A State of Bee-ing

Local beekeepers wax enthusiastic about their beloved hobby

STORY AND PHOTOGRAPHS BY BILL NEWCOTT



"You're dressed like a bear."

I am at this moment being addressed by a man wearing a thick, white, long-sleeved fabric top, his face obscured by the netting in a piece of headgear that resembles a CDC containment outfit. In the yard just beyond him, I catch sight of a cloud of bees darting around a wooden hive, tiny rebel X-wing fighters harassing a Death Star. Their buzzing sounds like the whine of a thousand distant drones.

I glance down at my clothing. I'm wearing dark jeans and a black windbreaker.

"Bees hate it when you wear black," he clarifies. "They think you're a bear." "Well, should I take this off?" I ask.

"I would," he says. "Bees hate bears. They'll go right for your eyes. To blind you."

Now I am tearing off my windbreaker like it's on fire. Of course, underneath I'm wearing a long-sleeved black T-shirt. I now look like a slightly smaller bear.

But my host, Chris Dominic, doesn't panic. He's been raising bees here behind his house in Ocean View for four years, and he knows what to do. He hands me a white protective top similar to his. As I pull it on I'm impressed by its weight and thickness. Two cords tie it closed to prevent bees from crawling up underneath. Finally, I am issued a pair of rubber gloves.

Tending to his backyard hive in Ocean View, Chris Dominic hunts for the queen in the churning, buzzing throng. The Adirondack chair is for evening reveries.

"Now you're safe!" he says excitedly. We approach the hive, where the bees all seem to be humming the same note (roughly B below middle C, musical experts have determined).

Dominic starts pumping smoke from a metal canister containing smoldering pine needles. It's a bee-soothing technique that dates back to ancient Egypt.

"It's best not to get stung," he says, and I wonder who in the world would contest that opinion.



When you wear black bees think you're a bear and bees hate bears. They'll go right for your eyes. To blind you."

The buzzing intensifies when Dominic lifts the metal lid off the hive's top box. Standing inside, like thick filing cabinet folders, are eight wooden frames crawling with bees. Teeming with bees. Absolutely covered with jostling, gyrating thoroughly agitated bees.

"They're not happy," mutters Dominic. I take a step back.

With a metal tool that resembles a small, shiny crowbar, Dominic pries out one of the frames.

Dominic, a retired data technician from Washington, D.C., has roughly 30,000 bees, all descended from a single queen he had delivered — along with three pounds of drones and females — by UPS. They are Italian bees, which are thought to be more laid-back than many other types. But this bunch is acting like they have been

deprived of their afternoon cappuccino. "Let's see if I can find the queen," he says, and I'm thinking good luck with that — it would be like locating your mother at a sold-out Yankee Stadium.

"There she is!" he says almost instantly. "With the red dot."

Pushing her way through the mob, like the pope in St. Peter's Square, is a bee generally indistinguishable from the rest except for a red dot of model paint placed there by the seller specifically to raise the chances of picking her out from the crowd. >

acrylic oil pastel watercolor





1301 COASTAL HIGHWAY, DEWEY BEACH, DE 19971 302-212-0002 | THERESIDENCESDE.COM







LIFE'S BETTER at the beach.

Featuring new construction with bay views!

Starting in the MID-600's Call today to schedule a virtual tour.



Only 11 condos left!



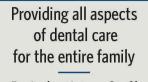
Delaware River & Bay Lighthouse Foundation Harbor of Refuge Tours



June 27, 1 p.m. & 2:15 p.m. July 25, 12 p.m. & 1:15 p.m. Aug. 22, 11 a.m. & 12:15 p.m. Sept. 19, 10 a.m. & 11:15 a.m. Starts at Cape May-Lewes Ferry terminal Advanced reservations required delawarebaylights.org • 302-226-3866



Dr. Steven B. Wright, DMD Dr. Daniel A. Luckenbaugh, DDS Dr. Katie Townsend, DMD Dr. Katelyn Vincent, DMD



Periodontist on Staff

Established 1968

302-645-6671 18912 John J. Williams Hwy., Rehoboth, DE www.RehobothBeachSmiles.com

Treasure Hunting



Combing the neighborhood, Julie Ellis-Hall's bees bring back nectar from flowers up to 3 miles away. "I've always thought bees were cool." she says.

