

# Colour



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# Colours far beyond chromatic in a jewelry world exploding with superb colored gems

*It is intended that this article serve as a quick reference on the intricacies of the colored gemstone market. The information is set forth in a brief, outline style for quick accessibility. Not every aspect of each gemstone has been addressed; instead, emphasis has been placed on questions frequently asked by the consumer. Consider this article a starting point from which will spring more thoughtful discussions with your Jeweler. Future articles will focus on specific gemstones in a more detailed manner. Or, the reader can always turn to the many fine and exhaustive volumes on gemstones for more in-depth information and flowing prose.*

## CONSUMER GUIDE TO COLOR

The "Unrealistic Remarks" listed are meant to be demonstrative and not to discourage the asking of questions. Please, keep asking questions; we all benefit from the consideration of the ideas they present. Whenever you have questions, I am sure your Jeweler would be happy to talk with you or perhaps even assist in researching your answers.

Before we tour the gemstone market, let's clarify a few topics pertinent to all colored gemstones.

When you are looking for a gemstone, what size is needed? Are particular dimensions important or is carat weight? A 9.3 x 7.7 mm oval amethyst, because of that gem's abundance, would be available, while looking for a rare demantoid garnet of the same specific dimensions would prove folly. Is there a setting in which the gem must be set and, if so, can the setting be adjusted to accommodate size changes? If you are looking at a fine or rare gem, it may not be realistic to expect to fit a specific mounting.

Does one gemstone need to be matched to another? Matching citrine, which is a plentiful gem, is not so difficult; exactly matching tanzanite, with all its varying nuances of color is a tough one. Sometimes a matched pair of gemstones is acceptable despite slight differences in color, especially when they won't be worn right next to each other, as for instance, in earrings. If the gemstones are to be side by side in a ring, then objection might be made to a less-than-perfect color match, unless the gems are of a rare and fine material.

Sometimes we can be finicky about the degree of expertise used in cutting a gemstone. With the rarer and more expensive gemstones, it is unrealistic to be as discriminating regarding cut. Certainly, many of the less expensive gemstones can be cut to optimum proportions, since cost is not such a factor. With fine rubies, sapphires and emeralds, allowance must be made because of their rarity and expense—unless one is willing to pay the price. Sometimes, even if one is willing to pay the price, the gem simply cannot be found. In some cases, the material itself is so beautiful and rare, such as Kashmir sapphire or Alexandrite, that to reject it because of a slightly off-center culet would be foolish.

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## COLOUR GUIDE

### ALEXANDRITE

#### Unrealistic Remarks...

"I must have Russian alexandrite, nothing else is as fine."

"Yes, I know alexandrite is rare, but I'd like to see three 5 x 9 mm emerald cuts—one each of good, fine and extra-fine quality. Also throw in a matched pair for earrings."

"This alexandrite is nice, but I need one that changes from ruby red to emerald green."

"This two-carat alexandrite is terrific! If only it didn't have that slight window."

"I have my mother's ten-carat alexandrite ring. It must be worth a lot of money."

#### Actually...

The color change of even the finest alexandrites is modified by secondary colors. The degree of color change as well as size and clarity play a major role in price determining. A good color change is imperative to fetch a higher price.

Fine alexandrite is very rare and expensive. Look for well-proportioned and well-polished stones but accept windows and slight cutting irregularities.

Unlike the supply of diamonds, that of colored gemstones is not controlled. Because of this, occasional windows of opportunity for purchasing rare gemstones occur for a brief period of time when an unusual gem find hits the marketplace. At such a time, a rare gem may be available at relatively inexpensive prices until the supply is absorbed into the market. Such a thing happened with alexandrite in 1987 and happened again a short time ago with tanzanite.

In April of 1987, a find of superb alexandrite was made in the small Brazilian village of Hematita in the gem-rich state of Minas Gerais. No major finds of new material have been made since. Hematita alexandrite is unusual because of its nearly complete change from bluish green to a plum red. Many of these alexandrites show an 80 to 95 percent color change—a change comparable to the classic Russian alexandrite. The Brazilian find was rich; still, scarcity of this gem did not allow very specific requests for dimensions and shapes. The oversupply has long since been absorbed into the market, and fine alexandrite continues to be much in demand. The people who bought alexandrite during this window of opportunity got a good selection at an excellent price.

Some Russian alexandrite has been brought out—most of it old material—and most is more suitable as mineral specimens than for faceted gems.

Heirloom jewelry with large "alexandrite" is usually a synthetic spinel with a color change.



Rings by Michael Angelo Design typify jewelry designers' current emphasis on color.

#### Key Points

Alexandrite was first found in Russia in 1830 and was named in honor of the Russian Czar Alexander. Alexandrite changes from bluish green to purplish red depending on the light in which it is seen. Interestingly, green and red were the colors of the Czarist army.

The first admirers of alexandrite viewed it in daylight and candlelight to see the green and red, respectively. Today, we usually use fluorescent and incandescent lights.

The name Alexander is derived from Greek, meaning "helper of men." This is a good gem for those involved in a service profession.

With its red and green colors, alexandrite is a fantastic holiday gemstone. Alexandrite jewelry is a tangible symbol of holiday love.

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## ALEX SEP KUS

For the fine Jeweler nearest you, call:

A.E. Betteridge  
Greenwich, CT

Brant Laird Antiques  
Dallas, TX

Cellini  
Waldorf Astoria, NY

Cindi Earl  
Nashville, TN

Earthworks Inc.  
Santa Rosa, CA

Fox's  
Seattle, WA

J.E. Caldwell  
Philadelphia, PA

J.E. Caldwell  
King of Prussia, PA

J.E. Caldwell  
Chestnut Hill, PA

Jensen Stern  
Ketchum, ID

Julius Cohen  
New York, NY

Mark Knipe  
Concord, NH

Mayfair Jewelers  
Scotia, NY

M.H. Reinhold  
San Juan, PR

Park Promenade  
Winter Park, FL

Shreve, Crump & Low  
Boston, MA

Simons  
Clayton, MO

Tiny Jewel Box  
Washington, DC

Von Barga's  
Stratton, VT

Von Barga's  
Springfield, VT

Von Barga's  
Burlington, VT

Miss Jackson's  
Tulsa, OK



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Men are intrigued by the color-change phenomenon. Alexandrite provides sufficient durability for wear by men.

### AMETHYST

#### Unrealistic Remarks...

*"I want a twenty-five-carat 'grape jelly' amethyst, it must be unzoned (evenly colored) and eye-clean. Forty dollars per carat should get me a top stone."*

*"At \$20 per carat, couldn't I get a well-cut amethyst?"*

*"I need a beautiful, large gemstone, but nothing as common as amethyst."*

#### Actually...

Large, fine amethyst is difficult to find—especially with no apparent zoning when viewed through the table. Most natural amethyst will show some degree of zoning. Prices for the larger and finer material can be \$80–\$150 per carat.

Faceted amethyst is seen with varying degrees of cutting finesse. Many of the more commercial-quality amethysts are cut in a routine, labor-saving manner, while the fine material is often subjected to more artistic and time-consuming cutting. Conversely, artistically cut amethyst can also be found since the stone is relatively inexpensive and weight retention is not a major factor in fashioning the cut.

Commercial-quality amethyst is plentiful, but the rich "grape jelly"—colored amethyst with red secondary coloration is anything but commonplace.

### Key Points

Fine amethyst has a rich and regal color. Purple has long been considered the color of royalty.

Amethyst can be found in larger sizes in bold, dashing pieces of jewelry. Even in finer qualities, it is relatively inexpensive.

The dark purple of amethyst looks particularly striking with yellow gold. The lighter colors, when well cut, can brightly shine and mesmerize.

Amethyst has excellent durability. An amethyst ring can be worn for almost any occasion.

### AMETRINE

#### Unrealistic Remarks...

*"Ametrine is very plentiful—that's why it's inexpensive."*

*"Ametrine— isn't that made in a laboratory in Brazil?"*

*"I'd like a pair of round ametrine for earrings."*

#### Actually...

We have the quartz gem family. Purple quartz is called "amethyst," while golden quartz is called "citrine." In only one place in the world does the regal

amethyst and sunny citrine occur together in one gem, which we call ametrine: Bolivia's Anahí Mine. We call ametrine a one-locality gemstone, as are tanzanite, tsavorite and chrome tourmaline. But ametrine is even rarer, as it only comes from one mine whereas the other gems mentioned come from just one mining area.

