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by Editor

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The classis L5 look of Shelburne is nothing to write home about, but it does offer plenty of eye candy chondrules for those who take the time to look closely.

The Shelburne chondrite fell back in 1904, and although an exciting event at the time, Shelburne is one of many meteorites whose fall circumstances have fallen into the dust bin of memories. The relegation of Shelburne to an asterisk noting a witnessed fall rather than a model meteoritic event is likely due to the low distribution of Shelburne in collections even though 18kg were recovered.

So for those who need a refresher about the fall of Shelburne, here is the account as collected and documented by O. C. Farrington. The images from the article are
The more you look, the more you see. Shelburne is a sleeper looking more like cement than not. But under even mild magnification, the chondrule texture is rich and filled with plenty of well-formed chondrules.

Chicago, U. S. A.
February 1, 1906.

THE SHELBURNE METEORITE.

BY OLIVER CUMMINGS FARRINGTON

The Shelburne meteorite fell about three miles from Shelburne, Ontario, at 8 p. m. August 13, 1904. Two stones were obtained from the fall, one of which weighed 12.6 kg. (27 lbs.) and the other 5.6 kg. (12 lbs.). The latter of these stones came into the possession of his Museum, where it is preserved under the Museum number, Me. 606.

The general phenomena of the fall and the larger stone have been described by Borgstrom** (Trans. Royal Astronomical Society of Canada, 1904, pp. 69-94). It remains to describe the smaller stone and give some additional general observations regarding the fall.

The distance between the points of fall of the two stones was about three-quarters of a mile and the direction between them a southeast-northwest one, the smaller stone being at the southeast. The latter stone fell within eighteen inches of the rear porch...
of the residence of Mr. John Shields.

The phenomena of the fall, as stated by Mr. Shields to the writer, were that sounds like a muffled drumbeat were heard by various members of the family who were in the house at the time, followed by a dull thud at the rear of the house. A man at the barn, two or three rods west of the house, also saw a momentary light. Mr. Shields’ impression from the noise was that an old shed in the rear of the house had fallen. He accordingly investigated to see if this were true. The shed proved to be intact, but a hole newly made was noticed in the soil near it. It was also noticed that the side of the house south of the hole was splashed with mud.

Crust is crust. Even if just a small patch, it counts.

No one investigated farther at the time, but on the morning of the second day (August 15) Mr. Shields dug into the hole and at a depth of eighteen inches* found the stone here to be described. A portion of a burdock leaf, which had evidently been carried into the hole with it, lay under the stone. This showed no evidence of charring or burning.

The character of the soil in which the meteorite fell was clayey, and no other stones were observed while digging it up. The meteorite lay with the side shown in Plate V, down. The weather at the time was fair, but there had been a shower a few hours previous. The mud splashed by the meteorite against the house was seen by the writer when he visited the locality six months after the fall, in February, 1905.

The mud had been thrown in considerable quantity across the porch, a distance of about three feet, upon a window, and was even to be seen on the lower side of the roof of the porch at a height of about eight feet. The direction in which the mud was thrown was southeast from the point where the meteorite fell. The shed shown in Fig. 1, was six and a half feet from the point of fall. The height of this shed is twelve feet. It stands north of the house, and northwest of the point of fall of the meteorite. A line
drawn to the point of fall of the other stone would pass directly over the roof of this shed so that had the direction of fall of the smaller stone been at a low angle with the horizon, it would have struck the roof.

Calculation shows that the angular altitude of the meteorite must have been at least 26 ° to allow it to clear the shed, if it came from the northwest. If its movement was in the opposite direction, i.e., toward the northwest, it must have fallen nearly vertically to have avoided striking the roof of the porch. This fact, together with the noticeable throw of mud to the southeast, indicates that the path of the meteor was toward the southeast. If this view be correct, the larger stone fell first, which is contrary to the usual rule, and, contrary to what would be expected, since the greater momentum of larger stones usually carries them farther.

Shelburne is a classic representative of a classic meteorite fall event.

It is possible in this case that the bursting of the meteor caused a deviation of motion which brought the larger stone to the ground first. The accounts of those who saw the meteor pass seem to be of no value for determining the direction of motion. In the reports quoted by Borgstrom four observers assert that the meteor was traveling northwest and three that it was traveling southeast. A similar conflict of opinion was found by the writer to exist among those at Shelburne who saw the meteor. A point on which all witnesses agreed, however, was that several reports were heard, at least as many as three. This would indicate that the meteorite broke into more pieces than were found.

