# Dissecting the Marble Pattern 

By Julie Gracie Moseley of ZenDada Bengals

## Introduction

We Bengal breeders have a lexicon to describe rosetted Bengals: terms like "arrowheads", "doughnuts", "pancakes", and such. But when I started to breed marbles, I quickly realized that we didn't have a very useful vocabulary to talk about them. We had a few simple words like "bulls-eye" (used only in the phrase "no hint of..."), and "chained" (as in Nola Voodoo Magic of Junglebook and rarely if ever used elsewhere). We also had a variety of terms whose meanings were ambiguous at best: "pork chop", "tuning fork", "black marble" and such.

Not only did we lack a Marble Lexicon, but a framework upon which to build it. We needed a construct for dissecting the marble pattern.

## The Elements of the Marble Pattern

## Eye not Bulls-eye

Marc King of Casarocca Bengals introduced me to a useful concept: seeing the marble pattern as an eye, rather than a bulls-eye. A bulls-eye is a good way to describe the classic tabby pattern. But marbles should be "uniquely different" from that pattern. So separating the pattern into an upper and lower eyelid, and an iris, helps us see exactly where the difference lies.

Let's take a look at a graphic of an eye:


Where the upper and lower eyelids meet is called the canthus. Medial means toward the center, i.e. the nose. Lateral means toward the side, i.e. the ear. Since we're talking about an eye-like pattern on the torso, we'll use cranial (toward the head) and caudal (toward the tail) instead. Upper could be dorsal (toward the spine) and lower could be ventral (toward the belly).

Let's simplify this graphic a bit so we can use it to demonstrate the eye concept by superimposing it on an American Shorthair Classic Tabby, then on a Marbled Bengal:


Here it is on this classic tabby pattern in Helmi's photo of Gazer:


Pretty straight forward, right? Now let's apply the eye to the marble pattern in Helmi's photo of Sun Dog. And while we're at it, let's identify the other elements of the marble pattern as well.


Notice that the "upper and lower eyelids" have moved; and that they no longer touch each other, i.e. both the "cranial canthus" and the "caudal canthus" are separated.

## Rib Pattern

The rib pattern occupies the space between the eye pattern and the shoulder markings. It does not equate to a rib bar in a spotted. In fact, some of the most horizontal spotteds come from marbles with this rib pattern. Notice that Sun Dog's rib pattern flows into the lower eyelid creating one long continuous line from the top of the shoulder, across the lower torso, all the way to the hip. This is one of the ways we generate horizontal or diagonal flow in a marble: by connecting pattern elements longitudinally, drawing one’s eye from head to tail with one continuous line.

## Spine Lines

The spine lines are five lines running parallel to the spine down the center of the back, three of which are pattern, alternating with two which are background or "third" color the third color being the "tri" in tri-color. I love Helmi’s term for the spine lines. She calls them "skunk stripes."

## Butterfly and Shoulder Markings

The butterfly is the pattern over the top of the shoulders. It is best appreciated when viewed from the back, as are the spine lines. So let's do that now. This is another Helmi photo of Sun Dog:


Sometimes the butterfly and shoulder markings blend together to form a single distinct pattern of their own, like a bolero or a shawl draped over the shoulders. We can call this formation a "cape" if we like. Let's take a look at ZenDada Phoenix Rising of Bahiya who has a cape:


## Fill Pattern

Inside the marble pattern, there is another pattern, the "fill pattern." It's what occupies the space within the border of the marble pattern. A solid fill pattern is one comprised entirely of the pattern color. A marble that doesn't "open up" has a solid fill pattern. The opposite of this is "no fill pattern." It is comprised entirely of the third color in a tri-color marble.

Let's imagine a tri-color marble whose pattern is black on a gold background, and whose third color is chestnut brown. If this cat has a solid fill pattern, then the entire marble pattern is solid black; that is to say, there is actually no pattern at all, but only a fill color identical to the pattern color. If there is no fill pattern, then the inside of the marble pattern is solid chestnut surrounded by a border of black; again, there is actually no pattern at all, but a fill color identical to the third color.

A fabulous example of no fill pattern is Helmi's photo of Prattmandu Itsa Marbleous Feeling:


When a fill pattern is present, there are a myriad of delightful variations: polka dots, ripples, little panes of stained glass, mottled patterns, mosaic tessellations, M.C. Escher-like polygons, and more. I love the discrete dots and squiggles in the fill pattern seen here on Calcatta Hyakutake of Calanda (photo by Francine Camenzind, courtesy of Marc King):


What you call your fill pattern is up to you. It should simply be descriptive - something that instantly paints an image in the mind of your audience.