Ametrine was first brought to the Western world by a Spanish conquistador as a gift for his queen. The conquistador received the mine as a dowry from his marriage to an Indian princess named Anahí. (Please see the author's article on the Anahí Mine in this issue for further information on ametrine's history, mining and jewelry uses.) Prior to Bolivia's legalizing mining in the area and the establishment of the Anahí Mine, ametrine was mined sporadically, on a small scale and illegally. To safeguard the illicit mining and allow ametrine's importation into Brazil, rumors were falsely spread that ametrine was either mined in Brazil and/or the product of a laboratory in Brazil. This is not true; ametrine



Above: Most amethyst will show a degree of zoning (unevenness of color) when viewed through the table (large top facet).



Right: Ametrine is a naturally occurring quartz combination of amethyst and citrine.



occurs naturally and is found in the ground. Ametrine is one of the few gems that is not subjected to a treatment process in bringing it to the jewelry market.

The organized mining and marketing of ametrine is a recent development. Since most consumers are unfamiliar with ametrine, its relatively low price is not reflective of its rarity and beauty. Price will increase with consumer demand.

Presently, ametrine is most typically seen in the emerald cut, which distinctly shows a sharp delineation between its purple and golden colors. Cutting the gem in other shapes, such as round or pear, creates a more subtly colored gem that shows a different color from every angle.

#### Key Points

Ametrine is a beautiful and rare gemstone mined in one locality, the Anahí Mine in Bolivia.

You can get a large and distinctly colored gem at a very reasonable price. At present, ametrine's beauty and



*The value of aquamarine depends more upon color than size.*

rarity are not reflected in its relatively low price.

Purple and gold are opposite colors on the color wheel and, therefore, harmonious. They are an exotic color combination that touches human emotion.

Gems can either show a distinct color delineation or be faceted in forms that have more subtle nuances of color which seem to change when viewed from different angles.

Ametrine is a very durable gemstone and easy for Jewelers and lapidary artists to work with.

## AQUAMARINE

#### Unrealistic Remarks...

*"I need a selection of dark, 8 mm round aquas from which to choose."*

*"My aqua is big and clean; it must be worth a lot of money."*

*"Why buy aquamarine when there is blue topaz?"*

*"Could my Brazilian aquamarine be heated?"*

*"I need a pair of 4 mm rounds to match the color of my fine eleven-carat aquamarine."*

#### Actually...

Aquamarine is readily available in large sizes with excellent clarity. For any given quality, prices rise slowly with size to about twenty carats, then the price flattens as the jewelry uses for larger stones are limited.

The price of aquamarine is based on depth and purity of the blue color. Smaller-sized stones (one to three carats) which are darker blue and devoid of gray and green secondary coloration are much more difficult to find than their larger (five carats plus) equivalents. In the late 1980s, the greater quantity of Zambian aqua on the market provided smaller-sized, darkly colored stones in a variety of shapes. This is now rarely seen. Madagascar and Brazil's Tatu Mine have more recently produced some extremely fine aquamarine; prices reflect its rare quality, and it is not readily available.

Due to weight retention and crystal orientation, aquamarine is usually seen fashioned in the emerald cut. Rounds and the marquise cut are the most difficult shapes to find. Many of the stones are cut with slightly deep pavilions (bottoms), which helps in darkening the color.

Most Brazilian aquamarine comes out of the ground greenish blue. These aquas respond readily to heat treatment, which purifies the blue color by driving away the green, resulting in a more marketable gemstone. The heating of aquamarine has been an accepted practice for decades.

#### Key Points

Because of its rarity, aquamarine has lasting value and the chance for long-term appreciation, while blue topaz doesn't due to its extreme abundance on the market from laboratory irradiation.

When available, smaller-sized dark blue aquamarines allow you to purchase the finest aqua available at a min-

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imal investment. They may cost more per carat than their larger equivalent, but their smaller size makes their total price realistic.

Aquamarine is a gem with high name recognition. It has been a jewelry favorite since Edwardian times, when it was set in white metals.

Aquamarine is the birthstone for March. Many will be amazed that their birthstone can be so well colored in sizes they can imagine wearing.

Aquamarine is emerald's durable and less costly cousin.

Aquamarine is believed to remedy idleness, help in winning disputes and protect from slander, which makes it a great gift for college graduates! It is also thought to protect against dangers and illnesses at sea, thus is appropriate for yachtsmen or sailors.

## CAT'S-EYE CHRYSOBERYL

### Unrealistic Remarks...

"I need a fine, greenish cat's-eye. I want to see the 'milk and honey' effect and can spend \$4,000 for a stone of about four carats."

"Please get me a selection of three or four extra-fine cat's-eyes."

"I need a matched pair of fine cat's-eyes about 7.3 mm round."

"I don't care if this cat's-eye has a sharp eye and golden color, the fact that it has a heavy bottom (or high dome) tells me it was just cut for weight retention. Therefore, I am forced to reject it."

### Actually...

Fine cat's-eye chrysoberyl is a true rarity; strong demand by the Japanese, who still have great international buying power, makes this stone even rarer. Extra-fine gems in three- to five-carat sizes command \$3,000-\$8,000 per carat, if you can find them.

Cat's-eye chrysoberyl is judged by its color, clarity, straightness and definition of the eye, translucency and symmetry of shape. Most cat's-eyes on the market are golden brown with slight green; the more green, the less desirable the color is considered. The "milk and honey" effect is seen in fine gems of a golden honey color. To see this effect, shine a light at an angle to the top of the stone. The dome will divide into dark (the honey) and light (the milk) halves on each side of the eye. The dark and light halves will reverse as the light is moved across the dome.

Cat's-eyes often seem a bit bottom-heavy or have high domes. This may help in the orientation and strengthening of the eye and this condition sometimes has to be accepted.

Since fine cat's-eye is so rare, locating matched pairs, especially those of a specific dimension, is nearly impossible.

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## JEWELS BY STAR<sup>TM</sup>

- |   |   |
|---|---|
| Braunschweiger Jewelers<br>Morristown, NJ               | East Towne Jewelers<br>Mequon, WI                             |
| Hamilton Jewelers<br>Lawrenceville, NJ<br>Princeton, NJ | Rochester Lapidary Supply<br>Rochester, MN                    |
| Black, Starr & Frost<br>Costa Mesa, CA                  | Rummele's Jewelers<br>Green Bay, WI                           |
| Davidson & Licht<br>Walnut Creek, CA<br>Santa Clara, CA | Scheherazade<br>Edina, MN                                     |
| George Walton Gold & Diamond<br>Anchorage, AK           | Boccardo Jewelers<br>Scranton, PA                             |
| Maxi's Fine Jewelers<br>Cupertino, CA                   | J. Karen Jewelers<br>Exton, PA                                |
| Morgan's Jewelers<br>Palos Verdes, CA<br>Torrance, CA   | Les Crago Jewelers<br>Erie, PA                                |
| Steiner's Jewelry<br>San Mateo, CA                      | Kolman Jewelers<br>Monroeville, PA                            |
| Hyde Park<br>Denver, CO                                 | Mountz Jewelers<br>Carlisle, PA                               |
| Cargo Warehouse Jewelers Gallery<br>Vermillion, OH      | Barry Sable Diamonds<br>Philadelphia, PA                      |
| Davis Diamond Galleries<br>Sylvania, OH                 | Wayne Jewelers<br>Wayne, PA                                   |
| Gidding Jenny Fine Jewelers<br>Cincinnati, OH           | Herkner Jewelry<br>Grand Rapids, MI                           |
| Jaffe & Gross Jewelry<br>Dayton, OH                     | B. Sanfield<br>Rockford, IL                                   |
| Michelson Jewelers<br>Paducah, KY                       | Alexander's Jewelers<br>Texarkana, TX                         |
| David Harvey Jewelers<br>Norwalk, CT                    | Kruger's Jewelers<br>Wichita Falls, TX                        |
| London Jewelers<br>Glen Cove, NY                        | Haltom's Jewelers<br>Fort Worth, TX                           |
| Mann's Jewelers<br>Rochester, NY                        | Linz Jewelers<br>Dallas, TX                                   |
| Raymond's<br>Watertown, CT                              | Murray Jewelry<br>Longview, TX                                |
| Richards Diamonds<br>Westfield, MA                      | Susan's Custom Jewelers<br>Corpus Christi, TX<br>Victoria, TX |
| Alvin Magnon Jewelers<br>Tampa, FL                      | Stanley & Weaver,<br>Waco, TX                                 |
| Beard's Custom Jewelry<br>Jacksonville, FL              | Allen's Jewelers<br>Albany, GA                                |
| Gause & Sons<br>Ocala, FL                               | Aurum Studios<br>Athens, GA                                   |
| Goldsmith Jewelers<br>Mary Esther, FL                   | Barton Clay Jewelers<br>Birmingham, AL                        |
| Park Promenade<br>Winter Park, FL                       | Crystal's Fine Jewelry<br>Nashville, TN                       |
| Clarke's Jewelers<br>Shreveport, LA                     | Fountains Fine Jewelry<br>Memphis, TN                         |
| Gregory's Jewelers<br>Jonesboro, AR                     | Hudson-Poole Jewelry<br>Tuscaloosa, AL                        |
| Mitchener & Farrands<br>Oklahoma City, OK               | J. Caudle & Co.<br>Huntsville, AL                             |
| Roberson Fine Jewelry<br>Little Rock, AR                | Lauderhill's Fine Jewelry<br>Dunwoody, GA                     |
| Barrier's<br>Wichita KS                                 | Levy Jewelers<br>Savannah, GA                                 |
| S. Joseph & Sons<br>Des Moines, IA                      | Rone Regency Jewelers<br>Chattanooga, TN                      |
| Tivol Plaza<br>Overland Park, KS                        | Windsor Jewelers<br>Augusta, GA                               |
| Adolf Jewelers<br>Richmond, VA                          | Heathcliff Jewelers<br>Columbia, SC                           |
| Albert S. Smyth<br>Lutherville, MD                      | J.B. Lacher<br>Greenville, SC                                 |
| Mervis Diamond<br>MD, VA, DC                            | Lions Jewelry<br>Charlotte, NC                                |
| Reines Jewelers<br>Charlottesville, VA                  | B. Gregory Jewelers<br>Statesville, NC                        |