The stone found by Mr. Shields, and now in the possession of the Museum, has a shape resembling that of a flat-iron. Its length is 10 inches (25 cm.), its width 5
[square] inches (14 cm.) and its thickness 3 inches (8 cm.). The several surfaces show differences of crust and rugosity, which indicate the orientation of the meteorite. Thus, of the broad surfaces, one, that shown in Plate VI, is smooth, and has only broad, shallow pits. This was the surface found uppermost when the meteorite was dug up, and is plainly the rear side of the meteorite.

The opposite surface is for the most part peppered with small, irregular pits and the crust is thinner. It is not as smooth as the side previously described. It seems evident from the character of the crust and the pittings that not only was this the front side of the meteorite in falling, but that a piece corresponding in outline to the rough portion was split off during the fall.

On the lower side of the surface in the position in which the meteorite stands in Plate V, the interior of the meteorite is seen, over two areas, each covering about a square inch. Of these areas the one at the right was produced by a piece having been chipped off for examination when the meteorite was first found. The one at the left, triangular in shape, is a natural scaling which, since it is not encrusted, must have been made about the time the meteorite struck the earth. It passes along the plane of a nickel-iron-troilite vein such as appears in other parts of the meteorite, and the position of this vein doubtless determined the fracture.

Of the narrow surfaces of the meteorite, one has a rugose character and incomplete crust similar to that of the front side of the meteorite. Here, evidently, the meteorite split off from some other mass during its descent to the earth. The other narrow surfaces have a complete crust and rounded edges. Their pittings are few and irregular and show rounding and smoothing.

Until next time….

The Accretion Desk welcomes all comments and feedback.
accretiondesk@gmail.com
Over the last 25 years or so of professional writing I have reviewed books, software, and products on many occasions. Generally these reviews end up discussing the
writing style, sturdiness of the product or the ease-of-use of the program. As I prepared to write a review on Geoff Notkin’s new book I knew right away that a discussion of the quality of the paper, beauty of the photographs, and the excitement of the stories was just not going to do it.

Almost immediately while reading Rock Star Adventures of a Meteorite Man, I found myself making connections in the form of similarities and contrasts to my own life. I was sucked into the story and found myself hanging on every page. Having known Geoff for a while I was somewhat familiar with the trips that he has taken and knew something about many of his adventures. Unfortunately, most of the opportunities I see Geoff he is super busy and I myself am often on the run. The result is we have only on a couple occasions had the opportunity to really talk at any length. So as soon as I started his book I began to learn a great many things about parts of his life experience I only poorly understood. I knew that he’d been deeply involved in rock music but quickly found in reading the book how extensive and important a part of his life music has been.

Geoff the punk rock years.

Deciding on what kind of review to do has been an interesting process for me. But, I have decided finally to write my review as a series of the emotional responses I had to what I read. It’s my belief after completing the book that a great many readers will have similar experiences as they read what Geoff has shared. I think perhaps the
greatest compliment anyone can give to an author is to let them know the extent their writing has personally impacted them as a reader. So obviously, I do not have to beat around the bush about whether I liked this new book. I found the book to be a fascinating emotional journey that I took along with Geoff. I would add though in some cases it was the striking contrasts that stood out most.

I was sitting at my granddaughter’s junior high school waiting for her to get out on a Wednesday afternoon. It was only her second day of class at that school. We were all kind of anxious about where to pick her up and being there on time. She was just getting used to the school and where things were. So I arrived early enough to park in the first parking spot next to the exit. I had enough time to read a couple chapters of Rock Star. By this point I was already hanging on every page as I remembered my challenging childhood and read about his interesting younger years. I have basically no musical ability, though I think perhaps if I practiced I could probably learn again to play the harmonica. I have a couple around the house. I did play it when I was young. But, I have great admiration for those who do have musical ability. As I was reading that Wednesday afternoon I was also thinking about getting home as soon as I could. My wife and I would need to be on our way soon to the Greek Theater in Los Angeles for a concert by Huey Lewis and the News and Joe Cocker. As I sat in my seat center stage, quite a ways back, I couldn’t seem to shake the thoughts and feelings that Geoff’s book had raised in my soul. I kept thinking about the twisting path my life had taken, how far I had been at various times, from my early goals. My mind seemed filled with thoughts of the struggles; times when music that was all I could afford for entertainment. The hours of Dylan, and Joplin and Arlo who along with others were my only friends in the tiny studio apartment under the flight zone.

