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# TEXAS

PARKS & WILDLIFE

The OUTDOOR MAGAZINE of TEXAS

## BEYOND WORDS

Our First Photography Issue

THE SKY HAS NO LIMITS

by WYMAN MEINZER

BEE'S - EYE VIEW

by ROLF NUSSBAUMER

DIVE DEEP

by JESSE CANCELMO

PLAY OF LIGHT

by LAURENCE PARENT

INSPECTING INSECTS

by CLIVE VARLACK

THROUGH OUR EYES

by EARL NOTTINGHAM,

BRANDON JAKOBEIT & CHASE A. FOUNTAIN

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KEEP TEXAS WILD Pg. 49  
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JANUARY 2010




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For the latest information on Texas' parks and wildlife,  
visit the department's website: [www.tpwd.state.tx.us](http://www.tpwd.state.tx.us).





## SPECIAL PHOTO ISSUE

WE'VE decided to let our photography do the talking in this special photo issue, so a few of our regular departments are on hiatus for this month only. Look for a return to our regular format in the February issue.



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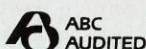
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# In the Field

## WYMAN MEINZER

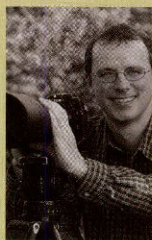
of Benjamin is a freelance photographer whose photos have graced the pages of *Texas Parks & Wildlife* magazine for 30 years. His work has been published in magazines such as *Smithsonian*, *Natural History*, *National Wildlife* and *Geo*. He has photographed and/or authored 21 large-format books since 1993. The latest, *Working Dogs of Texas* with author Henry Chappell, is available at [santafeonthebrazos.com](http://santafeonthebrazos.com)

## LAURENCE PARENT

was born and raised in New Mexico. After receiving a petroleum engineering degree at the University of Texas at Austin, he practiced engineering for six years before becoming a full-time freelance photographer and writer specializing in landscape, travel and nature subjects. Laurence has had 38 books published. His most recent are *Portrait of Austin*, *New Mexico Wild and Beautiful*, and *Big River, Rio Grande*.

## ROLF NUSSBAUMER

is a native of Switzerland but now calls Texas his home. Rolf says he is fascinated by Texas, with its vast diversity and countless photography opportunities. Wildflowers found in Texas are one of his favorite subjects and include so many more than just the popular bluebonnets, paintbrushes and Indian blankets, he says. Visit Rolf's website at [www.rolfnussbaumer.com](http://www.rolfnussbaumer.com) to enjoy more of his award-winning images.



## JESSE CANCELMO

has been capturing images of undersea wildlife in the Gulf of Mexico for more than 25 years. His recently published book, *Texas Coral Reefs* (Texas A&M Press), is a celebration of the undersea treasures off our coastline—our many natural and artificial reef habitats. Jesse's adventures and explorations take him around the globe in his never-ending quest to capture ocean images.

[www.cancelmophoto.com](http://www.cancelmophoto.com)

## CLIVE VARLACK

is a British Virgin Islander transplanted in Richmond. Clive bought his first camera in 1965—a \$15 Kodak Instamatic—and had his first photo published in 1970. Fascinated by nature in its totality, he says he focuses in on the insect world, hoping to better understand and share the roles, purposes and benefits of the entomological society relative to the human experience. More of Clive's work can be viewed at [www.theimagefinders.com](http://www.theimagefinders.com) and [www.agpix.com/clivevarlack](http://www.agpix.com/clivevarlack)

## TPWD PHOTOGRAPHERS

spend various amounts of time shooting around the state, as well as handling processing and archiving. Chief Photographer Earl Nottingham has been shooting astounding photos for TP&W for 14 years. Assistant Art Director Brandon Jakobeit handles all photography for the magazine and Photographer Chase A. Fountain is the official photo archivist for TPWD. We're proud to feature them with our fabulous freelancers in our photography issue this month.



# AT ISSUE

FROM THE PEN OF CARTER P. SMITH

**You can tell a lot about a man by the pictures he keeps.** I was reminded of that observation not long ago while sitting in the office of a South Texas rancher I was scheduled to meet. While waiting for his arrival, I could not help but gaze upon his collection of black-and-white photos on the walls, full of memories from his 70-some-odd years of life in the Brush Country. From the look of things, he had seen more than his fair share of working pens, round-ups, mornings on horseback, ranch hands, cow dogs and bird dogs, and successful deer hunts. I hadn't even met the man behind those pictures yet, but I instantly knew I was going to like him.

I had that very same impression of *Texas Parks & Wildlife* magazine some 30-plus years ago, when my grandmother on my mother's side gave me a subscription as a Christmas present. As a boy, I recall immersing myself every month in the outdoor articles, and particularly in the spectacular photographs that accompanied them. Pictures of snow-capped peaks in the Chisos, bighorn rams atop the Sierra Diablos, fall foliage at Lost Maples and McKittrick Canyon, green jays perched amidst groves of ebony trees, and majestic white-tailed bucks silhouetted against fading Hill Country sunsets all stoked my imagination and inspired me to get outdoors and fish, hunt, hike, bird watch and generally roam around the lands and waters of my home ground.

And, although my dear grandmother is no longer with us on this earth, I say a silent word of thanks to her each and every month when the new issue of the magazine comes into the office. I think she'd like the fact that I still get those same very feelings of inspiration, curiosity and pride in our state's vast beauty and heritage that I did when I was just a boy. I hope those same feelings are elicited in you when you receive your issue of this magazine.

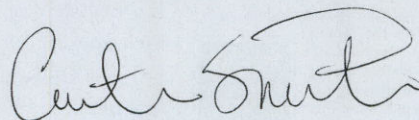
I want you to know that our magazine is created, edited and produced by a remarkable group of colleagues. To a one, they take very seriously their charge to produce a mission-focused publication that represents the most relevant, topical, wide-ranging and informative conservation and outdoor recreation magazine in the state. A big part of that charge is ensuring that the magazine's photos help complement and augment those written stories through dramatic and relevant imagery.

This issue, in contrast, is dedicated to the photographs. In these pages, you will be treated to the work of some of the most talented and creative outdoor photographers in all of Texas, if not the world. Their genius lies in making the natural richness of the Texas landscape in all its corners, forms, habitats and inhabitants accessible to us all.

I hope you enjoy the images of this edition as much as I do. And if you think about it, please share it with a friend, neighbor, colleague or maybe even a grandchild. Who knows where it may lead them?

Happy New Year's from all of us at the Texas Parks and Wildlife Department.

Thanks for caring about Texas' wild things and wild places. They need you more than ever.



EXECUTIVE DIRECTOR

*In these pages, you will be treated to the work of some of the most talented and creative outdoor photographers in all of Texas, if not the world.*

## *Texas Parks and Wildlife Department mission statement:*

**To manage and conserve the natural and cultural resources of Texas and to provide hunting, fishing and outdoor recreation opportunities for the use and enjoyment of present and future generations.**




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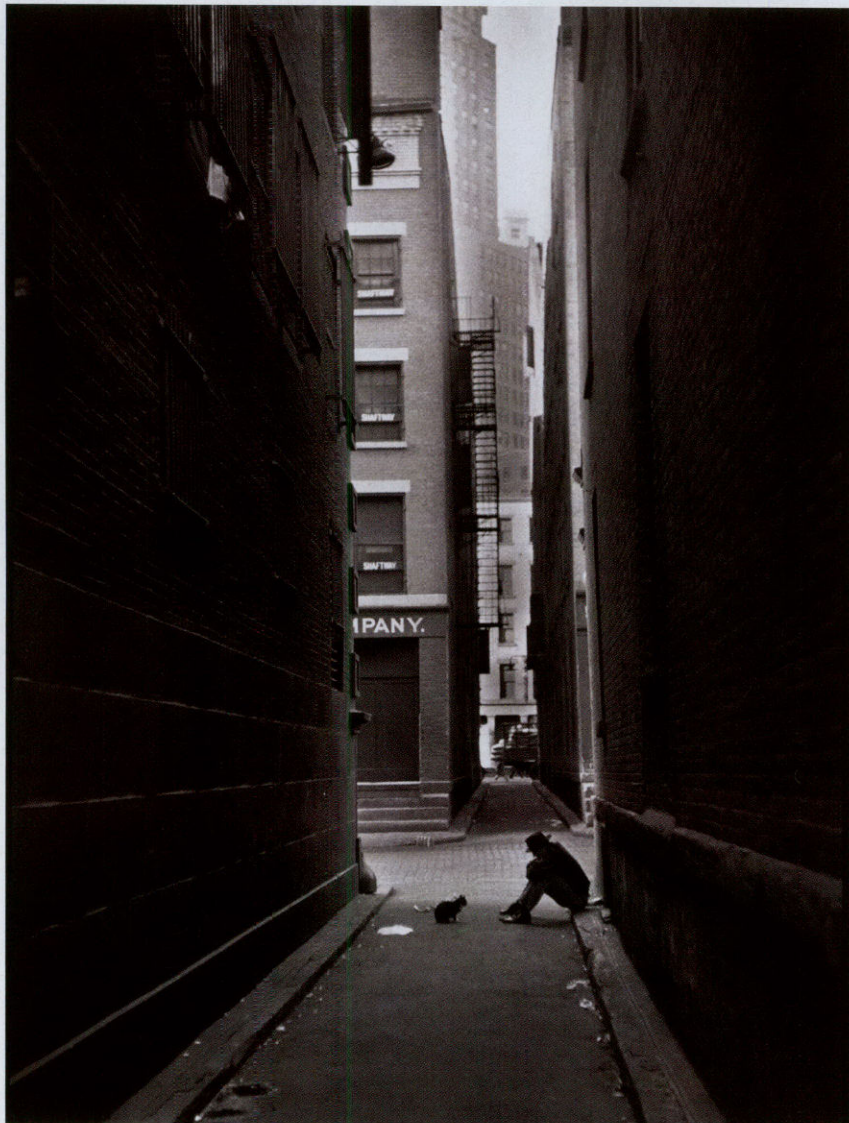


