



Australian opal is being considered for the prestigious Global Heritage Stone Resource designation.

Geologists debate resource status of Aussie opal

Debate is raging about whether Australian opal qualifies for an international designation that was initially reserved for architectural dimension stone.

The issue was recently raised by Dr Barry Cooper, the secretary general of the International Union of Geological Sciences' Heritage Stone Task Group. The task group was established in August 2012 to facilitate the formal designation of natural stone that had gained cultural significance and widespread use in art and architecture, particularly in heritage buildings and historic constructions.

Through the Global Heritage Stone Resources (GHSR) designation, the group of international geologists aimed to formalise the stone's characteristics for professional and research purposes, as well as enhance its recognition amongst fellow geologists, engineers, architects and other related groups. In his presentation at the recent 2015 European Geosciences Union General Assembly in Vienna, Cooper explored the limitations of the relatively new international status, acknowledging the arguments for and against considering some ornamental and semi-precious stones for designation. Specifically, he proposed Australian Precious Opal as a potentially worthy candidate.

A CULTURAL ICON

"Immediately Australian Precious Opal satisfies several GHSR criteria, including historic use for more than 50 years and wide-ranging utilisation for prestige jewellery around the world," Cooper's presentation abstract read. "It is also recognised as a cultural icon, including association with national identity in Australia as it is legally defined as Australia's 'national gemstone' as well as being the 'gemstone emblem' for ... South Australia."

Cooper indicated that designating Australian

Precious Opal as a GHSR would likely be the first time the gemstone had been given any formal international recognition in the geological arena. However, he also acknowledged various reasons why opal should not be accepted, the foremost being that the designation had originally been intended for building stone rather than gemstones.

"It may be argued that opal is also a mineral not a stone or rock, however the precious quality of opal results from mineral impurities/crystal irregularities and specimens of Boulder Opal are best regarded as rock," the abstract added.

Cooper noted that some other gemstones would never gain GHSR status due to the level of manufacturing or processing involved in their production, which could lead to the loss of a stone's natural qualities.

"Some of my colleagues are up in arms," Cooper told BBC News. "Where's the limit? If you ask me, I'd say stones like diamonds and sapphires are far too manufactured. But stones like opal are not only jewellery gemstones - they can also be used in sculpture and mosaics. They broach across into art and that gives them a deeper cultural significance. The crux is that there is probably some value in them being designated."

During the general assembly, a number of other stones were also nominated for designation, including Luserna stone, Candoglia marble and the "green stones" of Valtellina and Valchiavenna in northern Italy.

The task group has yet to make its first designation but BBC News suggested that honour would likely be bestowed upon Portland stone, a type of limestone originating from Dorset, England that is commonly used as a building stone and in British building construction.



Construction of the Ironstone Railway Exhibition Centre commenced in October 2014.

Industry gives quarry museum a hand

A number of UK construction materials companies have donated cement and aggregates to help a volunteer-run quarry railway museum build a new exhibition centre.

Rocks By Rail: The Living Ironstone Museum is based in Cottesmore, Rutland, UK. It aims to recreate the experience of a 1950s and 1960s ironstone quarry and railway through the preservation of original machinery from the period.

The museum's Ironstone Railway Exhibition Centre, which began construction in October last year, will be an insulated exhibition and conservation building housing three rail tracks for the quarry railway exhibits. It is expected to reach completion later this year.

The museum's volunteers appealed to local building materials companies to assist in the centre's construction and received a "terrific" response.

Hanson provided 20 tonnes of cement and aggregates to build concrete walkways between the rail tracks, Lafarge Tarmac donated a layer of limestone fill and 40 tonnes of granite chippings to create the rail track base, and Cemex provided the track itself, which had been left over from the company's work on rebuilding a light railway.

Stewart Jones, the manager of Hanson Cement's Ketton site, said, "We are delighted to be supporting the museum project with the supply of both cement and aggregates. We wish them every success."