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## Key Points

Fine cat's-eye chrysoberyl is a prized gem. It is revered by knowledgeable gemstone connoisseurs.

Shine a light on the cat's-eye and marvel at its similarity to the iris of a living cat's eye. Move the light back and forth over the eye to make it "wink." Show its "milk and honey" effect.

The person who wears a fine cat's-eye owns a distinctive natural wonder.

Many different gemstones can achieve a cat's-eye effect.

## CITRINE

### Unrealistic Remarks...

*"I don't want a citrine if it's heated."*

*"This is a beautiful citrine, I'd buy it if the cutter would have paid more attention to proportions."*

### Actually...

Most citrine is the end result of heating certain qualities of amethyst or smoky quartz. What is referred to as "Madeira" citrine is a deep, bright, reddish brown while

"Palmyra" citrine is a medium, yellowish orange. Golden citrine is of a light gold to yellow color.

Citrine is readily available in quite large sizes for which it is not necessary to pay a premium price. In fact, price usually decreases for sizes over twenty-five carats as their use in jewelry is limited.

Citrine, though it can be quite attractive, is an inexpensive gemstone. Therefore it is often given a routine, labor-saving cut. Conversely, since it is inexpensive, it is some-

times found in more artistic cuts because weight retention is not a concern.

### Key Points

The golden colors of citrine create a striking optical illusion when combined with yellow gold. One wonders where the metal ends and the gem begins.

Citrine is easy to wear every day as it is durable and accents the same clothing colors as yellow gold.

Citrine is a beautiful and inexpensive gem which can be set in bold, striking jewelry.



*Citrine can range in color from reddish brown to golden yellow.*

## DEMANTOID GARNET

### Unrealistic Remarks...

*"Demantoid can't be more dispersive than a diamond, where's the fire?"*

*"I want to have a necklace made to accompany my antique demantoid pin. Where can I get some demantoid melee (small, round stones)?"*

### Actually...

Demantoid does have greater dispersion than diamond. A white diamond more readily shows its dispersion as demantoid's darker body color somewhat masks the dispersive effect, or older stones may become worn and need recutting.

Fine demantoid is a very rare gemstone. Stones over three carats are unusual, and prices for such rarities are negotiable. Russia is the premier source for demantoid and supply is extremely sporadic. One characteristic of Russian demantoid is an inclusion of an asbestos mineral which resembles a horse's tail flying in the wind. So unique and characteristic are the horsetail inclusions that demantoids have often been cut so that the inclusions are unmistakably visible.

If melee is needed, tsavorite garnet works nicely since melee demantoid is not usually available.

### Key Points

Demantoid is very rare and more dispersive than diamond; its name stems from the German word for diamond in reference to its adamantine luster.

Fine demantoid has a breathtaking beauty.

Demantoid was a favorite gem of Art Nouveau Jewelers.

## EMERALD

### Unrealistic Remarks...

*"I need a very fine, three-carat emerald for \$20,000."*

*"I don't want my Colombian emerald oiled."*

*"I said I wanted a Colombian emerald, and this one is marked Muzo."*

*"I need to see your finest five-carat emerald. Money is no object."*

*"The price for a marquise emerald should be equivalent to the price of an emerald cut of equal quality and size."*

### Actually...

A fine emerald is a true rarity and of great demand in the international marketplace. Prices for fine, three-carat emeralds easily exceed \$20,000 per carat. Does your desire for top color and clarity match your bank balance? If not, sacrifices must be made in size, color and/or clarity. Which is more important? If your pocketbook doesn't meet the price, one or more of these fac-

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tors will need to be adjusted.

Emerald inclusions, especially in gems from South America, which tend to be more included than those from Africa, are routinely filled with oil and, increasingly, epoxy resin, to lessen the visual effect. For filler to enter the stone, inclusions must break the gem's surface. If the emerald has inclusions, it is reasonable to assume they have been filled. If this practice does not add color to the emerald, it is not considered fraudulent. Other treatments however, when not disclosed, may be considered fraudulent.

Emeralds are cut in what is called the "emerald cut" because it affords the greatest retention of weight when

simply indicate its origin and say nothing about its physical qualities. Nonetheless, trade usage of locality names continues and, when used, often refers to the following general characteristics:

**COLOMBIAN EMERALD.** Historically, the finest emeralds come from Colombia. Muzo and Chivor are the two major emerald mining districts in this country. At their finest, Colombian stones can be a vivid and intensely pure green, or slightly bluish green. They are, on very rare occasions, found eye-clean; inclusions are typical.

**ZAMBIAN EMERALD.** Zambia is the major producer of African emerald. Emeralds from this locality are typically much cleaner than the South American emeralds. They may be a bright green but often have a bluish tinge.

*Garnets are found in a variety of species and colors.*



cutting from the rough crystal. Pear shapes, ovals and especially marquises and rounds are difficult to find and a price premium of ten to fifteen percent may be paid for finer stones in these shapes.

The locality term *Muzo* is sometimes used in reference to an emerald. It is confusing and often unclear whether it is being applied to emeralds from Colombia's Muzo Mine or to an emerald that is from another locality, whether or not it has characteristics similar to an emerald actually from the Muzo Mine. The possibilities for the misuse or misunderstanding of locality names are great. Their use is discouraged or forbidden by most national and international trade organizations. Colors and physical characteristics are inaccurately assigned as being typical of all gems of a certain species from a locality, when a locality assigned to a gemstone should

Brazil is an important source of commercial emerald. These emeralds are typically smaller. Though often light and highly included, gems of very fine color are produced. Pakistan's Swat Valley is not yet a major emerald source, though it holds promise for future development.

It is important to remember, when shopping for an emerald, that descriptions of quality, not locality, are needed since each locality produces varying qualities. Should you want an emerald from a specific locality, it is possible to get a laboratory certificate authenticating origin based on internal inclusions, not color.

### Key Points

Emerald is historically the object of great desire and lust. Perhaps no other gemstone conjures up more images and associations with intrigue, beauty and richness.



Emerald green is a very lush and soothing color. It is so soothing that Nero viewed the gruesome gladiator fights through an emerald.

As the birthstone for May it represents spring and rebirth.

## RED GARNET

### Unrealistic Remarks...

"What? That beautiful gem is a garnet? No! Garnets are dark and boring."

"What? I said I need a garnet and garnets aren't \$300 per carat."

"I need a seven-carat pyrope garnet."

### Actually...

Reddish garnets are found in a great many garnet

ten fall under the variety of rhodolite. Generally, the more pink or purple and less brown a garnet, the higher the price, which reaches \$300-\$500 per carat for fine rhodolites in sizes over fifteen carats. Darker reddish stones are also enjoyed by many, providing they are bright and well cut.

Unfortunately, many associate garnet with the somber red stone crowning their grandmother's less-than-exciting jewelry. Actually, garnet can be quite dazzling.

### Key Points

"Raspberry"-colored rhodolite from Tanzania is dazzling and available in a variety of sizes and shapes. Fancy precision cuts particularly unleash this gem's brightness.



