

A Critical Balance

"In the end, we will conserve only what we love, We will love only what we understand, And we will understand only what we are taught." – Senegalese environmentalist Baba Dioum

Scientists estimate that 150-200 species of plant, insect, bird, and mammal become extinct every 24 hours. This is nearly 1,000 times the "natural" or "background" rate and, say many biologists, is greater than anything the world has experienced since the vanishing of the dinosaurs nearly 65 million years ago. Today many of the creatures that are familiar to us are at a critical balancing point. They might not be here for future generations to experience.

These nine artists have a dedication to the natural world, and feel they have a unique opportunity to share their observations and use their art to convey both the beauty of their chosen endangered species and the need to protect them. Painting in their own artistic style, each artist chose one or more species listed as endangered or threatened by the International Union for Conservation of Nature (IUCN). Their intent is to use art to inspire and educate in ways that will reach beyond statistics, policy, and politics.

About the Classifications

The conservation status of a species is an indicator of how likely it is to remain alive at present or in the near future. Many factors are used to assess a species' conservation status, including: the number remaining, the overall increase or decrease in the population over time, breeding success rates, and known threats.

IUCN Red List

The IUCN Red List of Threatened Species is a worldwide conservation status listing and ranking system. Following are the categories that we focus on with this group of species:

- Extinct (EX)
- Extinct in the Wild (EW)
- Critically Endangered (CR)
- Endangered (EN)
- Near Threatened (NT)
- Vulnerable (VU)



Gabriel Tempesta



Piping Plover, 2019 Charadrius melodus 24 x 30 Oil on board \$3,000

Piping Plovers live and breed during the warmer part of the year on the Northern Atlantic coast. This painting was done on Plum Island in Massachusetts. The artist says, "It was necessary to go in winter because the area they inhabit in spring and summer is closed to human traffic in an effort to help their numbers grow."

Besides the human disturbance from activity and development along the coast, Plover's face threats to their nests from cats, foxes, crows, and raccoons, among other species.

Gabriel Tempesta is a fine artist specializing in landscape and wildlife art with a background in illustration from Monsterrat College of Art. He lives and works in Northern Vermont.



Siberian Crane, 2018 Grus leucogeranus 60 x 30 Acrylic on Wood \$1,900



The distinctive plummage of the Siberian Crane includes red skin on the face and sides of the head, and white plumage with black wing tips. Their monogamous courtship involves singing and dancing. Additionally, these cranes have the longest annual migration, flying 3,000 miles between their breeding and wintering grounds in eastern Siberia and southeastern China.

Unfortunately, poisonings of these majestic Critically Endangered birds, as well as other species of cranes migrating through China, is not unique. Three Siberian Cranes were poisoned and died at the Liao River in northeastern China in March 2016. Poisoning can be unintentional, as in the case of farmers who treat corn seeds with toxic chemicals to prevent insect damage to their crops. Cranes also can be accidentally poisoned by poachers deliberately baiting geese and ducks for food or selling to restaurants in China.

This species is now only found in one main population in East Asia, with a few birds remaining in the historic Western/Central population. The oldest documented crane was a Siberian Crane named Wolf, who died at the age of 83. Wolf is in the Guinness Book of World Records.

Linda Mirabile has been painting for more than 40 years, with a special focus on birds. Additionally, she is a graphic designer and her company, RavenMark, works with environmental and non-profit organizations. She lives and works in Central Vermont.

Humboldt Penguin, 2018 Spheniscus humboldti 38 x 30 (framed) Acrylic on Fabriano \$1,300



These penguins are found off the South American west coast in the cold current of water running from the Antarctic to the Equator. This Humboldt Current (named after the French naturalist Friedrich Humboldt) provides them with a rich source of food including achovies, krill, squid, and other fish species. They are known for their athletic abilities, including climbing and swimming.

They have historically been heavily hunted for their meat, oil, and skins. Over-harvesting fish stock that they depend on, dogs preying on nest sites, and natural predators are all threats to this species. But the more alarming concern is the effect of El Niño as it warms the current they inhabit as well as causes a rise in severe storms, washing out nesting colonies. Marine pollution is also a serious concern.





