



Pond Life

by Mark Yokoyama



Voyage of the Whimbrel

As fall approaches, thousands of shorebirds arrive on St. Martin from North America. Some will stop to rest and eat before traveling on to South America, and others will spend the winter here. The Whimbrel is one of the largest and most beautiful of these long distance travelers.

The Whimbrel breeds in the Arctic during the summer, but the rest of the year is spent in warmer areas like the Caribbean. In some cases, they fly non-stop for over 2,500 miles to reach their



wintering grounds, so they typically arrive hungry. Luckily, St. Martin has many salt ponds with mud flats full of fiddler crabs and the Whimbrel has a long, curved bill that is perfect for grabbing fiddler crabs from their burrows.

Recently, scientists have been able to attach satellite transmitter “backpacks” to Whimbrels to track their migration. One thing they learned is that each bird will typically return to the same exact places each year, so the Whimbrels on our island are probably the same ones each winter. This information helps us understand how to protect breeding and overwintering sites that Whimbrels depend on.



One of the birds in the study—named Machi by the scientists studying her—had been tracked for 27,000 miles before a tropical storm forced her to stop in the Caribbean on her way to South America. Unfortunately, when she arrived on Guadeloupe, she was shot by hunters. This was a huge disappointment, but her death brought attention to the potential risks of overhunting, and new laws were passed on both Guadeloupe and Martinique to limit shorebird hunting.



If you would like to see a Whimbrel, they are typically on the island from late summer until early spring. The best places to spot them are the mudflats at the edges of our salt ponds. They are often at Salines d’Orient near Le Galion, and you might be able to see one from the birdwatching boardwalk along Étang de la Barrière near the Pinel ferry dock in Cul-de-Sac.

When writing about St. Martin wildlife in 1938, S.J. Kruythoff wrote, “The best time for hunting these curved-billed birds is at sunrise at the water’s edge.” Early morning and evening are the best times to see Whimbrels today as well, but if you are planning on shooting one, please make sure you use a camera!



All Dressed Up, but Not for Long

Bird feathers get worn and damaged, so they need to be replaced periodically. Almost all birds will change their feathers at least once a year, a process known as molting. Many birds will molt twice each year, once before the breeding season and once after. Often—especially for male birds—the breeding plumage is more distinctive. They dress to impress.



Birds that spend the winter on St. Martin are usually wearing their basic, or non-breeding plumage. This plumage is often brown or gray, with fewer markings, and serves as camouflage. It can even be a little bit confusing: when they're here, the Spotted Sandpiper isn't usually spotted and the Black-bellied Plover doesn't usually have a black belly. During the late summer and early fall, you still have a chance to see many birds arriving in their breeding plumage—or at least some of it—before they molt into their basic plumage.



The Black-bellied Plover is particularly impressive in its breeding plumage. It is the largest plover on the island, and the male has a black belly with a white stripe down each side of its neck. They are most common on the edges of our salt ponds, but may be found along the beach as well. They tend to be wary and are quick to fly off when approached, so a quiet approach and a pair of binoculars can help you get a better look. But do it early in the season: these birds may begin molting before their migration and will finish soon after arriving. After that, you might as well use their European name: the Grey Plover.



Common Gallinule: Thriving on St. Martin

The Common Gallinule, with its distinctive red and yellow bill, is a common sight on the ponds of St. Martin today, but it wasn't always so. During the 20th century, records indicated that it was rare here, or possibly absent from the island altogether. Understanding why it was rare in the past and common today could help us understand how to coexist with other bird species.



In his 1938 book, *The Netherlands Windward Islands*, S.J. Kruythoff provided what is probably the first account of this species on the island. He described it as "a winter visitant" that was "found on very remote ponds and swamps." He added that it was "a shy bird." This may seem to be a surprising assessment, as today the gallinule is found on almost any body of water on the island, even roadside drainage ditches surrounded by buildings and busy traffic.



