



## Connecting Culture, History, Art and Species Along the Rio Grande

Josie Lopez, PhD

The Rio Grande is a border between two countries, a series of ecosystems, and a lifeline. The river's headwaters are located in the San Juan Mountains of Colorado. It is the fourth-longest river in the United States and flows for 1,885 miles until it runs into the Gulf of Mexico.

The Rio Grande is a primary water source for humans as well as birds, mammals, reptiles, amphibians, and about 40 native fish species. Many of these species can only be found in this region, including the silvery minnow and the Rio Grande blue catfish. There are many native plant species and an entire biome of invisible life-forms sustained by the river. *Species in Peril Along the Rio Grande* is a collaboration across disciplines, organizations, and state and national borders. This exhibition is the impetus for exploring how artists can ultimately engage with one of the most pressing crises of our time—loss of species. The artists and their works are diverse, and they employ a vast array of approaches, techniques, and forms of creativity as they look to the often-overlooked plants and animals of our region.

A key thread that runs through the exhibition is a larger sense of interconnectedness. Species, habitats, and human behavior are now thought of as inextricably linked. As many of the works in this exhibition demonstrate, species loss has a profound impact on cultural, political, and historical developments over time. Paying attention to the biological and cultural connections between the living worlds of plants, animals, and humans is imperative to the survival of species in our region.

Several artists in the exhibition chose to explore the topic of the river and species living in the region through a broad, larger-scale lens. **Cannupa Hanska Luger's** *(Be)Longing* is a ceramic and steel sculpture of a buffalo, a species that was nearly killed off by the beginning of the 1900s. A series of videos shows the large sculpture submerged in the waters of the Rio Grande to metaphorically expose that the river's waters were and are tainted. Ancestral lands, plants, and peoples were decimated as the buffalo were ruthlessly slaughtered. Luger raises an important question: "How does losing one species a hundred years ago have lasting effects in the 21st century?" The constructed skeletal remains are an imposing physical artifact that is historically and culturally specific. It represents an acknowledgment of the past as well as a warning for the future. According to Luger, "through installation, sculpture and performative video, the piece implores audiences not to wait another hundred years to protect the next species in peril."

**Ruben Olguin's** *Evaporation* is a mud mural representation of endangered and threatened species along the Rio Grande. The artist uses clay and earth pigments collected in the Rio Grande Valley to depict the expanse of the river and the silhouettes of over 150 endangered species, including crustaceans, mollusks, fish, amphibians, reptiles, birds, mammals, and plants. As the harvested clay dries on the wall, the work echoes the cracking dry earth the river cuts through. Olguin's work invites viewers to reflect on the fragility of the river's inhabitants as well as the scarcity of water, climate change, and pollution.

Opposite:  
Michael Berman  
*Binary Codex - The Habitat*  
2019  
Carbon Pigment on Kozo Washi

Armed with his camera, **Michael P. Berman** explored and photographed the river from South Padre Island, Texas, to the headwaters in Colorado. Berman writes, "I drove the entire river. Top to bottom. Ain't no river left in the river. The peril of these species is all about lost habitat. I did not find a single place where the ecosystem along the river had not been radically shifted by people." In his photographs, Berman captures the beauty of the river but also the devastating traces of human impact on the natural world.

**Marisa Demarco, Dylan McLaughlin, and Jessica Zeglin** also consider the river itself as the subject for their collaboration *There Must Be Other Names for the River*, which includes six singers who reflect on historical river flow data through song. Their performance takes into account that the river became dry for miles in 2018. The singers physically and spatially convey the history of the flow of water while also projecting the future of the river.

Other artists focus their work more specifically on plant and animal species that are endangered. **laura c carlson**'s installation includes a cement memorial honoring freshwater mussels, drawings of five species of mussels, and a zine telling the stories of mussels threatened by oil extraction. carlson explored the Pecos River from its deposit into the Rio Grande through the Permian Basin and up to its headwaters. carlson states, "As far as my research has taken me, there are no mussels left in the Pecos River. This river is being actively destroyed due to new and intense oil extraction in the Permian Basin. The Pecos is polluted, saline, dammed, and lacks a strong riparian zone—all issues that mussels are extremely sensitive to." Together, these works expose how one of North America's most endangered animals will disappear without direct action toward reversing how the Pecos River is currently used.

**c marquez**'s installation reflects on both flora and fauna as they use seedpods and stems of the tall tumbled mustard plant to re-create the nests of the New Mexico meadow jumping mouse. marquez's nests employ tension and gravity as the only forms of attachment. There are 29 circles, representing the 29 surviving populations of the New Mexico meadow jumping mouse. In June 2014, the species was listed as endangered, and it was forecast that it would reach extinction in 10 years (521 weeks). According to marquez, "521 embodies this extinction timeline. It opens with all the nests on the wall, then releases over half of the nests during the runtime of the exhibition, reflecting the experience of steady loss." The



Nicasio Romero  
*Bolas y Nido*  
2019  
Willow, straw, wire, clay

installation grapples with the painful process of witnessing a species die off over time, but it also invites reflection through light, ephemeral materials that remind us of both the fragility and beauty of the natural world around us.

