

Diamonds in Wisconsin?

by
Ralph Neal Smith

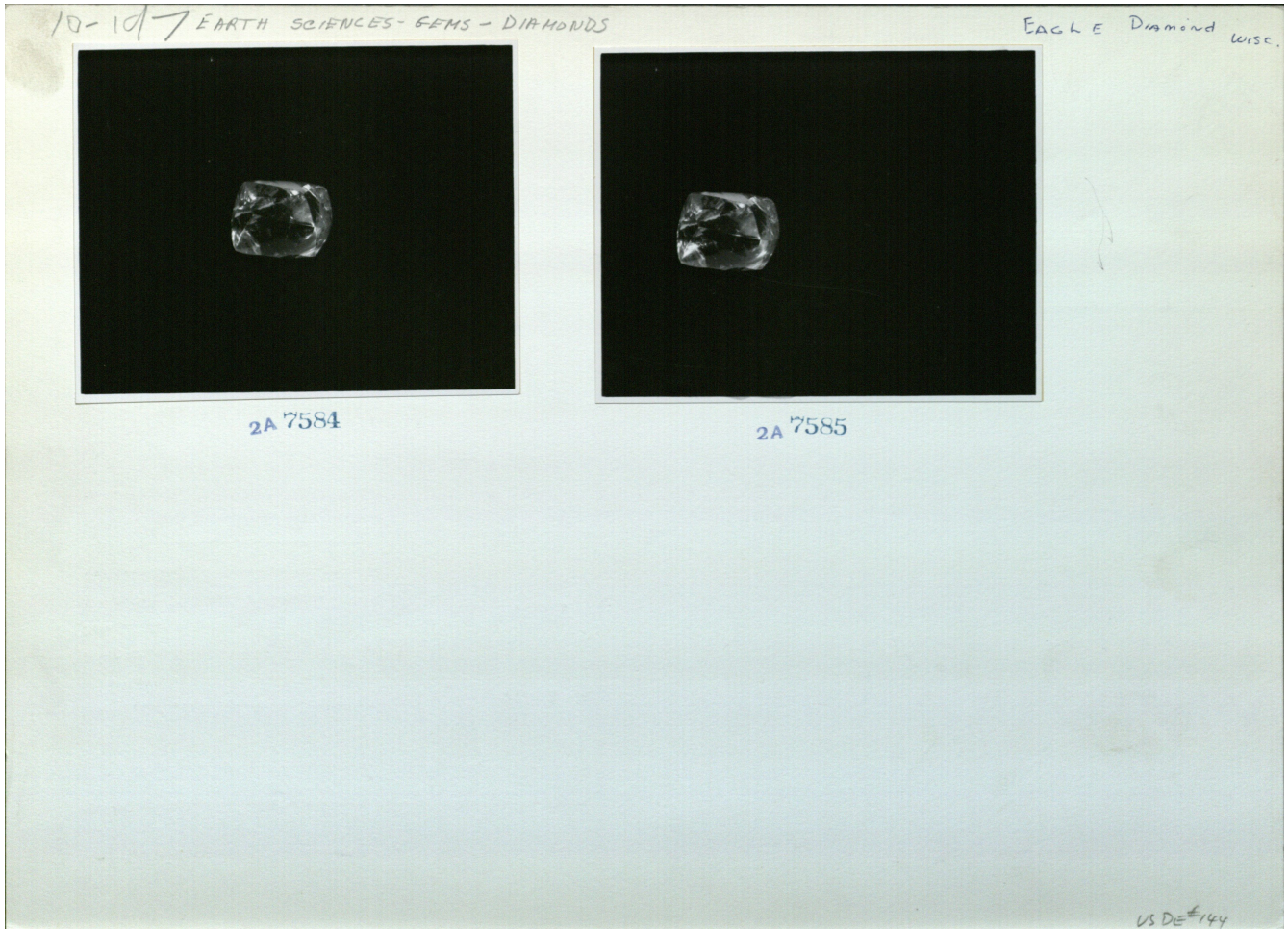
We're all Diamond Hunters. Figuratively speaking - but a lot of folks are looking for treasures and who hasn't fantasized about finding a diamond while out enjoying nature? In Wisconsin, this is a remote possibility – the odds are like one in seventy million, but it has happened. Why Wisconsin? Because the state was glaciated, and the theory had been for 91 years that glaciers brought the diamonds and deposited them in glacial drift. “In 1893, a geology professor at the University of Wisconsin named William Henry Hobbs read a newspaper story about a boy who had found a 3.83-carat stone while playing in a cornfield. Hobbs began collecting stories about diamond finds in the Great Lakes region and charted them on a map. They formed a loose arc around the region. That shape spoke a loud message to Hobbs. In 1899, he published a long article in the *Journal of Geology* speculating that the diamonds showing up in roadside gravel pits and farmers' fields were not products of the local soil, but had been carried south by glaciers, which had receded from the upper Midwest at the end of the last ice age, some ten thousand years earlier. The true diamond fields, then, should lie somewhere to the north.” Source – [The Heartless Stone](#) by Tom Zoellner and a great read for a world history of diamonds.

