

Land of Extremes

QUESTIONS? Contact Local Content Editor Richard Montenegro Brown at rbrown@ivpressonline.com or 760-337-3453.

EDITOR'S NOTE A series of stories on the history of man in our desert and the efforts of the Imperial Valley Desert museum to tell that story will run through October, replacing the Teen page until a new crop of interns return in the fall connected to the IVHigh journalism program.

ANCIENT EARTHEN ART

Desert geoglyphs' still shrouded in mystery



LEFT: The Blythe Giants are some of the largest humanoid figures in the US.

ABOVE: Geoglyph in the Yuha Desert, with Meg Casey. PHOTOS COURTESY OF IMPERIAL VALLEY DESERT MUSEUM

The largest concentration of local geoglyphs are in a 165-mile band along the Colorado River between Needles and Yuma — not surprising since the Colorado River has been the area's most reliable source of water for centuries. Their meanings are still shrouded in mystery.

BY NEAL V. HITCH
Special to this Newspaper/Imperial Valley

There are some mysteries that, once discovered, never let you go. In 1976, Harry Casey of Brawley began to explore a desert mystery that fascinates him to this day.

While taking an archaeology class with Jay von Werlthof at IVC, Casey, an avid flier since high school, enlisted his 1946 Piper J-3 "Cub" plane for archaeological aerial reconnaissance.

The project began with a 35 mm camera and a plane with a hole cut in the floor of the pilot's cabin.

Casey figured he could fly and shoot film at the same time. It became an amazing legacy and a lifelong love.

Harry and his wife, Margaret, (they met during a field class to the fish traps) have spent the last 38 years traveling the Colorado and Mohave deserts exploring earthen art known as geoglyphs. The Caseys have flown almost 800 hours, documenting geoglyphs across the southwestern United States, Mexico and South America, trying to learn the stories behind their creation.

Photographing geoglyphs year after year, Casey has created an unparalleled record of the physical changes of the geoglyphs in the Southern California deserts over the last 38 years.

Geoglyphs: Ancient earthen art?

There are hundreds of geoglyphs throughout the deserts of the extreme southwestern United States, but they remain a relatively unknown phenomenon.

The largest concentrations of geoglyphs (also called intaglios, or earthen art) are found in western Australia, northern Chile, southern Peru (the famous Nazca Lines) and the extreme southwestern United States and adjacent Mexico.

The images are best seen from the air and can range from only a few feet to hundreds of feet in length.

Ancient geoglyphs are nearly all found along terraces or cliff edges near a reliable source of water, like the Colorado and Gila rivers.

They are made by removing desert pavement, leaving the lighter under soil as a visible image.

This has been done by hand, with a stone, or with a rake or hoe to clear away stones. Smaller figures are often tamped down into the earth by foot.

Dating

While dating these desert marvels is still an uncertain science, desert varnish may hold the key.

Geology professor Ron Dorn, with Arizona State University, has been working with desert varnish for years and used it to date many of our local geoglyphs.

Desert varnish is not a part of the rock itself, but paper-thin layers of clay minerals blown onto rocks over thousands of years.

Minute amounts of organic matter are trapped in the rock by the varnish, and carbon-14 dating can be done using Accelerator Mass Spectrometry (AMS C14) dating.

The geoglyphs of the Colorado Desert

The largest concentration of local geoglyphs are in a 165-mile band along the Colorado River between Needles and Yuma — not surprising since the Colorado River has been the area's most reliable source of water for centuries.



Jay von Werlthof and Harry Casey fly over geoglyphs, July 1982. PHOTO COURTESY OF IMPERIAL VALLEY DESERT MUSEUM

Their meanings are still shrouded in mystery.

Ethnographies suggest that geoglyphs represent creation stories, records of important events, mythological events, constellations or astronomical phenomenon (like marking the sunrise for solstices).

Some geoglyphs are near or surrounded by dance circles, suggesting ceremonial or religious connections.

The oldest local geoglyph Professor Dorn's AMS C14 dating study recorded is the "Schneider" geoglyph in the Yuha Desert (roughly 2,794 BCE), while the youngest (at roughly 840 BCE) is the Winterhaven "Trail Guardian." Often geoglyphs can be given an estimated date based on their subject matter.

For example, horses were extinct in America until reintroduced by the Spanish in the 1500s.

This would make the "Horse Geoglyph" near Pilot Knob one of the youngest local geoglyphs, although AMS C14 dating has not yet been done on the site.

Because they are on the ground, it is often difficult to see geoglyphs. The BLM fence

many geoglyphs in highly trafficked areas and is charged with their preservation.

A few of the best examples, like the Blythe Giants, are easily accessible and include BLM interpretive signs.

Casey hopes that education and renewed interest in the geoglyphs will provide further long-term preservation.

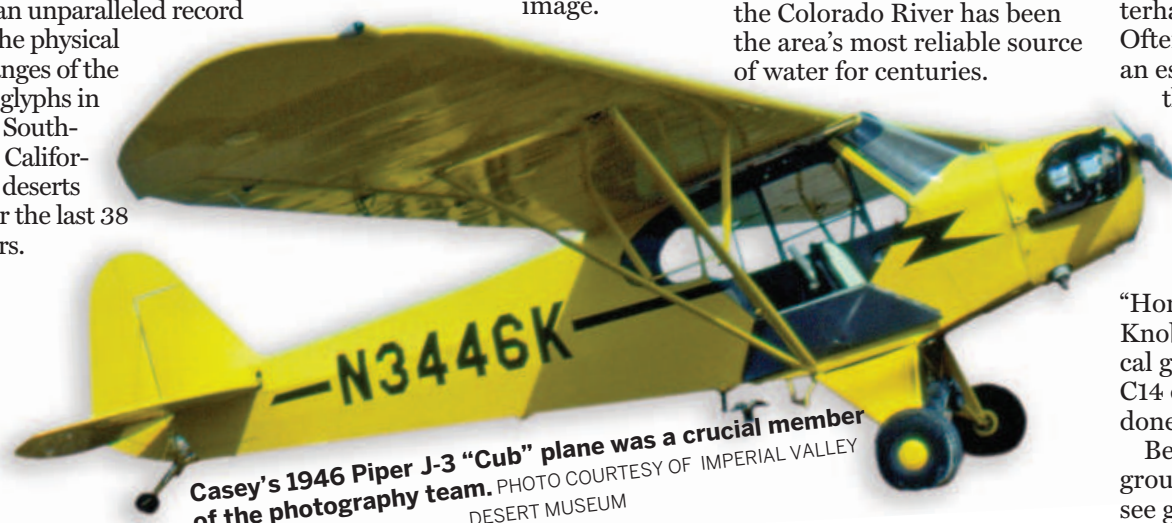
Insuring legacies

Thousands of Casey's photographs — both digital and 35 mm — and research notes are now being preserved in the Imperial Valley Desert Museum's archives as the most recent addition to our collections.

Casey's hope, and the hope of the museum, is that when fully processed, this collection will provide serious researchers with a unique opportunity to study the geoglyphs of the Colorado and Mohave deserts.

The long-term goal of the museum is also to curate an exhibit of Casey's photographs so that a new generation can be introduced to the mysteries of the geoglyphs.

Neal V. Hitch is director of the Imperial Valley Desert Museum.



Casey's 1946 Piper J-3 "Cub" plane was a crucial member of the photography team. PHOTO COURTESY OF IMPERIAL VALLEY DESERT MUSEUM