Left: Rhodolite, a prized variety of garnet, is set here in a white- and rose-gold ring by Nanz Aalund of Nordstrom. Right: Fancy precision cuts like these trillions, unleash rhodolite's brightness. Lower: Rhodolite can be quite dazzling and rich at the same time.

species, mainly pyrope, almandine and pyrope-almandine. Several reddish garnets may have a strikingly similar appearance yet be different species. Specifically requesting a pyrope does not best convey the qualities of the garnet you need. Describing the color and not the species will get the project off to a faster start.

The preferred reddish garnets are the lighter purplish pink ones which most of-

Jewelry manufacturers like rhodolite's consistency, beauty and price.

Jewelers find garnet untemperamental and easy to work with. Garnet is a durable gem that men can wear with ease.

True red garnets can be extremely bright and show sharp definition when contrasted against the richness of yellow gold.

Someone with a January birthdate who balks at writing a check for a tsavorite can acquire an extra fine rhodolite for a fraction of the price.

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Reddish garnet looks great combined with other colored gemstones such as tanzanite, tsavorite, amethyst, green tourmaline, peridot and citrine.

### KUNZITE

#### Unrealistic Remarks...

*"I'd like a dark lilac kunzite in a 6x4 mm oval."*

*"Because of its light sensitivity, kunzite has no place in jewelry."*

*"It's okay to wear kunzite to the beach if it's cloudy."*

*"Kunzite shouldn't be worn in a ring."*

*"How could a Jeweler not have any matched pairs of kunzite!"*

#### Actually...

Kunzite is a delicately colored pink to lilac gemstone. Because of its light color, a larger size (over ten carats) is needed to show depth of color. At the beach,

its color will lessen until it reaches a point of stability. The degree of color loss depends upon the stone's previous exposure to UV light as well as its unique chemistry. Why some kunzites lose their color more than others is the subject of research.

Some people believe that kunzites will not be affected by wear on cloudy days. This is not so: UV light is present on both cloudy and sunny days. It is UV light that sunburns skiers on cloudy slopes. Instead of turning pink, however, kunzite loses its pink.

Due to its heat sensitivity and strong cleavage, kunzite is difficult to cut. For this reason, kunzite is rarely seen calibrated or in matched pairs.

Kunzite must be worn with caution just like a fine piece of clothing. The wearer of a kunzite ring need only pay some extra attention. If a woman can wear fine clothing, she can enjoy everyday wear of her prong-set kunzite ring.

Ovals and cushions are the most common cuts in



*The colored-gem palette presents options subtle and bold, including pink spinels approximating the color of kunzite.*

you see the ocean as deep blue. Fill your glass with ocean water, and the water's color does not look so blue. The seawater in the glass is much lighter than the ocean itself because the massive body of ocean helps to concentrate the color. For this reason, kunzite is often cut with a deep pavilion. One- to four-carat kunzites with deep color are unusual. The seawater analogy above can also be applied to aquamarine and tanzanite.

Kunzite is a light-sensitive gemstone. Upon prolonged exposure to ultraviolet (UV) light or daylight,

kunzite, though pear shapes are available. The emerald cut does not maximize the gem's potential for brightness, and rounds are not good for weight recovery from the rough.

#### Key Points

Kunzite, named after Dr. George Kunz of Tiffany & Company, was first discovered in San Diego County at the turn of the century.

*Continued on page 42*



## COLOUR

Kunzite is often referred to as "the evening stone," because in subdued light a well-cut stone tends to glow. Its brilliance, combined with the larger size, makes it a topic of conversation and awe.

The larger-sized kunzites are perfect for pendants, pearl enhancers and big, bright rings.

Kunzite looks especially nice with white metal, which is increasing in popularity.

Kunzite is lovely on women who wear soft pastels. With its delicate blue tinge, it particularly flatters women whose complexions fall into the "winter" category.

The soft color of kunzite blends well with other colors. Its almost neutral coloring will make it a choice to accent a great variety of clothing.

Proper cutting of kunzite is imperative; poorly cut stones are robbed of their brilliant potential.

## MORGANITE

### Unrealistic Remarks...

*"I need a pair of 7 mm morganites for earring studs."*

*"Morganite is a common, plentiful gemstone."*

*"I need a dark pink morganite."*

found in the course of mining other, higher-priced gemstones. Its low price per carat doesn't make it the object of a massive output of time and capital by miners.

Like kunzite, morganite can be practically colorless in smaller sizes. Stones of at least five to seven carats are needed to show any hint of color.

### Key Points

Morganite is a large, pink gemstone available without the light sensitivity and prominent cleavage of kunzite and at a lower price than pink tourmaline.

Morganite is terrific for those desiring a delicate pink gemstone; it is particularly feminine.

Well-cut morganite has a bewitching glow in subdued light.

Morganite was named after J.P. Morgan and is found in San Diego County and Madagascar, though most morganite comes from Brazil.

Morganite's lighter color makes it almost neutral and, therefore, easy to wear with almost every color in one's wardrobe.

If you can find them, a matched pair of morganites, ten carats each, make impressive and inexpensive earrings.

Morganite can be very interesting combined with rose gold.



*Burmese peridot and ruby combine with diamond in a sophisticated vintage piece.*

### Actually...

The beryl morganite can be found in pale pink to peach colors. Like aquamarine, morganite is routinely heated to drive away the yellow components of its color. Heat treatment results in a purer, pastel pink that can be quite bright when well cut.

Morganite is a unique stone and in limited supply. One of the reasons for its scarcity is that it is often

## PERIDOT

### Unrealistic Remarks...

*"Nobody likes peridot."*

*"All sizes of peridot of equivalent quality are priced the same."*

*"I don't want any yellow in my peridot."*

*"Egypt produced the only fine peridots."*

*Continued on page 44*



## COLOUR

### Actually...

Fine peridot is a rich and beautiful gemstone which is characterized by its medium to dark green or slightly yellowish green color. Most peridot has a slight touch of yellow. Upon seeing a fine peridot for the first time, those harboring peridot prejudice remark, "Now, that's beautiful, what is it?" Unfortunately, most people have been introduced to peridot by the overly yellowish or brownish green specimens.

There are two main sources for peridot today: Burma and Arizona. The San Carlos Indian Reservation of Arizona produces attractive, smaller-sized peridot; it tends to be more yellow or "limey" than the Burmese material. Typical sizes of Arizona peridot are from under one carat to three carats; five-carat stones are considered on the larger side. Burmese peridot can be magnificent. In finer qualities it is a spinach green without the limey or olive colors. These Burmese beauties can be found in the twenty- to thirty-carat range. Egypt's St. John's Island is a classic locality for peridot but is not a current producer. Many experts feel that Burma produces the finest gem peridots while Egypt has produced finer crystal specimens. There is a paucity of fine large peridot in today's market, and prices reflect this scarcity.

Size and locality play a major role in peridot's price. The price for a fifteen-carat gem is much different from that of an equivalent quality three-carat one. Fine stones from Arizona under five carats would barely fetch \$150 per carat. Fine peridots over fifteen carats can command prices up to \$500 to \$650 per carat.

Peridot, having a hardness of 6.5 to 7, is borderline soft for ring use. Over time, stones in rings may show wear in the form of scratches or worn facet junctions. Mounting the peridot in a protected setting helps, and the stones can be repolished, sometimes without removing them from the setting.

### Key Points

Like gourmet foods, fine peridot is an exquisite but acquired taste. It is for those with a sophisticated gemstone palate.

Women have seen the peridot color in clothing fashions for several years.

People with August birthdays who have never liked their birthstone will be delighted when they feast their eyes on the beauty of fine peridot.

Peridot is beautiful combined with amethyst, pink and red tourmaline, red spinel, tanzanite or rhodolite.

The United States is a major peridot producer.

No other gemstone is colored like peridot; it is an original.

Some of Cleopatra's emeralds were probably fine peridot from Egypt.

## RUBY

### Unrealistic Remarks...

*"I only want the finest ruby, so it must be from Burma."*

*"I received two stones the same size, color and clarity. The rubies have equivalent symmetry, the round shouldn't cost more than the oval."*

*"The three-carat ruby you sent me is fantastic—if only it didn't have a window."*

*"There is no reason why ruby should be priced so high."*

### Actually...

Very fine rubies are scarce—probably the rarest of all colored gemstones. Because of their beauty and rarity, they are in great demand in the international marketplace. Prices for larger fine rubies can seem staggering.

