



Inspired by Nature

Photographs from the E.O. Wilson Biodiversity Foundation



Biodiversity is everything around us, all of nature, including ourselves. It is the living fabric of our lives—an intricate web of interrelationships that is vital to the maintenance of the world as we know it. *Inspired by Nature* invites you to connect with biodiversity and experience how we are inspired and transformed by this connection.

Save the biosphere and you have the capacity to save the world. —E.O. Wilson

E.O. Wilson has said, “There is no greater high than discovery.” By letting us see the world in ways we may not have perceived before, these photographs allow us to discover and enhance our collective experience of the beauty and wonder of our biodiverse planet. We hope these images create a deeper appreciation of the living world and inspire greater environmental stewardship. If we save the biosphere, we have the capacity to save the world.

Photographs and Text by Charles J. Smith



Path to Yellowstone

Often called the American Serengeti, Yellowstone is the last place in the United States where a visitor can observe the full cast of keystone species playing their roles in the quest for survival and reproduction. Everyone is here; grizzly and black bears, bison, grey wolf, deer, elk, moose, pronghorn, eagle, osprey, cutthroat trout, and thousands of other supporting species, all discoverable to those who take the time to go and look.



Gull Lake with Fog

At the bottom of the exceptionally steep eastern flank of the Sierra Nevada mountains is a string of glacial lakes. The largest is Mono Lake, but tiny Gull Lake is surely the most charming. Not far from here lies the John Muir trail, named after the great Scottish-American naturalist and writer who changed our view of nature with his passion, eloquence, and spiritual relationship with nature.



Sandhill Cranes on the Platte River in Nebraska

Cranes are mischievous and slightly crazed when the race is on to breed and get to the feeding grounds in the North. Some of the males will dance and show off in the most wondrous ways—springing up and chucking various bits of debris at rivals. That’s my interpretation as a fellow fella, but take it with a grain of salt. Some say they are merely relieving social stress with their antics, but only the cranes really know.



Gulls and Terns in the Mangroves of Northern Peru

The world’s greatest fishery runs along the western coast of South America. Here, the northerly moving Antarctic Current causes massive upwellings of nutrient-rich water. At the bottom of the food chain are photosynthesizers—the phytoplankton. Up a level in the trophic hierarchy are tiny animals—the plankton, krill, and copepods. Then you find the small fish, and higher still, the bigger fish and birds that eat them.



The Flatirons Above Boulder, Colorado

The western Great Plains come to an abrupt and rather vertical ending in prairie meadows along the Front Range of the Rocky Mountains. Under selective pressure from millions of grazing bison, the grasses of the short-grass prairie developed roots that, in some cases, go down over twelve feet. Encouragingly, about 50% of the original prairie grasses remain in Colorado.



Northern Elephant Seals at Piedras Blancas, California

Capable of holding their breath for two hours and diving to over 5,000 feet, elephant seals have made a remarkable comeback through the Marine Mammal Protection Act. These animals were hunted for their oil and were thought to be extinct by 1880. But a small group of around 100 individuals survived in Baja California and were able to expand under legal protection. Today there are about 180,000.



Indian Peaks Wilderness in Fall

Just east of the Continental Divide, all the rain that falls here will find its way to the Mississippi River and the Gulf of Mexico. Before it gets there, it will support a variety of creatures that require fresh water—from farmers growing corn to sandhill cranes foraging on the Platte River. The trick lies in balancing the needs of one species with the needs of thousands of species.



Moose in Yellowstone National Park

In North America, moose are one of the few mega-fauna (the big animals) that survived the great North American extinction 12,000 years ago. They, along with deer, elk, pronghorn, coyote, cougar, and bears survived. Thirty-three large creatures did not. Those include the mammoth, mastodon, sabre-tooth cat, American lion, American cheetah, the giant sloth, et al. It is likely that the arrival of homo sapiens was largely responsible, but that contention is being debated.



Mallard Landing

This hefty bird does not appear flight-ready, yet a mallard can fly at 55 mph for many hours on stiff, rapidly beating wings. Mallards have adapted well to human incursions, but many species of waterfowl cannot make the transition and their numbers are declining year after year. Habitat loss is the problem as bogs, estuaries, and prairie potholes are converted to farms and subdivisions.



