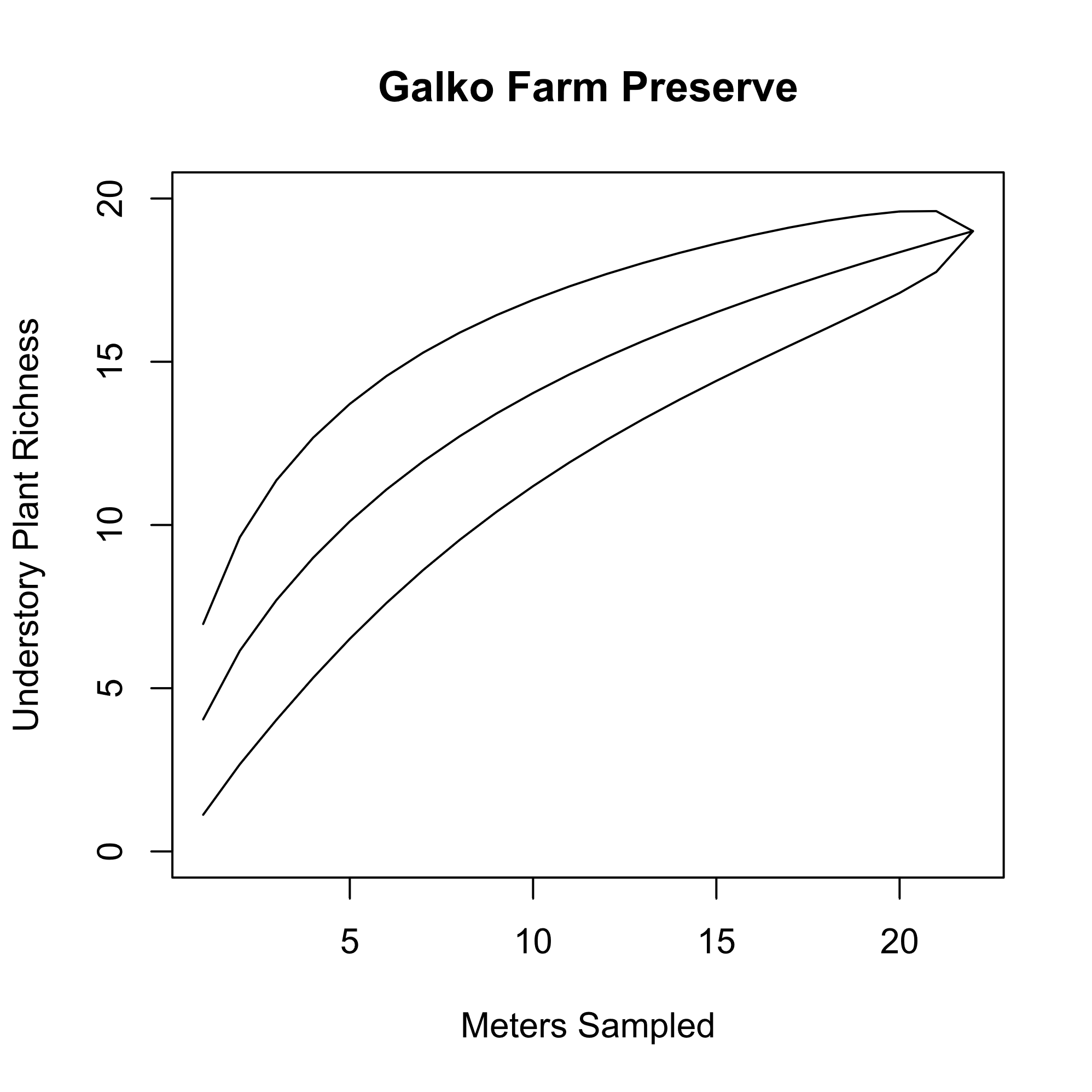


Fig. S4. Species richness at Ragged Mountain upslope. This site was located in Berlin, CT (41.6314, -72.8078) and was sampled on April 12, 2010, with a 200m transect. This site represents upland forest habitat in Central Connecticut in which many ant-dispersed plants were found in a relatively higher elevation and dry location compared to the other three sites. At this location, the only ant-dispersed plants found were Red Trillium (*Trillium erectum*) and Trout lily (*Erythronium americanum*). This figure shows the species accumulation curve at this location. The species richness was 11, with an estimated species pool of 12.4 ± 2.2 (*Chao1* and *Chao1* standard error).