Dhole, 2019 Cuon alpinus 22 x 24 (framed) Acrylic on Fabriano \$900



This canid, native to Central, South and Southeast Asia, is also referred to as India wild dog, whistling dog, red dog, and mountain wolf.

The Dhole is reminiscent of our U.S. Eastern coyote whose magical singing and barks resound in our wooded areas many an evening. The Dhole has its own unique characteristics, especially the extraordinary vocalizations they use to communicate with one another and warn of danger. The repetitve whistle is so dinstictive that it identifies individuals within the pack. They are incredibly adaptive, surviving in multiple habitats, and are highly social and cooperative. They live in extended family packs of 5-12 individuals.

Like our own Eastern coyote, their biggest threat is both habitat loss and senseless hunting.

Brown Kiwi, 2018 Apteryx mantelli 31 x 25 (framed) Acrylic on Fabriano \$900



The Brown (or Common) Kiwi is a flightless ground-nesting bird found in the North Island of New Zealand. The Kiwi is the official state bird of New Zealand

These birds are covered with a coat of shaggy, hair-like feathers that lack the typical barbules found on most bird's feathers. One usually sees these birds bent over with their beaks in the ground foraging for food. Their nostrils are at the tip of their beak allowing them to smell their food more easily. Additionally, they have sensors in the tip of their beak that allows them to sense the movement of their prey.

Because of the spread of farming and ranching these birds are declining at a rapid rate due to habitat loss. As well, human activity brings with it dogs, cats, and rats — all of whom raid nests that are found on the ground. Approximately only 5% of eggs hatch.

Much is being done to stop the rapid decline of Kiwis and protected areas are being established, along with work to hatch eggs in captivity and release the chicks back into the wild. Public education and increased awareness, along with conservation efforts, are this kiwi's only hope of survival.



Nissa Kauppila



Little Brown Bat ???

Myitis Lucifugus
Size?

Medium?

\$?



Typically found living in humid swamp lands these bats are found from Alaska (USA) to Labrador and Newfoundland (Canada), south to Southern California, Northern Arizona, Northern New Mexico (USA). Little Brown Bats are absent from much of Florida, the southern Great Plains regions of the U.S., southern California, and parts of coastal Virginia and the Carolinas, which surprises scientists as they do prefer humid conditions. Once the most common bat found in the U.S., White-nose Syndrome has killed more than a million bats and could wipe out Little Brown Bats completely in the Northeast within the next two decades.

Suzanne Stryk

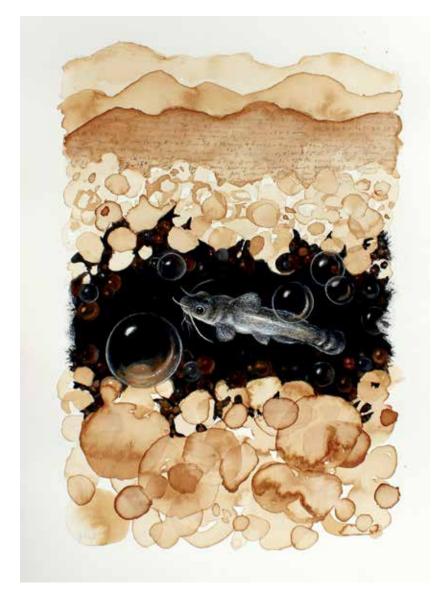
Chucky Madtom, 2018 Noturus crypticus 17 x 14 (framed) Mixed media on paper \$725



The Chucky Madtom is a small freshwater catfish endemic to two East Tennessee waterways: Dunn Creek and Little Chucky Creek. *Noturus* refers to the fusion of back fins to the tail, while *crypticus* comes from "kryptos" meaning hidden or secret, referring to the species' secretive habits as well as having kept its identity in secret for so long.

This species is critically endangered due to water degradation, primarily pollutants from agriculture or silt from development. And because of habitat fragmentation, chucky madtoms are susceptible to inbreeding depression and genetic bottlenecks; competition from invasive crayfish also puts this secretive little fish at risk.