I don’t want to give away the story. I want every future reader of his book to enjoy and absorb it and be affected as much as possible. So I’ll just say that we both had very creative atmospheres in which to grow. His creativity was nurtured more at home, mine more at school. He had anguish and trouble with school and I had quite a bit at home. He hunted fossils, I hunted fossils, he wanted to see Meteor Crater, I was fascinated by Meteor Crater. His meandering journey of life has taken him through music and art, graphic design, writing, with working in geology mixed in. My twisting journey has taken me from geology with the intent of being a professor, to owning printing companies, doing graphic design, writing and returning to geology with the meteorites. Periods of part time work wearing many other hats weaved together my early years.
Geoff's travels as a meteorite hunter have taken him far and wide in search of space treasures. The sunset above was shot in Australia, and this forest picture is of a crater at the Morasko strewnfield in Poland.

After the first several chapters the book begins to focus more on meteorites. It seems Geoff's life becomes more focused as well. At that point in my reading I found myself musing about my own experiences hunting for meteorites. I was doing the once a decade cleaning of my office while reading Rock Star. I kept finding these
zip lock baggies filled with all the junk that my detector has found. It was always my intent to make some kind of a display of the bullets, old locks, railroad spikes, ammunition clips and the other truly weird things that I have found. Perhaps someday I will make such a display but I found it just a little humorous as I read of the strange and varied objects he has likewise been forced to unearth. Meteorite hunting is after all a harsh task master which makes us do many crazy things we might not do if we took a second to think it over.

Paul Harris and I basically met on a trip to the desert hunting meteorites. We ended up under my truck stuck in the sand digging; with his minivan broken down from striking a boulder. We were far from town though not as in Geoff’s case in the Atacama Desert. But, I know the bond that grows when you work though such a problem without throwing up your hands, and running around yelling “Oh crap we’re all gonna die”. It was the way that difficult trip was taken in stride by Paul and I that lead to the friendship we have built over the many years since. I felt a similar thing must have happen between Geoff and Steve Arnold as I read their story of being stuck in the sand.

Steve Arnold and Geoff Notkin as they unearth a big pallasite meteorite.

Most of the time I spend writing nowadays is spent writing scientific material in a somewhat sterile matter-of-fact manner. Reading Geoff’s book was very refreshing; there is nothing scientifically sterile about Rock Star even when he is writing science. His description of his friends and the new individuals he meets put me right
there on the spot. I am wishing now that I had done some better note taking, some better remembering, a little more serious consideration about how precious moments spent with friends really are. It’s very clear in reading Rock Star that Geoff has truly savored the experiences he’s chosen to share in the book. I think I’m not that special as a reader. I think this book is going to touch a great many people the same way it has me.

Geoff at Whitecourt enjoying one of those great moments as a Meteorite “Finder”.

I came out of the bedroom into the family room the other night and my wife was watching Monty Python’s “The Meaning of Life”. Another something Geoff and I share is affection for Monty Python. The next time I see Geoff I’ll have to remember to quote a funny line, or maybe silly walk. I could bring him a spam spam and spam sandwich but as he says many times in the book he is a strict vegetarian.

So I guess there’s very little left to say: I love this book. I think a great many others will too, and of course it goes without saying that the graphic design is wonderful, paper is slick and the printing excellent, photography beautiful, and meteorite specimens outstanding. Again a truly spectacular piece of work, but the real treasure is in the story. Thanks Geoff for sharing.
THIRTEEN

CRATER AT THE EDGE OF THE WORLD

It's quiet now and I have a chance to think.
The sun sets in the biggest sky I have ever seen.
I'm far away and I don't know how I'll make it.
If it's time to go . . .
I'm not sure I understand the meaning of this yet.
Time will pass but I know that
I never will forget
All these strange days.

From "Strange Days"
By Anne Muñick

FOLLOWING A DELIGHTFUL VISIT with the Tverkov family, the American contingent, together with Kanya, traveled to Domodedovo Airport where we boarded the largest civil aircraft I have ever seen, en route to Krasnoyarsk, the capital of Siberia.

Domestic airline travel in Russia is unlike anything else in the modern world. We walked out onto the tarmac at Domodedovo, under expansive wings with jet engines running, in the dead of night, carrying all of our own luggage and climbed through a door to the airplane's lower deck. We stowed our bags in racks and angled up a cramped stairwell to the passenger deck. There were no seat assignments and a churlish free-for-all ensued as passengers pushed and elbowed their way to the front of the plane. I assumed every seat would end up being taken—hence the melee—but much later I realized the flight was only half full, so I moved to the rear of the jet and enjoyed a row of four seats to myself. I am not clear why the passengers felt it was so important to sit close to the cockpit.

