

**Date: Fri**      **Time: 10:30am-12:00pm**

**Session: Ecology**

**Moderator: Ana Gonzalez**

**Note-taker: Angela England**

**Notes From Discussion:**

1. Lipps: After landfill closed, how long before trees grew?
  - a. Restored as prairie not forest
2. Abedin: explanation in lay terms?
  - a. Denitrification happening in Jordan River, bacteria found from sediments similar to known denitrifiers.
  - b. Relevance to wastewater treatment plants, use methane and nitrate/nitrites and get N<sub>2</sub>
3. Abedin: How much can these bact reduce N and C levels in wastewater?
  - a. Unknown, still active research
4. Abedin: Why Jordan River?
  - a. Impaired ecological function, also is near university so convenient
  - b. Wonder how much "restoration" will impair existing microbial function
5. Abedin: Relationship of functional components of system, microbial community variation near veg roots edge channel vs middle channel sediments
6. Lipps: Former landfill restoration to forest – why "semiclimax" classification if hackberry early colonizer spp.?
  - a. Looking for bottomland hardwood spp., Sugarberry/ash/elm forest USFS classification, also UNTx studies nearby river fork in undisturbed riparian forest used same procedure and found transitioning to old growth, had sugarberry elm and ash as top 3, oaks blackwalnut pecan as secondary (she had different), SRS USFS says takes 200 yrs to reach oak, sugar/elm/ash within 50ish years
  - b. Terminology of forest succession possibly problematic, resilience and disturbance not really incorporated, especially "climax" riparian – floodplain expect flood "disturbance"
  - c. Is an oak forest really the goal to restore to near streams? Willow cottonwood