Suzanne Stryk was born in Chicago and currently resides in Southwest Virginia. She's had solo exhibitions in locations throughout the country, including the National Academy of Sciences (DC), the Morris Museum of Art in Augusta (GA), the Eleanor B. Wilson Museum in Roanoke (VA), and Gallery 180, The Illinois Institute of Art in Chicago.



Suzanne Stryk

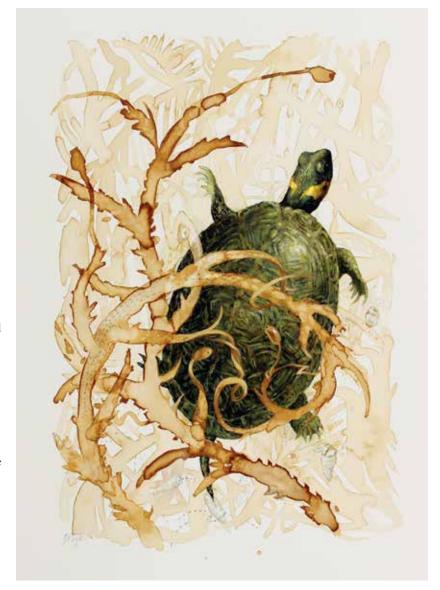
Bog Turtle, 2018 Glyptemys muhlenbergii 17 x 14 (framed) Mixed media on paper \$725



The Bog Turtle is the smallest turtle found in the United States. They are also one of the most rare turtles found in here. Laws banning the collection of the turtles for sale have done little to stop the practice. They are a prized species in many animal black markets.

Current Bog Turtle population is unknown, but estimates range from 2,500 to 10,000. Invasive plants, such as purple loosestrife, can dry out large areas of suitable habitat. Erratic weather patterns resulting from global warming will also disrupt the fragile habitat balance, key to the turtle's survival.

In addition to bog turtles needing a very specific habitat, much of the remaining habitat in the Northeast has been fragmented by roads and development. As the changing climate alters the availability of the turtle's current habitat, they will have very limited ability to migrate to places that could be more suitable.



Shearon Murphy

Rusty Patched Bumble Bee, 2019

Bombus affinis 18 x 18 Acrylic on wood \$900



Rusty Patched Bumble Bees live in colonies that include a single queen and female workers. The colony produces males and new queens in late summer. All rusty patched bumble bees have entirely black heads, but only workers and males have a rusty reddish patch centrally located on the back.

These bees once occupied grasslands and tallgrass prairies of the Upper Midwest and Northeast, but most grasslands and prairies have been lost, degraded, or fragmented by conversion to other uses. Increases in farm size and technology advances have led to practices that harm bumble bees, including increased use of pesticides, loss of crop diversity which results in flowering crops being available for only a short time, loss of hedgerows and the flowers that grew there, and loss of legume pastures.

Shearon Murphy resides in Winthrop, Maine. After graduating college in 1997 with a B.S. in biology, Shearon began her career as a biologist and found a passion for all things surrounding the study and management of Maine's common loons. She is a biologist and illustrator for Bio Diversity Research Institute.





Shearon Murphy

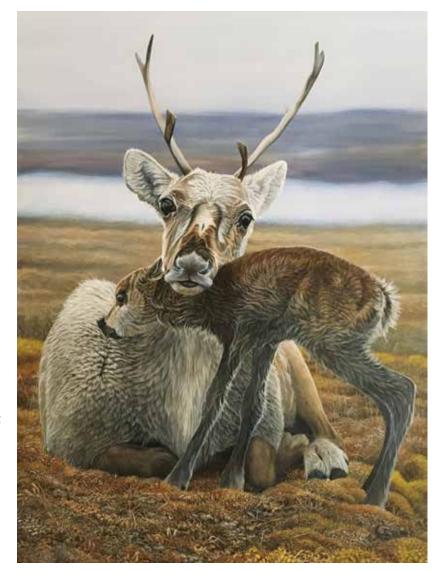
Porcupine Caribou, 2019 Rangifer tarandus 48 x 36 Acrylic on wood \$3,200