As is typical almost everywhere, smoking was not allowed onboard especially not in the cabins, but throughout the flight young Russian men constantly walked to the back of the plane, went into the lavatories, lit cigarettes, and stood there leaning pensively against the seat cushion walls, with the bathroom doors open, as if that somehow made it okay.

Krasnoyarsk is an enticing river city, founded in 1628 by a regiment of 150 Cossacks. We were treated to a private tour of the geological institute, enjoyed a cruise up the Yenisei River on a marvelous white hydrofoil that looked like something out of Thunderbirds and passed the site where, in 1772, the German zoologist and botanist Simon Peter Pallas identified a strange iron meteorite full of green crystals. Today, all pallasiites carry his name. After our boat trip, things started to go wrong.

Our permit was already approved, the helicopter company had been paid a
Above are a couple sample pages of the book for you to see what I mean about a great looking book.

Information And Ordering
This Month’s
Meteorite Market Trends

by Michael Blood

Please Share and Enjoy:
The Hunt for Battle Mountain Meteorites

by Robert Verish

A photo gallery of my August 2012 trip to Battle Mountain, Nevada.

There won’t be a “Bob’s Findings” article this month because I’ve returned to the strewn-field near Battle Mountain, Nevada, where a meteorite fell on the 22nd of August 2012 (UTC). The first find from this fall was found by this author on September 1st 2012 10:50AM (PDT). Since then, there have been many more finds made by a variety of finders. A list of finds can be found here.

This is the time for meteorite-recovery, while the weather holds up, because winter comes early at this elevation and latitude.

Hope you enjoy the images:

Photo Gallery of my August 2012 trip to Battle Mountain:

2012 September 1st – Nevada
Field ID: BaM01 (L6 S4 W0)

2012 Sept – Nevada
Field ID: BaM01 (L6 S4 W0)

2012 Sept – Nevada
Field ID: BaM01 (L6 S4 W0)

Found in strewn-field near Battle Mtn. NV
BaM02 (L6) from Battle Mountain, Nevada (image dated September 1 [PM] – taken by anonymous finder – courtesy of Sonny Clary)

2012 Sep 02 – Battle Mtn. Nevada
Robert Ward showing me BaM02 (954g) that he just purchased, that morning.

2012 Sept 08 – Nevada
This fragment (Field ID BaM09) found by Marty Cunningham is now part of the type specimen at UCLA.

Below image taken 2012 Jan 05 4:36PM PST – Nevada
Sunset in Nevada. . .

When I first posted the above image in January of this year, I said it was an omen and predicted that 2012 would be the year of many bolides! Hope you enjoyed the images!
There will be much more information about these meteorites from Battle Mountain in the near future.

References:

[meteorite-list] Battle Mountain Field report / strewn field conditions / etc.

Robert Verish  
Fri Sep 7 22:14:56 EDT 2012  
http://six.pairlist.net/pipermail/meteorite-list/2012-September/087060.html

[meteorite-list] Fw: BaM01 classification

Robert Verish  
Wed Sep 12 00:41:18 EDT 2012  
http://six.pairlist.net/pipermail/meteorite-list/2012-September/087119.html

[meteorite-list] Fw: BaM01 classification

Michael Farmer  
Wed Sep 12 00:52:02 EDT 2012  
http://six.pairlist.net/pipermail/meteorite-list/2012-September/087123.html

[ Meteorite Picture of the Day] Halite crystal in meteorites
Monahans
Tue Sep 18 2012

My previous articles can be found *HERE*

For more information, please contact me by email: Bolide*chaser
When Richard Norton went on to the great beyond three years ago, he left us with three books that we all know and love: “Rocks from Space”, “The Cambridge Encyclopedia of Meteorites” and the “Field Guide to Meteors and Meteorites” but there was one segment of the population that had been left out and as Dorothy tells us in the Introduction to “What’s so Mysterious about Meteorites” : “He had always wanted to provide a basic introduction to his beloved meteorites that could be read by young adults and anyone interested in the subject of rocks that fall from the sky”. And here it is, lovingly finished by Dorothy Norton – the perfect person to handle that work because she knew what Richard wanted to accomplish, and because she knows quite a lot about meteorites too.
This book is part of a new collection created by Mountain Press Publishing Company: “What’s so Cool about Geology?” with 2 titles already published: “What’s so great about Granite?” and “What’s so hot about Volcanoes”. The fact that this series of books is addressed primarily to young adults does not mean that Geology, and meteorites in this case, are simplified to the point of leaving a lot of important information out, it means that it is all there but written in a way that makes it accessible to all.
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The book starts logically enough with some background: meteor showers and meteorites as told to children and to adults, and Chicken Little leads us naturally to the famous and well documented fall of Park Forest, where a child was one of the primary witnesses since a meteorite fragment fell in his bedroom. A thorough retelling of the fall, the pieces recovered and many pictures serves as a great and lively example to introduce the reader to the world of meteorites.