If one were to find an economical diamond mine - it might be worth up to \$70 billion! Diamond mining is big business for both the public and private sector world-wide. But wait just a second, what do diamonds have to do with groundwater in Wisconsin – what the heck? Well, that's part of this story, too. In 1876, near Eagle, WI a large diamond was found while digging a water well for a farm in the Kettle Moraine in Waukesha County. The diamond was 15 12/32 carats and came to be known as the Eagle Diamond. Tenant farmer Charles Wood was deepening the well when seventy feet below ground surface in glacial till he found a wine-yellow stone the size of his thumbnail. It was one of the biggest diamonds ever found in North America up to that point. Mr. Wood died before ever knowing it was a diamond. The location of the Eagle Diamond find is approximately where the present day water tower is for the village of Eagle, WI which is now known as Diamond Hill. A great hoax was perpetrated, and you can read about that elsewhere. One can read more on the hyperlink below. <http://www.eaglebusinessassn.org/EagleWaterTower.asp>

I soon learned that the Eagle Diamond had been at the American Museum of Natural History (AMNH). I wanted to see if there were pictures of it and of the diamond from Oregon, WI or anything I could use for this article. I got excited because I thought this was the same museum as the Smithsonian Museum of Natural History that displays “The National Gem Collection” with the book of the same name by curator Jeffrey Post, Ph. D. I read about Dr. Post on their website and emailed him. He informed me I had the wrong museum - the American Museum of Natural History is located in New York City. OOPS! I told him I had his book, [The National Gem Collection](#), and maybe that explained my cognitive dissonance with the book/museum mix-up error – but probably not. He was gracious and said, it's a common mix-up between the two museums and that he works with the AMNH all the time. And he then provided me with the curator's name and email address and said I could mention him as my contact – which I did.

George Harlow, Ph. D., Curator for the American Museum of Natural History, and Jamie Newman (M.S.) were both very accomodating. And were able to provide me scanned images of the Eagle diamond from Eagle, WI and of the diamond from Oregon, WI. In this article, is a picture of this very same 3.83-carat diamond referenced by Professor Hobbs in the first paragraph, which was found near Oregon, WI. In 1893 Hobbs read in local papers of a new find. Five year old Stanley Devine was playing in a rocky field in Oregon Township 2.5 miles southwest of Oregon, fifty miles west of Eagle, when he found a 3.83-carat stone at the base of a cornstalk. Amid Stanley's tears and

howls of protest, his father confiscated it in exchange for a penny. Hobbs authenticated the stone, then started poking around and discovered other finds that had not made the papers. Fifty miles northeast of Eagle, near Saukville, Hobbs met a German farmer who had picked up a large stone in 1881 while plowing with his horses, but kept it unidentified. He discovered a huge one, 21.21 carats, found by another farmer in 1886 in nearby Theresa. Hobbs published his research. These diamonds ultimately were purchased by George Kunz, the famous self-educated mineralogist for Tiffanys in New York for his collection and it was exhibited at Tiffanys & Co. until World War I. Kunz sold his diamond collection to financier J.P. Morgan who in turn donated the collection to the American Museum of Natural History. In addition to the photos, Jamie Newman provided copies of the index/catalog cards from the display cases. This provides fascinating information on the depositional environment that the glacial drift diamonds were found under in Wisconsin.



