Program: Natural History of Central Indiana, past, present, future
Speaker: Tom Swinford, Assistant Director, IDNR
Guests: Michael Donnelly, Colleen Mestichelli, Natalie Nicholls, Brittany Swinford, Rick Wiethoff
Attendance: 116
Scribe: Dick Carter
Editor: Carl Warner

Today's presentation regarding the "**Natural History of Central Indiana, past, present, future"** was made by Tom Swinford the assistant director of Indiana Department of Natural Resources - Nature Preserves. Tom is recognized as an authority of the landscapes, flora, and fauna of Central Indiana. (Email: tswinford@dnr.in.gov)

Tom touched on the geologic history of Indiana starting with the glaciers and how geology formed natural communities. He highlighted the eight state nature preserves in Marion County - the highest quality natural areas remaining within Indianapolis city limits. This includes the sizeable preserves of Ft. Harrison and Eagle Creek, which also form the core of two of Indiana's designated important bird areas. There are 297 nature preserves dedicated and spread throughout Indiana containing over 50,000 acres. The group works closely with varied partners, the State, cities, and counties in dedicating significant natural areas to be conserved.

Tom reviewed the origins of major landscape changes that occurred from glacial ice age flows, which were up to two miles thick, starting about two million years ago. Several various, active glacial ice flow streams that moved and spread, generally southward, across the northern United States from the Canadian Polar Regions have been identified. Some of those flows stopped at about the southern 1/3 end of Indiana a few tens of thousands of years ago. After this glaciation, Indiana developed into a largely forested area. However 14 percent of the northeast portion was grassland that joined with our neighboring state of Illinois and spread westerly through the plains to the Rockies. The lakes region formed in northeastern Indiana. Till plains formed in central Indiana

Glacier activity was described with more detail: to show how till plains of glacial fill undulate in central Indiana with seasonal pond formations; moraines of unconsolidated glacial material deposits formed; rubble loads transfers occurred; domed kames, created by crevasse melt water contents forming high deposits, are seen at the Crown Hill Cemetery; tunnel valleys, working under the glacier to form deeper areas, are found at Fall Creek, etc.. Great gravel and sand deposits are found in Indiana from the massive glacial deposits which migrated thousands of miles from their original northern glacial starting locations.

More recently since the Ice Age, the hands of humans have also altered the terrain in major ways as well. Deforestation, farming, construction, mining, lumbering, industrial pollution, improper usage, coal mining, and creature migration flow disruptions by newer construction barriers, etc. have caused major impacts. He talked about the forest types, wetlands, prairies, and streams that strongly impact various areas of our state. Protected reservoirs of biological species are still being established. Currently, massive aggregate mining for supplying massive construction projects has the potential to cause great harm to our local water supplies. The purity and availability of our water resources needs major protection! At this time, the White River basin is populated with smallmouth bass, occasional eastern bobcats, black crown night herons, migratory Indiana bats, screech owls and box turtles, etc.

Tom Swinford