



Pearls: Fashionable freaks of nature

By Neeta Gupta

Many precious gemstones and metals are found in the depths of the earth. Pearls however, are one of nature's greatest and oldest miracles; they arise in perfect form from the bottom of the deep sea from within oysters. They require no cutting, polishing, or changes of any kind to add to their lustrous beauty, and come in many variations of shapes and shades. These attributes, as such, have been considered prestigious throughout much of ancient history, and even today, pearl jewellery is coveted.

Pearls through the ages

Up until the 20th century, pearls were generally thought of as the 'queen of gems,' but have come to be symbolic as well, with different meanings originating in different cultures.

In the days of ancient Greece, the pearl was held in high regard for its elegance and association with love and marriage, and even ancient Egyptians were buried with the prized gems.

In the Byzantine Empire, only the emperor was allowed to wear pearls, as common belief dictated pearl jewellery represented the purity of the wearer.

During the Dark Ages, valiant knights wore pearls into battle, believing the magic of the exquisite jewels would protect them

from harm. This is similar to the astrological views surrounding pearls, too.

Astrology associates pearls with bringing happiness and ridding people of illnesses. In ancient China, pearls were believed to guarantee protection from fire and fire-breathing dragons.

Around the 18th century, pearls symbolized class and status as only blue-blooded ladies would wear the fine gem. In Europe, pearls symbolized modesty, chastity, and purity. Many European countries passed laws forbidding anyone but nobility from wearing pearls and they would decorate only the grandest royal courts.

Nature vs nurture

Pearls are treasures from the Earth's streams, rivers, lakes, seas and oceans, and they've always embodied the mystery, power, and life-sustaining nature of water.

Natural pearls are organic gems formed in the bodies of certain mollusks, usually around a microscopic irritant, and always without human help of any kind. They are composed mostly of concentric layers of nacre, which is made of the same basic material as Mother-of-Pearl—the inside layer of certain shells.



A beautiful array of abalone pearls.



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PEARL FYI

- The most important rule for caring for pearls is: "Last on, first off." Pearls should be the last thing you put on after you have applied all sprays, make-up, lotions, and perfumes, and the first thing you take off. It's important to remove pearls before pulling clothing over your head or washing your face.
- The most iconic pearl necklace style is a strand of pearls graduated from 3 mm at the end to 7 mm in the centre.
- Pearl colour is a combination of body colour, overtone, and orient. Body colour is the overall colour of the pearl. Overtone refers to one or more noticeable translucent colours in the body colour. Orient is a form of iridescence that appears to be just below the surface. Not all pearls display all three characteristics.
- Generally, the rounder the pearl, the more expensive it is, as a perfect round shape is difficult to achieve. A pearl free from blemishes (scratches, cracks, bumps, ripples, dimples, or pits) is more valuable. Statistically, less than two per cent are round or near round, but even with that small percentage, a typical annual crop of 882 tonnes of jewellery-quality cultured pearls means a huge number of rounds and near-rounds.
- In 1916, French jeweller Jacques Cartier purchased his famous Fifth Avenue store in New York City by trading two natural pearl necklaces for the property.
- The easiest way to determine pearl authenticity is by rubbing it on a tooth. When you rub the pearl against a tooth you should feel a slightly rough, natural texture. If the pearl is artificial, made of glass or plastic, it would feel slick and/or smooth. ✦

Natural pearls virtually disappeared from the mainstream jewellery markets in the 20th century due to pollution, over-fishing, and economic factors. Today, natural pearls are scarce and only found occasionally in the seas of the Eastern Hemisphere. This has caused bid frenzies and record-breaking sales for famous antique pieces. Now, they are often available through antique or estate dealers and auctions, and can command very high prices.

Since the early 1900s, pearls are mostly manually formed or cultured by stimulating an irritant into the oysters rather than letting it occur by itself.

Cultured pearls are grown requiring human intervention and care. The mollusks themselves are raised specifically for culturing.

To begin the process, skilled technicians insert one or more nuclei (usually shell beads or pieces of flesh from other mollusks) into each mollusk. These nuclei act as irritants and trigger the secretion of nacre. Workers tend the mollusks until the cultured pearls are harvested. This usually happens after about 18 months, but occasionally up to three years after nucleation.

