

THE FORTNIGHTLY CLUB OF REDLANDS, CALIFORNIA

Founded 24 January 1895



Creatures of Steel and Imagination:
How Borrego Springs Gave Birth to a Fossil Menagerie

Jim Hendon

A.K. Smiley Public Library, Redlands, California

April 2, 2015

Summary

Scattered outside Borrego Springs, California stands a metal menagerie of fantastic creatures. Extinct mammoths, ground sloths, saber-toothed cats, camels and numerous other species rust in the desert sun within a conservancy known as Galleta Meadows. Built recently by artist Ricardo Breceda, the whimsical, roadside collection was financed by Borrego Springs patron Dennis Avery, heir to the Avery adhesive label fortune. Many of the sculptures depict prehistoric mammals of Anza-Borrego Desert State Park, reflecting Avery's appreciation for the park's exceptional fossil record, and his regard for its paleontologists and bone hunters. Other pieces depict today's wildlife, dinosaurs and historical figures. Although Avery died in 2012, his "Sky Art" legacy added a unique feature to remote Borrego Springs, helping to attract the tourists on which it depends.

Author Background

Redlands native Jim Hendon is a former newspaper reporter and editor who covered energy, business, technology other topics during a 10-year career, including four years at the Rocky Mountain News in Denver. He later worked 15 years in corporate communications for Chevron Corporation and served as the company's head speechwriter. Since 2004, he has worked as an independent business writer and speechwriter, primarily for Chevron. As a boy, he was introduced to the desert by his grandfather and remains a frequent visitor to desert environments, enjoying cycling, hiking and photography. Son of former Fortnightly member Larry Hendon, he holds a degree in journalism from San Diego State University.

SLIDE: Title

Drive down past Indio, past the date groves of Coachella, then keep going another 30 miles to the land of the Salton Sea.

SLIDE: Park vista

Make a right on county highway S-22, and you will soon find yourself in Anza Borrego Desert State Park, 600,000 acres of badlands, dry lakes, sandy washes and pastel-colored mountains – the second largest state park in America.

SLIDE: Dove, rattler

It's home to some of the hardiest creatures anywhere, including the Roadrunner . . . White Winged Dove . . . the Speckled Rattlesnake . . . and . . . more recently . . .

SLIDE: Mammoths

Extinct mammoths.

SLIDE: Camels

Prehistoric camels.

SLIDE: Sailback dinosaurs

And a foraging family of sailback dinosaurs.

The collection of 129 metal sculptures is scattered throughout private lands just outside the remote desert town of Borrego Springs.

Two hours from Redlands . . . two hours from San Diego . . . a long way from just about everywhere else . . . Borrego Springs offers an unpretentious getaway for desert-loving tourists.

The town fills a different sort of “donut hole,” being completely surrounded by parkland.

An example of a large, nearby metropolis would be Julian . . . or if you prefer, Brawley.

Borrego is home to about 3,000 stalwart souls year-around . . . more like 6,000 if you count the second-home owners who don’t live there in summer . . . and up to 12,000 people at one time, if you count the visitors at the peak of the tourist season.

People come to relax, ride bikes, gaze at the desert sunsets, jump into pools, hike, watch birds, hit golf balls and bump around in Jeeps.

Take it from a confirmed desert rat: Visiting Borrego can be a lot of fun.

But I think it’s fair to ask:

Why would anyone want to put such an extensive exhibit way out here?

* * *

First, we need to note that many of the animals depicted in metal today . . . actually lived here long ago.

Ebbing and flowing across millions of years, the Gulf of California and Colorado River delta created shallow seas, estuaries, marshes, freshwater lakes and grasslands which harbored everything from oysters the size of dinner plates . . . to walruses . . . to giant sloths.

And second, we need to meet Dennis Avery.

SLIDE: Dennis Avery

Redlands had the Smileys.

San Diego had Spreckels, Horton and Scripps.

And Borrego Springs had Dennis Avery.