# SCOUT

NEWS AND VIEWS IN THE TEXAS OUTDOORS

## WHY WE SHOOT

*Our chief photographer explores the psychology of photography.*



The creative eye of a photographer is as unique as the individual. Regardless of the subject matter, the photograph yields a tangible method of preserving a split-second of existence, what Henri Cartier-Bresson described as "the decisive moment."

**It's a simple question** that I often ask of other photographers — one that even a seasoned pro can have difficulty answering and, as rhetorical questions go, causes an individual to look below the surface and find a deeper truth.

*Why do you take pictures?*

After a contemplative pause, my colleague Wyman Meinzer answers that question in halting and measured beats. "I take pictures ... because ... number one ... I can't draw." Only with further probing does the underlying truth emerge as to why he chooses photography as an occupation.

"When I see beautiful light on a landscape, I get an emotional rush," Wyman says. "A photograph is my way of sharing that emotion with others. The camera is my paintbrush."

Implicit in his observation is that the camera, like a paintbrush, is a means to an end — a tool that allows his inner artist to share an experience and the emotions that go with it.

Joseph Niepce, another visionary who also lacked painterly talents, might have asked himself the same "why" question in 1826 as he developed the first faint photographic image of a French farmhouse on a piece of sensitized pewter, ushering in the magic of photography and creating a new palette composed of light.

Since the creation of that memorable image, photographic processes have evolved from time-consuming chemical-based processes of creating images to simpler and commercialized methods that allowed the masses to enjoy photography.

Today, the electronic image is rapidly



replacing traditional film in its ability to not only take a quality photograph but also to then instantly share it with the world. The camera has become the tool of choice in documenting life as it happens, and statistically there is a good chance that, at any given time, most of us have some type of camera with us and for each of us there is a “why.”

Those reasons are as unique as the number of individuals behind the cameras and yet, there are some basic similarities. Many use photography primarily as a tool to remember and savor the fleeting moments in life.

As French photographer Henri Cartier-Bresson noted, “Photographers deal in things which are continually vanishing and when they have vanished there is no contrivance on earth which can make them come back again.” Generations of treasured family albums attest to the power of a photograph to let us re-visit the past and re-ignite emotions.

Others pursue the “trophy” aspect of photography—a challenge for the perfect picture. The wildlife photographer will spend days on end returning to a cold blind waiting for the perfect animal, as will the landscape photographer waiting



▲ Clearing skies reveal a verdant Chihuahuan desert after a passing thunderstorm, giving the photographer the elements needed to create a visual sense of place.

atop the summit for the perfect mix of light and subject.

The quest to get the perfect photo becomes a hunt, and the photographer the hunter. Interestingly, many traditional hunters now prefer to shoot with a camera rather than a gun.

In the end, every individual has a reason for enjoying photography. However, there is one common underlying (perhaps subconscious) commonality that unites us.

Whether photographing a gorgeous sunset, the delicate patterns of a butterfly wing or a child’s smile, the simple act of taking a photograph forces us to pause our lives for a brief moment while concentrating on the scene in the viewfinder.

In a helter-skelter world that seems to be

spinning faster each day, the click of the camera shutter gives us an opportunity to do the impossible — to arrest time for one precious fraction of a second. The resulting image provides a respite with which to appreciate and savor the moment.

Dorothea Lange, known for her striking documentary photographs of the Great Depression, noted “The camera is an instrument that teaches people how to see without a camera.”

Quite simply, the camera is merely a tool that gives us the opportunity — and possibly a need — to pause life momentarily and to re-affirm that we are participants in its magnificence.

The photograph is just the evidence. ★

—Earl Nottingham



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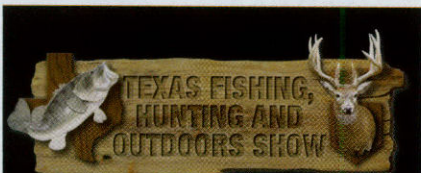
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# Deceptively Delicate

Water-loving maidenhair ferns grace creek banks and ponds.



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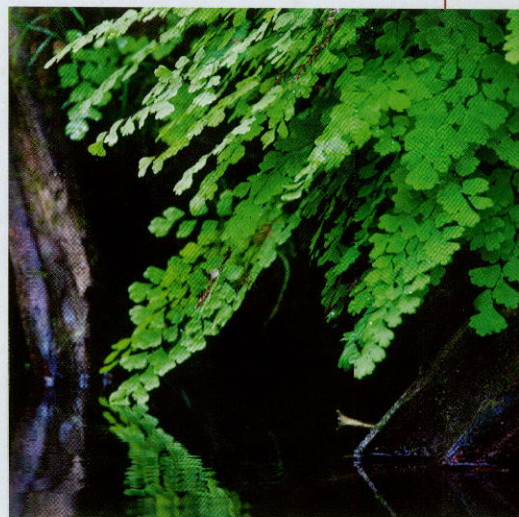
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David Mahler's interest in Southern maidenhair and other native Texas ferns started years ago with a field guide he kept in hand while working as a camp counselor.

"Ferns have such wonderful shapes, and they're so interesting," says Mahler, an Austin ecologist and landscape designer who often incorporates the delicate, yet hardy plants into ornamental ponds and habitat restorations. For instance, mounds of Southern maidenhair fronds spill from limestone crevices into a faux Hill Country stream that he designed at the Lady Bird Johnson Wildflower Center.

In the wild, Southern maidenhair — which occurs throughout the western half of Texas — grows in moist, shady spots along creek banks and limestone ledges. Another common name for the species — Venus-hair fern — originated from its



▲ Maidenhair ferns add a graceful touch of greenery to water features.

botanical name and refers to the plant's lazy, fan-shaped leaflets. In Latin, *Veneris* refers to the goddess Venus while *capillus* means hair.

Just so you know, not every so-called fern is a fern. True ferns reproduce by releasing dust-like spores. Nonnative asparagus fern, a misnomer listed as an invasive species in Florida, produces flowers and seeds. As for those microscopic spores, maidenhair and other ferns produce millions of them on the underside of leaves. Only a few survive. By means of cell division, those develop into tiny, heart-shaped plants called gametophytes that have simple root systems.

The ho-hum process gets steamy, so to speak, when a gametophyte grows male and female organs. The appropriate parts turn out spermatozoids and an egg. Via a water drop, the egg is fertilized and — *voilà!* — another fern takes root in a habitat. Like many plants, Southern maidenhair also spreads through rhizomes (underground stems that send out more stems and roots).

"That's mainly how I grow maidenhair and four other common ferns in my backyard nursery for my projects," Mahler says. "Now if I could only grow the other 130 Texas native species!" ★

— Sheryl Smith-Rodgers

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# Target Practice

*Lockhart lessons help you hit the bull's-eye.*

## Winter doldrums got you down?

Need a boost? Here's a suggestion: Bundle up, head outside and shoot a bow. Liz LaRue, an interpretive ranger at Lockhart State Park, will show you how.

"I've always had an interest in archery," she says. "My grandfather was a bow hunter, and when I was nine years old, he bought me one. We'd go to the archery range and practice. I never hunted for game, but I target-practiced a lot. That time my grandfather spent with me meant so much. It also inspired me to love nature and do the kind of outdoors work I do today."

This month and next, LaRue will teach four afternoon sessions, open to all ages. Bows and arrows are provided at no cost; just call ahead to reserve a spot. "There's also no charge for the classes," she adds. "Participants will need to pay the \$2 park entrance fee, but that's it!" The park's new classes are affiliated with the Texas Parks and Wildlife Department's archery program, which promotes the challenging sport in more than 250 Texas schools.