"She's been a great queen," says Dominic. I'm touched by the affection in his voice.

At the bottom of the hive, the entrance resembles the doors to Grand Central Station, with little hairy commuters coming and going, pushing past each other without so much as an "excuse me." Many of those arriving have yellow clumps on their feet, like bright booties: pollen from the many flowers they've visited today, up to 3 miles distant. They wear those booties from flower to flower, shaking them off each time as they provide essential pollination services to the local flora.

The incoming bees also have abdomens swollen with nectar, sucked from various blossoms. Inside the hive they'll share mouthfuls of the stuff with their fellow worker bees, who'll chew the gummy substance for a half-hour or so before passing it on to another. Eventually this shared gunk becomes honey, which the bees will store in wax honeycomb cells for future hive consumption.

It takes eight bees a lifetime of flying, sucking, and chewing to make just one teaspoon of honey. So it takes a lot of bees to feed a hive — and a lot more than that to make enough honey for us to steal for our morning bagels.

Dominic heads into the kitchen of his bright farmhouse and offers me a taste of homemade honey from a halfempty jar. It's delicious, of course. His wife, Barb, joins us. "This is Bill," says Dominic. "He came dressed as a bear."

Barb looks at me sadly. "Ohhhh," she says.

n the back porch of her house, Julie Ellis-Hall hands me a set of head-to-toe white beekeeper duds: a screened hood, a heavy top, a pair of fingerless gloves, and a pair of thick white pants.

"It's really best if the bees don't crawl up your leg," she says. More timeless wisdom.

Ellis-Hall, a Lewes real estate agent, is a little bummed out. Just yesterday she found one of her hives had died over the winter. It appears the little guys starved to death — but mysteriously, the hive was full of honey.

"It appears they clustered together during a cold snap and stayed that way — they didn't just walk next door to get their honey," she says, a tinge of remorse in her voice.

"Couldn't the cold have killed them?" I ask as we bounce across her Lewes area lot in a golf cart, heading for two hives she keeps at the far end.



I'M DAWN TARTAGLIONE, DO, FACOS

I'm the medical director for Bayhealth Neurosurgery. For 20 years I've focused on a whole-person approach to keeping bodies and minds healthy. Whether you have a sudden head injury or chronic neurological condition, my goal is to improve your quality of life — not just treat your disorder. At Bayhealth I'm equipped with state-of-the-art technology like ExcelsiusGPS[®] — a robotic guidance and navigation system for spine surgeries. Rest assured, I'm here for you!



I'M HERE to lead innovative neurosurgery.

NEUROSURGERY BAYHEALTH.ORG | 1-866-BAY-DOCS

四白

The Carrie Lingo Team

MOVING FORWARD TOGETHER.



"Even in the dead of winter, the top of a beehive is warm to the touch."

An eighth-generation Delawarean, Ellis-Hall has been an avid hunter and fisher her whole life. And then she discovered beekeeping.

"I've always thought bees were cool," she says. "Then my sister-in-law in Maryland got them — and I knew I just had to have bees."

She's not alone: The Sussex County Beekeepers, part of a statewide organization, meet every first Tuesday in Georgetown. That's where Ellis-Hall met experienced beekeepers who were more than happy to help her get started.

"Some of these people have 900 hives!" she says.

Now she's in her seventh year keeping bees on her six-acre property along Conley's Chapel Road.

We pull up to two humming hives. She removes the top of one and, using a tool similar to Dominic's, separates the frames, breaking the wax seal created by her bees.

She yanks a frame out — and it's as if she has summoned forth a vast apiary army. There are bees everywhere. I can feel and hear them throwing themselves against my protective gear.

I'm vaguely freaked out, but Ellis-Hall couldn't be happier. Even through the combined two layers of netting on both of our hoods, I can see the smile on her face and the happy glint in her eyes as she roots through her bustling hive.

The bees are visibly restless. Ellis-Hall tries to calm them with puffs of smoke, but the pine needles she's using don't seem to be producing much.

