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During the summer of 2011, the project team from Butler University has taken biotic samples at the four lots that will constitute the "North Farm" in the St. Clair Place neighborhood. Additionally, we sampled additional "control" lots in the neighborhood that will remain unchanged for the foreseeable future. We initially were sampling the lots designated "South Farm" in the draft long-term neighborhood plan but these lots proved to be untenable for sampling for a variety of safety and logistical concerns. The new "control" lots are located closer to the North Farm sites and will provide suitable comparisons for the sites undergoing development. Below are descriptions of the sampling that have been executed to date according to type of organism. The attachments contain primary data sheets.

## 1) Floristic Inventories

Dr. Rebecca Dolan and student interns visited the sites four times in July to create plant inventories. All lots in the study area and the control were walked and all plants recorded. Data for lots were lumped into "Study Area" and "Control Area".

A total of 51 species were seen. Many are non-native plants most would call weeds. At the Study Area, 60% (28 of 47) were non-native, 52% (14 of 27) at the Control Area.

Of the non-natives, a few were species considered invasive. They are of management concern when they are found in natural areas. In the Study Area these species include: Tree-of-Heaven, Amur honeysuckle, Winter-creeper and White mulberry. In the Control Area these species include: Japanese knotweed, Amur honeysuckle, White mulberry.

Physiognomic breakdown, number of species seen:

	Study site	Control Site
Tree	7	5
Shrub	3	3
Woody vine	4	2
Herbaceous vine	1	1
Perennial forb	16	5
Biennial forb	3	2
Annual forb	12	9

Sites will be revisited in the fall for future data collection.

## 2) Birds

Bird sampling took place using 50 meter, fixed-radius points incorporating five minute point counts. Sampling visits were conducted on the morning of July 6, 2011 between 7:40 and 8:00 A.M. Due to the size and shape of the parcels, only one sample point was incorporated to each site. One sample point was used in the east side parcel and one was used in the west side parcel along Bellville Road, and points were located in the center of the parcels. All birds observed within the sample point as well as those heard, or observed moving through the site were

noted. In the east parcel the following birds were observed: House Sparrow (4), Mourning Dove (1), European Starling (1) and Common Grackle (4). ON the west side parcel the following birds were observed: House Sparrow (8), European Starling (3) and Northern Cardinal (1).

## 3) Reptiles and Amphibians

We have deployed cover boards for sampling reptiles and amphibians in the North Farm sites. We have had trouble ensuring the boards do not disappear, since they are 2' x 2' pieces of plywood. In this case, we have now marked the boards to identify them as part of a Butler University research project and this seems to be adequate. We will continue to inspect the cover boards for evidence of herpetological activity over the month of September.

## 4) Insects

In On July 7, 2011, interns went to the North Farm and took the GPS coordinates of the plot to use to get random points for the insect collections. The first control site was abandoned because of site development and a new site was identified. On July 15, we mapped the coordinates for the control site. Six random points for the south and north site were determined and sites were sampled on August 2.

Our sampling protocol was to use a reverse action leaf blower with collection fabric and pvc pipe to collect the sample. We constructed a one-meter square sampling square out of pvc pipe and laid it down at the random GPS points and sucked with the leaf blower for one minute at each point.

We are currently working to sort through the samples and will be identifying them down to the taxonomic classification level of "order".

USDA Name	Common Name	St. Clair Place Study Area	Control Area
Abutilon theophrasti	Velvetleaf	Х	
Acer saccharinum	Silver maple	Х	Х
Ailanthus altissima	Tree of heaven	Х	
Amaranthus hybridus	Slim amaranth	Х	х
Ambrosia artemisiifolia	Annual ragweed	Х	
Arctium minus	Lesser burdock	Х	Х
Bidens frondosa	Devil's beggartick		
Campsis radicans	Trumpet creeper	Х	
Celtis occidentalis	Common hackberry	Х	
Chenopodium album	Lambsquarters	Х	х
Cichorium intybus	Chicory	Х	
Commelina communis	Asiatic dayflower	Х	Х
Convolvulus arvensis	Field bindweed	Х	
Conyza canadensis	Canadian horseweed	Х	х
Cynanchum laeve	Honeyvine	Х	х
Cyperus strigosus	Strawcolored flatsedge	Х	
Daucus carota	Queen Anne's lace	Х	
Duchesnea indica	Indian strawberry	Х	
Erigeron philadelphicus	Philadelphia fleabane	Х	Х
Euonymus fortunei	Winter creeper	Х	
Glechoma hederacea	Ground ivy	Х	
Lepidium virginicum	Virginia pepperweed	Х	Х
Lonicera maackii	Amur honeysuckle	Х	х
Matricaria discoidea	Disc mayweed	Х	
Morus alba	White mulberry	Х	х
Morus rubra	Red mulberry	Х	х
Oxalis stricta	Common yellow oxalis	Х	
Physalis longifolia	Longleaf groundcherry	Х	
Plantago lanceolata	Narrowleaf plantain	Х	
Plantago major	Common plantain	Х	х
Polygonum cespitosum	Oriental lady's thumb	Х	х
Polygonum cuspidatum	Japanese knotweed		х
Polygonum scandens	Climbing false buckwheat	Х	х
Portulaca oleracea	Little hogweed		х
Quercus macrocarpa	Bur oak	Х	X
Rumex crispus	Curly dock	X	X
Rumex obtusifolius	Bitter dock	X	Α
Sambucus nigra	Black elderberry	X	х
Solanum dulcamara	Climbing nightshade	X	Α
Solanum ptycanthum	West Indian nightshade	X	Х
Sonchus asper	Spiny sowthistle	X	^
Taraxacum officinale	Common dandelion	X	
Torilis japonica	Japanese hedge-parsley		
Toxicodendron radicans	Eastern poison ivy	X X	X
Trifolium dubium	Suckling clover		X
		X	Х
Trifolium pratense	Red clover	X	

Trifolium repens	White clover	Х	
<u>Ulmus pumila</u>	Siberian elm	Х	Х
Verbascum thapsus	Common mullein	Х	Х
Viola sororia	Common blue violet	Х	Х