## Perimeter or Border

The perimeter of the marble pattern is the border that separates the fill pattern from background color. There are really only three features currently specified by the marble UCD regarding the marble "standard." One, of course, is a horizontally flowing random pattern. Secondly, tri-coloring is preferred. And this is the third: "Contrast must be extreme, with distinct shapes and sharp edges." Therefore the border should be clear-cut, not fuzzy. It should not blend in with the surrounding background color. Ideally, it should be one continuous solid line around the outside of the marble pattern that prevents the fill pattern or fill color from ever touching the background color. Most marble borders are smooth lines. But one of the interesting variations is the scalloped border we see on the famous "chained" marble, Nola Voodoo Magic
 of Junglebook, or on Rainforest Song Catcher (photo courtesy of Jaen Treesinger):

## Pattern Distribution

## Use of Real Estate

As with spotted Bengals, we use the concept of acreage. When the acreage is low, the pattern is large. We generally refer to this as a "sheet marble", or simply a "big pattern" marble. High acreage is achieved when the marble is a sparble (ambiguous marble/spotted which we'll touch on later), or when the pattern is long and narrow. ZenDada Pahoehoe of Beaux Mondes is a nice example of a high acreage marble (photo courtesy of Vicki Beeler):


Flow
The Marble UCD tells us we should strive for horizontal flow. Song Catcher and Pahoehoe are both excellent examples of horizontal flow. But equally valid, are patterns that flow diagonally, from the upper shoulder to the lower hip; or in a serpentine fashion as we see on Bengaland's Nightstalker of Aaliyah (photo courtesy of Susan Speegle):


## Layout

Layout describes where the various pattern elements lie, and how they interact with each other. A random marble pattern isn't really random at all. The trained eye will spot the elements of the marble pattern on even the most "random" marble. The impression of randomness is achieved by morphing the pattern elements, or connecting them together in unusual ways.

We can elongate the elements, break them apart, and move them about, as we saw in Sun Dog's "eyelids." Or the marble elements can simply flow into one another. Connecting the elements end to end is what creates the serpentine pattern on Nightstalker. Let's look at Pahoehoe again, this time with elements clearly labeled. The rib pattern flows into the "lower eyelid." The "iris" flows into the "upper eyelid." And the "upper eyelid" flows into the spine lines above it.


We can also use thin lines to interconnect the marble pattern elements into a reticulated layout. This reticulated layout looks like a spider web on Spotsalot Jazzy Jazmine of AGA (photo courtesy of Mel Bowman):


Here is another reticulated layout. ZenDada Vanessa’s marble pattern elements look like the islands in an archipelago; and some of the islands are connected by bridges (photo courtesy of Richard Kulek):


## Marbleous Freaks of Nature

## Sparbles

A sparble is a marble whose pattern is so ambiguous that we might have to do a test breeding to prove that it's not genetically spotted. In this case, a picture is worth a thousand words. This is Abeo Aris of Spotacular (photo by Karen Soeteber, courtesy of Holly Coreo):


## Marbled Tummies

While the UCD says the marble tummy must be spotted, marbles might be better served by saying that the marble tummy must be patterned. Marble tummies are often covered with not only spots, but funky lines and squiggles as well. This is Goldcharm Moonrocks (photo courtesy of Diana Starr):


## 3D Marbles

Like the embossed pattern of the King Cheetah, some marbles have a 3D pattern. The pattern hairs, especially along the spine lines, are significantly longer than the background hairs. These longer hairs point toward the center of the pattern element, causing the pattern to stand up in a ridge. When the 3D marble gets excited or aroused, these ridges raise up in a display much like the hackles on a Rhodesian ridgeback. The 3D pattern is my personal passion. This is ZenDada "Pascal" (not yet registered) whose 3D pattern is one of the best I have produced to date; her hair has been smoothed as flat as it will lie, and she is in a relaxed state here:


## Conclusion

If I've piqued your interest, then you might have fun visiting our online photo gallery: www.marbles.exoticats.com. The gallery is an extensive collection of albums belonging to members of the marbledbengals Yahoo list. The gallery is also where you can find the Marble Photo Glossary, an assemblage of marble terms with pictures to illustrate their meanings. The Marble Lexicon is still a work in progress. If you have ideas or suggestions, join the marbledbengals list and we'll have fun chatting about them!

Hopefully you now have some new concepts and terms to play with. Take them for a test drive. Roll them around on your tongue and see if they taste right. See if they help you say something more meaningful about your marbles than "no hint of bulls-eye." Heck, show me a marble who really has no hint of a bulls-eye, and I'll show you a spotted cat!