**Nicasio Romero** also engages with the form of the nest in his installation, which looks to endangered bird species in and around Ribera, New Mexico. According to Romero, "the installation is a metaphor of a nest—a 'nido,' or sanctuary, for both migrating and resident birds." The nests represent the strength and resilience of birds but also point to recent die-offs that signal an urgent need to raise awareness.

**Suzi Davidoff** considers the relationship between birds, flora, and their habitat as she geographically contextualizes the northern aplomado falcon, which depends on native Texas grasses. She also depicts the Sacramento Mountains thistle found in Otero County, New Mexico, and the shootingstar geranium. The plant and animal species appear as shadow images cast over maps, demonstrating how the living world does not conform to human boundaries. These works also reveal that human behavior is the primary cause of species loss due to overgrazing, water usage, and habitat loss.

Since the early 1800s, invasive species have been present in and around the Rio Grande. **Jessica Gross** turns her attention to rats, which are an invasive species that live in the region. She draws parallels between humans and rats, connecting the history of invasion and colonization with current threats to natural habitats. According to Gross, "we are remarkably similar—they share our ability to adapt to and thrive in widely varying environments and, like us, have competed with indigenous species for resources, driving out those that are highly specialized to their environments. Someday, humans and rats may be the only animals here."

Artist **Mary Tsiongas** and Valle de Oro National Wildlife Manager **Jennifer Owen-White** tell the story of the silvery minnow through poetry and research. Collaborating with local experts on the ecology of the silvery minnow, they gathered data and used it to inform the video and digital still imagery that conveys the fight for survival that the minnow has faced in recent decades. The minnow points to the long history of contentious relationships forged by water management. Farmers, municipalities, pueblos, states, and even countries have fought over water rights for centuries, and the protection of a small fish has shed light on the need to take species and habitat into account.

**Nina Elder**'s *Interrupted Ecosystems* examines the near extinction of the beaver and the catastrophic loss of 80% of the two-needle piñon in New Mexico. According to Elder, "solastalgia is a premonition of longing for the present moment from an anticipated future. It is cherishing the places we live as we know them now. Solastalgia uniquely describes a triangle between place, time, and emotion. These drawings explore a solastalgic response to ecosystem collapse by translating information about ecosystem disruption into visual voids and inversions. These drawings ask: What is being erased? What is being turned upside down? What will remain? As dominant human culture is expressed through extraction, consumption, and waste, what are we going to remember? What will haunt us?"

**Kaitlin Bryson** and **Hollis Moore**'s work directly incorporates the natural materials produced by the cottonwood tree, using cottonwood paper embedded with native seeds. *Its Vitality Comes Through Fluctuation* examines the importance of cottonwood trees in the Middle Rio Grande Bosque. Cottonwoods grow when flooding occurs along the river, allowing for the successful germination of seeds. This process has become increasingly rare since 1941, resulting in fewer cottonwoods along the Rio Grande. Human

interventions and decreased levels of water have changed the natural flooding cycles of the river and will ultimately change the entire ecosystem, resulting in species migration and loss. Similar to c marquez’s installation, the cottonwood paper will change throughout the duration of the exhibition, revealing concepts of loss over time.

**Agnes Chavez’s** interactive installation, *BIOTA*, invites viewers to explore microbial species of the region through various technologies, from satellite remote sensing data to DNA sequencing. By making the invisible world of microbes visible, *BIOTA* raises an awareness of a world that is often unknown because it is not seen. Chavez collected and investigated data and imagery utilizing these new methods of scientific exploration in collaboration with local environmental organizations and scientists. According to Chavez, they “identified and collected DNA strands of a water sample from the Rio Fernando at the Taos Land Trust, revealing thousands of species that form the microbiome of the river. This bio-data was used to simulate an algorithmic ‘life-form’ growing in real time in response to changing environmental factors to visualize the delicate symbiotic relationship of this species in peril.”

This art installation reveals the complex scientific approach necessary to study microscopic life-forms, but it also makes visible a whole world of activity and beauty that is as integral to the ecosystem as the mammals, birds, mollusks, and plants represented in the exhibition. In some ways, the smallest life-forms reveal most emphatically that there is much work to be done to understand how interconnected the seen and unseen living world is.

Several artists in *Species in Peril Along the Rio Grande* grapple with the impact of the barriers built between Mexico and the United States. The barriers are not only the manufactured physical structures supposedly built to keep people out of the United States, they are also the historical, cultural, and racial barriers that promote the current environment of hate that allows a nation to ignore and imprison the weakest among us. The living world, both human and nonhuman, along the border continues to be devastated by systems and individuals that choose to ignore the interdependence of land, culture, the environment, and people.