Aside from teaching archery, LaRue hosts other monthly outdoor programs, such as nature hikes, bird walks and wildlife gardening. Check the park's online calendar for more information and schedules.

Throughout the 263-acre park, stone bridges, dams along Clear Fork Creek and other structures stand in silent testament to the hard work of Civilian Conservation Corps workers, who built Lockhart State Park in the 1930s. On a scenic overlook, they also constructed a wood-framed recreation hall, a popular site for weddings, reunions and church groups.

"A local man who worked on the project as a young man told us how, around lunch time, he'd look through a surveying tool called a transit and check the clock on our county courthouse," says J. Hess, park manager. "That building is two and a half miles away!"

Workers also built the park's nine-hole golf course, open daily year-round. Park facilities include campsites with

utilities and water/electricity only, 1.5 miles of hiking trails, picnic tables, a swimming pool, playground and multi-use basketball courts.

"What I enjoy most about this park is its rural setting, even though we're close to Lockhart," Hess says. "Just about every night, you can hear coyotes howl. You can also spot bobcats, deer and armadillos. And on the creek, we have a beaver family."

One-hour archery sessions will run from 1 to 5 p.m. Saturday, Jan. 23, and Saturday, Feb. 13. Each session is limited to six right-handed students and two left-handed. Accessible for the mobility and hearing impaired.

Lockhart State Park is located one mile south of Lockhart off U.S. 183. For more information, call 512-398-3479 or visit [www.tpwd.state.tx.us/lockhart](http://www.tpwd.state.tx.us/lockhart). ★

— Sheryl Smith-Rodgers



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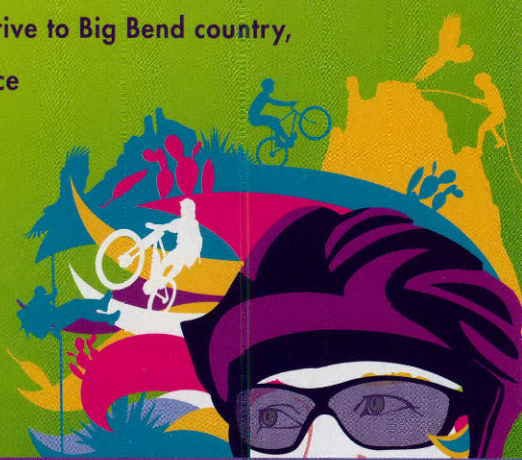


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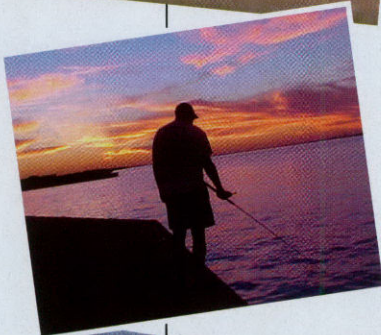


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# Bag of Worms

*That's not a pine cone hanging on your evergreen.*

So those twiggy "pine cones" hanging from your tree's branches look right at home, right? Harmless, too. That'll change in spring when evergreen bagworms hatch and disperse, possibly triggering an infestation.

Though dubbed a worm, *Thyridopteryx ephemeraeformis* begin life as moth larvae. After overwintering as eggs inside their two-inch-long cone, the caterpillars scoot off in search of food. Many balloon away on a strand of silk.

Here's where the species turns weird. Newbie bagworms — barely 1/25 inch in length — use silk to attach sand-like fecal pellets around their body, creating a mini bag. Through a top opening, the caterpillar, like a snail, sticks out its head and front legs for mobility. When threatened, it pulls back into the bag and shuts the opening. As the larva eats and grows, it layers leaf debris like shingles around the bag. By late summer, the inch-long larva stops eating and pupates within the cone.

Males emerge as fuzzy black moths with clear wings. Not females. Within their bags, they pupate into egg-making machines that lack eyes, mouths or legs. Attractive, eh? Males think so, once they locate a female via her sexy pheromones (chemical signals). After mating, a female deposits up to 1,000 eggs within the bag, then dies. The twiggy cone remains in place through winter, unless someone like you — fearing an infestation — decides it's not so at home there! ★

— Sheryl Smith-Rodgers



↑ Beware the "pine cones" that really contain green bagworm eggs.

## SIGHTS & SOUNDS

TEXAS PARKS & WILDLIFE TV AND RADIO



### TELEVISION

LOOK FOR THESE STORIES IN THE COMING WEEKS:

**Dec. 27 – Jan. 3:** Preserving water for rivers and bays; Wylar Aerial Tramway; spring white bass run; livestock and toads on the Round Bottom Ranch; coastal birds.

**Jan. 3 – 10:** Growth trends impact Texas water; tent tips; Atlanta State Park; saving San Antonio's wild habitat; Enchanted Rock.

**Jan. 10 – 17:** Conserving water; Fort Richardson; kids discover Big Bend Ranch; invasive species.

**Jan. 17 – 24:** Night fishing; oyster king Sammy Ray; Mustang Island; native grasses; Austin's Blunn Creek.

**Jan. 24 – 31:** Wade fish; Eisenhower State Park; Wildcat Mountain Ranch; city biologists; Dallas plants.



Sammy Ray may know more about oysters than anyone in Texas. Meet "the oyster king" the week of January 17–24.

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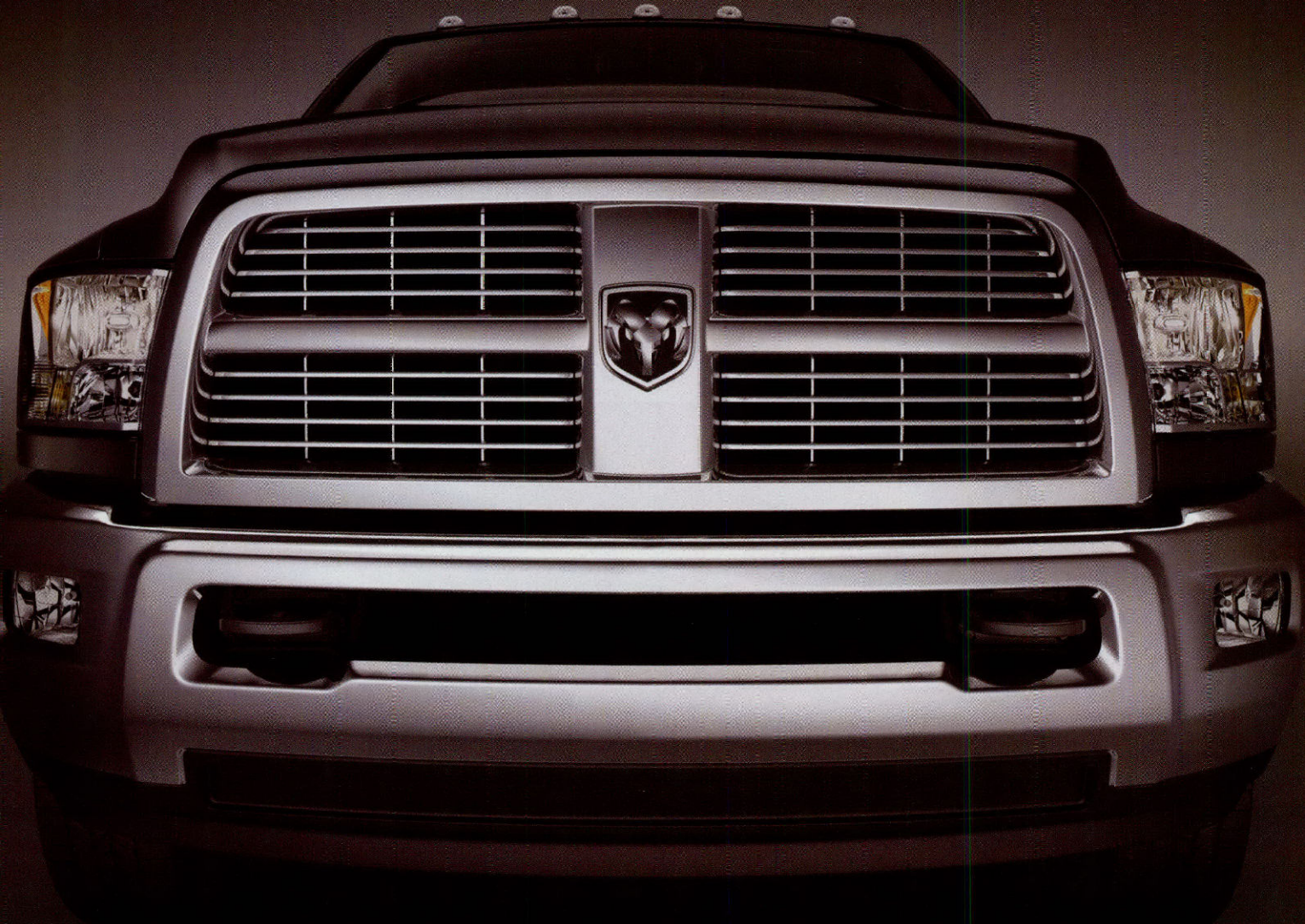






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[ THE *Sky* HAS NO LIMITS ]

« BY WYMAN MEINZER »



Lightning strikes over The Three Sisters mountains as the old Shafter Cemetery is painted by Meinzer's lights.





