# Moonstones of Meetiyagoda: Mining the Rare Blue Moonstones of Sri Lanka

Posted on



A moonstone pendant

**Pick up a blue moonstone anywhere in the world, and the chances are that**

**this beautiful gemstone would have come from a small village in southwest Sri Lanka – Meetiyagoda – where it is mined in a few primitive waterlogged pits, by hand, as it has been since 1906.**

**Words and Photographs** David Blacker

Moonstones on display by size and colour

Meetiyagoda is just a couple of kilometres from the coast, midway between Ambalangoda and Hikkaduwa, sitting over the earth's largest pegmatite vein of moonstone. The ten mines in Meetiyagoda are by far the world's primary source of blue moonstones.

The term moonstone was originally coined by the ancient Greeks to describe a particular gemstone that seemed to hold the ethereal light of the moon in solid form. The stone is a member of the feldspar family, a combination of two species, orthoclase and albite, stacked in thin alternating layers. When light falls through these layers, it scatters in many directions, creating a phenomenon known as adularescence, named after Mt Adular in Switzerland, one of the first sources of moonstones. In fact, "adularia" is an ancient namefor moonstone. The finest of these moonstones have a clear, transparent body, with a strong blue adularescence. Moonstones are the most valuable of the feldspars, an average quality moonstone of five carats is comparable in value to a South Sea pearl of the same size. In spite of the relatively modest price of moonstones, the blue variety tends to fetch a higher price than those of other colours because of its rarity.

Moonstone deposits occur in the crystalline granite known as pegmatite, in magmatic rock deep below the surface, unlike the sapphires and the rubies, which are sedimentary surface deposits. To get to the moonstone, the miners of Meetiyagoda dig deep rectangular shafts down through the claylike kaolin topsoil to the weathering surface of the pegmatite.

These mineshafts are called yati illama, and are in actuality twin-shafts, each about 10m square; one for actual mining, and the other to constantly pump out the ground water that would otherwise fill the mineshaft. As the yati illama is dug, the sides are reinforced with coconut logs and lined with branches and leaves of the kekilla fern (Dicranopteris linearis); the latter acting as a sieve which holds back the dense soil while allowing ground water through, thereby reducing the overall pressure of the earth and allowing deeper mining than would otherwise have been

possible.

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Once the pegmatite layer is reached, usually at a depth of 10-20m, mining can begin. Sometimes, horizontal tunnels are also dug outwards from the vertical shaft, in four directions, so that the maximum area of pegmatite can be exposed. Each horizontal donawa is 10m long and 2.5m square, and a miner must crawl into it to work by oil lamp or electric lights, in claustrophobic conditions, at temperatures often around 35˚C. Once this layer of pegmatite has been excavated, the yati illma will be dug down a further 10-20m and, if necessary, more donawa extended. This will continue to a maximum depth of 65m, or until the bedrock is reached.



The sorting begins

Each mineshaft is worked by four to six miners, half of them below ground, scraping chunks off the pegmatite vein and shovelling it into buckets which are hauled to the surface via a dabaraya – a log pulley which is turned by two men. The sludge of pegmatite debris, moonstone fragments, and mud – the illama – is then dumped in the illam kematha – a shallow pit next to the mineshaft. Each day, or each week, depending on how busily worked the mine is, the illama is then transferred to round wicker baskets and washed of its sand and mud in a nearby pond.

Once the mud has been washed away from the rough crystalline pegmatite, it goes through several levels of sorting, by size, colour, and mineral type. The sorting

begins immediately, on a rough shelf next to the pond, but might continue later even in the lapidary where it is cut and polished. Throughout, the miners keep a sharp eye open for the glitter of cyan that will identify a rare and famous blue moonstone. While Meetiyagoda is renowned for its moonstones, pegmatite is also home to other stones such as beryl, zircon, and corundum, and these too must be sorted away.

The large stone glows in a variety of pale blues when held to the sun.

In the lapidaries of Meetiyagoda, electric cutting machinery has largely replaced the traditional hand-powered hannaporuwa, but even these simply add speed to a process that is essentially done by hand, individual moonstones being polished one at a time by being held against the spinning wheel. While it is possible to find faceted moonstones on display, the traditional cut is en cabochon, producing the well-known round, egg- or teardrop-shaped stones.

Most of the moonstones are then sold as loose unmounted stones in the jewellery shops that front each mine, displayed by size and colour. Others are mounted set into rings, earrings, and necklaces, usually of silver, platinum, or white gold, which show off the subtle colours of the stones. Exceptionally sized moonstones are often made into brooches, and embellished with darker stones such as amethyst. Many of these stones make their way to destinations across the world.

The large stone glows in a variety of pale blues when held to the sun, the light reflecting off the nano-particles in the layers of feldspar. The blue moonstones of Meetiyagoda are indeed a rare find.

