



# Gem Market News



## KESHI

*Keshi with sapphires.  
Forty strands with 333 sapphires.  
All photos courtesy of Pearl Exporting Company.*

The term “keshi” has long been misunderstood in the jewelry markets. Keshi, in the traditional use refers to only the Japanese saltwater natural tiny pearls. They represent only 0.5% to 1% of the total Japanese akoya pearl production. Pollution is dramatically reducing production and it is estimated that it may be only half of current levels in the next five years.

*By Giuseppe Lombardo  
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### History

Pearls have been found in jewelry dating back to 100 BC and long beyond. The American Museum of Natural History has an interesting site regarding the history of pearls at [www.amnh.org/exhibitions/pearls/index.html](http://www.amnh.org/exhibitions/pearls/index.html).

*More than 500 years ago, keshi pearls were very popular among the Maharajahs of India and with the princesses of the Arabian kingdoms.*

India and many Middle Eastern countries have a long history with pearls. More than 500 years ago, keshi pearls were very popular among the Maharajahs of India and with the princesses of the Arabian kingdoms. Found in their surrounding seas, these “gifts of the mermaids,” as they were known, were worn with pride and associated with royalty. Before Kokichi Mikimoto made a name for himself in the culturing process in the early 1900s, natural pearls were rare and expensive and were only affordable by the rich and famous. Mikimoto changed the industry. His remarkable efforts in marketing cultured pearls have created an industry where there was previously none, and made pearls easily available to all. Indian mer-

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chants sourced keshi pearls in Japan and since then, have been importing these pearls from the Orient.

Thus, the history of Japanese akoya keshi began as a byproduct of the culturing process. Over the last 40 years, Japan has slowly become the biggest buyer of keshi pearls. As more people discover them, the demand worldwide is continually increasing for this unique gift of the mermaids.



*Different shaped keshi, 3mm and under.*

### **Keshi—What it is, What it is Not**

“Keshi” was initially used to refer to natural seed pearls found when harvesting the Japanese akoya saltwater oysters. These natural pearls resembled poppy seeds, which in Japanese are called ‘keshi,’ thus the name. Keshi may result from either freshwater or saltwater pearls but by the traditional definition, keshi are not freshwater pearls. In the marketplace, many dealers are using the term keshi in reference to Chinese freshwater pearls. Chinese freshwater pearls are not the traditional keshi and it is our opinion that they should not be called as such. CIBJO, an international confederation of national jewelry trade organizations, produces a publication known as the *Pearl Book*. In it, the following definition of keshi appears:

*Keshi Cultured Pearl.* A trade term that designates a non-beaded cultured pearl formed accidentally or intentionally by human intervention in marine pearl oysters such as the Akoya oyster (*Pinctada fucata*, Silver/Gold lipped oyster (*Pinctada maxima*) and Black lipped oyster (*Pinctada margaritifera*) and is a by-product of the culturing process. The creation results from the formation of a pearl sac either following injury of the mantle rim upon handling, from a partial piece of the inserted (transplanted) mantle tissue or the whole inserted piece following the rejection of a bead. See also South Sea Keshi Cultured Pearl (Hänni, 2006).

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In the marketplace, we believe that there has to be a distinction made on the type of pearl being sold and valued. With the availability of so many types of pearls, it can get difficult to evaluate them correctly as prices, quality, origins, availability, etc., are constantly changing.

Because of the culturing process, the natural pearl lovers of India and the Middle East do not consider cultured as ‘real’ pearls. Japanese akoya saltwater keshi are the closest to a natural seawater pearl that one can obtain. Natural pearl strands can demand hundreds of thousands of dollars, while Chinese cultured freshwater strands can start from as low as a few dollars. Japanese akoya keshi can range from \$45 a strand up to a few thousand dollars for a perfectly round matched strand of 5mm pearls.

To explain what Japanese akoya saltwater keshi pearls are, one must start by explaining what they are not. Keshi are not found in large quantities but are an extremely rare form of pearl. They are not freshwater pearls, which are harvested by the hundreds of tons. On the other hand, keshi are seawater pearls and are found in quantities from 0.5% to 1% of the total Japanese akoya cultured pearl production. A report by the Japanese government in the beginning of 2009 stated that their pearl production was in the 70-ton range. We think this 70-ton figure is from the mid 1990s and we currently estimate that it is currently now only 15 to 25

tons. This would bring the Japanese akoya keshi production to about 300 to 500 pounds per year (European Gemmological Symposium 2009—presentation by Andy Müller, Kobe, Japan). As the Japanese farmers produce fewer cultured pearls, many smaller scale farmers will go out of business. However, because the Japanese domestic market is such a big buyer of these akoya pearls,

there will always be farmers who will be operating on a niche basis.

Japanese keshi pearls can range from 0.6mm to 7mm, though the larger pearls are very rare. As for the South Sea and black Tahitian pearl keshi, these can occur in much larger sizes. The smaller Japanese akoya keshi are the original keshi pearls that gave the industry its name. In fact, keshi are precious because they are the most difficult to find of all pearls. Japanese akoya keshi can take up to a few years to form, although less than a year for smaller sizes are typical. Keshi are formed in a controlled environment and come in many shapes, hues, luster, colors, and sizes and can range from pure white to gray with tones of, blue, green, pink and yellow.

## **Keshi Formation**

Keshi pearls can be formed in different ways. One common method that a keshi can form occurs when the oyster rejects the beaded nucleus and an irritant makes its way inside the oyster. Layers of nacre are secreted over this irritant and a keshi is formed. Another occurrence is that the implanted tissue fractures and forms separate sacs, which in turn can form a keshi. Again, it is important to note that the Japanese akoya keshi is a by-product of the culturing process, but the keshi itself is 100% nacre unlike other cultured pearls, which contain a bead nucleus.