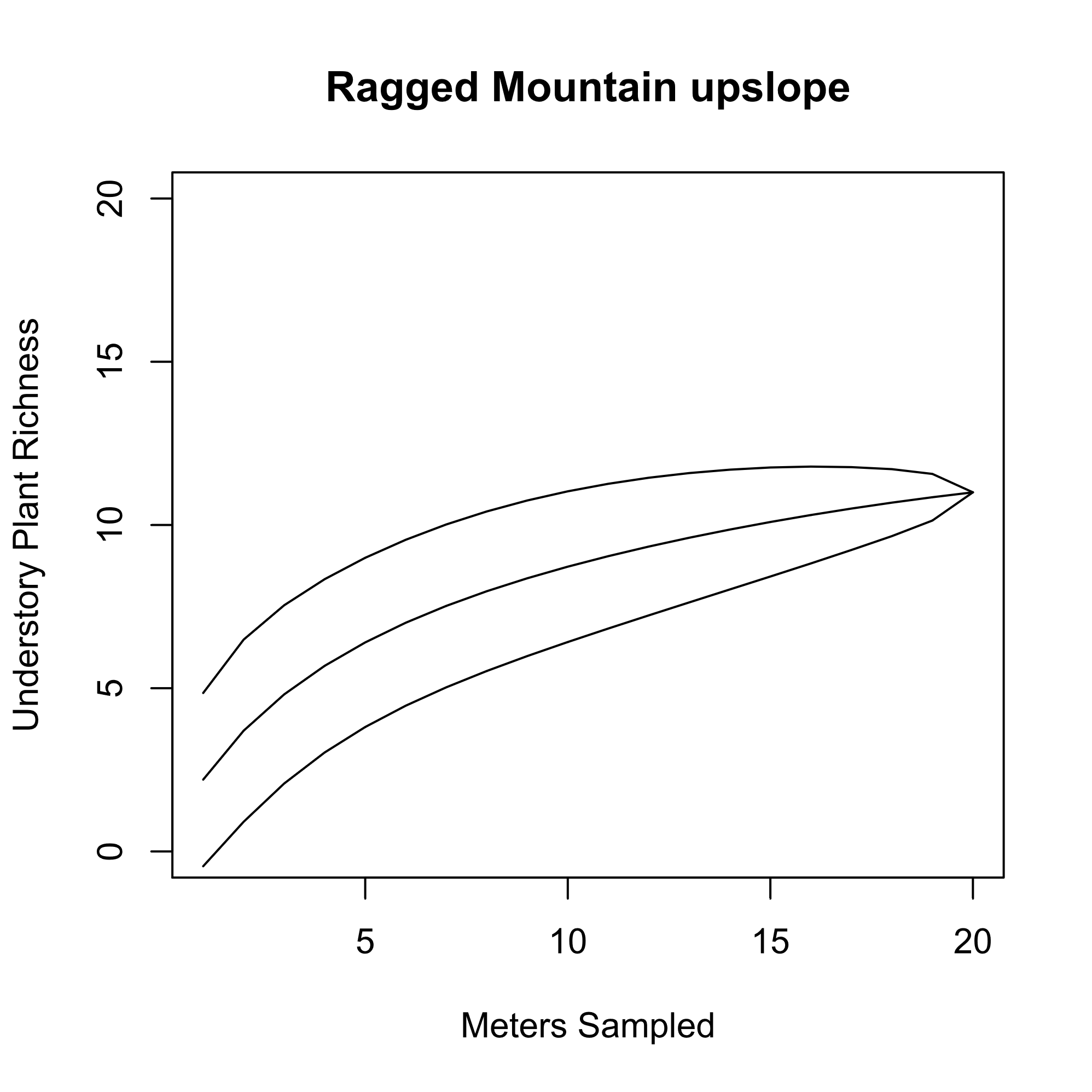


Fig S5. Species accumulative curve at Ragged Mountain downslope (41.6289, -72.8048). While this site surveyed within the same forest fragment as Fig. S4, represents a streamside, mesic forest habitat at relatively lower elevation than the Ragged Mountain upslope site. Ragged Mountain downslope was sampled on April 14, 2010 with a 170m transect. At this location, ant-dispersed plant species include Bloodroot (*Sanguinaria canadensis*)*,* Dutchman’s breeches (*Dicentra cuccularia*), Red Trillium(*Trillium erectum*), and Trout lily (*Erythronium americanum*). One *Viola* spp. was found that appeared to resemble Common blue violet (*Viola sororia*), but a sample was not collected to verify species identification. This figure shows the species accumulation curve at this location. The species richness was 18, with an estimated species pool of 21.2 ± 3.65 (*Chao1* and *Chao1* standard error).