SKETCH

Stolen Oct. 29, 1964



in Gem Case I

DESCRIPTION

Found in 1876 in gravel and clay of Kettle Moraine, cemented by ferric oxide into hard yellow matrix

GEM COLL. NO.

27

FIRST GEM COLL. NO.

SECOND GEM COLL. NO.

#77

NAME

Diamond

LOCALITY

Eagle, Waukesha, Co. Wis.

VALUE

WT.

15 3/8 Carats

SP. GR.

CUT

Rhombohedral-dodecahedron, curved faces-

LIBRARY BUREAU 89930

METRIC 1

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EARTH SCIENCES - GEMS - DIAMONDS

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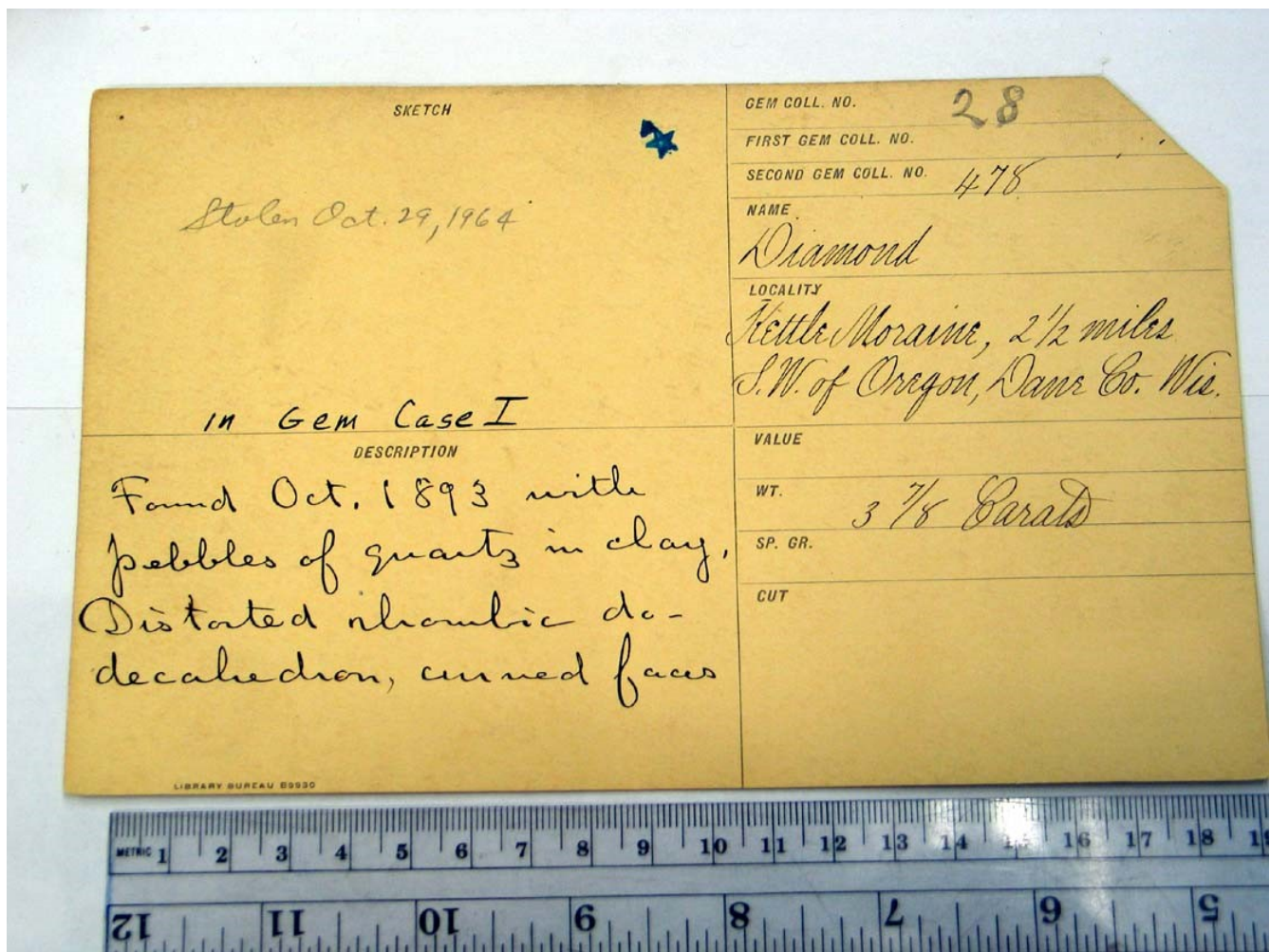