The Last Stand of the Colorado River Delta Wetlands

Since the completion of the Hoover dam in the 1930s, the Colorado River has not reached the Sea of Cortez, just below the U.S. border. Once forming a truly epic delta, now there is but a remnant of its former grandeur in this small “cienega.” It relies on runoff from the thousands of acres of farmland surrounding it. Still, there is hope. Groups like the Sonoran Institute are finding ways to buy water rights and restore the seasonal flow. The first big pulse in fifty years reached this area in 2014.



Three Sequoias and a Primate in Sequoia National Park

The largest of the Sequoia are the largest living things. They can reach 270 feet in height, and an astonishing 150 feet in circumference at the base. Before they attained legal protection, the species *Sequoiadendron giganteum* had a close call with loggers who sold the wood for fence posts, shingles, and believe it or not, toothpicks.



Western Grebes Courting

This stunning event may be the loveliest courtship in the natural world. Its quite an athletic feat to run across water for a hundred yards or more, so perhaps this is really a test that displays the health and fitness of a potential mate. (Are we primates any different?) How remarkable that a practical activity like mate selection would create a moment of high art—the dance of the grebes.



Fall in Zion National Park

Unique geology drives unique biodiversity. Four ecosystems are found in this mind-boggling national park—desert, river, woodland, and conifer which support 289 species of birds, 75 mammals, and 32 reptiles.



Fabian and a Ceiba

Two interesting organisms here. Fabian Rodes is a highly effective conservationist who managed the creation of the Cajas Biosphere Reserve. The United Nations considers the Cajas the most diverse biosphere on Earth. Dwarfing Fabian, the ceiba tree is adapted to the climate conditions of the “bosque seco,” the dry forests west of the Andes. Ceibas store water during the short rainy season and drop their leaves at the start of the dry season. They photosynthesize year-round using that stunning green bark.



Indian Peaks Wilderness

The Ancestral Rockies arose about 200 million years ago and its remnants are now the sediments of the Great Plains. The current incarnation of the Rockies went up about 60 million years ago. These mountains are unusual because they are a thousand miles from any coast. It's thought that an enormous slab of solid rock took a ride on a huge convection cell in the mantle and slid under North America at an unusually flat angle, pushing up the land a thousand miles inland.

Collaborative Storytelling Project



BioBlitz 2013, Jean Lafitte National Historical Park and Preserve, Louisiana. Photographs by Elena Rue.



BioBlitz 2014, Golden Gate National Parks, California. Photographs by Christopher Sims.

Students from all over the country attended National Park Service/National Geographic BioBlitz events in 2013 and 2014. Together, they developed a sense of awe about the natural world as they worked together with volunteer scientists, teachers, and other community members to find and identify as many species of plants, animals, microbes, fungi, and other organisms as possible within the 24-hour event.

With our collaborative storytelling project, the E.O. Wilson Biodiversity Foundation captures students' moments of transformative discovery at BioBlitz through interviews, documentary photography, and video and web-based projects. By sharing these stories, we aim to strengthen our individual and collective experience of the importance of our biological heritage, and to inform and inspire a grass-roots network of future environmental stewards.



Doe at dusk in Black Canyon of the Gunnison National Park. Named for its formidable ears, the mule deer is ultra-sensitive to the sounds of danger that can arrive at any moment in the form of coyote, cougar, or bear. Recent research has amplified the unappreciated fact that deer have distinct personalities and complicated social relationships.

ABOUT THE PHOTOGRAPHERS

Charles J. Smith is drawn to photograph the myriad of relationships of plants, animals, fungi, bacteria and, ultimately, people, in his wide travels. His photographs show us great beauty, but also the complex role of biodiversity as it plays out in nature.

Our collaborative storytelling project aims to capture the moment of personal discovery and transformation that occurs as young people connect with the natural world. Photographers **Elena Rue** and **Christopher Sims** captured students' experiences as they explored nature and conducted fieldwork at BioBlitz events.

ABOUT THE E.O. WILSON BIODIVERSITY FOUNDATION

The E.O. Wilson Biodiversity Foundation is dedicated to expanding knowledge and understanding of biodiversity in all its detail and complexity in order to best care for the living world. We work to promote the protection of biodiversity as a moral imperative and advocate that universal conservation should be one of humanity's transcendent goals. Our educational initiatives, including this exhibit, are focused on cultivating awareness and promoting understanding as a key foundation for citizen engagement and inspired care of our planet.

Please join us. Visit www.eowilsonfoundation.org to learn more.