Then I feel it: A pinprick on the second finger of my left hand. I look down and see nothing, but the spreading pain is unmistakable.

"I've been stung!" I say in the manner that 1940s war movie soldiers used to say, "I've been hit!"

Ellis-Hall looks at me. Her blue eyes are expressionless, and her words come out flat.

"You need to get away from here," she says. "They're all over you."

I turn and try to hustle toward the house, which is just a few hundred feet away but seems to be dipping beyond the horizon. It's not exactly like the scene in "The Swarm" where Henry Fonda gets smothered by a cloud of killer bees, but I do see two or three hurling themselves against my face netting — which I now notice has a bee-sized hole down around my mouth.

What's wrong with my feet? I can't seem to get beyond a shuffle. It's literally like that dream where you're trying to escape the monster but your feet won't move.

I look down. The protective white pants Ellis-Hall gave me have fallen down around my ankles. Yes, I have my jeans on, but I still look like a guy lurching around the house looking for toilet paper.

It's horrible. And hilarious. And I'm laughing hysterically, because I know this is probably the funniest thing that Ellis-Hall has ever seen.

"Jump in!" It's Ellis-Hall on her golf cart. And yes, she's laughing out loud. I manage to tumble onto the passenger seat. We roll off to safety.

The bees have lost interest. My finger has already stopped hurting. Ellis-Hall presents me with a little plastic bear filled with honey from her hives, and I feel like a child presented with a lollipop after getting a boo-boo.

Tactually think I may have the temperament for beekeeping. But my L community doesn't allow beehives, so I'll never know the quiet pleasures (and occasional panics) of this hobby. I keep thinking of Chris Dominic's hives, pressed close up against the back of his house, and the large Adirondack chair that he's positioned just 10 feet or so away from them.

He sits there often.

"How can you not love it?" he asks with a faint smile. "All those little bodies flying around, and that hum. "Hummmmmmmmm..." He's nailed it. B below middle C.

Bill Newcott, an award-winning film critic and former staff writer at National Geographic Magazine, AARP the Magazine and The National Enquirer, lives near Lewes.

STEPS TO THE SAND.

Ways from the worry.

The Boardwalk Plaza Hotel offers the perfect location to make the most of your vacation time, any time of the year. Just park your car. Go out for a walk on the beach or the boardwalk, or take a stroll downtown. Or stay in and enjoy our comfortable rooms and breathtaking views. You'll love the convenience of our restaurant, pub and room service—so much so that you may never want to leave. You can relax and leave your worries behind. Book your stay now!



2 Olive Avenue & the Boardwalk Rehoboth Beach, DE 19971 (800) 33 BEACH | (302) 227-7169 www.boardwalkplaza.com



Zoltar's Good Fortune

The boardwalk attraction has proved its creator's knack for turning a buck

Story and photographs by Bill Newcott



"I see you over dere!"

The booming, vaguely Eastern European voice stops me as I'm walking past Zelky's Beach Arcade Central on the Rehoboth Beach boardwalk.

I'm startled. Is someone talking to me? It's the end of the summer season. The boardwalk is crowded, and the source of that voice is obscured behind the late-season crowd.

"Yes, you!" I turn my head toward Zelky's, aglow from inside with strobing colored lights from its banks of video games.

"Come on over," the voice commands, "and let Zoltar be sharing with you your fortune!" Of course. It's Zoltar.

Like everyone else who lives around here, I've been accosted by the turbaned mechanical fortuneteller in the glass case countless times. Yet

there's something about that voice — the cranked up bass, the push-it-to-11 volume. Every time Zoltar calls to me, I have to at least glance in his direction.

Also like almost everyone else who lives here, I'm way too cool to actually stop and put actual cash into Zoltar's money slot. It's way more

"local" to stand by nonchalantly and witness the tourists as they donate their hard-earned vacation funds to the swami's cause.

"Your small payment will reap great benefits if you listen to these words of wisdom from the allknowing Zoltar!" the Gypsy advises three giggling girls who have taken the bait.

"The best place to find a helping hand is at the end of your arm!"

Creases of puzzlement flicker across their faces.

