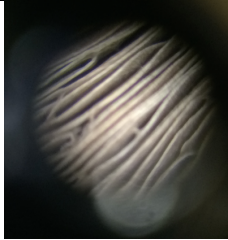
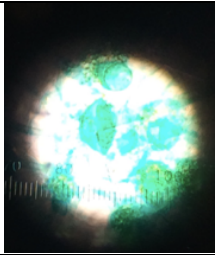
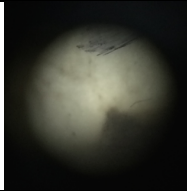


11 February 2015 – JB

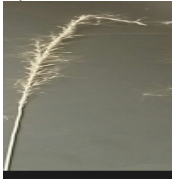
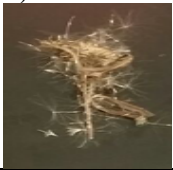
Plantae and Fungi

The purpose explored in this lab was to compare and identify various types of land plants that have evolved from green algae. Many types were examined including Bryophytes, Angiosperms seed plants, seedless plants, and Gymnosperm seed plants. Bryophytes are non-vascular plants. Flowering plants are considered Angiosperms while tall tree like plants are most often categorized as Gymnosperms. Seedless plants are often shorter wispy plants.

In this lab we first observed known vegetation and determined what groups they could be categorized into. We then traveled to the marsh transect and collected five different plants and noted the location, size, shape, and details. We also collected some leaf litter and put it into a bag. We then returned to the laboratory to inspect each plant. Each sample was examined and categorized similar to the known plants earlier. We then crafted a Berlese funnel and put the leaf litter into the funnel. We wrapped it in tinfoil with a light source directly aimed at it. We then performed PCR, the denaturing, annealing, and extension (amplification) of DNA, on our bacteria from last week. We then put the PCR sample onto a gel electrophoresis plate and examined the DNA bands on an Ultraviolet light. Lastly we examined some fungi and determined their categorized groups and titles. We looked at their Fungi Sporangia, globelike structured that give fungus its black color.

Name of Fungi	Group	Image	Why is it a fungus?
Mushroom	Basidiomycota		It has spores
Rhizopus Stilunfer	Ascomycota		It has rhizoids
Rhizopus Nigricans (Black Bread Mold)	Zygomycota		It has rhizoids

These are all fungi.

Transect Sample Plants	Location and # in transect	Description (Size/shape/height)	Vascular?	Specialized structures	Mechanisms of reproduction
1) 		Seedless Thin, Long 3 feet	Yes	Monocot Flowering	Asexual
2) 		Angiosperm Thin, Long, flower 1 feet	Yes	Monocot Flowering	Asexual
3) 		Angiosperm Thick, Stem-cotton Bush	Yes	Monocot Flowering	Asexual
4) 		Angiosperm Thin, short Thin stem Bush	Yes	Monocot Flowering	Asexual
5) 		Angiosperm Short, Thin stem Bush	Yes	Monocot Flowering	Asexual

Overall these plants had little variation. They were all of similar structure and function.

It can be concluded that a majority of the plants were of similar structure and function because they belonged to the same ecosystem and that is where these categorized

plants thrive. They may also lack diversity because the transect lies in a largely urban and developed area which stunts natural growth and diversity.