Burma has produced some extremely fine rubies, but fine rubies are not limited to those of Burmese extraction. As discussed in the section on emerald, the possibilities



*Ruby, shown here with blue and yellow sapphires, may be the rarest of gemstones.*

for the misuse or misunderstanding of locality names are great and the use of such designations is discouraged. Nonetheless, trade usage of locality names continues, often referring to the following general characteristics:

**BURMESE RUBY.** Historically, most of the finest rubies have come from Burma. They can exhibit a medium-toned, intense, pure (sometimes pinkish) red which fluoresces in ultra-violet light or daylight. *Pigeon's blood* was a term used to refer to the red of a fine Burmese ruby; since it doesn't convey a color with any accuracy, it is not recommended for use today.

**THAI (SIAM) RUBY.** These are typically thought of as being darker in tone than Burmese rubies and often brownish red to dark purplish red. Actually, Thai ruby makes up the bulk of the world's production and comes in all qualities, some of it very fine.

**CEYLON RUBY.** From Sri Lanka, this ruby is thought of as light in tone and is pinkish red or light purplish red (near pink sapphire) in color.

*Continued on page 46*



## COLOUR GUIDE

**VIETNAM RUBY.** An exciting and newer gem discovery is high-quality ruby from Vietnam. These rubies can mimic the finest Burmese in coloring and are often pinkish. Most are melee-sized and are not often seen over one carat. They are generally included. Don't get the impression that this is a source of "cheap" Burmese-quality rubies; two-carat gems can sell for \$30,000 per carat.

As discussed under emerald, it is important to remember that when requesting a gemstone, descriptions of quality, not locality, are needed because each locality produces varying qualities.

Ruby is one of the gemstones in which, all things being equal, a price premium is affixed to particular shapes. Better-quality rubies are usually seen in oval or cushion cuts. Generally, these shapes allow the cutter to get the most brilliant gemstones with the greatest recovery. If you insist on a fine and larger-diameter round ruby, try to find a squarish cushion that can be recut into a rounder shape or set with that illusion. The marquise is more of a novelty cut, and its popularity is not easily insured. Instead of cutting a marquise, cutters will usually cut a shape they can sell faster—unless the rough dictates a marquise for greatest recovery. The emerald cut, with the pavilion cut in long rectangular "step" facets, does not bring out a ruby's brilliance as does an oval or cushion cut.

A price premium is also placed on a ruby's size. Other things being equal, a loose rule of thumb is to expect to pay four times as much per carat for a three-carat ruby as for a one-carat stone and twice as much for a three-carat ruby as for a two-carat ruby.

Since fine rubies are rare and expensive, some allowance must be made in expectations for perfect cutting. Still, a better-cut ruby makes a much more attractive and wearable gemstone. Flat, lens-shaped or overly deep stones should be less per carat than gems of similar weight and quality that boast good cutting. Because of the rarity of the material and often primitive conditions under which they are cut, you can expect cutting that falls short of the optimum.

The high prices paid for gemstones mined in foreign countries is a very real phenomenon. Even finding fine larger rubies is a difficult task and seeming fortunes can be paid for less than dazzling stones.

Would you rather have a smaller and finer ruby or one that looks larger in jewelry but is not as fine in quality? If you are unable to purchase the finest, what degree and hue of secondary coloration and inclusions are acceptable to you?

### Key Points

Red is an emotional and passionate color. Ruby jewelry commands attention. Rubies are especially beauti-

ful accented by diamonds and are appropriate for yellow gold or platinum.

As July's birthstone, ruby brings excitement to the magic of hot summer nights.

Ruby is known as "The King of Gems" because of its extreme rarity and beauty in finer qualities.

A fine ruby has international value and appeal; it is coveted by people of all nations.

Europeans have often used ruby, not diamond, in engagement rings.

## BLUE SAPPHIRE

### Unrealistic Remarks...

*"I need a cornflower blue sapphire, so I need a Kashmir."*

*"You call these ten-carat sapphires a matched pair? They're beautiful, but the size isn't exact and one of them has a slight window."*

*"I want a fifteen-carat, fine sapphire with a marquise cut."*

*"Could any of the blue sapphires I see be heated?"*

### Actually...

Kashmir and Burma have produced some extremely fine sapphires, but fine sapphires are not limited to those particular localities. As with emeralds, the likelihood of the misuse or misunderstanding of locality names is great. Nonetheless, trade usage of locality names continues and often refers to the following general characteristics:

**KASHMIR SAPPHIRE.** Used to refer to what many consider the finest color of sapphire, which is a highly saturated, medium blue to slightly violetish blue, sometimes having a soft, velvety quality. "Cornflower" blue has been used to describe this color, but it is not an accurate term.

**BURMESE SAPPHIRE.** This is considered an extremely fine quality of sapphire. At its best, it shows a saturated, medium blue to slightly violetish blue. It may be "crisper" looking than the velvety Kashmirs. It is sometimes referred to as being "royal" blue, which, again, is not a precise term.

**CEYLON SAPPHIRE.** From Sri Lanka, these sapphires (when unheated) are generally very light to medium blue, grayish blue to blue-violet. Because of their lighter tones, the stones can be quite brilliant, especially when well cut. Many Ceylon sapphires exhibit extremely fine color.

**THAI SAPPHIRE.** Typified as being dark to very dark in tone and of a bluish black color. A lot of higher commercial-quality sapphire comes from Thailand.

It is important to remember that when shopping for a gemstone, descriptions of quality, not locality, are needed because each locality produces varying qualities.

Since fine sapphires, which are in the higher gemstone price range, are difficult to find, some allowance must be made in expectations for perfect cutting. Still,



a well-cut sapphire makes a much more attractive gemstone. Flat, lens-shaped or overly deep stones should be less per carat than gems of similar weight and quality that are well cut. Cutting often falls short of optimum due to the rarity of the material and often primitive conditions under which sapphires are cut.

As is the case for ruby, finer sapphires are usually seen in oval and cushion cuts. The long, rectangular pavilion facets on the emerald cut do not enhance a sapphire's brilliance as do the oval or cushion cuts.

ed by designs incorporating diamond baguettes, with or without brilliants.

If you aren't in the market for the biggest and best sapphire, find a bright pastel-blue sapphire which is much more beautiful than an inky blue gem of the same price. The lighter blue stones also look great combined with other colors of fancy sapphire.

According to the ancient Persians, our earth rested on a large blue sapphire whose reflection was seen in the sky.



*Sapphires are found in an almost incredible variety of colors.*

(Please see the Ruby section for a discussion of cutting styles.)

Blue sapphires are routinely heated. If not for this, many people would never be able to acquire and appreciate one for themselves. It is safe to assume that all sapphires you see have been heated unless specifically disclaimed. Because of their rarity, unheated sapphires are slightly more in price than an equivalent quality heated stone. However, a fine heated stone can command much more than a mediocre unheated stone.

### Key Points

Fine blue sapphire, with its cool, tranquil coloring, is internationally valued and desired.

Design ideas for sapphires abound. They are classic in three-stone or ballerina rings and well complement-

## FANCY COLOR SAPPHIRE

### Unrealistic Remarks...

*"If a sapphire isn't blue, it isn't valuable."*

*"Since I can't get pink diamond melee, I'll use pink sapphire."*

*"I want my intense gold sapphire unheated."*

### Actually...

Sapphire that isn't deep blue is termed "fancy." Some of the finer qualities of fancy sapphire, such as the intense hot pinks, can command as much, if not more, than fine blue sapphire of the same size. If you want a pink sapphire but balk at the price of an intense pink, you may be happy with a less expensive purplish pink sapphire.

*Continued on page 50*



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Cynthia Renée Marcusson, of Cynthia Renée Co., has been immersed in the gem and jewelry trade since 1982. Beginning as a gem mine geologist, Cynthia was soon lured by the creative challenges of the jewelry industry. After seven years with an internationally recognized gem mining concern, she started her own company, Cynthia Renée Co., a firm bringing innovative Jewelers the powerful combination of fine colored gemstones, promotional expertise, intensive training seminars and creative jewelry design.

Ms. Marcusson focuses primarily on helping some of the nation's finest jewelry stores locate and acquire colored gemstones. Her diverse roles require extensive public contact in the presentation and promotion of colored gemstones, interaction with domestic and international members of the gemological and scientific communities, knowledge of physical properties and economics of gemstone varieties, creative skills in jewelry design and manufacture, plus experience in coordinating and producing promotional materials and advertising.