The Dutch ornithologist Karel Voous visited the Dutch Windward Islands from 1951 to 1952 and published a survey of the birds he encountered in 1965. In his survey, he did not include the gallinule at all, and felt that the information recorded by Kruythoff was "insufficient." In fact, Voous found Kruythoff's data on a number of bird species to be lacking, but in each case, the presence of the birds was subsequently confirmed by later researchers.



In the early 1970s, Andries Hoogerwerf, assisted by his son Henk Hoogerwerf and son-in-law Anne de Haan, found gallinules each time he visited the island to conduct bird surveys, and even documented a nest with eggs. Although the number of sightings was small, with only one or two birds seen during most visits, it seems they were breeding on the island and here all year.

Today these birds can be seen on almost any body of water, and they breed throughout the year. Adult pairs can even be seen foraging with newborn chicks and their last generation of offspring—full-size, but with juvenile plumage—at the same time. What has changed over the last few decades and allowed them to thrive?



Were they hunted in the past? This could explain why they were rare and shy, even at a time when the island had more wetlands, and why some other wetland birds have also become more common on St. Martin over the last few decades.



Blue-billed Bully

The male Ruddy Duck in breeding plumage is unmistakable. It has a big, fat bill that is bright blue. In non-breeding plumage, it looks much more like the female of the species, with a gray bill. Of course, they don't grow a new bill every year. The outer surface of the bill is covered in a layer of keratin, the same material our hair and nails are made of, which grows continuously and provides the blue color.



The Ruddy Duck is one of the few ducks that breeds on St. Martin, and can be seen throughout the year. Surprisingly, it was first documented on the island in 2001 by Adam Brown and Natalia Collier from Environmental Protection in the Caribbean (EPIC), who found approximately 250 of these ducks at Fresh Pond. In 2002, they documented the presence of ducklings for the first time. Previous bird surveys of the island included no sightings of this species.



This duck feeds primarily on aquatic invertebrates, typically diving down to capture them. They will take a mouthful of mud from the bottom and strain out insects and other small animals. Because they are more active at night, they are often seen resting or sleeping during the day with their bills tucked under a wing. They will also roost in mangroves at the water's edge.

The male Ruddy Duck could be considered a bully because they are unusually aggressive for a duck, particularly during the breeding season. They will fight each other, chasing, diving and snapping with their bills. They are also known to chase other waterbirds.



This species is also a nest parasite, laying eggs in the nests of other Ruddy Ducks as well as the nests of other species. At this time, we don't know if this behavior has any significant impact on other ducks that nest on the island.

Ruddy Ducks can be seen on many of the ponds in St. Martin, particularly those which still have mangroves around them. Fresh Pond may be the easiest place to see quite a few of them. If you are lucky, you may even get the chance to see some of their courtship behavior: running across the water making slapping sounds with their feet and smacking their bills against their necks. It looks a bit strange, but given their continued success as a breeding species on the island, it seems to work.



A Clever Opportunist

The Green Heron is quite common on St. Martin, although it could often pass unnoticed as it waits in solemn stillness at the water's edge. It is a versatile predator, feeding on fish, frogs, lizards, insects, crabs and many other small animals. It is perhaps one of the smartest birds on the island, and one of the most adaptable, finding ways to survive, and thrive, on the island despite rapid human development of many of its former habitats.



It is a small heron, and not very green, although in the right light the feathers of its back can reflect a greenish hue. Adults have a dark crown above their orange eyes, a dark gray, back and a rich, brown neck. Juveniles tend to be a lighter brown with spotted wings and more prominent white streaks down their neck. They typically appear to be rather short and stout for a heron, but can extend their neck a surprising amount when they feel like stretching, or striking at their prey.

The Green Heron is one of the few birds that is a documented tool-user. In their case, they are known to drop insects or other small items onto the surface of the water in order to attract fish, which they then capture and eat. They are able to exploit a variety of food sources, and are often



found far from the salt ponds that serve as the primary habitat for most herons and egrets. They also hunt both by day and night, particularly favoring the hours around dawn and dusk when the dim light gives them a slight advantage against their prey.

