

Diamonds not always a girl's best friend

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With Valentine's Day around the corner, jewelers are gearing up for a busy period as happy couples come shopping for the perfect engagement ring. Top of the list is the classic diamond, and this year there are more choices than ever.

"Pure diamonds are perfectly clear," says Paul Meszaros, Associate Lecturer in Macquarie University's Department of Human Geography, "but tiny traces of other elements change the properties of the crystal and produce different colors."

Light is reflected differently as a result, producing the yellow and pink diamonds for which stores such as Tiffany are famous. This is the same across all the precious stones, with impurities producing the range of colors we love so much.

Many stones are clear naturally. Amethyst is the traditional stone for February and it's basically an impure quartz. Strictly it's a semi-precious stone but it just makes the grade thanks to its colour: they are a very intense royal purple. There are some very rare ones on the market these days, particularly the Siberian amethyst, which has a very vivid shade and consistent color throughout."

If semi-precious is too down market, the patriotic lover can find excellent quality stones a lot closer to home. Mines at Barrington Tops in New South Wales produce home grown rubies, and Inverell and Glen Innes are major producers of sapphires.



"Rubies are basically red sapphires," says Meszaros. "They are basically aluminium oxide, which is again clear, and only turn blue with iron and titanium in them." Rubies gain their distinctive color thanks to chromium in the stone. "Chromium introduces pink and red tones to sapphires. The higher the chromium, the redder the stone until eventually you get a ruby."

Most Australian stones are sent abroad to be cut then return to Australia to be sold. "We are used to very dark coloured stones but that's because we send everything abroad." You can get beautiful home grown stones here, says Meszaros, "if you are willing to pay and get producers." He recommends sticking to your local jeweler if you can't.

There is one final word of caution when considering your stone: "The bright shiny, perfect ones are probably not natural." Simulants mimic the quality, color, and luster of the original gemstone, but they are not as hard and don't last as well. "If it looks too good to be true, he warns, "it probably is."

Provided by Macquarie University

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