His father was Ray Stanton Avery, who made a fortune in adhesive labels and later formed today's Avery Dennison Corporation, an international player in labeling and packaging.

The son had a colorful life long before he sponsored the Borrego sculptures.

Among other achievements, he earned a law degree from Cambridge. There, he became lifelong friends with physicist and author Stephen Hawking.

Later, Avery worked for the San Diego city attorney and served as dean of students at Cal Western Law School.

Inspired no doubt by the philanthropy of his parents, Avery gave to worthy causes all his life, including community events, health care and education. He financed children's homes in South Africa. He funded language schools in China and San Diego. Quietly and without fanfare, he paid for the college educations of dozens of people, according to his widow.

Avery also was a resident of Borrego Springs for 10 years. There, his children attended the public schools – and he gave the town its Little League field, skatepark and football field lights, among other improvements.

And in the mid-'90s, he purchased – and set aside for preservation – the three, square miles where Borrego's menagerie now resides.

SLIDE: Galleta sign

He named it Galleta Meadows, after the hardy desert grass growing there, and with no fences, it is permanently open to visitors.

And between 2008 and 2010, he financed the creation of one of the most unusual, roadside art experiences in America.

Avery passed away in 2012, and is fondly remembered as not only generous, but curious and fun -- a guy who loved kids.

At an event to install the first Galleta animals, he reportedly walked around imitating the imaginary bellows of the extinct proto-mammoths being honored in metal that day.

* * *

SLIDE: Look closely

Most of the sculptures are near the road, and some are tucked into remote patches of unspoiled desert.

You experience all of them in the open air, so Avery named the collection “Sky Art.”

To see some of it, you either have to walk a quarter mile of rough country -- dodging ocotillo, cholla, beavertail and barrel cacti -- or take your chances driving the narrow, sandy roads winding across the landscape.

Any way you look at it, Sky Art has become a distinguishing feature of Borrego Springs.

* * *

But Avery could not have made it happen without this man.

SLIDE: Ricardo Breceda

Ricardo Breceda’s story is beautifully told and illustrated in the 2010 book by Diana Lindsay, *Accidental Artist*.

Born in Durango, Mexico, Breceda grew up on a family ranch and was educated to be a primary school teacher. He later worked in construction, and when a bad fall sidelined him, he launched a business selling exotic cowboy boots.

As Lindsay tells us:

One fateful day, he traded a pair of boots for a welding machine and began to ‘play’ with it. Probably nothing would have come from it – but then his seven-year-old daughter, who had seen the Jurassic Park movies, asked him to make her a life-size dinosaur.

So accidentally, an artist was born.

In time, Breceda and his partners established a business called Perris Jurassic Park, just off Interstate 215.

And it was the sight of metal dinosaurs alongside the freeway which first inspired Avery to connect with Breceda in 2007.

About the same time his Borrego work was getting off the ground, Breceda received a substantial order for sculptures of African animals from the Norco-based company, American Veterinary Identification Devices, which makes I.D. microchips for pets and zoos.

The two projects gave Breceda the boost that made him successful, and today, moderately famous. His creations are now found across the world, from Canada to Australia.

As his Perris business grew, Breceda expanded fabrication to Rosarito Beach, just south of the border. He relocated temporarily to Borrego Springs, but later moved his shop to Temecula, where he welcomes both visitors and customers today.

* * *

So together, the millionaire and the Accidental Artist made Borrego's metal menagerie happen.

But they might never have done it without another source of inspiration.

SLIDE: Fossil Treasures

Fossil Treasures of the Anza Borrego Desert is the definitive work on the paleontology of this vast California parkland.

Published in 2006, the 394-page book is a tribute to the combined work of dedicated scientists and fossil hunters who have been researching the area since the 1850s.

Avery understood the importance of paleontology to Borrego . . . so he helped to finance Fossil Treasures . . . donating a reported \$160,000 to the project . . . which incorporates numerous drawings, as well as colorful paintings by artist John Francis.

