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## **GOLD IN IOWA**

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Gold is widely distributed throughout the Earth's crust and is mined on all continents except Antarctica. South Africa possesses the largest known gold reserves and produces about two-thirds of the world's gold, with Russia accounting for most of the remaining one-third. Gold is most often found in igneous rocks such as granite, although it is also present in a variety of other rock types, usually constituting less than 1 part-per-million. Most granites are formed by the slow cooling and crystallizing of magma produced by the melting of pre-existing rocks. Because of its low melting point compared to other minerals, gold is among the last minerals to solidify during cooling of this molten magma. This characteristic allows the gold to be naturally concentrated with other low-melting point minerals such as quartz. Gold commonly solidifies in cracks and veins around quartz and other late crystallizing minerals. Gold is also found in oceanic basalts, metamorphic and sedimentary rocks, and in unconsolidated sediments deposited by streams or glaciers.

There are no outcroppings of gold-rich rocks in Iowa. However, gold is present in the veneer of glacially deposited materials that cover most of the state. This glacial material was derived from Minnesota and Canada where gold-bearing igneous rocks are present at the land surface. The glaciers eroded these gold-rich rocks and mixed them with other rock debris before depositing them in Iowa. While the gold is present in small amounts throughout these glacial materials, it may be concentrated by the state's many rivers that cut into these deposits. Because of its high density, the gold (as small grains and flakes) is deposited along with sand and gravel by the flowing water. These stream deposits are the best place to find gold in Iowa. Historically, gold has been reported along the Iowa River near Steamboat Rock and Eldora in Hardin County; along Otter Creek near West Union, Brush Creek and the Volga River in Fayette and Clayton Counties; along the Des Moines River near Pella, Douds, and Farmington; along Vasser Creek in northeast Davis County; and along the Little Sioux River near Correctionville in Woodbury County and near the town of Cherokee. Along the Big Sioux River at Klondike in Lyon County, a small placer mining operation recovered gold from river gravels in the early 1900s – Iowa's only known commercial gold mining venture.

In 1853 an Eldora innkeeper named John Ellsworth reported gold on his farm along the Iowa River. As news of the discovery spread, Iowa experienced its own gold rush. It is estimated that as many as 3,000 would-be miners descended on the Eldora area in search of instant wealth; all left disappointed.

In 1904 a report on the Geology of Fayette County by T.E. Savage (lowa Geological Survey Annual Report XV) stated that \$1.00 to \$1.50 worth of gold could be panned from Otter Creek by a "patient washer" in a day. In 1904 an ounce of gold was worth only \$20.67. Today with the value of gold about \$300 per ounce, a similar day's work could produce gold worth about \$25.00.

So, if you get caught up in the lure gold, grab a pan and take to the field. Find a river or creek that cuts into glacial deposits (primarily in north-central or northeast lowa). Contact the landowner and secure permission to explore along the river. Locate an area where sand and/or gravel occur, and test your gold panning skills. Who knows, with a lot of work and little luck you may join the fraternity of individuals who have discovered lowa gold.