

# Gold Panning



Gold pans for recovering heavy minerals by gravity concentration come in several sizes. For searching out gold in alluvial deposits a round pan some 40 cm in diameter and 6 cm deep is generally used. A smaller pan 30 to 38 cm in diameter is perhaps a better size for new chums until they become proficient in handling a gold pan.

The sides of the pan normally slope 30-40 degrees from the horizontal. Usually made of iron, these pans are often kept blackened on the bottom to make it easier to identify small specks of gold. They should be kept free of grease, as this tends to disperse the recovered gold.

Gold panning imitates what nature has accomplished over many years in forming placer deposits; the action whereby heavier objects, because of their density, work their way to the bottom of a depression due to the swirling agitation above.

Now, suppose you have chosen a good site near a source of water for your gold-panning activities. What you do next is scrape the wash into the gold pan and make sure that it is completely broken up and saturated before you commence panning.

While the wash is soaking, stir or "knead" the contents of the pan with both hands to break up lumps and free any gold present from clayish material. The miners who used this process on a large scale many years ago called it "puddling."

Next mash and discard the larger stones to begin reducing the pan's contents. Thoroughly break up all remaining lumps of clay by rubbing them against the sides and bottom of the pan.

During such operations the gold pan usually sits on the bottom of a waterhole, just below the surface. When you have broken up the clay lumps take the pan in both hands and raise it until it is only slightly covered with water then swirl the wash around in the dish. This helps to wash the smaller stones and gravel and loosens the gold causing it to sink through the swirling wash onto the bottom of the pan.

The next action is to shake the pan and its contents slowly in a rhythmic motion from side to side and then slowly tilt the pan forward as you continue to shake it. Be careful that you only tilt the pan forward until small stones and sand are slowly carried over the edge of the pan.

Just as this action starts, stop shaking the gold pan. Now allow more water into the pan and repeat the whole procedure until there is little wash left in the pan.

To see if there is any gold in the pan hold the pan up in the opposite angle to the normal tilting, panning angle and, with a small amount of water in the pan, move the dish around just enough to allow the water to run up and over the wash. This should carry away the last amount of wash to reveal your first specks of gold.

It all takes practice and it is better if someone can show you how it is done professionally. So contact your local lapidary club, for the members of such clubs enjoy meeting visitors and usually at least one member is an experienced gold panner.

It is interesting to note that an experienced miner can pan off from seven to 10 dishes per hour. If this rate of panning is maintained for eight hours, the quantity of alluvial material treated is about 0.4 m.

In many places, heavy black sands, essentially magnetic oxide of iron, accompany gold. Take care not to lose any gold when finally panning it out in the presence of such sands. You may find that a strong magnet is very useful to remove black magnetic sand when it has dried out. You can then pick out the tiny specks of gold with a moistened finger tip and drop them into a small bottle full of water for safekeeping.

If you are working a creek in an area of very fine gold, it may be difficult to extract the gold using a pan because it tends to float off during the final stages of panning. To overcome this, add dish washing or laundry detergent to the water in the pan. This will make the gold sink and it will be much easier to collect.

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