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USDE #144



Photos and Images are “Courtesy of American Museum of Natural History”
 The photos are by Alex J. Rota. The index cards appear to be in the handwriting of Louis Gratacap, a famous geologist & mineralogist in his own right in the early 20th century.

On October 29, 1964 these natural treasures from Wisconsin were stolen from the American Museum of Natural History by Murph the Surf, a jewelry thief. The famous gems such as the Star of India, the DeLong Star Ruby, Schettler Emerald, etc. were all recovered eventually. But the dozen or so other diamonds (in addition to the Wisconsin diamonds) were never recovered. Murph the Surf was caught a couple of weeks after the crime, and served ~2.5 years in prison. It is believed the diamonds were sold to a fence and probably cut into smaller stones to destroy the evidence. After being paroled, he was convicted of murder of two young ladies in California. A Hollywood movie, “Murph the Surf” was produced and it starred Robert Conrad as the main character. There are several huge tragedies associated with the Wisconsin diamonds.

Please visit the American Museum of Natural History and reference the hyperlink below. You can learn more about Kimberlite pipes, etc. there. It is a fascinating website.

<http://research.amnh.org/eps/collections/mineralsandgems>

In 1906 a real diamond pipe (kimberlite) did materialize in Murfreesboro, Arkansas and the Arkansas Diamond Company was formed. It produced 1,400 stones worth \$12,000. But things went south quickly. It was eventually found to be uneconomical by diamond mining standards. Eventually, the State of Arkansas bought the property and it became a state park called Crater of Diamonds State Park. The only public diamond mine in the world – where people can pay to dig in the dirt and keep what they find whether diamonds or other semi-precious stones such as garnets, etc! I'm of the opinion that more uneconomical kimberlite pipes should be developed as parks to allow people to recover the resource. It is fun to dig in the dirt while rock-hounding, and the returns could be many fold, of course! See the Crater of Diamonds State Park hyperlink for more information.
<http://www.craterofdiamondsstatepark.com/>

It wasn't until April 14, 1990, that prospectors Charles Fipke, his partner Stuart Blusson, Ph. D. via their company Dia Met discovered what prospectors had been looking for for 450 years in North America – a very prospective North American diamond mine in the Northwest Territories of Canada. It took 91 years for UW Geology Professor William Henry Hobbs to finally have his theory proven by these prospectors! That is to say, if one means by resource recovery in economically viable terms to produce diamonds. I think that is safe to say that is really what Hobbs was suggesting for diamonds in North America. Hobbs theorized they were scraped from diamond pipes, carried down, and dropped when the ice retreated. That any had been found at all in the vast piles of debris signaled to him a huge lode somewhere along the path. His paper demonstrated that all the diamonds found to that point were in a great arc of glacial debris 600 miles long and 200 miles wide- the outer edge of the last ice sheet that presumably had come from Canada. (Hint: By the way, this is not exactly up-ice of Wisconsin according to glacial geology maps.)