Rehoboth Beach's boardwalk had the bad fortune of being shut down by COVID-19 — but Zoltar sees luckier days ahead.

"Yes," Zoltar continues, his mechanical mouth not even trying to sync up with his words, "you must work for happiness! So go on! Take your two hands, get some money out of your pocket, and let Zoltar tell you more!"

Savvy salesman, that Zoltar. Promise the secrets of the universe, deliver almost nothing, and then suggest the real truth is just another dollar away.

The kids do that thing adolescent girls do, glancing at each other with their mouths hanging open, half laughing and half hooting, crouching slightly. Then they scoot off, slowing only to ooh and aah over a little girl riding a mechanical horsey.



They also forget to pick up the little fortune card Zoltar has thoughtfully dropped into a rectangular frame near the money slot. They're clearly not coming back, so I help myself.

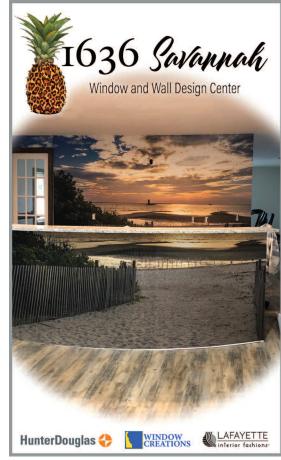
"Sometimes it is better," it reads, "to say too little than to say too much and regret it later." I nod and make unexpected eye contact with Zoltar the Wise.

There he sits, silently stoic in his glass cubicle (or seems to sit; his legs are invisible beneath a cut-out card table). Zoltar's mechanical eyes dart intently to and fro, his right hand passes mystically above a frosted glass ball. He is patience mechanically personified.

Until 90 seconds pass.

"I AM ZOLTAR THE GREAT GYPSY!" he suddenly booms in an eruption of self-validation. "I can see your fortune! Come see it too, no?"

Despite his know-it-all air, Zoltar has no idea how close he came to losing his spot on the boardwalk in 2017 when the Weiner family, owners of two other Rehoboth Beach arcades, bought the former Playland arcade. Zoltar had been there since at least the early 2000s. \succ





to Design, Build,



1636 Savannah Road Suite C, Lewes 302-682-2999 302-644-5685

Custom window treatments include blinds, shutters & shades, draperies & valances

Print application for home décor. We can customize your windows, walls, furniture & more!

Custom Peel N'Stick Wallpaper for small or large spaces. peel n' stick wallpaper that we print in-house.



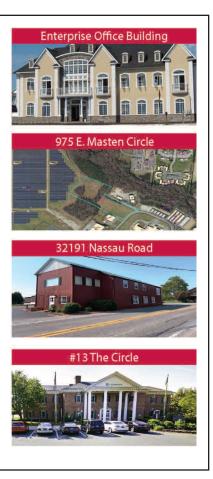


The Local **Trusted Resource**

Lease, Manage, and **Maintain Your** Commercial Property

> Ann Bailev 215-292-6100 AnnBailey@emoryhill.com





Treasure Hunting

"We weren't going to keep him," says Matt Weiner, whose father, Chuck, opened his first boardwalk location in 1985. "We thought Zoltar was this old-fashioned thing nobody would be interested in."

But then Weiner noticed small groups gathering around the soothsayer. On days when the Central Beach Arcade was closed, visitors went to the family's other locations and asked where Zoltar was.

"People seek him out year after year," says Weiner. "We had no idea how much people love him."

Zoltar may look lonely in his solitary glass booth, but he's not alone. He's got between 2,500 and 3,000 identical brothers across the U.S. from Coney Island to the Santa Monica Pier, all speaking in the same thunderous voice, all dispensing the same universal wisdom.

And they all have the same father: a pleasant-natured man named Olaf Stanton. He owns Characters Unlimited, just outside Las Vegas, and for his entire adult life he's been cranking out animated figures for businesses, theme parks, and boardwalk attractions.

On the day I catch Stanton by phone, he's just left his warehouse/assembly plant in Boulder City, on his way to check on some Zoltar machines he's got plying their trade along Fremont Street in downtown Vegas.

Stanton's first generation of characters weren't interactive at all — they served simply as come-ons for businesses trying to draw patrons inside.