Ms. Marcusson is a frequent speaker on such subjects as gemstone mining, jewelry selection and design, and the colored gemstone market. She has been featured by such diverse groups as the Gemological Institute of America, the Golden Door Spa and numerous community service organizations. She was a class teacher at the 1989 and 1990 American Gem Society's annual conclaves and presented a poster session in the 1991 International Gemological Symposium. The American Gem Trade Association has featured Cynthia's seminars at their Tucson Gem Faire since 1989. JQ Magazine regularly features her articles, and she is a book reviewer for Jeweler's Circular Keystone. Her fine gem-cutting skills won her a 1993 Cutting Edge Award from the American Gem Trade Association.

Ms. Marcusson graduated with distinction with a Bachelor of Science degree in geology from San Diego State University and completed her thesis on North America's largest gem mine, The Himalaya. When available, her leisure time is spent alpine and rock climbing, creative writing, reading, and enjoying family and friends.

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## COLOUR

Fine, intense "fuchsia" pink sapphire is hard to get. Finding a pair to match the one in a ring will take some time, and the colors may not match upon close inspection.

Pale yellow sapphires are routinely heated to achieve a deeper, more intense yellow to golden color. Lemony yellows tend to be more desirable than the overly golden tones. Unheated intense yellow sapphires are rarely seen. The large, clean oranges, devoid of brown, are particularly coveted in the Orient and priced according to their rarity. It is important to recognize what shades of yellow and gold you prefer.

Though not as rare as natural pink diamond melee, fine pink sapphire melee is still not easy to come by.

The Umbra area of Africa produces sapphires ranging from bright to spicy-colored.

### Key Points

Consider jewelry combining several fancy colors together in one piece.

Celebrate your individuality by wearing a sapphire of a different color—a fancy sapphire.

The intense, hot pink sapphires are exactly that—hot!

Pink sapphires are very feminine and great in engagement rings. Pink is also the color of unconditional love.

Yellow sapphires permit you the pleasure of wearing a large stone that comes from a much different price range than an equivalent blue sapphire.

Yellow sapphires are particularly striking set with black pearls, black mother-of-pearl or red tourmaline. A yellow sapphire ring with blue sapphire and diamond accents or a pink sapphire with ruby and diamond accents would be other intriguing possibilities. Combinations of light blue, pink and yellow sapphires can be worn by the adventurous in a variety of jewelry pieces.

## PADPARADSHA SAPPHIRE

### Unrealistic Remarks...

*"Well, this sapphire's orange, it must be a padparadsha."*

*"Get in a couple of fine padparadshas for me to see."*

*"I need an oval padparadsha to fit this 6.4 x 8.6 mm setting."*

### Actually...

A true padparadsha sapphire is of light to medium tones of pinkish orange to orange-pink. Unfortunately, many sapphires labeled as "pads" don't fall into this color range. Rust-, orange- or purplish-colored sapphires are not padparadsha but fancy sapphires.

Good padparadshas are very difficult to obtain. A supplier of fine sapphires will feel quite fortunate to have one in inventory at any given time. As is the case

with other rare, fine gemstones, wide choice and specifications of dimensions are not possible.

### Key Points

Fine padparadsha sapphire is one of the rarest and most expensive gemstones; it is for lovers of the mysterious.

The word *padparadsha* derives from the Sanskrit word for lotus flower, *padmaragaya*. A lotus flower is rosy-red when it is about to open. A padparadsha might be better described as a marriage of a Sri Lankan sunset (orange) and a lotus flower (pink).

A padparadsha sapphire captures the colors of and feelings stirred by a spectacular sunset.

## STAR SAPPHIRE & STAR RUBY

### Unrealistic Remarks...

*"All star sapphires are blue."*

*"I don't care if this sapphire (or ruby) has a well-defined, centered star with rich, even color; the fact that it has a heavy bottom (or high dome) tells me it was just cut for weight retention."*

### Actually...

Fine star sapphire and ruby are especially coveted and in demand. Stars are not just seen in blue, gray or black sapphire; pinks, purples and lavenders can also have stars. A true red star ruby is the rarest star. Prices for the finer stars reflect their exalted status.

Star sapphire and ruby values are based on color, clarity, orientation and definition of star, translucency and symmetry. Optimally, the star's hub should be centered on the dome and should have six rays, or "legs," of equal definition that extend from the dome's center to the girdle. Most star sapphires on the market are of a commercial gray to bluish gray color; the purer the blue, the more desirable the color is considered. A blue sapphire with a moderate-to-good star commands a higher price than a grayish sapphire with a strong star.

Like cat's-eyes, star sapphires are often seen a bit bottom-heavy or with a high dome, which may help in the orientation and definition of the star.

### Key Points

A fine star sapphire is a real prize and in worldwide demand.

Marvel at this natural phenomenon by shining a penlight on the star or holding it under a beam of sunlight.

A person who wears a fine star sapphire owns a distinctive natural wonder.

## SPINEL

### Unrealistic Remarks...

*"An expert can separate ruby from spinel at first glance."*

*"Spinel's just a poor man's ruby."*

*"I can't afford a matched pair of six-carat rubies, but it should*



*be easy to get a large pair of fine red spinels."*

**Actually...**

The beautiful bright spinel can tempt you with a variety of colors. Over the centuries, fine red spinels have been repeatedly mistaken for rubies. With today's sophisticated gemological equipment such mix-ups need not occur; still, upon visual inspection, it is not always easy to tell the two apart. Most red spinel has brown, orange or pink secondary coloration; the purer the red, the higher the price. The intense, slightly orangish or pinkish reds can be very vibrant.

Fine blue spinels are rarely encountered; most are overly gray, and blue spinel doesn't mimic blue sapphire as well as red mimics ruby.

Burma and Sri Lanka are the primary producers of spinel.

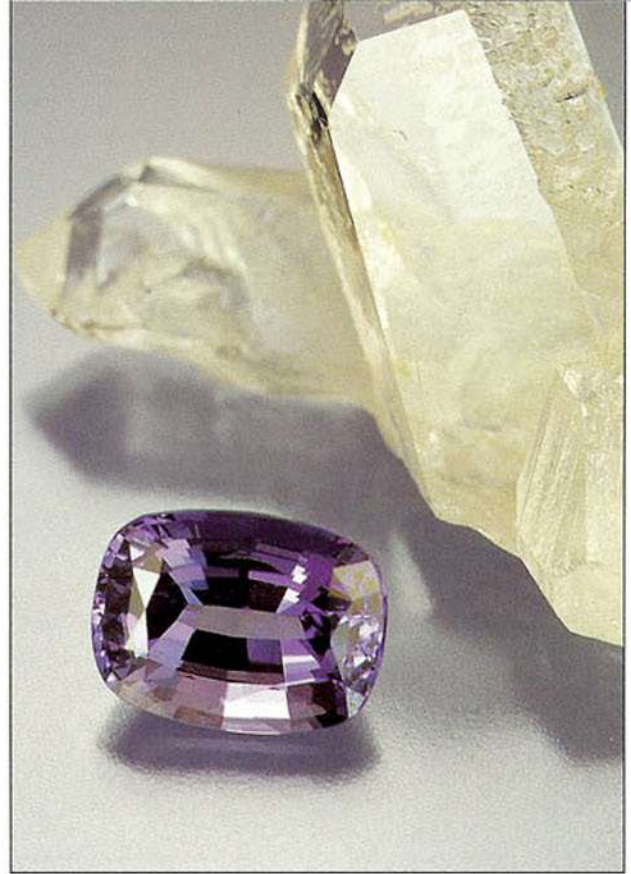
For reasons similar to those affecting emerald, ruby and sapphire, spinel is usually fashioned in oval and cushion cuts. (Please refer to the Ruby section for a discussion of cutting styles.)

Though they do not command the high price of ruby, matched pairs of fine red spinel are rare and unusual.

### Key Points

Red spinel has been historically mistaken for ruby. The British Crown Jewels' Black Prince's ruby and Timur ruby are actually red spinels.

Red spinel is brighter than a ruby and at a fraction of the cost. Spinel's rarity and beauty are not accurately reflected in its relatively low price. But...it's popularity is gaining.



*Bigger tanzanites concentrate their color to a degree that smaller stones cannot match.*

Spinel is available in a variety of shades and colors. Spinel is durable and attractive enough to set in a wedding ring.

Some people like having a gemstone which looks like a ruby to most people.

## TANZANITE

### Unrealistic Remarks...

*"I need a two-carat tanzanite the same color as the fine eleven-carat one I saw last month."*

*"I don't want my tanzanite heated."*

*"Tanzanite is impossible for a goldsmith to work with."*

*"Tanzanite can't be worn in a ring."*

### Actually...

We all wish the smaller tanzanites could match the color of the larger, well-colored ones. A two-carat tanzanite will not match the color of a finer eleven-carat tanzanite. The size of the larger gemstone helps to concentrate the color. It is the same scenario as that described under aquamarine and kunzite. The smaller tanzanites, though they can be well colored, just can't compete with the color of the heavier ones.