While any birds that are thriving on St. Martin today have made their peace in one way or another with the rising human population, the Green Heron is especially successful at exploiting human-impacted environments for personal gain. They are common along roadside ditches and even concrete drainage systems.



They consume the several frog species that were introduced to the island inadvertently by humans, and they will gladly pluck guppies or goldfish from backyard ponds. With their smarts and adaptability, they are one bird that will probably always survive on St. Martin.

To see a Green Heron, simply visit practically any body of water and look closely for them near the water's edge. They may be nestled amongst the vegetation or leaning out over the shallows waiting for a small fish to swim too close. If you're very lucky, you may even see their unique style of fishing with bait!



The Yellow-crowned Night Heron

One of our most distinctive herons, the Yellow-crowned Night Heron is a nocturnal predator that feeds primarily on crabs and other crustaceans. In fact, in this region it is often known as the crab-eater. It is a breeding resident on St. Martin and can be seen here year-round, although during the day it often prefers shady hiding spots where it can rest.



The look of the Yellow-crowned Night Heron is distinctive. It has a grey body and black head, with a white or yellow stripe down the top of its head. Its body and bill are thicker than those of most herons, and even the brown and white juveniles can be identified by their shape. The eyes of the adult are bright red, while those of the juvenile are orange. A closely-related species, the black-crowned night heron, may also be seen on the island, but it is less common. It has a black back and no stripe down the top of its head.



These night herons typically forage alone, most often on the salt ponds and their mud flats where crabs and other prey are plentiful. Less often, they may be seen on beaches, rocky coastlines or even in urban areas, during the quiet hours of the night. Although their primary diet is crabs, like other herons they will eat a variety of animals if they have the opportunity, including lizards, worms, mice and young birds.



Night herons nest in colonies, and on Pinel Island and Little Key there are a number of nests hidden in the trees. Their nests are made primarily of twigs and may be as large as four feet across. The same nest is used year after year, growing larger over time as nesting material is added. The night heron will lay several light blue eggs once a year, and it typically takes about two months from the time eggs are laid to when the young herons leave the nest. The night heron takes two years to reach adulthood, and in the second year, their coloration is in between the juvenile and adult plumage. Their body is a light gray-brown, and while they develop a black head and white cheek stripe, the stripe on the top of their head is brown rather than yellow.



The night heron is not endangered, but in the past it was considered a delicacy (known as gros bec, meaning thick-bill). Hunting of these birds for food, including young birds taken from the nest, may have reduced their population in the past, but is not common today. Like other herons and egrets they were also hunted for their feathers in the past. Today, if you would like to see a Yellow-crowned Night Heron your best bet is to search carefully along the shore of a salt pond or keep your eyes open at night, looking for this bird hiding silently in the shadows.



Ready for a Snipe Hunt?

Perhaps you are familiar with the term snipe hunt. It is a type of practical joke that typically involves using a ridiculous technique to capture an imaginary animal. What many people don't know is that a snipe is in fact a real bird that happens to be extremely difficult to find.

Here on St. Martin, one species of snipe—Wilson's Snipe—is a winter resident. Wilson's Snipe is a stocky shorebird with a long bill that can be found in marshy areas and roadside ditches—if you



can manage to find it at all! They use their long bill to probe the mud for snails, crabs, worms and other small animals.

The snipe is difficult to find because it tends to stay well concealed in vegetation. Most of the time, it goes unnoticed until it flushes, or flies away. It is quite easy to be only a few meters from a snipe, looking carefully for it, without seeing it at all. Although it is incredibly hard to spot, the snipe is a handsome bird, primarily brown with bold stripes on its head and back.

Like other migratory shorebirds, it makes a remarkable journey each year from its summer



breeding grounds in Alaska and Canada to its wintering grounds in the southern US, Caribbean and South America.

In addition to their stellar camouflage, snipes have other unusual talents. The tip of their bill is flexible, which allows them to open just the tip of their bill while feeding, without opening the rest of the bill. Presumably this comes in handy, allowing them to grab a food item from the mud without getting a mouthful of mud. Male snipes also make a unique whistling sound called “winnowing.” This sound is made not with their mouth, but by using specially curved tail feathers that produce a whistle with each wingbeat during flight.