**This page:** A summer lightning display over The Big Empty, the rolling plains of Knox County.  
**Opposite:** A dangerous storm casts a formidable shadow over the open rangeland of Knox County.









A lightning exhibition over the badlands and big ranch country between Benjamin and Truscott



An impending storm in the rolling plains of King County



A summer storm in its dying throes seemingly offers a nuclear display in its last act of defiance in King County





A magnificent rainbow offers a grand finale to a passing thunderstorm in the desert land west of Shafter.





Squarebud daisy (*Tetragonotheca texana*), flower bud opening



[ BEE'S-EYE *View* ]

« BY ROLF NUSSBAUMER »



Phlox (*Phlox sp.*), closeup of center of flower









Dayflower (*Commelina erecta*), whose stamens look like little butterflies

Blue curls (*Phacelia congesta*), blossom





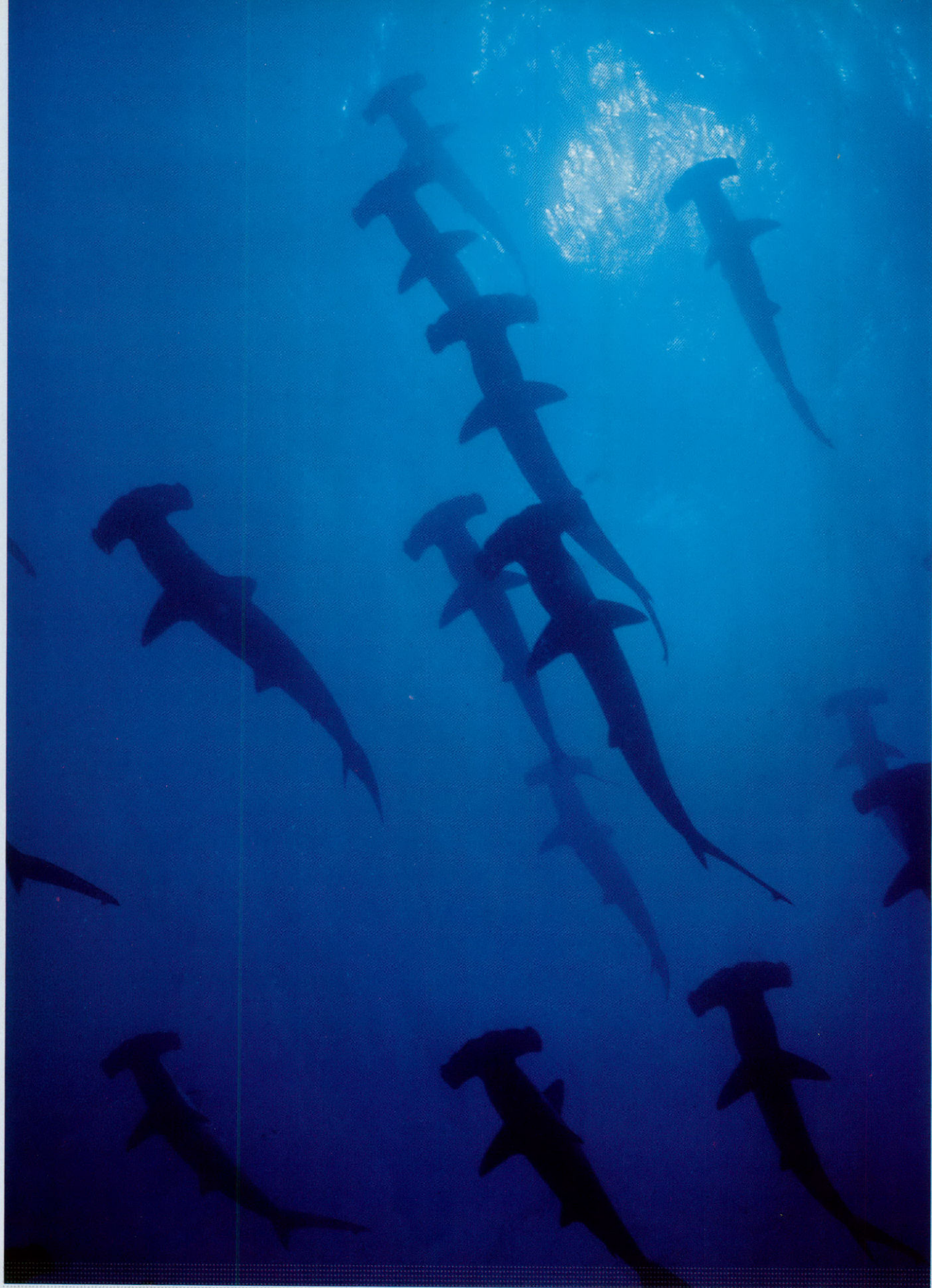
Texas bluebonnet (*Lupinus texensis*) in a wildflower field

**Opposite**, clockwise from top left: Texas spider lily (*Hymenocallis liriosme*), stamen close up; wine cup (*Callirhoe involucrata*), dew-covered flower petals; rattlesnake flower (*Brazoria truncata*); propeller flower (*Alophia drummondii*)









[DIVE *Deep*]

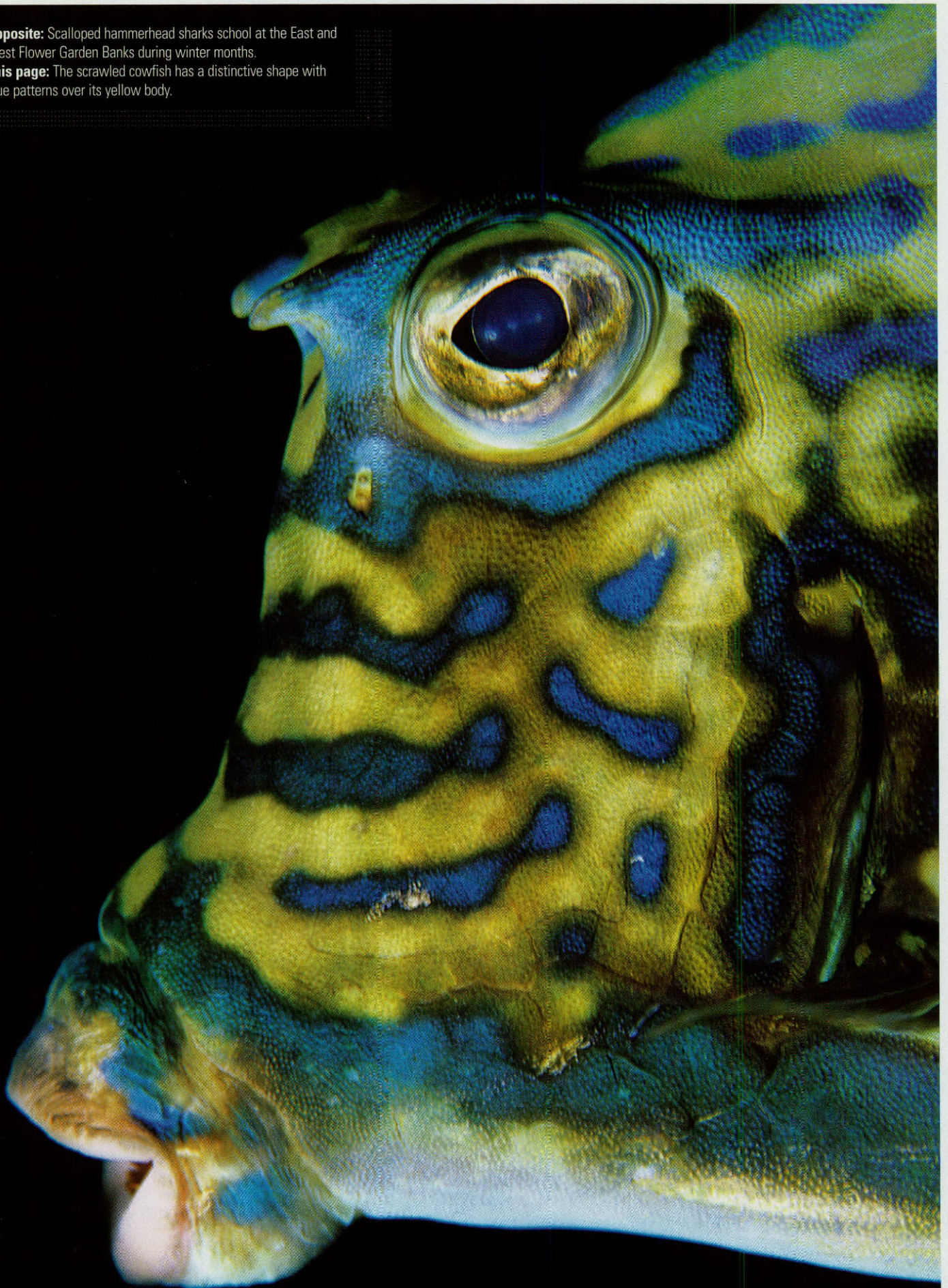
26 ★ JANUARY 2010

« BY JESSE CANCELMO »