Tiffany & Company, who tried to become the United States' sole marketer of tanzanite, coined the name

*Spinel and seafoam tourmaline earrings from Nordstrom show the subtlety of certain combinations of gems.*

*Continued on page 71*



## COLOUR GUIDE

in honor of the gem's homeland; it was found in Tanzania during the late 1960s. Tanzanite is a form of the mineral zoisite. It was gauged that most people would feel better about having a gem named tanzanite on their finger than one called zoisite.

All tanzanites on the market are subjected to heat treatment. Though heating can occur naturally in the earth, most tanzanites start as light brownish purple and must undergo heating to turn the deep, rich indigo blue we so admire.

Tanzanites, depending upon how they are oriented during cutting, can be pure blue or include the secondary and tertiary colors of purple and red. Some people prefer the pure blue tanzanites which most nearly resemble sapphire. Others opt for the most exotic reddish and purplish blue gems.

If your Jeweler can work with emerald, kunzite or topaz, then working with tanzanite shouldn't be a problem. When tanzanite first came on the market in the early 1970s, Jewelers' experience with it was limited; many stones were cracked due to unfamiliarity with handling its temperature requirements. Unfortunately, tanzanite got a reputation as being a difficult stone with which to work. Tanzanite is susceptible to sudden changes in temperature and can crack due to thermal shock. Care should be taken when sizing tanzanite rings, and it's best not to have them cleaned ultrasonically.

If care is taken, tanzanite rings can be worn every day—even if set with four prongs. One woman who wears her prong-set tanzanite daily removes it when working in her kitchen so it doesn't inadvertently go from the cold sink to the hot oven!

### Key Points

Prices for tanzanite are extremely competitive. A major find of tanzanite hit the market around 1990. As in other markets, colored gemstones are priced according to supply and demand. Tanzanite's greater supply temporarily lowered prices. Now, again, fine tanzanite is scarce and prices, though not at the level of before the big find, are rising. Greater exposure has increased public awareness, creating a higher demand. Tanzanite is becoming well established as a jewelry-store staple. While tanzanite is widely available, finer qualities are not in abundance.

Because of East African political and economic turmoil, it is difficult to predict long-term production. Tanzanite is a great gemstone to buy now, as it will probably become more scarce.

Large, fine-quality tanzanites over ten carats are available. You can purchase the best tanzanite in a large size.

People are attracted by the color(s) of tanzanite; it is exotic, fashionable and a conversation piece.

Tanzanite is much less expensive than a sapphire of equivalent quality.

This gem was named by Tiffany & Company.

## TOPAZ

### Unrealistic Remarks...

"Topaz is a boring, yellow stone."

"I want a 15 mm round reddish topaz."

"My imperial topaz is a gold color."

### Actually...

Topaz is a very bright, attractive gemstone which, at its best, is found in varying combinations of gold, orange, red, pink and brown. It is readily available in yellow, gold, and blue colors.

*Imperial*, *precious* and *sherry* are marketing terms sometimes used to indicate certain colors and qualities of topaz. Their use is inconsistent and discouraged or forbidden by most national and international trade organizations. Nonetheless, trade usage of these terms continues and often indicates the following general characteristics:

**IMPERIAL TOPAZ.** Orangish red, reddish orange to red and deep pink in color.

**PRECIOUS TOPAZ.** Peachy orange to slightly orangish gold in color. At one time, this term was used to denote a true topaz from a smoky quartz.

**SHERRY TOPAZ.** Yellow, yellowish brown to gold in color.

It is important to remember that when shopping for a topaz, descriptions of color, shape and size are needed instead of one of the marketing terms listed above.

Most pink topaz is the result of the heating of reddish brown to purplish red topaz; it is a stable treatment. Irradiation causing the most intense colors of reddish and pinkish topaz is not always permanent, and the stone may revert to its original golden brown color upon prolonged exposure to outside light. Shop with a trusted Jeweler to avoid this costly mishap.

Almost all of the world's topaz originates in Brazil. Supply of imperial topaz is very low and there is particularly strong demand.

Topaz has a hardness of 8, is resistant to scratches and can achieve a brilliant polish. During wear, it should be protected from hard blows.

### Key Points

Topaz has a high name recognition, yet many people have never seen a fine topaz. Very few people have ever seen how attractive their November birthstone can be.

Topaz has a romantic sunset color. It has the beauty of a padparadsha sapphire, in a larger size for a fraction of the price.

Topaz is a brilliant gemstone readily available eye-clean. It appeals to people who are finicky about the inclusions in other types of gemstones.

Fine reddish topaz is a "collector's quality" gemstone.

The brilliance of well-cut golden topaz is striking in combination with yellow gold. It is easy to wear every day since it accents the same fashions as yellow gold.

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# COLOUR

## BLUE, GREEN & CHROME TOURMALINE

### Unrealistic Remarks...

"Whadda you mean what color do I want? I said I wanted an indicolite."

"All green tourmaline is chrome tourmaline, which is very abundant."

"I need a blue tourmaline that looks just like sapphire."

"I need you to send me a five-carat indicolite to match the one I have now."

### Actually...

Green tourmalines are categorized as those colored by iron and those colored by chromium and/or vanadium. The former are referred to simply as green tourmaline, while the latter are called chrome tourmaline. Remember that all chrome tourmaline is green but not all green tourmaline is chrome!

The term *indicolite* (derived from *indigo* in reference to its blue color) is a subjective word frequently applied to any bluish tourmaline. While it is intended to describe a pure blue, one can find it used with tourmalines

Blue tourmaline has a great range of colors from vibrant teal, to dark aquamarine, to intense "sapphire" blue. Blue tourmaline is often listed as a good blue sapphire substitute, though the blue tourmaline that most resembles sapphire is typically over-dark and blackish blue. Most blue tourmalines have gray or green secondary coloration. Finding a true blue tourmaline is a real trick, and the finer qualities can fetch quite a price.

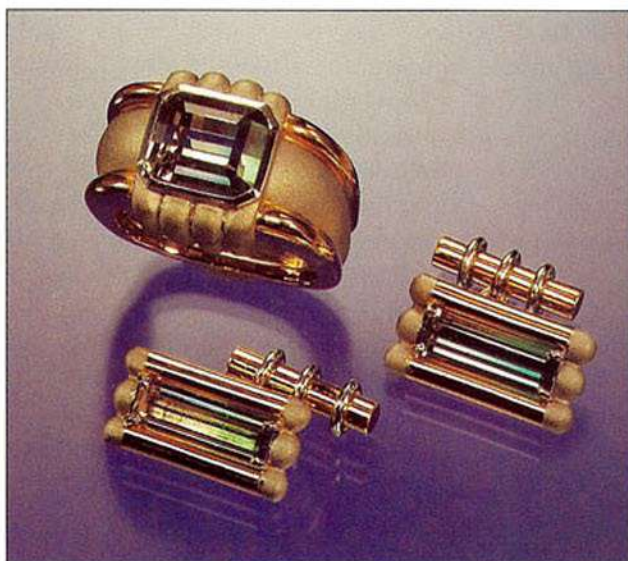
Blue tourmaline ordinarily is not seen in a designer's line because it is extremely difficult to match. Suites or matched pairs of blue regularly command a premium. Consider blue tourmaline as more of a one-of-a-kind gem.

The newer tourmaline from Paraiba, Brazil, has garnered international attention for its tremendously vivid blue, blue-green and green colors—more intense than any other tourmaline seen to this time. Many call this discovery one of the most significant gem finds in recent history. The production is scant and prices are holding high. High means \$10,000 per carat for a five-carat electric-turquoise gem.

Chrome tourmaline is from a localized area in East Africa. Due to its scarcity, especially in sizes over five

Left: Bicolor tourmalines are set in platinum and rose-gold ring and cufflinks by Mirjam Butz & Brown.

Right: The intense color found in tourmaline from Paraiba, Brazil commands premium prices.



that have only the slightest hint of blue. Some authorities consider the term an "insignificant varietal name" and campaign against its use. Instead, they recommend that tourmaline be described by a color modifier such as "green" or "bluish green" tourmaline. Alternative names create the opportunity for confusion but, nevertheless, they are active in the trade.