As the Sea of Japan becomes more polluted, there has been a dramatic decrease in keshi production. It is estimated that keshi production will be cut in half over the next five years, and will become almost unobtainable within the next ten years. Akoya keshi are also becoming rarer due to the mechanization of the cultured pearl harvesting process. In the past, pearls were taken out by hand, but now more automation is used and the pearls are sorted by machine, causing the smaller-sized keshi to be washed away. Also, with regards to Tahitian and South Sea keshi, farmers are now x-raying oysters to determine whether or not the nucleus has been expelled. If it has been expelled, the oyster is re-nucleated before a keshi can be formed.

Jewelry-quality keshi are produced in healthy, strong oysters. However, as previously mentioned, because of pollution in the Japanese Sea, these oysters are becoming weaker. In many instances, they are no longer able to produce pearls. It is also true that only the better farms produce jewelry-quality keshi. At the same time, many farmers x-ray the oyster, as they want the akoya pearl to have a large nacre, and will remove any keshi that has started to grow. There is also a perception that the akoya is re-nucleated after a pearl is formed and removed from the oyster. In reality, this type of oyster is never re-nucleated. A thickness of 0.3 to 0.4mm is the average thickness on a cul-

tured akoya pearl. A Japanese akoya keshi is a full nacre pearl, hence the closeness to a natural pearl.

## **Rarity Factor**

There is also one other factor when considering the rarity of Japanese akoya saltwater keshi. Since the smaller keshi are drilled by hand, the artisans who have the ability to drill these pearls are leaving the industry, and we estimate that there will be no more drillers left in the near future. Keshi are farmed in Japan then sent to India to be drilled and strung.

After this drilling and stringing process, they are sent back again to Japan to be restrung and used for jewelry. The artisan drillers in India are leaving the countryside and moving to bigger cities like Mumbai and are not being replaced.

Keshi pearls come in a variety of different colors and shades, and are known for their luster and uncommon orient. This is a result of their composition consisting of solid nacre. Since these pearls are formed without a nucleus, shapes tend to come more baroque, with round being very rare. Other shapes include rice, oval, flat, and semi-round. The round keshi pearls are so rare that dealers sell them by the carat or momme. One momme (m) = 3.75g = 18.75 cts. Normally, you

may see 0.01% of all keshi production perfectly round, so these type of strands are quite rare indeed. A few strands of round akoya keshi pearls with matching color may take 10 years to collect.

## **Evaluation**

Pricing keshi depends on factors such as shape, size, color, coating, luster and overall appearance. Due to their size, most akoya keshi pearls do not have blemishes, so unlike cultured pearls where blemishes are a major factor, akoya keshi is more about the shape and luster.

Since all akoya keshi pearls are naturally occurring and formed by different shaped irritants, the keshi tend

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*Keshi multi-strand necklace with 50 strands. There are at least 200,000 individually strung pearls.*

**Keshi** *continued from page 5*



*Larger sizes of gray color stick shapes.*

to take their shape. Therefore, round keshi are very rare, followed by near round, oval, etc. In general, the more lustrous the keshi the more expensive it is.

Color and coating of nacre can be divided into 2 parts.

1. Unbleached, mostly 3mm and up. These are the grays and silver toned keshi. The grayish bluish colors are more sought after and more popular, but the production is very limited. The better farms that produce higher nacre coating, especially the farms that produce nice 8mm and 9mm cultured pearls, will produce more creamy lighter shades of gray. The smaller farms tend to produce lower quality or smaller sized keshi with grayish tones, of which many are unusable as pearls.
2. Bleached. The whiter the keshi, the more expensive it is. An important part of this is that they must have

strong luster as well. When bleaching occurs, the coating on the pearl will determine how long they can be bleached without losing any luster. Also, keshi come in golden color, and if they are very golden, the price can be compatible to the white material.

Since there are many factors in appraising Japanese akoya keshi, the overall shape, size, color, luster and appearance of the strands will determine the price. For this reason, the easiest way to appraise may be comparison of similar lots. Experience is also key to accurate pricing. Gray strands can range from \$50 per strand up to \$500 per strand wholesale. Perfectly round white lustrous keshi in the 3mm range can demand more than \$1,000 per strand. ♦

*The Pearl Exporting Company specializes in Japanese akoya salt-water keshi pearls. [www.pearlexporting.com](http://www.pearlexporting.com). 866.6PEARLS. [info@pearlexporting.com](mailto:info@pearlexporting.com).*

## Events with Gemworld

**October 4, 2009**

Appraisal Clinic/Making Money Appraising/  
GemGuide Appraisal Software  
Co-presentation with JoAnn Gill  
for Tri-State Jewelers Association  
Annapolis, Maryland  
Contact: Tom Saquella, 410.269.1440, [tsaquella@mdra.org](mailto:tsaquella@mdra.org)  
JoAnn Gill, 410.296.6522, [joanngemone@msn.com](mailto:joanngemone@msn.com)

**October 5, 2009**

"Pricing Gem Treatments: The Facts, the Challenges,  
the Legal Issues"  
Montreal, Canada  
Contact: Ecole de gemmologie de Montreal, 514.844.0024

**November 11, 2009**

GIA Alumni Association Orange County  
Contact: Ruth Fitzgerald, [RFitzgerald@GIAOC.org](mailto:RFitzgerald@GIAOC.org)

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