**Opposite:** Scalloped hammerhead sharks school at the East and West Flower Garden Banks during winter months.

**This page:** The scrawled cowfish has a distinctive shape with blue patterns over its yellow body.





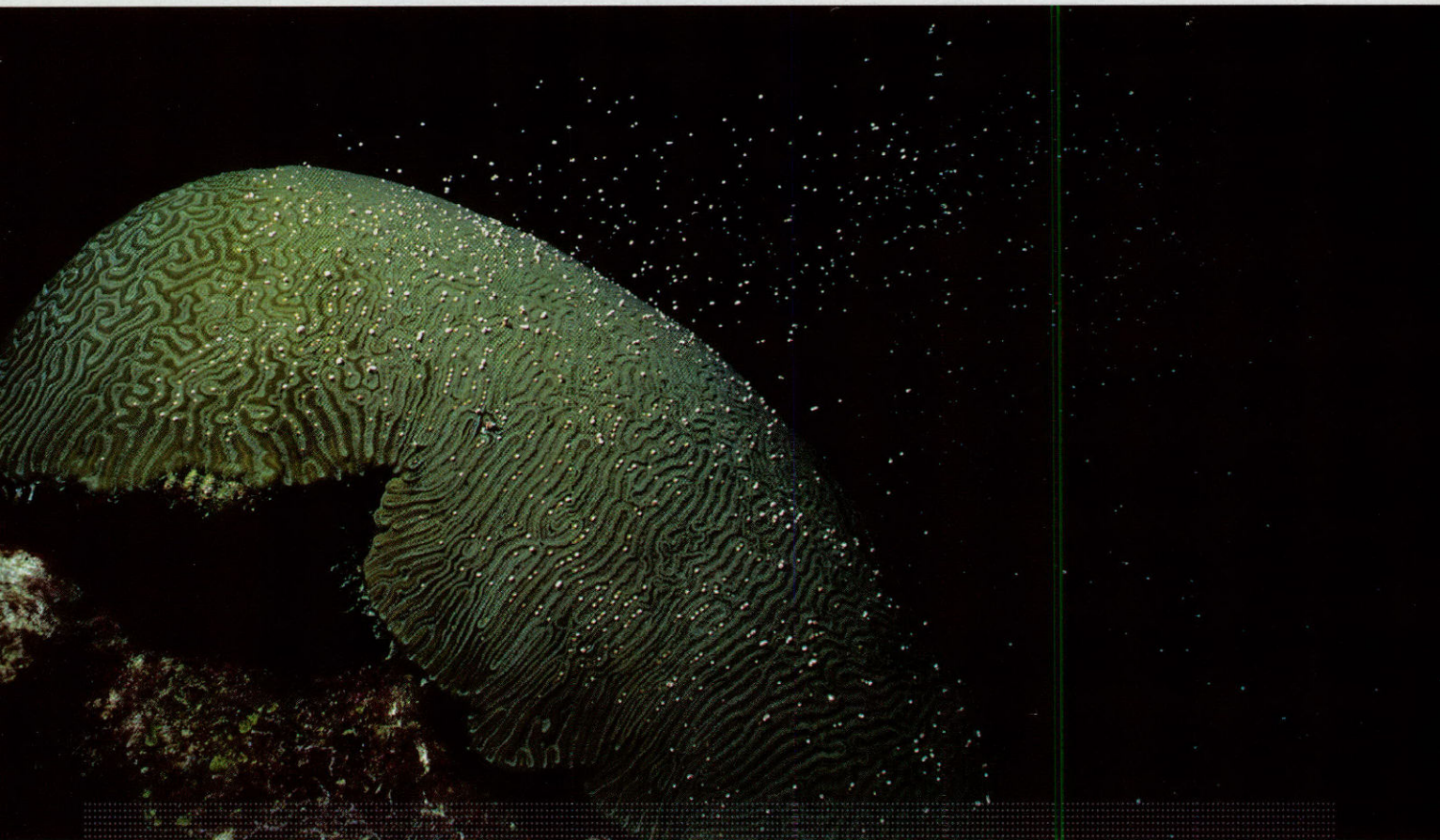


**Above:** Ruby red brittle stars are nocturnal creatures that become aroused when the coral spawns.

**Below:** Normally nocturnal spiny lobsters are often seen during the day at Stetson Bank.







**Above:** Brain coral heads at the East Flower Gardens Bank erupt with spawn seven to 10 nights after the August full moon.  
**Below:** Red night shrimp are seen during night dives at the East and West Flower Garden Banks.







**Above:** Formations of spotted eagle rays cruise through the East and West Flower Garden reefs in winter.  
**Below:** Barracudas are known for their lightning speed and intimidating dentures.



**Below:** A loggerhead turtle swims through a gas production platform near the East Flower Garden reef.





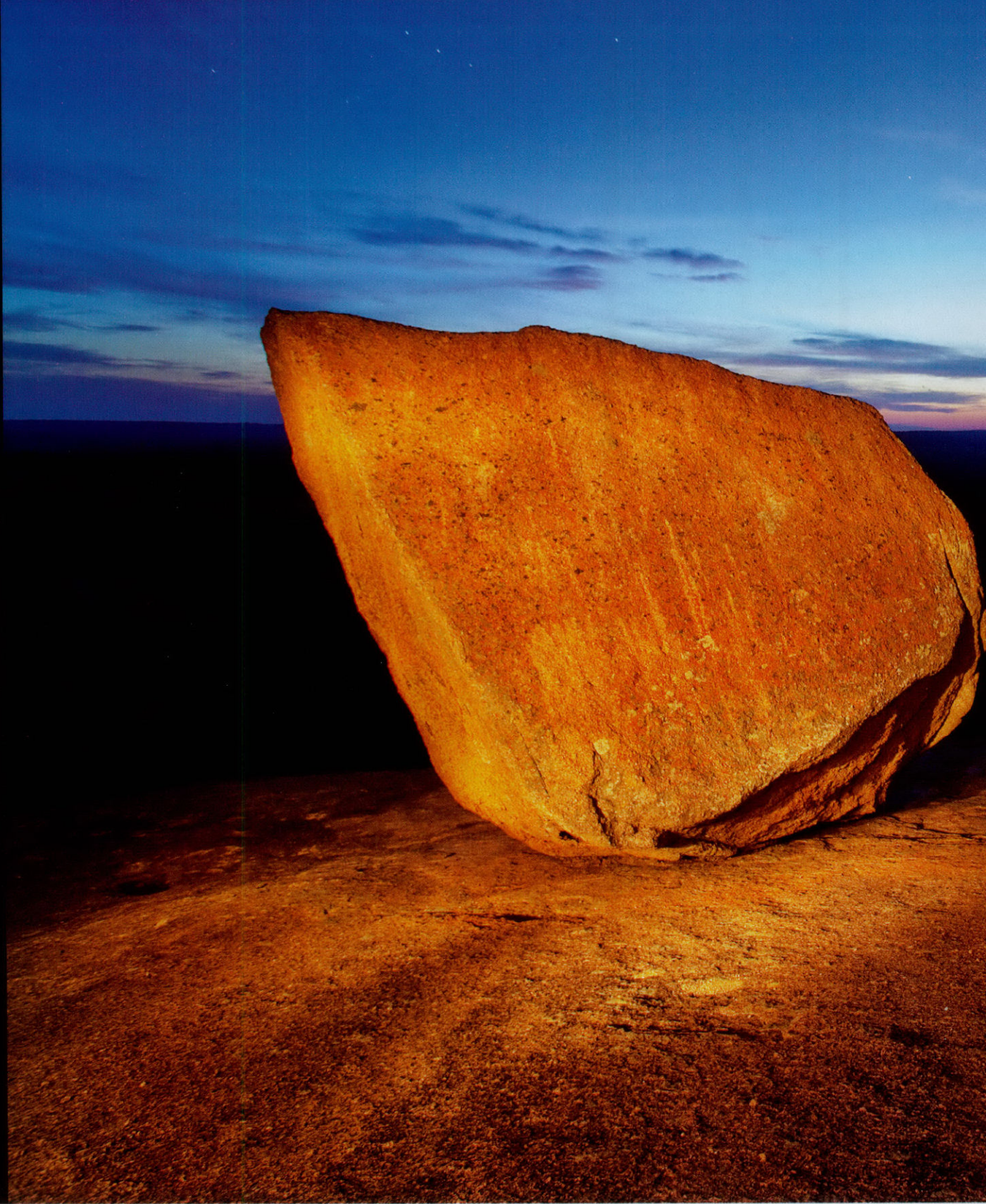


..... A majestic manta ray glides above the East Flower Garden reef.  
.....

