Most sinkholes occur in places where water can dissolve the rock below the surface, for example where the bedrock is limestone, salt, or gypsum. They can collapse very quickly, or slump slowly over time. Many sinkholes occur naturally, but human activities can also cause them. Over-pumping of groundwater, mining, and leaking pipes beneath roads and buildings are common causes of artificial sinkholes.

Why do sinkholes matter?

Like landslides, sinkholes can devastate small areas. Natural sinkholes are a potential threat throughout 20% of the United States. [1] Florida, Texas, Alabama, Missouri, Kentucky, Tennessee, and Pennsylvania are most sinkhole-prone because of their bedrock. Human-induced sinkholes can develop anywhere due to careless practices.
How does geoscience help?

Geoscientists study how sinkholes form in order to warn the public. They make maps identifying the types of bedrock where sinkholes are likely to form so that homeowners and public officials can understand their local risks.

References


Learn More

Introductory Resources

- Living with Karst - A Fragile Foundation (Booklet), American Geosciences Institute
  This booklet illustrates what karst is and why karst areas are important. It also discusses karst-related environmental and engineering concerns, guidelines for living with karst, and highlights sources of additional information.

Resources for Educators

- Education Resources Network, AGI's Center for Geoscience & Society
  Search for sinkhole resources in: Organizations, Curricula & Instruction

- NGSS Performance Expectations, Next Generation Science Standards
  2-ESS2-1, 5-ESS2-1, HS-ESS2-1, MS-ESS2-2, MS-ESS2-2, MS-ESS2-4, MS-ESS2-2, MS-ESS2-5

- NGSS Disciplinary Core Ideas, Next Generation Science Standards
  ESS2.A, ESS2.C

Frequently Asked Questions

How long does it take for a sinkhole to stop growing?
Florida Geological Survey

Which areas are most at risk for sinkholes?
U.S. Geological Survey

Do you have a question that's not listed here? Search all FAQs

Maps & Visualizations

Interactive map of environmental information in Minnesota
Minnesota Department of Natural Resources

The Minnesota Department of Natural Resources' Watershed Health Assessment Framework provides a comprehensive look at Minnesota's watershed and environmental information in the form of an interactive map. The map includes information on: Water quality: Impaired waters, which have a...