Hinckley Reservation – 2,700 acres, largely square in shape with mostly unbroken mature forest.
Rocky River Reservation – 2,600 acres, mostly narrow bands of broken forest.
Mill Stream Run Reservation – 3,200 acres, mostly narrow bands of broken forest, but a few larger (100+ acre) blocks of forest.
The percentage of all forest birds detected (within 50 m) in each of the three reservations that are HIGHLY SENSITIVE to habitat disturbance. Graph shows that a greater proportion (nearly 20%) of birds at Hinckley are considered forest interior species. Hinckley is 'square' in shape and therefore has a greater proportion of its forest represented as forest interior habitat (vs. forest edge or disturbed).
The average number of Neotropical migratory birds that are forest obligate species (do not occur in any habitat except forest) detected per 10 minute point count (within 50 m) in each of the three reservations. Graph shows that more forest-dwelling NTMBs were detected per survey in Hinckley than in the other two reservations. Hinckley is ‘square’ in shape and therefore has a greater proportion of its forest represented as forest interior habitat (vs. forest edge or disturbed).
The average number of Ovenbirds detected per 10 minute point count (within 50 m) in each of the three reservations. Graph shows that Ovenbirds were significantly more common at Hinckley. Hinckley is ‘square’ in shape and therefore has a greater proportion of its forest represented as forest interior habitat (vs. forest edge or disturbed)….the sort of habitat preferred by Ovenbirds.
The average number of Hooded Warblers detected per 10 minute point count (within 50 m) in each of the three reservations. Graph shows that Hooded Warblers were significantly more common at Hinckley. Hinckley is ‘square’ in shape and therefore has a greater proportion of its forest represented as forest interior habitat (vs. forest edge or disturbed)….the sort of habitat preferred by Hooded Warblers.
The average number of Veerys detected per 10 minute point count (within 50 m) in each of the three reservations. Graph shows that Veerys were significantly more common at Hinckley. Hinckley is ‘square’ in shape and therefore has a greater proportion of its forest represented as forest interior habitat (vs. forest edge or disturbed)….the sort of habitat preferred by Veerys.
The average number of ALL BIRDS detected per 10 minute point count in each of the three distance bands in each of the three reservations. Graph shows that more birds were detected in the distance bands farther away, but this was likely due to the fact that these bands encompassed larger areas (and, hence, more birds were found there).
The average number of forest birds that are HIGHLY SENSITIVE to habitat disturbance detected per 10 minute point count (within 50 m) in each of the three reservations. Graph shows that more disturbance SENSITIVE birds were detected per survey in Hinckley than in the other two reservations. Hinckley is ‘square’ in shape and therefore has a greater proportion of its forest represented as forest interior habitat (vs. forest edge or disturbed).
The average number of Scarlet Tanagers detected per 10 minute point count (within 50 m) in each of the three reservations. Though a species often considered sensitive to forest disturbance and reliant upon large unbroken blocks of forest, the graph shows that Scarlet Tanagers were significantly more common at Mill Stream Run, than at either of the other reservations.
The average number of Wood Thrushes detected per 10 minute point count (within 50 m) in each of the three reservations. Though a species often considered sensitive to forest disturbance and reliant upon medium to large blocks of forest, the graph shows that Wood Thrushes were most abundant at Rocky River Reservations.
This curve was calculated using Program Distance, a mathematic approach used to estimate species’ densities. It also allows one to estimate the “effective distance” from which an observer begins to miss (not detect) birds. In our initial year of observation, our “effective distance” was a little less than 50 m (meaning we began to miss as many birds as we saw). So, in most of the analyses that follow, I simply used all birds SEEN WITHIN 50 M of the observer. There are more sophisticated ways of analyzing these data (and we will do that), but for this talk it is sufficient to simply, state that we can use this technique to compare across sites (parks) where visibility (detectibility) may differ.