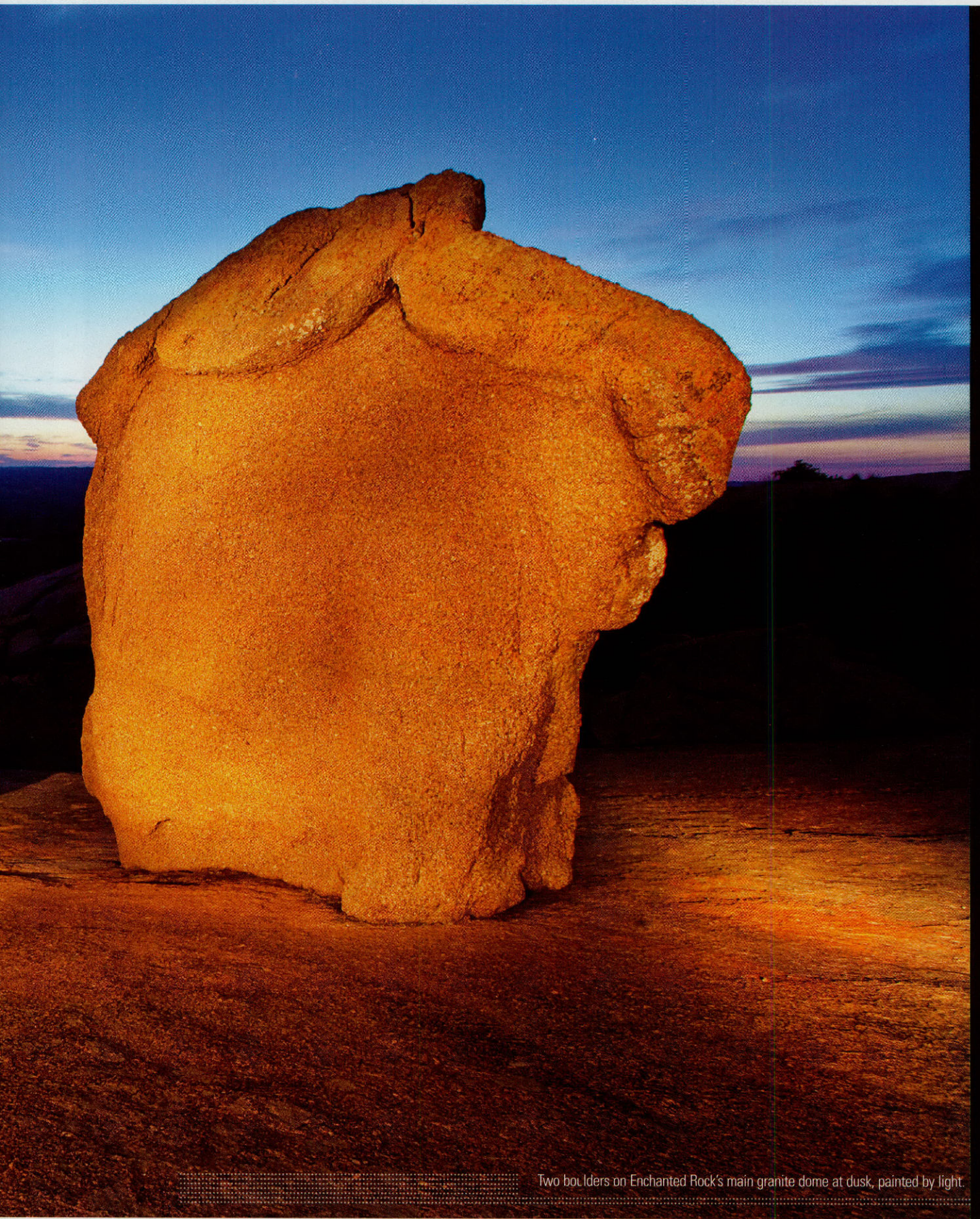


PLAY OF *Light*

« BY LAURENCE PARENT »







Two boulders on Enchanted Rock's main granite dome at dusk, painted by light.









**Opposite:** Ranch windmill on the grasslands near Marfa, with a bright full moon.

**Above:** Old abandoned truck with Christmas lights with a sunset backdrop in the desert.

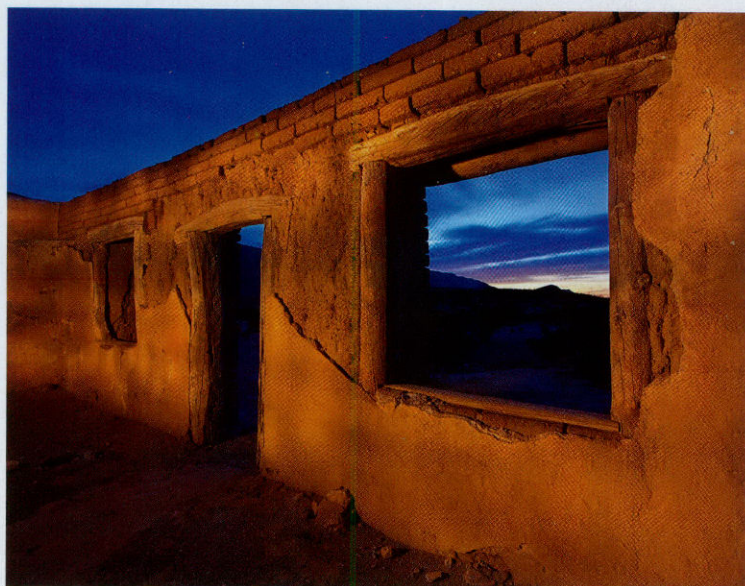
**Right:** Illuminated adobe ruin in the ghost town of Pueblo Nuevo, Chinati Mountains.







**Above:** Stone arch created by balanced rock, at dusk with artificial lighting, Big Bend National Park, Grapevine Hills.



**Left:** Old adobe house ruin at dusk, lit up with lights, in the Castolon area of Big Bend National Park.

**Opposite:** Stone walls created by Donald Judd at his former compound, Las Casas (private ranch in the Chinati Mountains) topped by a starry night sky.









# INSPECTING



Paper wasp worker, *Polistes canadensis*. While more people-tolerant than yellow jackets and hornets, these wasps will not hesitate to strike.



# Insects

« BY CLIVE VARLACK »



Green lynx spiders (*Peucetia viridans*) have been observed on the same leaf for three days, waiting for prey.





A polyphemus moth caterpillar (*Antheraea polyphemus*) rests between feedings.

**Opposite:** A praying mantis (*Mantis religiosa*) consuming a freshly caught damselfly.







**Opposite, top, from left:** Nine-spotted ladybug beetle (*Coccinella novemnotata*), the beautiful and beneficial aphid-destroying bug;; a golden silk spider (*Nephila clavipes*), the world's richest insect, lives on a golden web.



A doubleday bluet (*Enallagma doubledayi*) waits on a grass stalk for unsuspecting flying insects to come close before pouncing on them.

**Opposite, bottom, from left:** Giant swallowtail butterfly caterpillar (*Papilio cresphontes*) with defensive osmeterium fully extended; the rusty skimmer dragonfly face (*Paltothermis lineatipes*) displays mesmerizing behavioral antics.



