

Geography In The News™



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WHERE TO FIND GOLD!

Gold unquestionably has been the mark of wealth throughout history. Just the mention of gold in the 1800s led otherwise sensible people to stampede to the sites of gold discoveries. In their excitement, some potential gold miners left plows in the fields, deserted their stores filled with goods, vacated government offices and abandoned their families with no means of support.

The geography of gold production has shifted numerous times throughout history with new discoveries and the resulting gold rushes. Major U.S. gold rushes began in Piedmont North Carolina (1799), on Cherokee lands in Georgia (1835), California (1849), Colorado's Pike's Peak (1858), the Black Hills of South Dakota (1874) and Alaska and Canada's Klondike (1897).

Until the 1980s, the price of gold remained below \$100 per ounce, in part because governments regulated its price. Over the past decade, however, the value of gold has skyrocketed, resulting in mini-gold rushes around the world. Abandoned mines are reopening, debris piles from previous mining operations are being reworked and miners are staking new claims as the price of gold approaches \$1,000 per troy ounce. A troy ounce is a measurement used to weigh

precious metals and is about 10 percent heavier than an avoirdupois ounce, which is one-sixteenth of a pound.

Gold is valuable largely because it is scarce. Reputedly, all of the pure gold ever mined would only fill about two Olympic-size swimming pools. Gold is a soft metal with properties that make it beautiful, durable, resistant to most chemicals and useful in certain industrial and electronic applications.

In its natural state, gold is found in two basic locations – as veins (called lodes) and as placer (pronounced, "PLAAH-sir") deposits. Gold in veins is associated with other minerals including quartz, copper and silver, while placers include small flakes and nuggets of gold removed from veins by erosion and deposited as alluvium. Because the specific gravity (weight) of gold is much greater than other minerals, it settles to the bottom of streambeds.

Gold mining of lodes involves the use of shafts and tunnels to follow the veins. Gold is separated from the ore when it is crushed and processed. Mining of placer gold, on the other hand, may include the

environmental damage and stream pollution.

In 2006, the top gold producing countries in order of production were South Africa, China, Australia, United States, Peru, Russia, Canada, Mali, Uzbekistan and Ghana. Gold, however, is mined commercially in at least 78 countries.

Because most gold mining processes are so environmentally destructive, heavy restrictions are placed on mining operations, particularly in developed countries. As one example, virtually all large dredge operations in Alaska began to cease soon after statehood was achieved. National environmental laws increasingly restricted stream pollution generated by heavy uses of mechanical dredges and sluices.

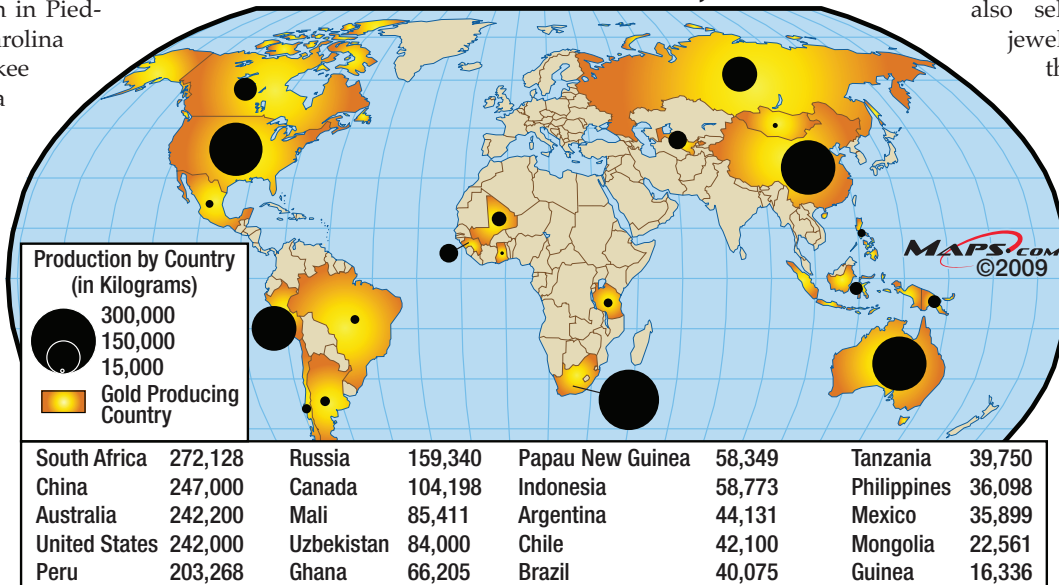
Today, historic gold mining associated with the Alaska and Canadian Yukon gold rush has created a booming tourist industry during the short summer season. Tourists on commercial land tours and cruises are entertained and educated at gold mining operations. They pay for brief lessons and the privilege of panning for gold on company property and they can keep their "discoveries."

Often the commercial stores associated with the tourist operations also sell novelties and jewelry made from the flakes of gold that the tourists find. Usually, the price of the jewelry is greater than the value of the flakes, leading tourists to remark often that, "...the gold mine is not in the ground, but in the company stores." Nonetheless, panning for gold is considered recreation for many tourists who want a "Klondike experience."

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World Gold Production, 2006



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Source: British Geological Survey

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Sources: British Geological Survey, July 2008:

<http://www.bgs.ac.uk/mineralsuk/commodity/world/home.html>

simple and inefficient method of panning or it may involve larger sluice boxes and dredges. Although small amounts of gold may still be panned from the streams in known gold producing regions of the world, most gold is processed from lodes. Large scale dredges and sluice boxes are seldom used anymore because of potential