**Zeke Peña’s** *The River* and *All Against the Wall* depict the river as a habitat and also bring attention to specific species and human interactions. *The River* illustrates a historical timeline, taking into account colonization and the development of an international border between Mexico and the United States. It is a chronicle of the people who have survived on the river for thousands of years. *All Against the Wall* features several species that are impacted by the continued development of border infrastructure, including the tortoise. The overall narrative of Peña’s work provides a glimpse into what the international river community once was and the urgency for humans to come together and fight to preserve the region’s biodiversity as well as its culture.

**Catalina Delgado-Trunk** incorporates the sacred and the profane as she connects the history and the mythology of Mexico through the jaguar, which is an endangered species today. According to Delgado-Trunk, “jaguars are at the center of many ecological and mythological Mexican narratives and are believed to possess a powerful and generative force in the traditional spiritual realm. Tezcatlipoca is one of the central deities in the Mexican pantheon, along with his three brothers. His sacred spirit animal is the jaguar (ocelotl), and he is brother and arch-rival to Quetzalcoatl, whose sacred spirit animal is the eagle (cuauhtli). Tezcatlipoca and Quetzalcoatl, the jaguar and the eagle, are opposite forces involved in the

creation of our current world and the sun. While the eagle is connected with the bright sun and the day, the jaguar becomes the lord of the night and the ruler of the moon; the spots on the fur represent the stars.”

**Jaque Fragua** depicts the Mexican gray wolf, the jaguar, and the ocelot in official-looking signs that speak for the voiceless. Official signs serve the purpose of directing people’s behavior, conveying the rules of society, and demanding attention. Fragua’s signs demand that we pay attention to the animals that are being impacted by the cordoning off of the border region. Fragua states, “Our natural environment is at odds with modernization, industrialization, globalism, and colonization. Our lifestyles do not respect the life of the land, water, or air. Our endangered relatives, the plants and animals that share this home with us, need our attention and care more than ever.”

**Marcia I. Santos’s** *Affective Cartography* is an illustrated map of the borderlands surrounding Ciudad Juárez and El Paso. The map was produced in conjunction with a collaboration that arose from a class seminar, Desert.Art.Archive. The maplike diagram was devised to represent the collective imagination—historical, social, and aesthetic—that exists across the landscape, in contact with the topography and surrounding plains, hills, flora, and fauna. The map also brings attention to the impacts of resource management, environmental policies, and the limits of both countries.

**Janette Terrazas** is a fiber artist who has realized many projects addressing issues such as the oppression of women and social injustices as they relate specifically to the border region. She often looks to the impacts of capitalism and industrialization as well as the responses to these conditions as they influence border identity. The tendency to reuse materials, for example, is common along the border. Terrazas’s use of electronic components references the 669 factories in the area. Using circuits and interactive maps, she brings attention to the ocelot, cacti, and birds of the region. She also explores botanical colors. Terrazas notes, “In this practice, I have found more than one hundred color ranges, so I realize that the colors of the plants are a gift of our mother’s sacred technology; those techniques were used by pre-Hispanic cultures, by our ancestors.”

**Daisy Quezada’s** project embraces concepts of land and community as a way to connect with the natural world. Participating communities include Tewa Women United, Cochiti Pueblo, and Museo Regional del Valle de Juárez. The process of collaboration included engaging community members in conversations about flora and fauna. As part of the interview process, contributors each shared an article of clothing representing their regional understanding. Using an alternative firing process, Quezada transformed the articles into sculptural seeds, shaping the material into almond forms. According to Quezada, “this process is a way to share awareness of the interwoven aspects of place, history, physiology, and people; how relational characteristics of a place are all a part of this natural fabric.” The transcribed conversations, as well as images of the seed sculptures, are included in a small printed publication that will be distributed back to the communities along with the sculptures.

Each of the participating artists in *Species in Peril Along the Rio Grande* directly addresses a specific region and the species that live in that region. While bringing awareness to the dire challenges that the living world faces, the artists also reveal the intense interconnectivity that spans geography, time, and sociopolitical systems. Understanding these connections is an important step that has compelled these artists to speak up, act against, and challenge current structures that if left unchecked will continue to result in unprecedented loss of species.

**Josie Lopez** is Curator of Art at the Albuquerque Museum and formerly served as Curator at 516 ARTS. She received her BA in history and MA in teaching from Brown University. She also holds an MA in art history from the University of New Mexico and a PhD in art history from the University of California, Berkeley. Her 2013 publication “Picasso and the Forgotten War” appears in *Picasso and the Politics of Visual Representation: War and Peace in the Era of the Cold War and Since*, edited by Jonathon Harris, Liverpool University Press. She wrote *The Carved Line: Block Printmaking in New Mexico* and curated the accompanying exhibition at the Albuquerque Museum. Her research interests include examining art as a discursive agent in the political arena, modern and contemporary Latin American art, 19th-century France and Mexico, and the history of New Mexican art.