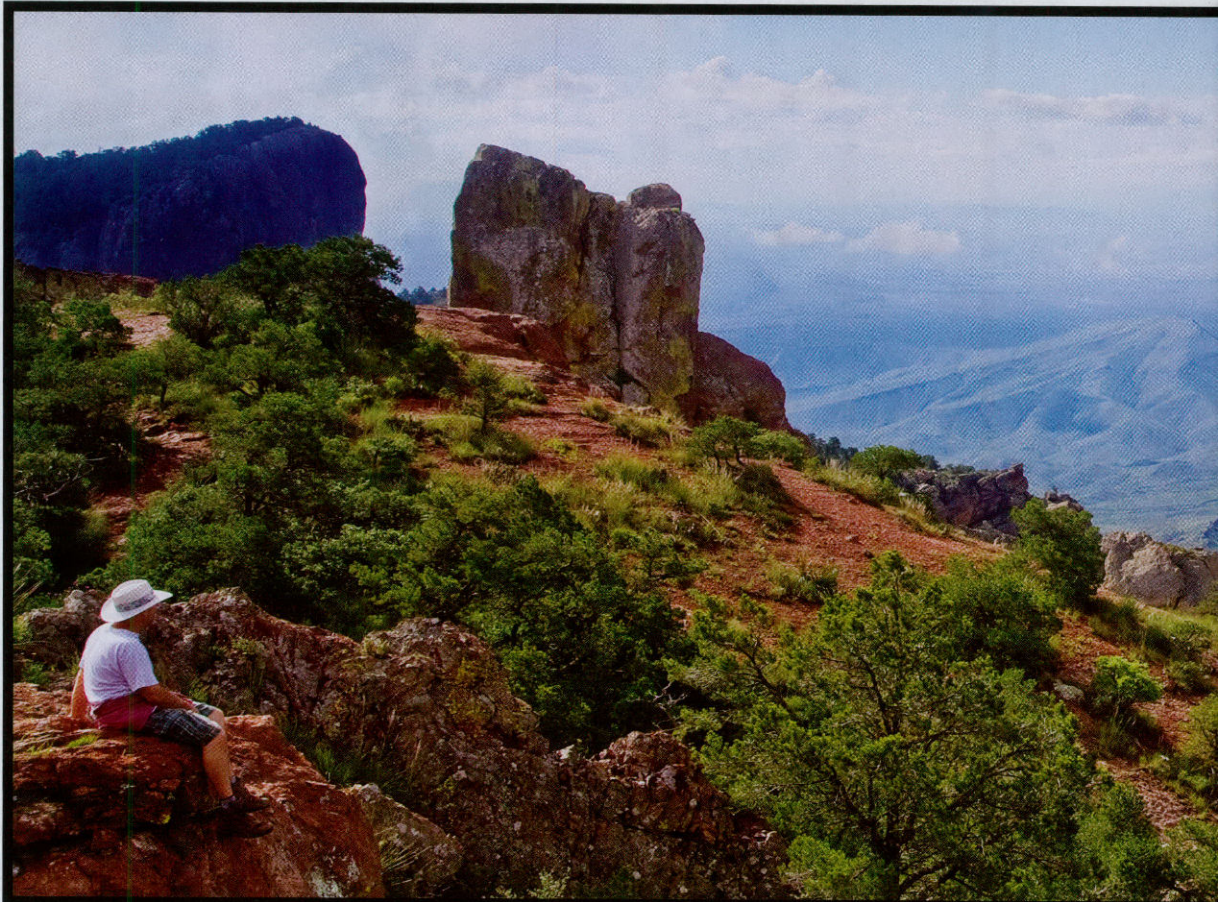




[ THROUGH OUR *Eyes* ]  
« BY EARL NOTTINGHAM, BRANDON JAKOBEIT & CHASE A. FOUNTAIN »



**Above:** Not your usual bluebonnet photo. Earl Nottingham captured this eerie shot on a foggy spring morning in Bell County.







**Below:** Troy Jakobeit pauses to reflect on the magnificent view at Big Bend National Park, by Brandon Jakobeit.







Reflection of Garner State Park's Old Baldy in the Frio River (above) and the unforgettable spring-fed pool at Balmorhea State Park (below), both by Chase A. Fountain.

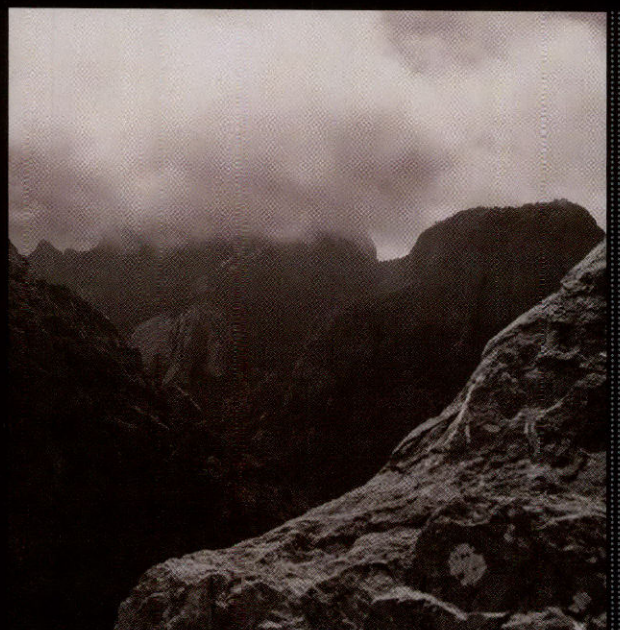






A dock and cypress trees in fall color at Caddo Lake, by Earl Nottingham.





Fog as a landscape at Big Bend National Park, by Brandon Jakobett.



# Keep Texas Wild



## ALIEN INVADERS!

Some plants and animals don't belong in our natural areas.



### » DAMAGE DOERS

WHAT MIGHT HAPPEN IF SOME POLAR BEARS got loose in Texas? Sounds silly, but they wouldn't live long unless we rounded them up and sent them back to the North Pole. But what if ants from South America crawled off a cargo ship along the Texas coast and easily found what they needed to survive? Year after year, they would reproduce and multiply. They might even attack Texas ants and reduce their numbers, kill baby animals of all kinds and sting humans repeatedly. Believe it or not, all that has actually happened. Today, biologists list the imported red fire ant among the state's many "invasive" animals and plants. As you'll learn, invasives hurt our natural world so we need to do what we can to keep them out of Texas!

*Mediterranean gecko*

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## » MOST UNWANTED ANIMALS



FERAL HOG

THE COSTS to prevent, monitor and control invasives across the U.S. are \$13 billion a year!



NUTRIA



EUROPEAN STARLING



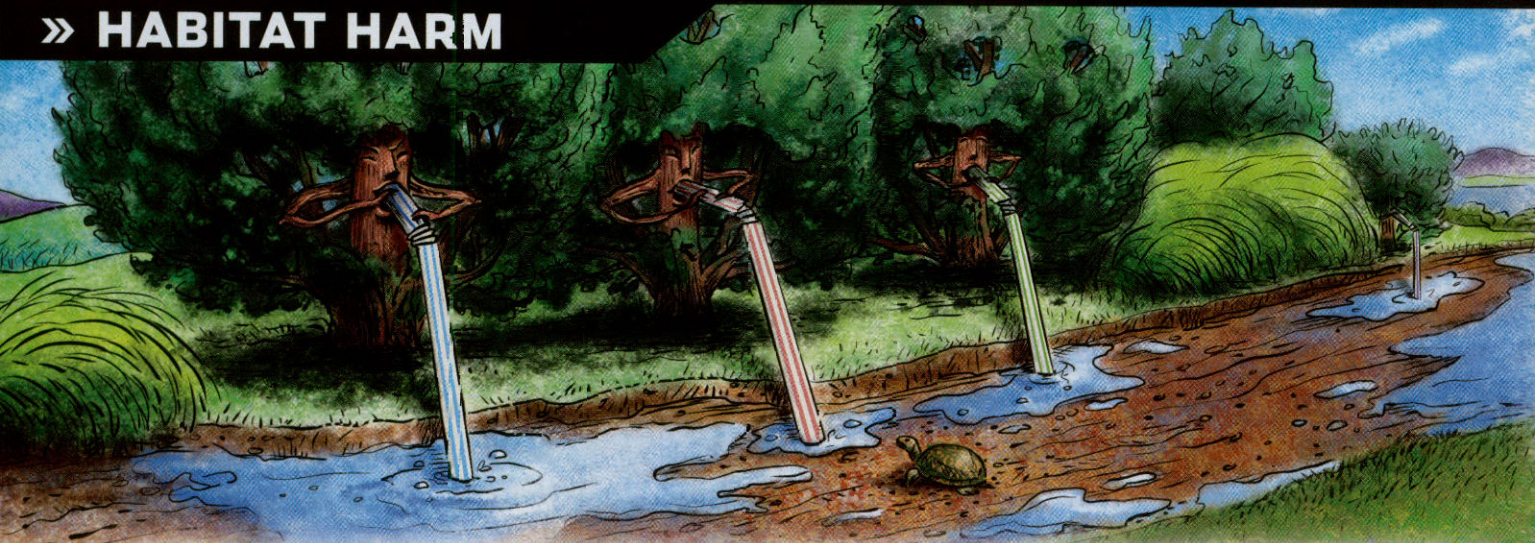
RED IMPORTED FIRE ANT



AFRICANIZED HONEYBEE

THIS PAGE: ROY F. NUSSBAUMER / ROYFNP.COM

## » HABITAT HARM



ALONG A RIVER OR IN THE DESERT, certain insects, birds, reptiles and other animals live among the grasses, plants and trees. Together, those plants and animals are considered to be “native” because they’ve lived in the same place long before humans arrived. But what happens if an invasive plant takes root? In West Texas after 1900, people planted a European tree called

saltcedar along the Rio Grande River. They hoped the trees would keep their riverbanks from washing away. Instead, the saltcedars — which thrived and gradually grew out of control — used so much water from the river that, in later years, it went dry in places. Their thick branches also blocked the sun, killing native plants that grew nearby. Now, no one likes saltcedar!



Did you know?