If you would like to see a snipe, your best bet is to search carefully by roadside ditches and marshy areas where grasses or other plants provide cover at the water's edge. If you do come upon a snipe, you may not notice it until it flies away. If that happens, don't despair! Snipes often have a favorite spot, so you can always come back another day to try to find it again.

Of course, it takes patience to develop the skill to spot a snipe, so don't expect to be an expert right away. In fact, snipe are so difficult to hunt, a special term was given to hunters that were able to shoot them. Eventually, this term would be applied to other expert sharpshooters. The word? Sniper!









Pond Life: Reflections

by Mark Yokoyama







Fluid Landscapes

You can draw them on a map, or stop time for a moment in a photo, but the ponds of St. Martin are ever-changing. Shorelines shift and water rises up and down. Mudflats expand as water drops during the dry season and grasses race to cover the new ground. People fill in the ponds—a bit at a time from the edges, or sometimes all at once.

The ponds change with regular cycles, like the wet and dry seasons. More unusual events also impact them: drought, flooding and hurricanes. They are perhaps the most dynamic wild places on the island. Even when they reflect the hills and sky during a windless moment, ponds are never truly still.



Ponds are also much more than water. There are entire communities of plants and animals that depend upon them, and these communities also change. Fall brings birds from far away in search of food. Drought strands fish in shrinking puddles. Spring rings with the sound of newly-hatched chicks and the warning calls of watchful parents.

Watch these fluid landscapes and you will feel the pulse of the island.



Between Land and Sea

Ponds exist as the ever-shifting border between land and sea. They are the buffer that protects each from the other, and the bridge that connects the two. They exist in flux, from day to day and year to year. They are incredibly rich and alive.



St. Martin's ponds are the oft-neglected jewels of the island. For much of recorded history—and even longer in the island's prehistory—humans depended on St. Martin's ponds for food and salt. It's no coincidence that colonists built towns in the areas near the island's ponds. These towns were often built on the same sites as earlier settlements long forgotten.

Over the past few decades, St. Martin's ponds have been devalued for various reasons. The changing economics of salt production doomed that industry. The population boom outpaced the capacity of the ponds as a source of shrimp, crab and fish. Filling the ponds became an irresistible form of magic: creating real estate from “nothing.”



Strictly speaking, development didn't require filling in St. Martin's ponds or pumping waste into them. Perhaps it was cheaper or easier than alternatives. By degrading and destroying the ponds, each generation made them less beautiful, less useful and less valuable, enabling a vicious cycle.

Ponds were key to the development of an island that humans would eventually discover and inhabit. They trapped nutrients flowing from the hills to feed a rich wetland ecosystem where mangrove roots became nurseries for fish and lobster. Their mangrove forests protected coastlines from erosion and lessened the blow of storm surge.



Even in their diminished state, they continue to offer these ecosystem services as best they can: processing our waste so it doesn't contaminate our beaches, providing drainage to reduce flooding of low-lying areas, and preserving the reefs that provide fishing and tourism revenue for the island. Though their vistas may be sullied by our garbage, they can be beautiful. Above all—and despite all—they are vibrantly and undeniably alive.



The Great Gamble

Spring is a time of change on St. Martin, particularly for the birds. It is a time when thousands of migratory birds are fattening themselves up for a long flight north, a journey that will take some as far as the Arctic Circle. Rarely seen migratory birds also stop by at this time—species that spend their winters further south and pass through the island only by chance.



The local weather shifts in the spring as well. Rainfall lessens gradually through the winter until late spring. The hills dry out and the water level drops on ponds that aren't open to the sea. As spring turns to summer, rains increase. Plants grow, insects thrive and food becomes more abundant. Periods of calm are broken by heavy rains and tropical storms.

Some local pond birds start their families during the spring dry season when water levels are low. Black-necked Stilts in particular make a great gamble on the weather. On St. Martin, they often build their nests on the remains of levees that separated salt pans during the long era of salt production on the island.



