

Dear Readers,

The cover of this edition of the Florida Geographer shows images, courtesy of the Florida Geological Society, illustrating the development and occurrence of sinkholes in Florida.

Most of Florida is underlain by carbonate deposits of varying thickness and age. This heterogenous and complex underground system is responsible for one of the most productive aquifers in the world. The karst terrain is eroded by acidic rainwater which percolates underground and dissolves the bedrock unevenly, into cracks, holes and subterranean caves. The surface can remain intact until at some point, the overburden is too great and a sinkhole occurs. The continuous cycle of rainy and dry seasons causes variations in stress, and weakening of the overlying sedimentary layers.

The formation of sinkholes can also be exacerbated by anthropogenic activity, such as pumping and water resource redistribution, which can lower the water table in some areas or raise it in others, along with the excess weight of building and development.

The research of the effects of sea level rise on karst aquifers is nascent; however, some studies are beginning to suggest that there may be some influence.

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