INDIANA GEOLOGICAL SURVEY
INDIANA UNIVERSITY

GEO Notes

Sand and Gravel: A Glacial Resource

Indiana's sand and gravel resources were deposited by at least four glacial events, but the majority were deposited during the Illinoian (190,000–130,000 years ago) and the late Wisconsin (35,000–10,000 years ago) glaciations. During these periods, ice sheets centered in northern Canada advanced south, eroding everything in their path. The eroded material was picked up and carried within or pushed beneath the ice and eventually deposited in Indiana. Glacial meltwaters deposited sand and gravel in sheets, fans, and channels as the ice retreated north.

More than $120 million worth of sand and gravel is mined each year in Indiana and used for road building and the manufacture of concrete, glass, and foundry molds. Subsurface deposits of sand and gravel contain the main source of drinking water for the northern half of the state. Research about these deposits helps aggregate producers locate economically viable deposits of sand and gravel, as well as documenting and protecting drinking water resources.

This photo shows glacial meltwater deposits of sand and gravel from a modern-day retreating glacier.