"I had a bunch of animated characters," he says. "Sea captains, cowboys, Indians, pirates — whatever someone wanted to have as an attraction in front of their businesses.

"But then some people said to me, 'Well, I don't see how this figure is going to make me any money.' So I got the idea to put my character in a box, put a quarter slot on it and charge to hear it talk and tell a little story — or tell a fortune."

First Stanton introduced Old Pappy, a grizzled miner who doubled as a fortuneteller. Next came Old Pirate, who also probed the future. Then, as Zoltar might put it, good fortune smiled upon him.

"In the late 1990s I made a character I called Swami my version of a Gypsy fortuneteller," he says.

Everyone who saw Swami recognized him immediately. With his turban, stern face and piercing eyes, Swami bore an unmistakable resemblance to another Gypsy fortunetellerin-a-glass-box: Zoltar, the mechanical figure who grants the wish of Tom Hanks' younger self to grow up overnight in the 1988 fantasy comedy "Big." The similarity was no accident, but Stanton stopped short of adopting Zoltar's name for fear Twentieth Century Fox, or its lawyers, would come pounding on his door.

Of course, given that Swami was virtually identical to Zoltar in every way, and since he was selling quite a few of these guys, there was still the nagging possibility that someone might accuse Stanton of copyright infringement.

But no one ever complained, and Stanton began to wonder why. On a hunch, in 2006 he looked into the status of



Zoltar — and was stunned to discover that, despite the character's near-universal familiarity, no one had ever filed for a trademark on him.

Stanton quickly corrected that oversight, and today the Zoltar trademark is owned by Characters Unlimited.

Most people who revisit "Big" are surprised to discover that the movie's Zoltar doesn't speak at all. Giving voice to him was Stanton's own stroke of genius — although the voice itself belongs to an actor named Josh Harrison, who works out of Nashville. Harrison voices not only the boardwalk version of the seer, but also a Zoltar slot machine and a miniature tabletop Zoltar you can have in your home (fullsize models run from \$5,800 to \$10,500).

Stanton's one regret is that although his company licensed Zoltar for a recent Liberty Mutual Insurance commercial, somehow Harrison did not get the voice acting gig.

"That slipped through our fingers," he says sadly. "We didn't know what they were doing."

Zoltar is far from being the only character in Stanton's stable. You can still buy Pappy and Old Pirate from him along with the white-bearded Oracle, Wyatt Earp, and Confucius. Stanton's crew of artists also makes animated animals, Santas, and dinosaurs — and they'll even whip up a custom animated figure of anyone you ask for.

"I had this one fellow who asked me to make an animated figure of his deceased mother," he says. "One day this box turned up from him containing her clothes, her jewelry, and even her teeth.

"That's a strange story."

"We weren't going to keep him," admits Zelky's manager Matt Weiner, whose family bought the location a few years ago. But there's a reason why Zoltar has more than 2,500 identical brothers nationwide.

Dusk is falling over the Rehoboth Beach boardwalk. The servers at Kohr Bros. are leaning on the counter, pooped after a long day. The arcade attendants are propped lazily against the doors, catching the evening's first offshore breeze.

Only Zoltar remains vigilant, sitting ramrod straight at his post.

"Come closer and listen to what Zoltar has to tell you!" he enthuses. "Dream as if you'll live forever. Live as if you'll die today!

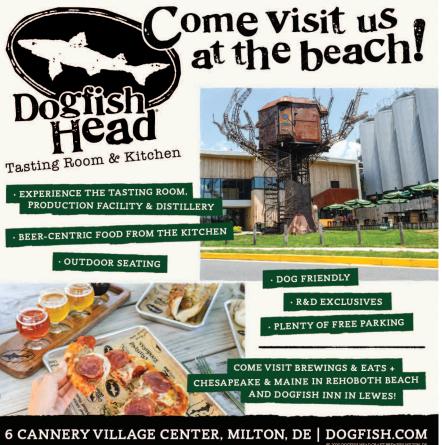
"So go on, have fun! "And surrender more cash for more wisdom from the Great Zoltar!"