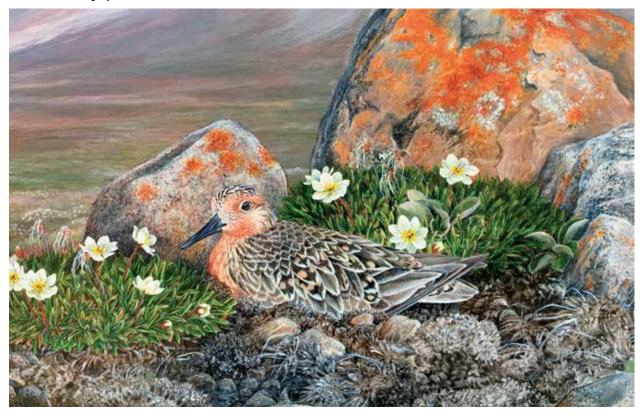
The Porcupine Caribou herd is one of many global herds: this herd migrates extensively and ranges through areas of the Northwest Territories, Yukon and Alaska. Annual migration of pregnant cows to calving grounds in the Arctic National Wildlife Refuge is approximately a 400 mile journey from wintering grounds in Canada.

They have historically sustained the livelihoods of Indigenous nations across the Arctic regions of North America. Gwich'in communities are located strategically along the migration route of the herd, and continue to rely on caribou for sustenance and their way of life.

The government is currently pushing to open Alaska's Arctic National Wildlife Refuge to oil drilling. This area encompasses the preferred calving grounds for the Porcupine caribou herd. Human activities and development associated with oil exploration and drilling have the potential to impact use of historic calving grounds. Loss or avoidance of these lands is likely to result in decreased calf survival for the herd.



Shearon Murphy



Red Knot, 2018 Calidris canutus rufu 12 x 24 Acrylic on wood \$1,400



The Red Knot breeds in the middle and high-Arctic areas of northern Canada. The red knots' breeding habitat consists of slightly vegetated land in the tundra where it is sunny and windy. Wintering and migration habitats consist of large, sandy tidal flats and coastlines near inlets of bays and estuaries that have remained undeveloped.

Red Knots rely heavily on horseshoe crab eggs that are laid on the beaches of Delaware Bay during spring migration in order to refuel for the remainder of the migration. Because of this reliance, they have played a major role in indicating the population decline of horseshoe crabs that use Delaware Bay as a reproduction site. The decline in the crab population is due to over harvesting by fishermen who use the crab as bait for conch and eels.

The Red Knot is hunted in South America as sport and food.

Heidi Broner

Sumantran Elephant, 2019

Elephas maximus sumatranus 30 x 30 Acrylic on canvas \$2,400

The Asian Elephant is found in India, Nepal, Bhutan and Bangladesh, China, Myanmar, Thailand, Cambodia, Laos, Vietnam, and Malaysia, Andaman Islands (India), Sri Lanka, Sumatra (Indonesia), and Borneo (Malaysia and Indonesia).

The loss of habitat has been the primary reason for the elephant's decline. About 20 percent of the world's human population lives in or near the present range of the Asian elephant, which is expected to double within the next 23 years. India's forests now cover less than 20 percent of the country, and barely half of that is suitable habitat for elephants. Cambodia and Laos still have considerable forest cover, but it is impacted by logging.

Other factors affecting the wild Asian elephant include mortality during capture and poaching for ivory.

Heidi Broner grew up near NYC in a family of artists in which drawing and painting were a natural, delightful part of daily life. In addition to painting, she has illustrated books, designed and painted murals, and worked for many years with Bread and Puppet Theater as an artist and performer. Heidi lives and works in Central Vermont.



Hawksbill Sea Turtle, 2018
Eretmochelys imbricata
30 x 30
Oil on canvas
\$3,900

The Hawksbill sea turtle is found mainly in the tropical regions of the Atlantic and Pacific Oceans. However, in the Western Hemisphere, they have been reported to nest as far north as Woods Hole, Massachusetts. They are also present in the Long Island Sound.

Hawksbill turtles were once thought to have remained in one local area for the duration of their lives. However, recent studies have proven that they migrate very long distances during their lifetimes.