Those same works of art gave Breceda the information he needed to bring metal to life . . . or as Avery put it, to evolve from paintings to 3D.

As a result, visitors can both imagine . . . and feel . . . what it might have been like to encounter these fantastic animals in the wild.

SLIDE: Gomphotherium

Meet Gomphotherium, a proboscidean (after “proboscis, for nose, or in this case, a trunk) believed to have migrated – or I think we can safely assume, lumbered -- to America across the Eurasia Land Bridge some 15 million years ago.

These are the oldest of the large vertebrates discovered in the Anza Borrego.

Found in Hawk Canyon, the primary fossil which confirmed Gomphotherium’s presence is estimated to be about 9 million years old.

With the paintings and illustrations of Fossil Treasures as a guide, the sculptor gave us not one of these hippo-sized herbivores, but two adults and an adolescent.

* * *

The Gomphotheres were the first works.

And on it went from there, with Breceda building creature after creature, and Avery financing the work every step of the way.

And soon, Borrego Springs found itself home to an open-air zoo filled with Miocene, Pliocene and Pleistocene wildlife.

SLIDE: Sculpture detail

The lifelike renderings are impressive in themselves.

And the closer you get, the more you see how Breceda expresses the finest details in the unlikely medium of 26-gauge rolled steel on top of skeletons of recycled metal.

Tens of thousands of welds . . . hundreds of feathers . . . countless shreds of fur and even individual hairs and wrinkles . . . scales, fangs, eyelashes . . . all from steel.

Clearly, this is a guy well matched to his medium. When asked recently which work is his favorite, Breceda said “the one I’m working on now.”

SLIDE: Tortoises

There are the giant tortoises . . . at least five species have been discovered.

SLIDE: Sloths

And the giant sloths . . . paleontologists have traced these not to the Eurasia Land Bridge across what is now the Bering Strait . . . but to a separate migratory event from the south.

Spend some time with the Fossil Treasures book and you will learn about something called The Great American Biotic Interchange – the ultimate explanation for the Sky Art of Borrego Springs.

The northern bridge was created in part by successive Ice Ages, locking up enough water to expose more land.

To the south, the continental plates shifted, forming the Andes and creating the Panamanian Land Bridge, linking North and South America.

The two-way biotic traffic occurred over several chapters, ending about 500,000 years ago, and the sediments at Anza Borrego represent the entire interchange period.

Indeed, in their introduction to Fossil Treasures, editors George Jefferson and Lowell Lindsay tell us that the catalog of Anza Borrego’s prehistoric landscape “reads like a Who’s Who” for some of the most unique creatures ever to inhabit North America.

Dr. John Anderson White, who first explored the Anza Borrego in the 1950s, described “a practically perfect record . . . like a huge filing cabinet” with fossils on 250 different levels.

The sloths were among the first South American species to come here, first crossing some 9 million years ago.

Along with a six-inch long fur coat and half-inch thick skin, Paramylodon Harlani had bony nodules in its hide which likely discouraged predators. They had a peculiar, square muzzle, stood up to 9 feet tall and weighed up to a ton.

Happily for visitors, Breceda's sloths are true to estimated size. Also happily, there is more to the artist's achievement out here than a tribute to the fossil vertebrates of the Great Biotic Interchange. After the initial manufacture of camels, mastodons, tortoises and the rest, the artist and Avery turned their collaboration to other subjects.

SLIDE: Horses

South of town, wild horses, known to have lived in North America at various times in the past several million years, frolic across the Galleta Meadows landscape along highway S-3.

SLIDE: Bugs

Along Big Horn Road, a giant scorpion and grasshopper face off on a sandy battleground.

And nearby, Breceda built a Spanish Padre and a fantasy Indian head with a feathered crown.

In another nod to history, he made a gold miner and his mule.

In a nod to Borrego's present-day bestiary, he crafted a family of "borregos," or bighorn sheep.

SLIDE: Dragon and Jeep

Breceda's largest and wildest creation swims through the sand and across Borrego Springs Road – a sea dragon inspired by a Chinese New Year parade, and with a rattlesnake's tail, perhaps to localize the genus.