In some ways, these levees are the safest place for a nest. Well out over the water, they are protected from predators. The mongoose, for example, loves eggs but hates water. These spots also offer excellent views of incoming threats. Black-necked Stilts are fierce protectors of their nests. When approached, they put on elaborate displays to distract and confuse.

The weather itself can be the greatest threat. Nests are often just a few inches above the water line. A sudden storm can easily inundate them, drowning the eggs before they have a chance to hatch. There is a delicate balance between protection from predators and the risk of a flooding disaster.



Successful nesting on a St. Martin salt pond requires the right location and the right timing. Perhaps increasingly, it requires some luck as well. During a drought, nesting in the wrong spot could mean having no pond left to forage in. Unusually early rains could flood a whole season of nests. Although there might be time to try again, it's a huge effort.

It's hard to say what the future holds, but most scientists believe that climate change will make weather patterns less predictable. For species already living their life cycle on the edge, troubled times could be coming.





Mangrove Mystery

Mangroves, a group of trees that have developed adaptations that allow them to thrive in wetland and coastal environments, are a critical resource to virtually all the wetland birds of St. Martin. Mangroves in many parts of the island seem to be faring poorly, and this may in turn be a bad sign for the entire wetland ecosystem.



From Grand Case to Coralita, troubling scenes ring many of St. Martin's ponds. Mangrove trees, which once formed a green wall around most ponds, have transformed into collapsing piles of dead branches. Why is this happening, and what can be done about it?

Over the last few centuries, people have diminished and destroyed most of the mangrove wetlands on St. Martin to make land available for farming and development. In many cases, mangroves form a thin curtain around ponds, perhaps just a few meters deep. However, until recently these last fringes of mangrove seemed to be doing well: lush, green and dense.



A few years ago, mangroves began dying noticeably around the cemetery pond in Grand Case, where a thriving colony of egrets nested each year. Within a short period of time, dead mangrove trees surrounded much of the pond. Soon, mangroves were dying at the airport pond in Grand Case, Étang Chevrise, and Étang de la Barrière, where a beautiful birding boardwalk was suddenly surrounded by dead branches.

If you're hoping to learn the cause of this mangrove collapse, you'll be disappointed for now. There's no clear culprit. Recent droughts may be a contributing factor, and the quickly-rising population of invasive Green Iguanas may be another. Perhaps a combination of factors are



interacting to produce this dismal result. Unraveling this mystery will require careful study of many details like rainfall and water quality, at many sites over an extended period of time.

Without knowing the cause we can't know the solution, but we're not alone. This year, about 10,000 hectares of mangroves died in Australia, perhaps the largest dieback ever seen. Perhaps research conducted there will uncover a remedy, and help us take action here before it's too late.



Where Are They Now?

Egret nesting colonies are loud and bustling with activity. On St. Martin, they also seem to be on the move year-to-year as some of their prime locations collapse.

The nesting season for the island's egrets—Great Egrets, Snowy Egrets and Cattle Egrets—usually starts in January. They nest in colonies that feature a mix of all three species. Great Egrets are first to start, giving them responsibility for selecting prime nesting locations.



Favored locations are almost always in mangrove wetlands, with the birds building their nests in the mangrove trees. They are particularly fond of locations at the water's edge—or better yet, in mangroves surrounded entirely by water. It's impossible to hide a colony of dozens of noisy birds, but the water does give them some protection from predators.

Prime nesting locations change over time. A photo from the 1970s documents a large colony nesting on red mangroves near Le Galion. Five years ago, the cemetery pond in Grand Case was home to perhaps the largest colony on the island. Fresh Pond, with its healthy mangroves, is also a popular nesting location.



In some cases, it seems that the colony destroys its own home. Popular mangrove trees can lose their leaves during the nesting season, when they're covered in nests. Although they may recover between nesting seasons, they seem to decline when used heavily year after year.

Greater forces are also at work shaping mangrove wetlands and potential nesting areas. Over the last few years, mangroves have died around many of St. Martin's ponds: the cemetery pond in Grand Case, Étang de la Barrière in Cul-de-sac, Étang aux Poissons in French Quarter, and many more. Hardest hit are the mangroves at the water's edge, the favorites for nesting egrets.