The great staking rush in Canada started shortly after November 7, 1991, after word got out that the Dia Met-BHP Billiton joint venture had issued a joint press release, competitors got wind of this and staked claims adjacent to Fipke's claims or where there were errors and omissions (Oops, we missed a claim.) There was one junior exploration company named Aber Resources (and their partners) which had followed the old maxim, "If one lucky fellow strikes it rich, stake claims nearby." In fact, by February they were able to stake claims for 2,400 square miles near Misery Point in the Northwest Territories of Canada at a cost of \$250,000 – all the money they could scrape together. Aber Resources chief exploration geologist is the daughter of the prospector who started the company. Her name is Eira Thomas. She grew up helping her father, Grenville Thomas, in the Canadian Bush and after graduation from college started work with the company. She had more real world experience than most. Long story short – the Aber Resources syndicate made a smart deal with Kennecott – Kennecott agreed to fund all the exploration there, while the syndicate got a huge share of whatever they found. Eira Thomas drilled through a barely frozen lake to find a kimberlite pipe – and the next potential diamond mine was found. Eira Thomas earned ~\$300 million dollars for her shares of Aber Resources when they were bought out at the age of 25. She used some of the money to start up her own junior diamond exploration company and is known as "The Queen of Diamonds!" in Canada. She has several prospective kimberlite pipes in her sights as the diamond rush in Canada continues for it's second decade.

Charles "Chuck" Fipke found his diamond prospect in the tundra after having staked close to 385,000 acres—600 square miles—in 2,582.5-acre rectangles. How did they choose this area? The key process was a lot like prospecting for gold mines – which is what he told his employees they were doing. Fipke was looking for sand sized indicator minerals in the soil samples they collected by helicopter in a 10-mile grid pattern. They started in British Columbia and headed East and Northeast. Literally they would go and chip into the tundra soil two feet collect a 25-lb sample of soil for Fipke to analyze for sand grain sized indicator minerals in his lab in Kelowna, BC. He became known as the

Sandman. Here's more information on indicator minerals from the AMNH with a picture for good measure.

<http://www.amnh.org/exhibitions/diamonds/indicator.html>

When Fipke found his prospect there were very large pyrope garnets (G10 garnets), which are very deep red low-calcium/high-chromium garnets, in the soil samples and these are only associated with diamond bearing kimberlite pipes (like in South Africa). He sampled close to 600 square miles North of Lac de Gras and collected hundreds of samples. We won't talk about the mosquitoes, gnats, and biting flies or bears – or the extreme weather conditions. Diamond prospecting is the worst. Diamonds are more rare than gold, and most kimberlites do not contain economically viable quantities of diamonds, if any. Only about 30 of the 6,000 known kimberlites have ever become major mines. Fipke & Company did very well indeed. He sold his company and his payout was on the order of \$1 billion dollars. And he kept a ten percent royalty on production from the mine. His wife divorced him and she received half a billion dollars in the settlement. Chuck Fipke said that was the best money he'd ever spent. For more information about this complex & fascinating story, please read the superb book Barren Lands – An Epic Search for Diamonds in the North American Arctic by Kevin Krajick.

Here is an excellent article to get you pointed in the right direction on potential diamond deposits in North America. Please google “Diamond Deposits of the North American Craton – An Overview” by W. Dan Hausel to reference his extensively researched article.

Hopefully the pictures will give the reader an idea of what diamonds carried by glaciers and deposited as glacial drift look like and the index cards provide extra clues on the depositional environment. There have been kimberlite pipes found in Wisconsin – near Kenosha – which were deemed not economically viable. I'd like to conclude with two concepts: 1) It's been over a hundred years since diamonds of significance have been found in Wisconsin – keep your eyes open – “in the fields of opportunity it's plowing time again”, and 2) if further kimberlite pipes are found in Wisconsin – and deemed not economically viable by diamond mining standards – that we at least strongly consider making it a state park or private park along the lines of what Arkansas has with the Crater of Diamonds State Park. There will likely be semi-precious stones worth digging for and perhaps a diamond or two for the lucky rock-hounds – not to mention the potential economic boon that tourism and development, etc. of that nature may generate.