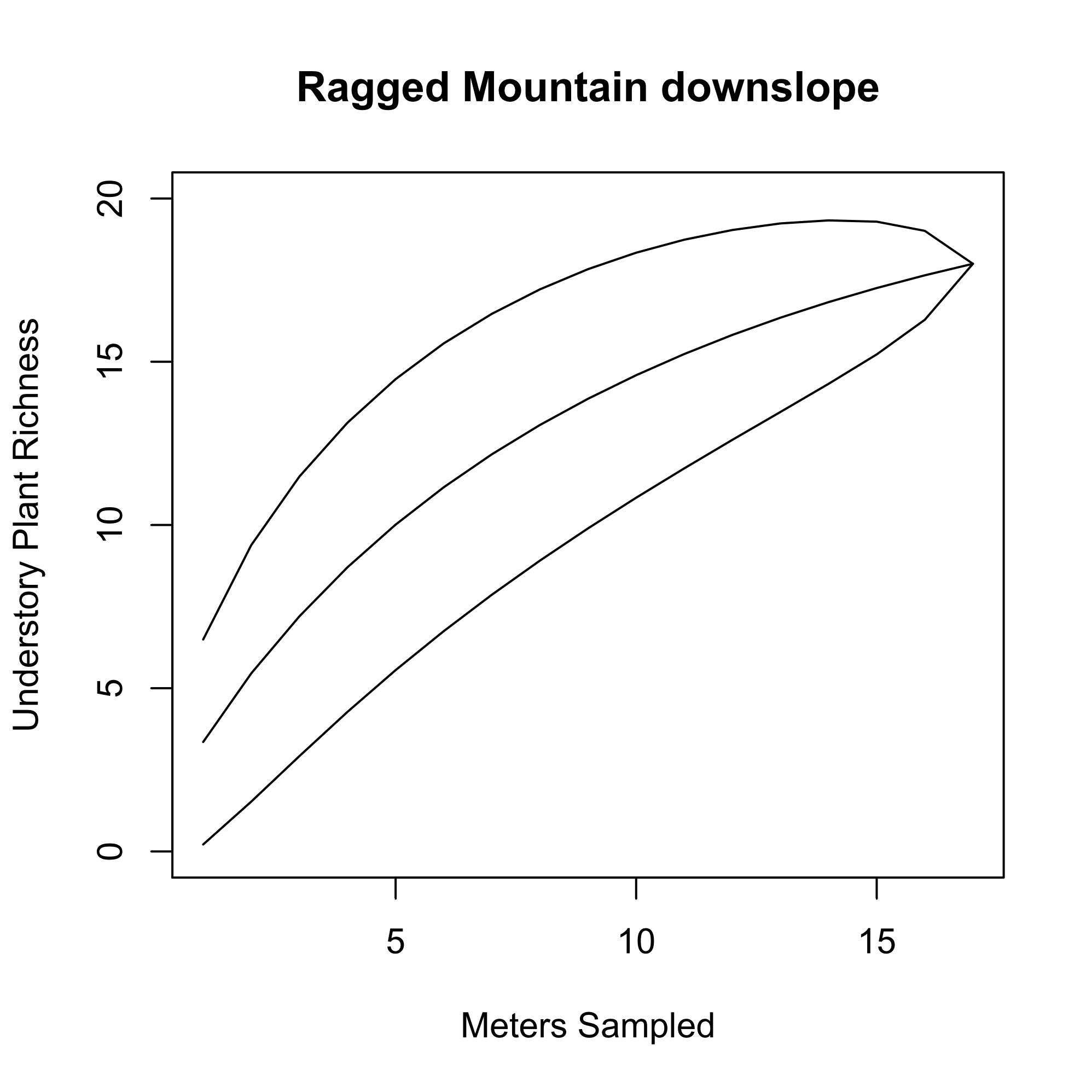


Figure S6. Plant coverage transect and ant bait location information for 2017 post-manipulation surveys at Henry Buck Trail site. Within each of the nine subplots, five baits were placed at locations marked with orange circles. Plant community survey were completed with two transects across the diagonal of each plot. Any individual plant located at the intersection was not measured an additional time when completing the second transect.