Bill Newcott, an award-winning film critic and former staff writer at National Geographic Magazine, AARP the Magazine and The National Enquirer, lives near Lewes.



Put some salt in your air.





The Telescope in the Cemetery

251 years ago, the sun shone on Lewes as astronomical history was made By Bill Newcott | Photograph by Carolyn Newcott

A quarter of a millennium and one year later, the author reenacts Lewes's shining moment in astronomical history at Bethel Methodist Cemetery.



It is 2 p.m. on June 3 and people are looking at me. Or, rather, they are looking at my reflecting telescope, set on its tripod just beyond the low brick wall of Bethel Methodist Cemetery along Savannah Road in Lewes.

No one stops to ask me what I'm doing with this primarily nocturnal instrument, surrounded by headstones and pointed directly at the sun. I wish someone would, because it's a fascinating story.

At least I think so.

The fact is, I'm engaged in a re-enactment of sorts: At this specific location, at this precise second, on this exact date 251 years ago, a team of astronomers dispatched to Lewes by none other than Benjamin Franklin himself observed the small black disk of the planet Venus traverse the face of the sun.

In so doing — in concert with astronomers taking similar measurements at that moment from locales around the globe — they helped define the size of the solar system to a level of precision that rivals the most exacting modern calculations.

And, dear reader, if that does not get your juices flowing, I'd suggest you flip right now to the restaurant guide in the back of this issue. Because we're about to wander, starry-eyed, into the realm of monumental historical nerdishness - and the personal passion of a modern Rehoboth Beach resident whose obsession with stars, time and historical instruments enabled me to stand confidently on the spot where 18th century scientific history was made.

Tt was on May 26, 1769, that three gentlemen arrived in Lewes by boat from Philadelphia. Owen Biddle was a prominent Philadelphia clock maker; Joel Bailey was an experienced surveyor who had helped define the Mason-Dixon Line; Richard Thomas - no known relation to the actor who played John Boy on "The Waltons" — was a prominent Philadelphia surveyor. We can only

imagine how strange they looked unloading their exotic cargo, including three reflecting telescopes, a surveyor's theodolite, and a full-sized pendulum clock.

It was odd enough when the trio immediately rented an empty house on South Street (now known as Savannah Road). But when they approached two local schoolboys for a mysterious task, the weirdness of these visitors must have seemed positively flummoxing.

Most likely, it helped that they had been dispatched here by the great Ben Franklin, who even then was a living legend. As a leading light of the Philadelphia Philosophical Society, Franklin had aligned himself with London's Royal Astronomical Society (remember, the Revolutionary War was not to erupt for another six years) in its quest to determine the vast distances of outer space.

In 1769, every astronomer worth his salt knew the planet Venus was scheduled to pass before the sun around 2 p.m. Colonial time on

June 3 — and that the phenomenon would not occur again until 1874. Through separate observations of the event from enough spots across the face of the Earth, scientists would be able to accurately measure not only the distance to the sun. but by extension the size of the entire known solar system. Franklin enthu-

siastically joined the project. Three locations, widely separated to mitigate the chance of weather problems, were chosen for observations: Philadelphia's State House Square (now known as Independence Square); the Pennsylvania farm of David Rittenhouse, America's leading astronomer; and Lewes.

of that."

A backwater town at the mouth of Delaware Bay may seem like a strange choice for participation in a global scientific study, but Franklin had a double mission in mind. In order to precisely measure the transit of Venus, the Lewes team would first need to conduct an extensive survey to determine their exact

latitude and longitude — information that could also be used to pinpoint the location of the brand-new Cape Henlopen lighthouse, an important navigational aid for Philadelphia-bound ships. The guys had just eight days to prepare. A land survey requires a known starting point, and the only relatively handy one was the recently surveyed Transpeninsular Line in Fenwick — the very same one Mason and Dixon used to determine the starting point of their famous line separating Maryland and Pennsylvania. Working feverishly with a small crew of local workers, in less than four days Bailey and Thomas surveyed a distance of some 20 miles across farms, forests, and ponds from Fenwick to Lewes, following Colonial-era roads and trails whenever possible.

