

*REGIONAL NEWS
ART AND SCIENCE
BECOME ONE FOR ARTIST*

by MARCIA GOODGE
TELEGRAPH STAFF WRITER

ORIGINALLY PUBLISHED IN
BRADFORD COUNTY TELEGRAPH
UNION COUNTY TIMES - LAKE REGION MONITOR
THURSDAY, SEPT. 11, 1997

ORIGINALLY PUBLISHED IN

BRADFORD COUNTY TELEGRAPH

UNION COUNTY TIMES - LAKE REGION MONITOR

THURSDAY, SEPT. 11, 1997

REGIONAL NEWS
ART AND SCIENCE
BECOME ONE FOR ARTIST

by MARCIA GOODGE
TELEGRAPH STAFF WRITER

Art is art and science is science and never the twain shall meet - unless Allan McCollum is around.

McCollum is an internationally famous artist. He has works on permanent display at the Museum of Modern Art in New York City. He has had exhibitions all over the United States and in Europe, Australia, Japan and many other countries. He is off to France at the moment.

When it comes to art he really knows his stuff, but things scientific are a slightly different matter. So where does an inter-

nationally famous artist go to learn about lightning? Why to Camp Blanding, of course.

McCollum and Jade Dellinger, an independent curator and exhibition organizer, were in the area for the last two months working on preparations for McCollum's newest project.

Dellinger is involved with organizing a cooperative project for Museum of Science and Industry in Tampa and the University of South Florida Art Museum. The idea was to combine science with art for a display that would be appropriate to both museums.

Dellinger felt McCollum would be the man to do it. But what type of display would bring science and art together? There are a lot of aspects of science that are very beautiful and would therefore lend themselves to artistic display. Plants, insects, animals, underwater creatures — you could name a thousand.

But McCollum was interested in lightning. "I didn't know light could create objects" before visiting the Gillespie Museum of Minerals in Deland and seeing fulgurites.

He has read books by Dr. Martin Uman from the University of Florida who heads up the lightning research facility located at Camp Blanding. Uman's work has been featured on *Nova* and in *National Geographic*. When it comes to lightning, Uman is the expert.

So McCollum decided to use some aspect of Uman's lightning research as a basis for his artistic display. But McCollum is not known for his painting, so a simple painting of lightning would not do. He is best known for his works involving casts, molds and templates — more three dimensional work, although he has done two-dimensional as well.

"Allan (McCollum) as an artist is interested in lightning as creation," said Dellinger.

But lightning is a tremendous flash of electrical energy that is gone almost as soon as it arrives. If a picture or painting is not good enough, what is?

When lightning enters the ground where certain types of minerals and sand are found, sometimes the minerals are vaporized and the sand is fused into a fragile, lightning shaped, glassy formation called a fulgurite.



Allan McCollum is an internationally famous artist who is working with the lightning researchers at Camp Blanding to produce an artistic display using fulgurites. Fulgurites are formed of sand that has been fused into branching bolt shapes when lightning strikes the ground. Here, McCollum shows the PVC pipe buried in a garbage can full of clay. The fulgurite will be formed inside the PVC pipe.

“They sometimes extend as far as 60 feet into the ground,” said Dellinger. “You rarely see them since they are so fragile and are formed underground.”

A small portion of the research being carried out at Blanding involves fulgurites. McCollum decided his project should also involve fulgurites, but he didn't just want to find a fulgurite to use - he wanted to make one.

McCollum and Dellinger have been to Blanding off and on for months trying to make the fulgurite which McCollum would use as the basis of his project.

How do you make a fulgurite? First you get a bolt of lightning to strike a certain place...

That isn't really as silly as it sounds. Through Uman's research it was found that small specialized rockets can be shot into the air when the weather conditions are right. The rockets cause lightning to strike.

Getting the lightning to go where you want it to go is not really that difficult, either. Lightning is electricity and electricity follows the path of least resistance. They attached one end of a copper wire to the rocket and the other end they attached to a plastic tube filled with different types of sand and minerals (it was a very long wire).