Humans have hunted Hawksbill Sea Turtles for their decorative shells as well as to consume their meat and eggs. Today, the continued illegal harvest of these vulnerable turtles and their eggs, along with impacts of marine pollution, entrapment in commercial fishing nets, habitat loss and warming ocean temperatures have brought this species to the brink of extinction.

Susan's photo reference for this painting was captured swimming alongside this beautiful Hawksbill Sea Turtle while visiting St. John, USVI.





Black-footed Ferret, 2018 Mustela nigripes 24 x 36 Oil on canvas \$2,900 Black-footed ferrets are the only wild ferret native to North America. A dweller of mid-grass prairies and rolling hills, black-footed ferrets are considered to be North America's rarest mammal. They have been heavily impacted by early attempts to exterminate prairie dogs through poisoning. Prairie dogs and their colonies are a black-footed ferret's main source of food and shelter. By the 1960's, black-footed ferret populations had diminished to such extremes they were considered extinct in the wild.

In the 1980's, biologists in Wyoming live-trapped remaining known black-footed ferrets in an effort to revive their populations through captive breeding programs. As a result, their populations have somewhat recovered, although their numbers are still sensitive to disease and excessive prairie dog control.

Susan Parmenter lives and works in Sunapee, New Hampshire. Through her work, Susan hopes to stimulate public awareness and the critical actions needed for the protection of declining species.

Northern Rockhopper Penguin, 2018

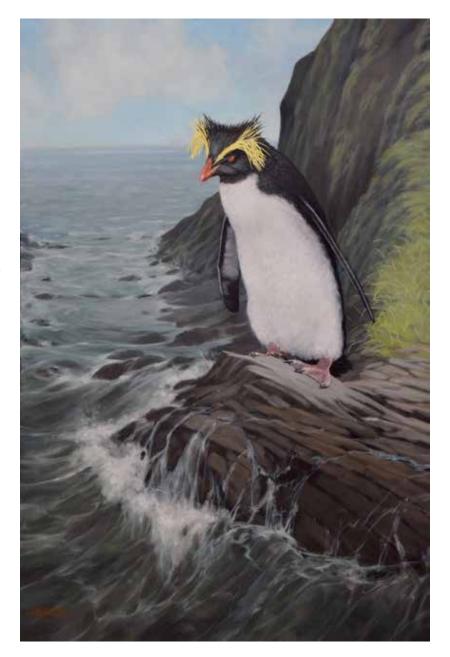
Eudyptes chrysocome 36 x 24 Oil on canvas \$2,900



Rockhopper Penguins are found on Gough Island, Nightingale Island, and mostly on Tristan da Cunha, a British territory. They occur farther north than many other penguin species and are found in high grasses called tussocks, where they make burrows and nest. As their name implies, they live on rocky shorelines.

Rockhopper penguins leave the breeding colony in late summer or fall and spend 3-5 months at sea, where they find food.

Penguins are a tourist attraction, and they are one of the main reasons people travel to the Falkland Islands and other habitats of these penguins. It is estimated that Rockhopper Penguins have undergone a decline of more than 30% in their total population size over the past 30 years. Threats to their populations include commercial fishing, which reduces the amount of available prey, and oil spills.





Northern Atlantic Right Whale, 2019 Eubalaena glacialis 48 x 72 Oil on linen \$7,200



North Atlantic Right Whales were once common along the eastern United States coastline. They were hunted to near extinction in the 1700's and considered "the right whale" because of their relative docile nature while feeding in close proximity to shorelines as well as having a plentiful blubber content causing them to float when killed.

There are about 400 of these whales existing on the planet today. Their current decline is largely due to ship strikes and entanglement in fishing gear. This, combined with a notable decline in reproduction, which includes zero documentation of births in 2018, threatens the very survival of this species. Remarkably, as of February 2019, there have been three North Atlantic Right Whale calves spotted off the coast of Florida — a glimmer of hope for the future.