Combining these ground measurements with several nights of astronomical observations (including the positions of Jupiter's moons), Bailey determined the precise location of the rented house in Lewes. However, using his coordiζζ..... nates today would put the house Sometime when I roughly at the interwas a kid, my father section of Pilottown Road and Shipcarbecame fascinated penter Street, not far with sundials: how from the Lewes Histhey worked, why torical Society campus. they worked, the

So, why am I standing with my telescope in a cemetery nearly a halfmile from there? Allow me to introduce you to Jim

angles involved, all Morrison, a now-deceased Oklahomaborn engineer who worked briefly for the U.S. space program in California before settling in for a long career at IBM. He retired to the Rehoboth area and became fascinated with Lewes's connection to the 1769 transit of Venus.

"I'm not sure when his fascination with astronomical measurements started," says his son, Chris Morrison, a photographer for a Kansas City, Mo., TV station. "But sometime when I was a kid, he became fascinated with sundials: how they worked, why they worked, the angles involved, all of that." Then came an infinitely more exotic



FEATURED LAND OPPORTUNITIES



Build your new house on this expansive property with over 800 ft. of frontage along Wil King Road. Backed up to a large wooded area, live in seclusion yet still be close enough for a short drive to both Rehoboth and Lewes beaches. Great value for this location!



Build your business on this 1.96+/- acres possible commercial location in the thriving business area of Long Neck, at the busy intersection of Route 24 & Route 5. Gain maximum visibility on this corner parcel. Currently zoned AR1. Call me today to secure your new business spot here!



JACK LINGO, REALTOR® (302) 542-2097 JACK@JACKLINGO.COM

As a part of the third generation of Jack Lingo REALTOR[®], Jack is no stranger to Southern Delaware real estate. He is the grandson of company founder, Jack Lingo, and is the son of John Lingo, Jr. Jack is active in his community and has been coaching Cape Henlopen High School's varsity lacrosse team since 2002. He loves working with the real estate team, and is proud to continue his family's legacy as a REALTOR[®] in the company's Lewes office.

pursuit: astrolabes, the baroque devices sailors used for centuries to steer by the stars.

"He actually found a way to simulate a physical astrolabe on a computer," says Morrison.

Museums often publish lushly illustrated books of astrolabes from their collections, treating them more like works of art than scientific instruments. In 2007, Jim Morrison tried to fill that gap with a painstakingly researched book on all things astrolabe. Titled "The Astrolabe," it's out of print now, but if you go on Amazon you can pick up a paperback copy for \$499, shipping included.

Naturally, as a resident of the Lewes-Rehoboth Beach area, an astronomical enthusiast like Morrison could not ignore the 1769 transit of Venus. Reading Biddle's account, he couldn't help but think there was something wrong about the reported location of the observatory near what is today the historical complex. For one thing, Biddle clearly stated that he had rented a house on South Street (now Savannah Road) about .02 miles southwest of Fourth Street. That would put it a lot closer to today's Beebe Healthcare than to the Lewes Historical Society.

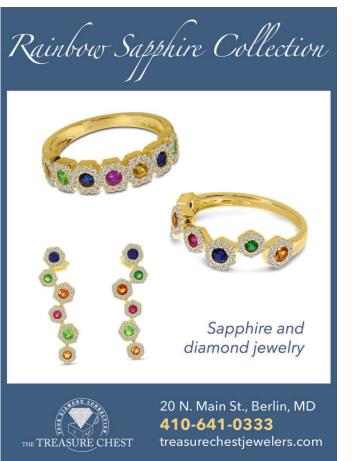
It was, then, in the spirit of Ben Franklin's alliance with London's Royal Astronomical Society that Morrison teamed up with Geoff Thurston, a member of the British Astronomical Society. Together they drafted a scholarly paper recalculating every measurement Biddle and his team made. They considered how Biddle presumed a spherical shape of the Earth when it is now known



The late Jim Morrison of Rehoboth Beach, seen here observing the 2012 transit of Venus from Cape Henlopen, was instrumental in having a historical marker erected along Savannah Road in Lewes.

to be more of an ellipsoid. They found occasional cases of transposed numbers in Biddle's calculations. Superimposing the reported route of Bailey and Thomas on a Google Maps grid, they found a consistent degree of shift from known roads.