His final Borrego piece captures a favorite local pastime -- a Jeep exploring the desert -- Sky Art heading skyward.

* * *

That was back in 2010, and the community has since embraced this upbeat and offbeat series of events as part of its recent history.

And even those who feared the Sky Art might become something of a nuisance have come to recognize its contribution to the local economy.

But the other side of this happy tale is that it took place against a backdrop of fresh struggles and new challenges . . . in a town where struggles and challenges have always been business as usual.

If you ride a bike out past the De Anza golf course to Galleta Meadows, past Breceda's dragon . . . you'll come to the citrus groves which have been a fixture in Borrego Springs for decades.

SLIDE: Citrus

These grapefruit and lemon trees lie at the heart of the town's single greatest problem: Water.

Agriculture today consumes 70 percent of Borrego's water, golf courses another 20 percent and everything else, including tourism, about 10 percent.

They've seriously drawn down their only source – an aquifer filled by mountain runoff over millions of years.

Time was wells could hit water at 40 feet. Now they're down to 200 feet in some cases.

Pumping and treating costs are forecasted to eventually drive water prices much higher.

In short, agriculture is threatening real estate, retiree lifestyles and tourism in a place where these things, not farming, today matter most to the economy.

They have a community coalition working on the problem.

But established water habits, and the businesses and people who are used to them, die hard.

* * *

SLIDE: Shadow

Things have never been easy here, despite the undeniable charms.

Completely surrounded by a harsh wilderness, pounded each year by relentless summer heat, this place doesn't seem to change much.

Borrego Springs is a town which has never had mail delivery – people pick up their mail at the post office.

It's a town with no stop lights. No parking meters.

As the current president of the Chamber of Commerce says, “Borrego Springs is not on a route to anywhere, so the only people that find their way here are those who choose to do so.”

It's true for residents and tourists alike.

But come to Borrego they do.

SLIDE: Mural

Regulars always hit the surprisingly good Italian restaurant – run by enterprising Chinese from Imperial Valley -- at the Borrego Springs Airport, with its surprisingly impressive murals of vintage aircraft.

There are some fun shops and nice desert galleries.

There's the excellent state part visitor's center.

And the Borrego Art Institute with its new center, built with contributed funds, and which has just completed its 9th annual competition for fine-art landscape painters.

More recently, there's the Borrego Film Festival – move over, Palm Springs.

SLIDE: Almost there

Still, it's been tough to build momentum.

Borrego was hit hard by the recession after 2008.

The town's most important resort hotel shut down, and its largest, golf-based housing development fizzled out as well.

Both have since reopened.

However, now there's something else to worry about.

SLIDE: Wildflowers

High season business has long depended on the annual explosion of spring wildflowers.

The starkly beautiful desert park has attracted up to a million visitors each year, and it has been estimated that an exceptional bloom may bring in as much as a quarter of those.

Recently, the statewide drought has robbed Borrego of this natural tourist magnet. Perhaps far more serious, an invasive plant, the Sahara Mustard, has recently swept into Borrego Valley, threatening to overwhelm the native plants.

Here again, the community is working on the problem, in this case with the help of the University of California.

In the meantime, the business and arts communities are well engaged in campaigns to improve Borrego Springs and promote it as a year-around destination – with much more to offer than just the spring bloom.

* * *

SLIDE: Sky Art

So, how much is Borrego's menagerie adding to the local economy?

As Avery once pointed out, these free exhibits require no water, and you can enjoy them any time of year.

There is no sure way to measure the benefit.

But during the five years since Breceda completed his masterpiece, the Chamber of Commerce has reported a growing stream of tourists stopping in to the office, seeking directions to the new attraction.

And the chamber is well prepared.

SLIDE: Map

The effort is paying off in unexpected ways, as Borrego now has people combining Sky Art, photography and astronomy.