When the lightning struck, it followed the wire down to the plastic tube and into the sand, fusing it and making a fulgurite.

"We decided it would probably be smart to create the fulgurite above ground rather than spend weeks excavating each one as it was created," said Dellinger.

A geologist helped the artist and the curator design a very complicated system for doing this. He filled a length of PVC pipe with minerals and sand and then buried it in a garbage can filled with clay. Many of the minerals they used were provided by DuPont.

They ready the garbage can (high voltage electrical buffer?) and then go into the small portable building that serves as a command center for the project. McCollum watches the monitors carefully. They tell him when the electrical fields in the air reach the correct levels to produce lightning. When that happens, he fires the rocket, lightning strikes and a fulgurite is formed.

McCollum has created several fulgurites out at Blanding. He will choose the one which best suits his purpose and then he will have the beginning point of his project.



One object has a great deal of emotional value. What happens to the value of that object if it is multiplied? McCollum wants to find out with his displays. This one is a replication of a plaster cast of a mold left by a dog who died when Mt. Vesuvius erupted in Pompeii.

What is he going to do with the fulgurite then? He will likely make about 10,000 of them.

McCollum has used the idea of mass production and multiplication in many of his artworks.

“One object can have great value and meaning,” said McCollum. “If one has a certain value, then what is the value of hundreds? Do they each maintain the same value? I am exploring what happens when a thing is multiplied.”

McCollum points to the display he made of the Pompeii dog. Pompeii is an Italian city that was buried in molten lava when the volcano Vesuvius erupted hundreds of years ago.

When the lava surrounded animals and people, it killed them and then destroyed the bodies—but not before the lava had cooled leaving three-dimensional fossil like outlines in the rock. Archeologists later poured plaster into the outlines to preserve the outlines.



Dinosaur footprints left millions of years ago in the coal mines of central Utah form the basis of this display.

One of the outlines is of a dog which had been chained and could not escape the lava. Its death-throes are powerfully evident in the cast that was made.

“In the case of the dog, I took one thing that has tremendous meaning and made hundreds. The question is how do we think of its value now,” said McCollum. Does the vision of a hundred Pompeii dogs wake the same kind of emotion in the person who sees them as does the vision of one Pompeii dog?

McCollum describes his work as “handmade mass production.”

He has made similar displays with copies of fossilized dinosaur bones and other objects. In one display he created by hand 10,000 things (reminiscent of a child’s top) that were all similar and yet all individual. They looked similar, yet no two were exactly alike in color and pattern.

McCollum plans to do the same type of thing with the fulgurites. He will chose several and will then produce copies of each one—all of which will be similar, yet all of which will be slightly different.

“What we’re doing here is different from what Allan (McCollum) has done before,” said Dellinger. “This is the first time that Allan, as the artist, has created the original object from which he will mass-produce the copies.

The fulgurites chosen by McCollum will be taken to the University of Florida Museum of Natural History to be treated so that they are no longer fragile.

A company called Sand Creations in central Florida will assist McCollum in producing the copies.

McCollum said that this project is similar to the one with the dinosaur bones where he used the painted plaster models of more than 400 dinosaur bones in a display.

“In each series, nature has produced the object. I put the nature-made and the artist-made side by side and try to see which is the more mysterious and wonderful,” said McCollum. “It’s a big challenge to put an art object next to something like a fulgurite or a dinosaur bone” and compare them, said McCollum.

When the display is set up in Tampa, McCollum said he plans to provide brochures describing both Camp Blanding and Starke as a means of helping people understand how the project was completed. With the help of DuPont, Camp Blanding, the University of Florida and Dr. Uman’s lightning research facility, an internationally famous artist is on the verge of his latest creation-created in part right here in our area.

THE EVENT

PETRIFIED LIGHTNING FROM CENTRAL FLORIDA

A PROJECT BY ALLAN MCCOLLUM

CONTEMPORARY ART MUSEUM
UNIVERSITY OF SOUTH FLORIDA

MUSEUM OF SCIENCE AND INDUSTRY
TAMPA, FLORIDA