After this crashing introduction, the next chapter considers in greater details where meteorites come from. We are then introduced to the Asteroid Belt, the Near-Earth Asteroids and what happens beyond the Belt, with a side-trip to how Asteroids are named. (Yes, both Richard and Dorothy Norton have their own asteroid named in their honor). Then Richard and Dorothy take the time to explain the differences between the various asteroids and how those differences are reflected in the meteorites that we have in collections, allowing us to guess with a high degree of confidence where those meteorites came from.
Now that the reader knows where they come from and that the spectra analysis hinted at differences between them we move naturally to a closer look at what meteorites are made of.

This chapter opens with a very clear explanation of how it probably all began, from a supernova, to clouds of dust, to the formation of the Sun and Planets, and how those masses, planets, stars, asteroids coalesced, got differentiated, and ended up looking very different and containing very different minerals, from iron to carbon. This whole chapter is abundantly illustrated with pictures of each of the various types of meteorites, seen whole and in a thin-section through a microscope.

Even experienced meteorite collectors might find bits to add to their knowledge; I particularly like the three pictures showing the three main petrologic grades of stony, from 3 to 5; finally a clear way to see how chondrules practically melt away gradually from one grade to the next one. And there is an explanation on how water came to Earth within purple salt crystals. The various NASA missions to Vesta, the Moon and Mars are also described, showing their relevance to the study of meteorites; a couple pages are devoted to ALH84001, and to the meteorites found on Mars.

Iron and Stony-Iron meteorites are looked at next, from a funny picture of Tim Heitz on top of a huge Campo to other pictures showing the various crystallization patterns and how this was discovered.

One nice touch: Finally a good clear explanation on how it is possible to tell how long
a meteorite has been in Space and on Earth. Another good tidbit for more advanced readers.

But it is not all serious science, the book is colorful and there are quite a few drawings to keep the younger readers amused and interested. And Dorothy Norton’s drawings are justifiably famous.

IT’S A CARBONACEOUS CHONDRITE!

The book goes on to look at what happens when an Asteroid strikes the Earth. Richard and Dorothy explain why a fireball always lands much further than you think, and why it makes a difference which direction the asteroid comes from. Then several very good pictures help them explain what ablation, regmaglypts, flow lines and orientation is. There is even a checklist for the lucky witness to a fireball and I would guess that even seasoned observers would find it very helpful.

This is followed by a description and explanation of the other phenomenon related to
meteorites, namely Impact Craters, Tektites and of course Chicxulub. And thank you Richard and Dorothy for reminding young, impressionable readers that no one has ever been killed by a meteorite.

Of course now that all has been said about meteorites, the next question to be answered is “Where are they?” And the explanation that follows would help young readers but it might also be a very good reminder to all meteorites hunters: where is it legal to hunt? What to take with you? There is even a checklist to help you get organized. And the chapter closes with pictures of the most common meteorwrongs, an excellent reminder.

Finally a few appendices will help the reader start a collection (Thank you for mentioning the IMCA!), and will give you some useful addresses if you do indeed find a meteorite. And the book closes with a list of Resources, a Glossary and an Index.

Thank you Dorothy for finishing Richard’s book, it will fill very nicely a great need, I am sure that many youngsters, and some not so young will appreciate it enormously.

(PS: The book is now available from Amazon, and a few of your favorite meteorite dealers.)

CHICKEN LITTLE WAS RIGHT!
CK Chondrites

by John Kashuba

CK chondrites, Karoondites, contain objects that hint at the processes that produced the rocks we have in our collections. Here are a few.