Turns out, this desert community is one of the best places in America to view the Milky Way, watch meteor showers and even – when conditions are perfect – see traces of the Northern Lights.

The Borrego Dark Sky Coalition – which earned the city an official Dark Sky Community designation in 2009 -- has been working to grow the ranks of star-gazing tourists.

This includes photographers, who support workshops offered by Borrego-based astronomer Dennis Mammana and others.

SLIDE: Night Sky

And the result is wonderful images such as this one from California photographer Ken Lee.

It is of course Breceda's Gomphotherium, standing beneath a swirl of stars, just like its namesake might have done, millions of years ago, under the original "dark sky."

* * *

No doubt, everyone who visits these artworks will have favorites.

SLIDE: Grape workers

Besides the wonderful extinct mammals, one of mine is Breceda's group of Mexican vineyard workers, commemorating those who -- with the help of Caesar Chavez -- confronted the Di Giorgio farming empire here in 1966.

The sculptures honor the humble, migrant laborers from the artist's homeland. And they give their subjects dignity -- for me, a key characteristic in most of Breceda's work.

SLIDE: Cabazon

It matters because here in Southern California, we have a lot of options if we want a prehistoric encounter, both dignified and otherwise.

At Cabazon, the long-standing concrete Apatosaur and T-Rex are supplemented by a newer, robotic dinosaur attraction, complete with lessons in Young Earth Creationism, including the suggestion that the dinosaurs walked with Adam and Eve.

Nearby, The Living Desert -- historically devoted mainly to conservation and a conventional zoo experience -- has started featuring actors performing in realistic dinosaur suits.

If we head the other direction, we can get a more academic experience at the L.A. County Museum or the La Brea Tar Pits.

At the museum, they've started supplementing the spooky skeletons with a new dinosaur show like the one at Living Desert, while La Brea features performances by an actor dressed up as a sabertooth cat.

All of this, of course, sells tickets and keeps the kids entertained -- and reflects the pervasive influence of the entertainment industry.

The Jurassic Park ride at Universal Studios leaves literally nothing to the imagination -- and in some ways that's a shame.

* * *

SLIDE: Ear

Borrego's rusty, sharp-edged attractions are different -- being as much art, as they are science, and out in the middle of nowhere.

They don't move. There are no admission prices or special effects, no goofball Disney smiles on the animals, no Hollywood hype, no stuffed toys, no gift shop. Instead of the roar of nearby freeways and clogged boulevards, all you are likely to hear is the desert wind, the chatter of passing cyclists or the warble of a Cactus Wren.

SLIDE: Dinosaur combat

To see Breceda's Carnotaurus and Allosaurus frozen in combat -- for example -- you have to drive well off the road. Go early in the morning, especially on a weekday, and it will be just you, the desert and a pair of alpha predators.

Stare at them a while, ponder where humans might have fit into the food chain back then, and you may feel a chill, despite the rising mercury.

True, the paleontologists say these two particular species never really met – they actually lived eons apart in geologic time.

Indeed, there is no evidence that any dinosaurs ever lived in the Anza Borrego.

Not that they absolutely weren't here, mind you, only that no fossils confirm that they were.

But I would argue that we can overlook this inconsistency in the Sky Art animal collection, because Breceda presents real species discovered elsewhere . . . the Utahraptor, the Spinosaurus, the Velociraptor.

And for the most part . . . he endowed these . . . and all his other renditions . . . with dignity.

* * *

SLIDE: Big bird

Meet one of the largest North American birds of all time.

Three of the six specimens ever discovered were found in the Anza Borrego.

Originally thought to be scavengers, they were just as likely hunters, according to the Fossil Treasures chapter on birds.

Breceda gave us not one but two of these flying nightmares, which go by the scientific name, *Aiolornis Incredibilis*, that is, the Incredible Wind God Bird, with a wingspan of 16 to 17 feet.

Get up next to one and yes, it seems plausible that they might have caught snakes and taken them back to the nest, or swooped down to take the occasional young peccary for breakfast.

