## The billion billion stones of Jasper Beach

Article posted by Chris Mackowski on August 11, 2010 in: Leisure & Travel

I had already been reminded that morning what a billion billion looked like. I had started my day well before dawn and so had taken the opportunity to gaze skyward. With no ambient light to pollute the heavens, I could see infinity spread above me—layer upon dark transparent layer, a billion stars set in each one, stretched across the sky.

Hours later, standing at the edge of the sea, I was reminded again of a billion billion. This time, I needed only to look down rather than up: a billion billion



small, smooth stones, piled like a high sand dune that stretched the entire length of the beach.



In fact, the dune *is* the beach—a half-mile curve that runs east-west between two cedar-topped bluffs that mark the outstretched edges Howard's Cove. Toward the top of the ridge, the stones are bigger—fist-sized or perhaps a little larger. Closer to the high-tide mark, the stones get smaller, perhaps the size of a thumb tip. Near the low-tide mark, the stones are the size of fine gravel.

The sea has rubbed them all smooth and regular—no hard

shapes, no sharp edges, no harsh cracks.

Most of the pebbles have a reddish hue, dark enough to be almost brown, and this is where the beach gets its name: Jasper Beach. Jasper is an iron-rich form of silica, and the abundance of iron gives jasper its reddish hue.

But according to the <u>Maine Geological Survey</u>, few of the pebbles at Jasper Beach actually consist of jasper. Instead, the geologists suggest, most of the rocks consist of a fine-grained volcanic rock called rhyolite, which, like jasper, is also dark red.

But any attempt to categorize the rocks of Jasper Beach is immediately confounded by the rocks themselves. For every



rhyolite-red rock, there's a nearly-round ball of white quartz with its characteristic flecks of black or a pebble that looks like it might have once been a brick in a younger time.

And this is where the billions become overwhelming, because you can spend hours and hours—days, weeks if you want—examining stones, turning them over in your hand, feeling their

smoothness and marveling at their designs, and as you set one down and pick another up, you will never begin to wrap your mind around the vastness of their numbers.



One is crimson red with Seussian swirls of black. Another is solid algae-green and flat, perfect for skipping. Another mimics the stormy surface of Jupiter, complete with a great angry eye. A piece of orange quartz shows off chips of white and black. Another stone somehow blurs seamlessly from bluish green to milky red in the span of a few millimeters.

Every stone is different. Every stone is beautiful.

Their real beauty comes out when the stones are wet with seawater, which brings out their colorful vibrancy. They may lack luster when dry, but once wet, they look magic.

So, so many of the stones, above the water line, rest in lackluster obscurity. They've been piled high by the sea and forgotten. But even there, they have the chance to shine as the fog rolls in from the sea, turning the air milky white even as the ridge of stones comes alive with color.

Swatches of beach grass grow along the top of the ridge, as do a few clusters of wild roses, but beach peas are the most common plants.

Near the top of the ridge, the sea has also deposited assorted human detritus. Some is expected: a piece of chewed up lobster buoy; a couple feet of coarse, weathered rope; chunks of partially burned driftwood used in bonfires. Some is unexpected: a discarded plastic bottle of pink



Powerade, an inside-out rubber work glove, the green plastic casing of a spent shotgun shell.

There are other shells, too—pieces of crabs, empty periwinkle shells, shattered muscle shells bleached to iridescent light-purple in the sun. There are clumps of dried seaweed and sheets of kelp that have come unanchored from the sea floor.

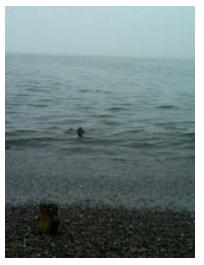
As the morning fog thickens, a lobster boat calls out with its horn. The engine chugs along, propelling the boat from buoy to buoy, cutting back for each trap

tending. The boat itself remains invisible, but the sound of its engine marks its progress across the cove.

A harbor seal, thirty feet offshore, pokes its head above the waves for a look around. It finally dips back under.

About two-thirds of the way down the beach to the east, the remains of an old fishing weir jut out of the water. Once, a whole line of wooden stakes taller that phone poles, rose like skeletonal fingers from the sea in a line perpendicular to the shore. Fishermen would stretch nets between the poles, and the schools of sardines that came in close to shore at high tide would get ensnared. Now, only the pole farthest out remains standing; a lone cormorant sits on it, gargoyle-like. The stumps of two other poles, closest to shore, show only at low tide.

The stone ridge slopes more gently to the sea down at this far end of Jasper Beach. The stones, too, are much smaller—gravel-sized, but still smooth and crunchy underfoot.



All the way at the beach's very eastern edge, just before the bedrock cliffs that jump skyward, a freshwater inlet drains from an inland salt marsh into the sea. The water in the inlet teems with rock crabs that move about with the slow-motion deliberateness of astronauts on the moon. Small caves and craggy rock formations, all covered in seaweed, all cut from the side of the bedrock cliff, make up the far border of the inlet.

But back near the parking area and beyond it to the beach's western end, the ridge of stones rises steep, almost wall-like, from the water. The wall of stones has several terraces, though, visible at low tide. The steppes, called storm berms, are created by the fluctuating water levels that come

with rough weather. Low tide also reveals not a smoothly curved shoreline but a series of indentations—called cusps—that give the waterline's profile a scalloped look.

The waves rush in to shore and climb the slope. Then, as the water retreats back through the stones, the beach *hisses*. Sometimes it sounds like something sizzling in a frying pan; others, it sounds like a kindly librarian gently shushing a talker. Regardless of the intensity, the hiss comes from the stones themselves and often reveals much about the beach's mood.

Located just south of Machiasport, Maine, which runs



the beach as a local park, Jasper Beach remains one of the state's best-kept secrets. Even the old severe weather warning station, situated atop the cliff the runs along Jasper Beach's western edge, now sits deserted, no longer telling anyone about severe weather and certainly not telling anyone about the beach of a billion billion stones.

Who would believe such a tale, anyway? A billion billion is far too big for anyone's mind to envision, too big even to imagine.

Yet Jasper Beach is one place in the world where a visitor can remain well-grounded and, in doing so, still get lost in the vastness of billions.