A large chondrule with numerous different zones of parallel olivine “bars” – actually plates. The sets of bars have been cut at different angles so each presents differently. Killgore CK
An altered radial pyroxene chondrule with a distinct olivine rim and which contains olivine grains. DaG 275 CK4
The round object that occupies nearly the entire height of this frame contains at least two chondrules and many mineral grains. It is surrounded by a dark dust jacket. Maralinga CK4
Metal is still evident in this type 3 chondrite. We see staining of matrix and in cracks of silicate grains. Incident light. NWA 1665 CK3-an
This is a corner of the barred chondrule in the center of the previous picture. Metal / sulfide blebs occupy the rim here. Incident and cross polarized light. NWA 1665 CK3-an
Opaque phases make this a striking pair. Transmitted light. NWA 1694 CK3
This irregularly shaped assemblage of olivine grains has blebs of metal at points around its edges – the round black objects in this view. NWA 2372 CK4
Extensive solid state recrystalization has rendered the matrix translucent in this type 6 chondrite. NWA 2388 CK6
A striking barred olivine chondrule in a dark matrix. NWA 2708 CK4
A large, complex feature in NWA 4425 CK3.8. Field of view is 12mm wide.
A compound barred olivine chondrule with a sphere of metal in the rim at the top. A crater at the seven o'clock position might have been formed when a similar sphere vacated the chondrule. NWA 4657 CK4
A granular olivine chondrule with a shell of coarse olivine grains. NWA 4422 CK3.9
Usually bragging rights go to the monsters, but there’s a tiny end of the spectrum that deserves respect as well. I suppose there exists a full gradational transition from macro- to microtektites, but at the scale readily discerned by the naked eye, this is the smallest complete Australite in our collection. This morphology is well-known, and generally termed a “dish”. It is the final remnant of a fully flight-ablated tektite—one that has literally turned inside out, essentially a flanged button that has converted all of its button to flange. Little or none of the primary re-entry material remains unmodified. One might argue that these are a distinctive sub-category of the tektite pantheon: a derivative second-generation form, not just flight-modified, but completely restructured. This specimen is from the Kalgoorlie region of West Australia. Approximately 0.1 gms, 7.9 mm diameter, author’s collection.
Meteorite Calendar – September 2012
by Anne Black

Please click on the meteorite calendar to view a larger image.

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<td>1995 Dong Ujin Qi</td>
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<td>1954 Arbol Solo</td>
<td>2008 Sulagiri</td>
<td>1768 Luce</td>
<td>1836 Aubrexi</td>
<td>1897 Gambat</td>
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<td>1963 Karatu</td>
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<td>1822 Epinal</td>
<td>1988 Palca de Abarzu</td>
<td>1910 Baroti</td>
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<td>1902 Crumlin</td>
<td>1987 Carancas</td>
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<td>1843 Klein-Wenden</td>
<td>1879 Tomatlan</td>
<td>1775 Rodach</td>
<td>1950 Murray</td>
<td>1897 Gambat</td>
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<td>1945 Atoka</td>
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<tr>
<td>1865 Muddoor</td>
<td>1887 Phu Hong</td>
<td>1873 Khairpur</td>
<td>1942 Maziba</td>
<td>1996 Ferno</td>
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<tr>
<td>1949 Beddgelert</td>
<td>1969 Murchison</td>
<td>1936 Macbini</td>
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<td>1949 Akaba</td>
<td></td>
<td>1944 Torrington</td>
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<td>2003 New Orleans</td>
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<td>1873 Santa Barbara</td>
<td>1832 Minamino</td>
<td>1891 Guea</td>
<td>1928 Naoki</td>
<td>1984 Binningup</td>
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<td>1939 Langfang</td>
<td>1825 Honolulu</td>
<td>1969 Murchison</td>
<td>1938 Benld</td>
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<td>1939 Selakopi</td>
<td>1908 Kangane</td>
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<td>1973 Lichtenberg</td>
<td>2003 Kendrapara</td>
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<td>1999 Kobe</td>
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Fell in September but exact dates unknown

| 1843 Picote | 1869 Yorktown (New York) |
| 1875 Mornans | 1886 Bradford Woods |
| 1930 Aguda | 1930 Malampaka |
| 1933 Noyan-Bogdo |         |
Meteorite Times Magazine

Gibeon Meteorite – The Wave
by Editor

Our Meteorite of the Month is kindly provided by Tucson Meteorites who hosts The Meteorite Picture of the Day.

Contributed by Anne Black – The Wave – 229 gram part slice. 24 cm long. Iron, IVA

Submit Pictures to Meteorite Pictures of the Day
Please support Meteorite-Times by visiting our sponsors websites. Click the bottom of the banners to open their website in a new tab / window.
Once a few decades ago this opening was a framed window in the wall of H. H. Nininger's Home and Museum building. From this window he must have many times pondered the mysteries of Meteor Crater seen in the distance.

Photo by © 2010 James Tobin