SLIDE: Horse and cat

Did sabertooths ever hunt wild horses?

The fossil record shows that several kinds of horses lived about the same time as the iconic Pleistocene cats.

Stockier than today's lions, they were not built for speed, but they may have been the ultimate ambush predators.

So Breceda gives us a horse in sudden flight, trying in vain to elude its nemesis, which has just sprung from cover.

SLIDE: Peccary, smilodon

What a time it must have been.

A time when mother peccaries likely stood nervously to nurse their vulnerable young.

And when sabertooths, tired or full from the hunt, took a moment to rest.

A time when families of foraging tapirs trotted through the brush together.

SLIDE: Tapir family

They appear suddenly, just alongside the lonely Galleta Parkway, as if they might at any moment cross the road in front of your car.

We know that these creatures lived in a completely different and often lush environment – not a desert.

But as one visitor put it: They look like they belong here.

With just a little effort, the imagination can fill in the blanks.

And for those who let the past in, and open themselves to wonder, the Sky Art of Dennis Avery and Ricardo Breceda can be quietly moving.

* * *

In an epilogue to the book, *Fossil Treasures*, the editors wrote these words:

“On the surface, paleontology may seem to have little impact or relevance to our modern digital culture.

“But inherent in the human spirit is a deep and profound curiosity about our past and a compulsive longing to understand our biological origins.

“In some ways paleontology, although a foggy view into deep time, satisfies these basic needs. And it does so on the same human experiential level as a Bach fugue or a Monet water lily.

The remains of ancient life help us understand our place in time and space, and allow us to touch the past.”

SLIDE: Camel rising

In other words, we owe them something . . . these long-lost and engaging fellow travelers.

We're in debt also to Avery, for his simple, human generosity . . . and to a thoughtful artist, whose work is a tribute to those who unearthed these kindred spirits from beyond recorded history.

Here they are today, being themselves, for our enjoyment and – make no mistake – our edification.

Breceda's Gigantocamelus even appears to be taking a bow.

Or is it simply kneeling on its forelegs to lie down for a nap – or rising after a satisfying roll in the prehistoric dust?

SLIDE: Repeat title

What a time it must have been.

#

Acknowledgements and Sources

I am indebted to many people and sources for the research supporting this paper. The definitive book on the Borrego metal sculptures is *Ricardo Breceda, Accidental Artist*, 2012, by Diana Lindsay.

The book which inspired Dennis Avery to finance the metal menagerie is the award-winning *Fossil Treasures of the Anza Borrego Desert*, 2006, co-written by numerous paleontologists.

Reports in *The Borrego Sun*, *The Desert Sun*, *San Diego Union-Tribune*, *Los Angeles Times*, *San Diego Reader* and other publications helped tell the story of the sculptures, the people behind them and particularly the challenges facing the Borrego economy. Rich Caldwell, owner of the delightful Borrego Valley Inn, helped me understand the town's economic challenges and recent history.

I gleaned information and context also from the web sites of The Galleta Meadows Estate; The Anza Borrego Desert Paleontological Society; the Borrego Dark Sky Coalition; Borrego Modern; Page Museum/La Brea Tar Pits; Anza Borrego Desert Natural History Association; and others.

The Borrego Village Guide, published by the Borrego Springs Chamber of Commerce, and *The Borrego Springs Community Plan*, provided useful maps and context, as well as information about the town's economic challenges.

Thanks to photographer Ken Lee, who authorized use of selected images. Other photos were shot by the author, who has visited Borrego Springs numerous times over the past 20 years.

I am indebted to my grandfather, Glenn Walker of Westmoreland, Calif., for taking me to the desert when I was a boy to search for fossils, Indian pottery fragments and arrowheads. He instilled in me a love and respect for the desert environment, its wonders and oddities, both human and natural. And lastly, thanks to my wife Kathryn, who has been my (mostly) enthusiastic companion in exploring the backroads and canyons of Anza Borrego Desert State Park.

-- Jim Hendon, April 2015