Michael Boardman

Mountain Gorilla, 2019 Gorilla gorilla berengei 22 x 24 Watercolor on paper \$1,960

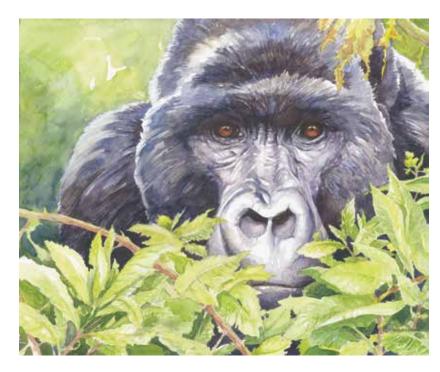


Mountain Gorillas live in the war torn Virunga mountains bordering Rwanda, Uganda and Democratic Republic of Congo in central east Africa.

With just over 1,000 Mountain Gorillas in existence according to a recent census, they are the only great ape who's population is increasing.

Although they inhabit politically unstable borders, they are valued as an ecotourist attraction and source of pride for citizens of the area, who have protected the species from poaching. Mountain Gorilla viewing is a huge boon to the countries in which the gorillas live, and revenue sharing with local communities has cemented the importance of these animals to a local ecotourism-based economy. Habitat loss is another serious threat.

Michael Boardman...



Reticulated Giraffe, 2018 Giraffa camelopardalis reticolata 40×30



Acrylic and walnut ink on wood \$3,200 (sold)

The Reticulated Giraffe is a subspecies of giraffe native to the Horn of Africa. It lives in Somalia, southern Ethiopia and northern Kenya.

To save the remaining 8,500 individuals in the wild, several conservation organizations have been formed. Their work involves hiring and training local "guards" to monitor trail cameras that capture footage of wild giraffes, pinpoint the location of poaching activity, finding and removing snares. These conservationists are developing a photo ID database so individual giraffes can be tracked and studied.

Adelaide Murphy Tyrol works out of her studios in Plainfield, Vermont and New York City. Along with her gallery work, Adelaide is a natural history illustrator and works with the Wellborn Ecology Fund, Northern Woodlands and Biodiversity Research Institute. She also co-owns a scenic painting house in NYC where she paints large format backdrops for the fashion and film industries.





Atlantic Cod, 2019
Gadus morhua
30" x 24"
Acrylic on wood panel
\$2,300



For centuries, North Atlantic cod was one of the world's largest and most reliable fisheries. Decades of overfishing have resulted in dramatic population declines.

It has been 15 years since the moratorium on fishing Atlantic cod in eastern Canada, but the fish stocks have not replenished. The disappearance of cod in Labrador and Canada is a wake-up call on the effect that overfishing can have on a fish stock.

Blue-eyed Black Lemur, 2019

Eulemur flavifrons 30" x 24" Oil on belgian linen on wood panel \$2,300



The Blue-eyed Black Lemur is currently one of the worlds' most endangered primates. It is found only in a small region of the island of Madagascar, where they live in subtropical forests. In 2015, it was estimated that the Blue-eyed Black Lemur could go extinct in the wild in as few as 11 years due to habitat loss from slash and burn agriculture, forest fragmentation and hunting pressures. It is thought there are fewer than 1,000 individuals in the wild. It is the only blue-eyed primate besides homo sapiens.



Sicilian Garden Dormouse, 2018

Eliomys quercinus dichrurus 9" x 8"

NT

Gouache on Sicilian papyrus \$400

The misleadingly-named garden dormouse actually primarily inhabits woodlands, from sea level up to an altitude of 6,500 feet. On the islands of the Mediterranean Sea, all of the several subspecies of Garden Dormouse are very rare.

Nearby, in the Netherlands, the Garden Dormouse is nearly extinct: in 2007, researchers reported finding only nine animals in two woods in the province of Limburg, where it used to be common. They suggested this is a result of the landscape becoming increasingly monotonous, and due to climate change, which interrupts hibernation. The Garden Dormouse has the remarkable ability to detach its tail from its body if seized by a predator. The short, curved claws and cushion-like covering of each foot makes this species, like other dormice, an adept climber, and its relatively large ears and eyes hint at its well-developed sense of hearing and ability to vocalize.