## HOW MANY INVASIVES ARE IN TEXAS?

- 79 plants (includes 12 aquatic/wetland plants)
- 10 mammals
  - 4 birds
  - 7 fishes
  - 11 insects
  - 11 mollusks and crustaceans

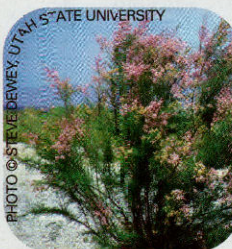
HYDRILLA



CHINESE TALLOW



GIANT SALVINIA



SALT CEDAR (IN BLOOM)



WILD HYACINTH

## »HOW DO INVASIVES GET TO TEXAS?

JUST A FEW WAYS...

- RELEASED BY HUMANS (channeled apple snail)



- SHIPS EMPTY THEIR BALLAST WATER (brown mussel)



- PLANTED BY HOMEOWNERS IN YARDS (Chinese tallows)



- RELEASED FOR HUNTING (oudad)



## »ACTION PLAN

WHAT'S BEING DONE TO STOP INVASIVES?



- \* INCREASING PUBLIC AWARENESS.



- \* SOME PLANTS AND ANIMALS ARE LEGALLY BANNED.



- \* EXPERTS ARE RESEARCHING THE PROBLEMS.

ILLUSTRATION BY CHET PHILLIPS

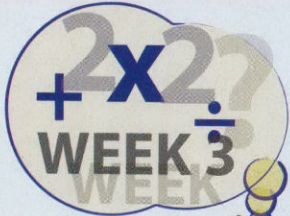




# Spike's Activity Page



## » WILD MATH

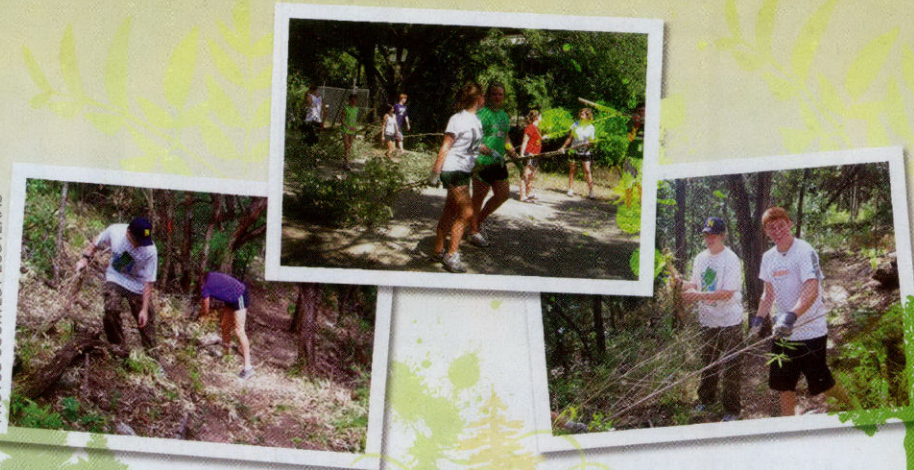


**IN EAST TEXAS**, many people are working hard to remove an invasive aquatic plant called giant salvinia from Caddo Lake. If not controlled soon, this floating fern from South America could cover the entire lake and endanger the lake's native fish, birds and wildlife. Imagine that you're a biologist who wants to know how long it will take giant salvinia to fill the lake. The first week, you see 2 acres of the plant. Each week, the area doubles. So, the second week, there are 4 acres (2 X 2). How many acres of giant salvinia will there be in Week 3? Week 4? How far can you go? Can you figure out how many weeks it will take to fill a 10,000-acre lake?

## » ECO EXPERTS

AFTER LEARNING HOW HURTFUL INVASIVE PLANTS CAN BE, several Austin 10th graders decided to take action in 2006. Instead of sleeping late or playing video games on a Saturday, they put on heavy gloves and removed as much bamboo as they could from Bright Leaf Preserve, a 200-acre natural area not far from downtown Austin. A year or so later, the concerned teens – led by 17-year-old Jordan Sessler – formed their own organization called EcoTexas as a way to continue their fight against invasives in Texas. “Today, after lots of hard work at Bright Leaf, we’ve restored three acres of native forest,” says Sessler, who’s now a student at Harvard University in Cambridge, Massachusetts. “By this year, we will also finish removing all invasive plants on 60 acres at Zilker Preserve. Plus, we’ve cleared invasives at dozens of other parks, too.” As if all that’s not enough, EcoTexas volunteers work to stop the spread of invasive plants by educating people. “For instance, 85 percent of invasive plants are planted by people in their yards,” Jordan explains. “If we can just keep getting the word out, then hopefully they’ll buy native Texas plants instead. We have to protect our natural environment for the sake of our children and grandchildren.”

PHOTOS COURTESY ECOTEXAS



## » KEEPING IT WILD

NOT ALL NON-NATIVE PLANTS are invasive. For instance, your parents may grow crape myrtles for their colorful blooms. Although they're not Texas natives, those crape myrtles aren't invasive because they just won't grow well outside a tended yard. However, you may have some invasive plants in your yard. Look to see if you any of these common ones. If you do, ask your parents about replacing them with the suggested Texas natives.

 <b>Nandina</b>	»»	 <b>Turk's cap</b>
 <b>Chinese tallow</b>	»»	 <b>Bigtooth maple</b>
 <b>Chinaberry</b>	»»	 <b>Mexican plum</b>
 <b>Pyracantha</b>	»»	 <b>Evergreen sumac</b>
<b>INVASIVE</b>		<b>NATIVES</b>

NANDINA © CHRIS EVANS; RIVER TO RIVER CWMA; CHINESE TALLOW © JAMES H. MILLER, USDA/ARS; CHINABERRY © TED BODNER, SOUTHERN WEED SCIENCE SOCIETY; ALL OTHERS BY TPWM



**NEXT MONTH:  
Buffalo Soldiers**

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PHOTO BY TPWM



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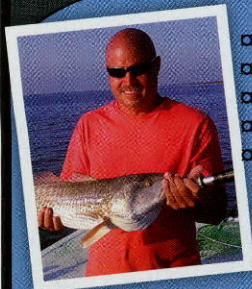
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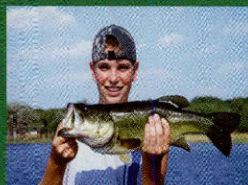
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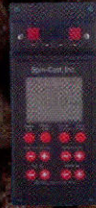
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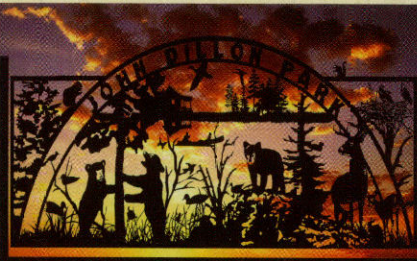
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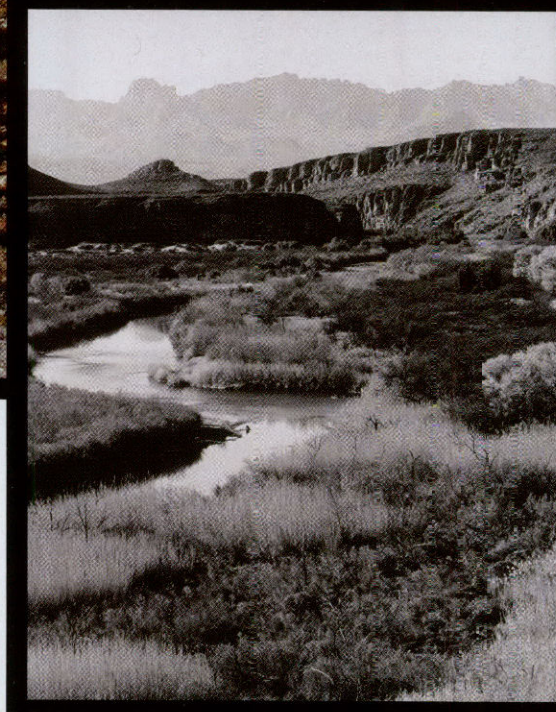
JACKIE MATTHEWS



Last September, *Texas Parks & Wildlife* magazine was honored to be a sponsor of the first-ever Shooting West Texas photographic symposium at Sul Ross State University in Alpine. Assistant Art Director Brandon Jakobeit, Chief Photographer Earl Nottingham and Photographer Chase A. Fountain participated in a variety of ways, including helping to judge the photo contest. We'd like to share three of the judge's choices here. You can find more spectacular shots from participants on our website, [www.tpwmagazine.com](http://www.tpwmagazine.com).



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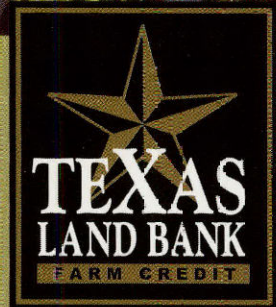
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