In the end, Morrison and Thurston painted a digital bull's-eye on this spot where I'm standing in the Bethel Methodist Cemetery:





close to Savannah Road, right where the front yard of a 17th-century house would have been, the main street ensuring there would be few trees to block the view of the early afternoon sky.

Aside from some clouds, the sky I now stand under matches perfectly the one Biddle, Bailey and Thomas beheld, the sun nearly straight above my head. My telescope is aimed sunward, just as theirs were — but of course I'm not going to look directly into that eyepiece. I don't want to incinerate my retina. The 18thcentury stargazers placed heavily smoked glass in front of their telescopes, but even then it was dangerous to gaze at the sun too long. So they glanced through the glass periodically, waiting for the moment hoping they'd be looking just when the dark circle of Venus began to appear.

Biddle did not know the exact time when Venus would pierce the sun's horizon — around 2 p.m. was the best anyone could figure. But he was not depending on a pocket watch to alert him. In order to establish the precise local time, the pendulum clock he'd floated in from Philadelphia had been set at the exact moment the sun was at its zenith.

It is 2 p.m. I stand back from my telescope. From there, I'm able to see through the eyepiece that intense, focused solar light.

A few blocks from here, in the 355vear-old Rvves Holt House on Second Street, I know the shadows on the floor match perfectly those that were cast the day Biddle and Bailey looked hopefully into their eyepieces.

The echoes of that time sound around me.

The moment arrives. Biddle momentarily averts his view through the telescope. Bailey lets out a shout. Biddle peers again — and lets out a gasp. There it is: A tiny, nibble-size crescent has already been bitten out of the sun. "Now!" he vells.

Immediately, those two schoolboys Biddle hired begin chanting out the seconds — taking turns minute by minute — following the beats of the swinging clock pendulum. For the scientists looking through their telescopes, it's an 18thcentury version of a digital countdown

clock superimposed on the image of the Biddle is cursing himself for having Of 171 field observations made that

sun. The scientists look away from their evepieces only long enough to write down the times Venus initially touches the sun's disk (first contact) and when it is fully inside it (second contact). missed first contact, but Bailey got a good look and logs Venus' first appearance 2:11:53 p.m. Importantly, both men get the same time for second contact: 2:29.53. Eighteen minutes in all, to the second. day across the hemisphere, the Lewes data was considered to be among the most meticulously collected. Mathematicians in London pored over the numbers and calculated that the distance from Earth to the sun — a value known as an astronomical unit — was about 95.37 million miles.

Our best number today: Some 93 million. That's about a 2 percent error. Not bad for a bunch of guys rolling telescopes around in wooden wagons.

There is a photo of Rehoboth's Jim Morrison, bent over a reflecting telescope in a spot that looks to be Cape Henlopen State Park. He is observing a transit of Venus — only the fourth since Bailey, Biddle and Thomas lugged their paraphernalia from Philadelphia to Lewes. His excitement seems to reach out through the camera. This is the sort of thing he lived for.

I look at the photo and I'm glad Jim Morrison lived long enough to have that moment. He died on April 8, 2016, which in one of those cosmic coincidences happens to be the 280th anniversary of the birth of David Rittenhouse — the Philadelphia astronomer Ben Franklin had handpicked to head the transit-of-Venus project.

After planning for a year and dispatching Biddle's team to Lewes, on June 3, 1769, Rittenhouse finally sat down on his Pennsylvania farm to observe the event he'd anticipated for so long. But Rittenhouse didn't see first contact.

He had fainted.

Bill Newcott, an award-winning film critic and former staff writer at National Geographic Magazine, AARP the Magazine and The National Enquirer, lives near Lewes.





2020 VIRTUAL HISTORY BOOK FESTIVAL LEWES, DELAWARE

BRING HISTORY HOME

HistoryBookFestival.org



Saturday, September 12, 2020 10:00 am - 5:00 pm

> Glass • Pottery • Jewelry Watercolor • Painting Woodwork · Metalwork & More!

BethanyBeachArtsFestival.com

Presented by: Quiet Resorts