Green is achieved by mixing the primary colors of blue and yellow. The countless combinations of blue, yellow and green provide us with tourmaline in a tremendous variety of hues. Applied to tourmaline, green should be judged on its freedom from brown or overly yellow hues. Green tourmaline is extremely plentiful, though bright, "happy" greens may be a bit more difficult to locate.

carats, it is also difficult to replace or match. Locating a very fine chrome over five carats requires quite a search.

Chrome tourmaline is difficult to find in melee. Tsavorite, which is mined in more localities, is much more abundant in melee sizes and is a good alternative.

It is no coincidence that both green and blue tourmaline are usually seen in the emerald cut. Imagine you are holding an uncut green or blue tourmaline crystal. It is elongated and pencil-shaped. In most cases, if you look down the length of the crystal, the color will be much darker or more olive than if viewed from the side of the crystal. So that less of the darker, unattractive color will be seen in the finished stone, the gem must be cut with its table parallel to the length of the crystal. Steeply angled ends must also be used. The emerald cut



most easily allows for steeper ends and gives greater weight retention from the uncut crystal. For these reasons, oval-, cushion- and round-cut green and blue tourmalines are found far less frequently.

Chrome tourmaline is seen in a greater variety of shapes; its color is not as affected by orientation of the crystal axis. This allows the cutter greater freedom in choosing the final shape. Chrome tourmaline tends to be dark. To combat this, a skilled cutter may cut a shallower gem and add extra facets to obtain greater brilliance.

In this day of abundant gemstone treatment, blue and green tourmalines are no exception. To brighten and purify color, greens and blues are commonly heated. Chrome tourmaline does not respond well to heating and irradiation.

### Key Points

Green, chrome and blue tourmalines are stunning on their own merits and are not merely substitutes or look-alikes for emeralds or other gems.

Large and fine-quality green and blue tourmalines are available. You can purchase the best qualities of blue



*Red or pink tourmaline, as in this large example, is often called rubellite.*

or green tourmaline in large sizes.

Because of its limited locality and the political and economic turmoil in East Africa, it is difficult to forecast the long-term availability of chrome tourmaline. Chrome tourmaline is a great gemstone to buy now as it will probably become more scarce.

The green and blue colors are very well suited for men's jewelry. They are durable and masculine. Blue, green and chrome tourmalines can also provide the beauty and durability needed for wedding rings.

Green or blue tourmaline is striking when combined with pink or red tourmaline. Green tourmaline also is

intriguing with amethyst and blue tourmaline or rhodolite garnet.

Mounted with the solitary, bold elegance of yellow gold or with other colored gemstones, vivid green, chrome and blue tourmalines are certain to captivate the imagination.

## PINK & RED TOURMALINE

### Unrealistic Remarks...

*"I love this hot pink (or red) tourmaline, if only it were eye-clean."*

*"Rubellite is a term only applied to red tourmaline."*

*"Oh, I never wear pink. Why would I want a pink tourmaline?"*

### Actually...

Due to the nature of the geologic system in which they are formed, red and pink tourmalines almost always contain inclusions. Inclusions in pink and red tourmaline are as accepted as those in emerald.

Rubellite is a term frequently applied to red and pink tourmaline but its use may cause confusion. Many authors and publications describe rubellite as meaning both red and pink tourmaline, while others relate the term only to red tourmaline. It's hard to tell which is correct. Some authorities recommend that the term be dropped altogether, contending that tourmaline may be best described by a color modifier as in "purplish red" or "orangish pink" tourmaline. Not only have the alternative names become confusing, but the term rubellite may create the negative connotation of a type of ruby imitation. In this era of abundant gem substitutes, the term may be especially misleading.

The intensification of red and pink tourmaline through laboratory irradiation has been successful. Laboratory irradiation of tourmaline does duplicate the natural coloring process. Tourmaline that is red or pink upon extraction from the earth gained its color by co-existing with minerals that emitted low levels of radiation. Very pastel pink, green, or blue tourmalines (which tend to have many fewer inclusions than redder colors) may take on a stable, deep pink or red coloration after irradiation treatment. Very light tourmaline that turns a vivid pink or red after irradiation treatment is quite unusual; most of it does not accept treatment successfully.

### Key Points

Pink is one of the most flattering and versatile colors. Pink tourmaline jewelry will harmonize with almost every fashion color. If you wear navy, black and white, pastels, greens, blues, reds and even khaki, your beautiful pink tourmaline jewelry will show up even better. In fact, pink tourmaline is smashing even with some shades of orange.

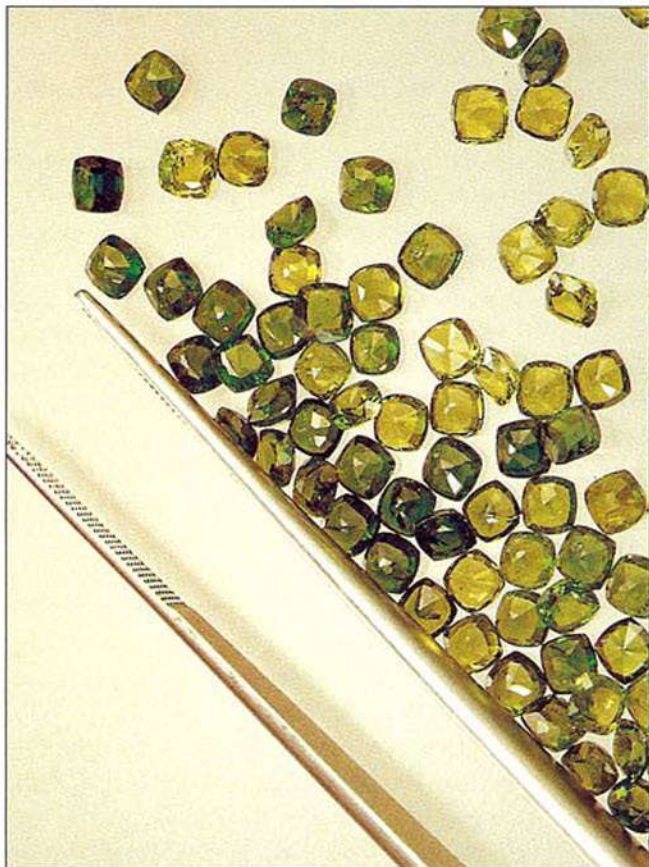
Some people will be interested in the geologic history

*Continued on page 74*



# COLOUR

that inclusions reveal, including traces of a gem's "liquid past." Interestingly, during the last Chinese Imperial Dynasty, there was a tremendous demand for the intermediate, carving grade of pink tourmaline, which was preferred over the cleaner grades. The reasoning was that clean gems could be produced by man while included ones were more obviously nature's handiwork!



Limited by the geology of the deposit, tsavorite does not come in large sizes. In fact, a three-carat fine tsavorite is considered unusual. Fine five-carat stones are rare. Since the extent of the deposit is limited and mining is sporadic, a fine tsavorite in any size is an unusual gem. Small, fine-textured inclusions are typical.

Tsavorite is usually seen in the cushion or oval cut; pear-shaped stones are also available. Generally, these shapes allow the cutter to get the most brilliant gemstones with the greatest recovery. The emerald cut does not maximize the gem's



## TSAVORITE GARNET

### Unrealistic Remarks...

*"This five-carat tsavorite is more per carat than the one-carat? Why, it even has an inclusion!"*

### Actually...

Tsavorite, the vivid green grossular garnet, was first discovered in the late 1960s in Kenya's Tsavo National Park. Tiffany & Company, who tried to become the United States' sole marketer of this new garnet, coined the varietal name, "tsavorite," honoring its locality. Of course, the name tsavorite conjures up a very different mental image than does "green grossular garnet."

To earn the name tsavorite, the garnet must be a vivid, rich, darker green and not a lighter, pastel or overly yellowish green. The finest tsavorites have a tinge of blue to their green color.

*Left: Tsavorite, a type of green garnet introduced by Tiffany, comes only from a small area along the Kenyan-Tanzanian border.*

*Right: The finest tsavorites have a tinge of blue to their vivid green color.*

brilliance. If you insist on a large, round tsavorite, try to find a squarish cushion that can be recut into a rounder shape or set with that illusion, since fine rounds over 6 mm are not easy to locate.

### Key Points

The beauty of a vivid, rich green tsavorite is moving. People are very attracted to its brightness and lush color.

Melee sizes of sparkling green tsavorite are available, allowing for jewelry with interesting calibrated work.

Tsavorite and tanzanite are two rare and vividly colored gemstones from East Africa. Both gemstones are also new—being first found in the late 1960s.

Because of East African political and economic turmoil, it is difficult to ascertain the status of future production. **JQ**