Besides human intervention, another big difference between natural and cultured pearls is that the bead nucleus accounts for most of the volume and weight of the cultured product. These pearls became commercially important in the 1920s around the same time natural pearl production began to drop. From the 1930s through the 1980s, pearl culturing diversified and spread to various countries around the world.

With this way of pearl cultivation, pearl jewellery has evolved into more than classic necklaces. There is a huge variety of cultured or natural pearls that can be used in many designs, such as the incredibly rare oval-shaped conch pearl.

Types of pearls

When most people think of pearls, what first comes to mind is a classic strand worn across the neck. However, pearls have evolved greatly overtime thanks to contemporary jewellery artists' efforts challenging this view.

Perhaps one of the best-loved gems of all time, pearls—and their modern counterparts, cultured pearls—form in a wide variety of colours. The most familiar colours are white and cream (light yellowish brown). Black, grey, and silver are also relatively common, but the palette of colours extends to every hue. Conch pearls come in many colours, ranging from coral-red to yellow, and most popularly, a soft pink. Abalone pearls are also uncommon and very much sought after. They have a brilliant, shifting blue-green and blue-violet colour.

Equally in demand are gorgeous golden pearls. These pearls are large and come in varying shades of gold, the most valuable being the deeper golden hues.

Tahitian or black pearls provide their own special dark and iridescent shimmer. When cultured, they can be found in numerous shapes, sizes, and even colours. A distinctive quality of Tahitian pearls is their ability to contain undertones and overtones, which gives them a remarkable 3D look.

Akoya pearls are the most common type used in jewellery today. The typical size of this cultured pearl is 6 to 8 mm (0.24 to 0.32 in.), and they are most commonly found in white or cream colours.



Golden pearls are large and come in varying shades of gold, the most valuable being the deeper golden hues.

Photo courtesy Neeta Gupta



An 18-karat gold and sterling silver bracelet I designed with sliced diamond and freshwater pearl.

Baroque pearls have a non-symmetrical shape and are an interesting contrast from the classic round pearl as it provides a very unique look. With this artistically-molded pearl, no two pieces are ever the same.

Designing with pearls

While creating jewellery with pearls, my priority as a designer is to maintain the original look, shape, and size of the pearl. The less risk of damage I can subject it to, the better. Sometimes, I am able to use pearls without even having to pierce through them.

What sets pearl jewellery apart from other gemstones? Take diamonds, for instance. They are radiant and glamorous, but there is only so much to do with them. Pearls give me a great amount of freedom to think outside of the box when designing.

Pearls are fairly tough gems, but can be easily discoloured, scratched, or abraded by exposure to heat,

light, and chemicals. They need to be handled carefully during the jewellery-making process which can increase labour costs. Thus, many imitation-pearls in the form of plastic or glass beads have become available to lure interest in price-sensitive markets.

Even for cultured pearls, treatments are commonly used to enhance their looks and salability. A bleaching process is used to lighten darker spots on the pearl, and dyeing is done to enhance or even change the colour of the pearl.

The irradiation process is gaining ground these days as it produces black, grey, or blue-grey colour in white or cream-coloured pearls. Though a trained gemmologist can often identify cultured pearls from imitations with a reasonably high-degree of certainty, positive identification for natural pearls requires advanced laboratory testing.

Regardless of a pearl's origin, these lustrous aquatic beauties will always offer design inspiration and remain an important part of the jewellery industry. ✦

Being an artist all her life, Neeta Gupta's creations are pieces of art in the form of jewellery. Originally, her interest in jewellery design led her to create for friends and family. However, when she found it frustrating to communicate her creative direction to goldsmiths, Gupta decided to learn how to make jewellery herself. After taking courses through the Gemological Institute of America (GIA), she launched her nature-inspired Neeta Gupta Jewelry Collection, which features carefully-crafted jewellery pieces with gemstones, organic outlines, and graceful textures you might find in nature. She can be reached via e-mail at info@neetagupta.ca.