In the late 19th century, Great Egrets and Snowy Egrets were driven to the brink of extinction—hunted so their feathers could adorn hats. Their plight inspired early conservationists, and their recovery over the last hundred years has been miraculous. Although they're now safe from feather hunters, the 21st century may pose new challenges for egrets. Where will they nest this year, and will there always be a place for them on St. Martin?



Natural Misfortunes

Natural disasters that are vast in scale and broad in their impact grab our attention. Names like Exxon Valdez and Deepwater Horizon are seared into our collective consciousness and remembered for decades. But these big events are far from the only threats to our environment.

The phrase natural misfortune seems like a good way to label the smaller environmental problems that aren't on the scale of something we would call a natural disaster. Almost by



definition, we don't know as much about these smaller, under-the-radar incidents. But while they are less visible, are they less problematic than the natural disasters that capture the spotlight?

Many natural misfortunes are probably never noticed at all, or perhaps just as a passing smell or a distracting piece of garbage on an otherwise lovely landscape. Improper disposal of oil—be it motor oil or fryer grease—might go unnoticed as well until an unwitting bird becomes a victim.

On the pond in Grand Case, a young Snowy Egret hides during the day, foraging in the morning and evening hours. As its oiled feathers get a little cleaner it can almost fly again, but for now



it is very vulnerable. Once a brilliant white, its feathers show the rusty orange of oil and clump together around the neck, exposing bare skin.

Over by the Great Salt Pond, an oiled Killdeer gradually starts getting a little fluffier after weeks of cleaning oil from its feathers. Somehow, it has managed to avoid being eaten by a stray dog or cat. It can't reach its own neck to clean the feathers there, so they're still thick with oil.



Natural misfortunes don't lay waste to whole ecosystems, but they do deserve our attention. In some ways, it may be more practical for us focus on them. After all, it can be hard to predict and prevent the occasional disaster, but smaller environmental problems can often be averted by taking a little more personal responsibility. Perhaps the term natural misfortune should make its way into our conversations, and preventing them should be a part of our culture.



Living History

It's hard to think of a historical site more abandoned and ignored than the Foga ruins at the Great Salt Pond. While we may have deserted it, the birds have not.

Built in the mid-1800s, the Foga pumphouse was ambitious for its time. The water pump removed fresh water from the Great Salt Pond. Salt was produced through the evaporation of seawater in the salt pans until salt crystals formed. Rainwater from the surrounding hills diluted



the seawater, delaying or preventing salt formation. The pumping station was one of many measures taken to avoid this. Other developments of the same period included canals to route fresh water around the pond and into the sea.

The Foga pumping station is tucked away on the north side of the Great Salt Pond, now separated from the pond itself by a large swathe of industrial area. Its ruins are in a small pool ringed with mangroves. The remaining structures of brick and stone are propped up by a wooden scaffolding that itself is showing signs of age, while huge gears and other parts of the machinery sit half submerged.



Though it's small, and hemmed in on every side, the area is still fascinating as a historical site and full of birdlife. Black-crowned Night Herons peer with disdain from their hidden perches in the mangrove trees and Zenaida Doves congregate atop the ruins. Tilapia swim the shallow waters, attracting Great Egrets and Green Herons. The Spotted Sandpiper, a migratory visitor, struts around the machinery at the water's edge, hunting for crabs and other small creatures.



Though it may not look like it in its current state, the Foga pumping station is a national monument. With a little clean-up, and some signage to tell the story of the site, it could become a popular spot to visit. Mangroves already provide a buffer, blocking much of the surrounding industrial area. Additional plantings could increase the effect, creating a natural and historical oasis that could attract both history and nature lovers.



Egret Against the Odds

Although we are living in what has been called the sixth mass extinction, the perseverance of many species against formidable odds is both astounding and hopeful.

About 100 years ago, the tide was just beginning to turn for the Snowy Egret. These beautiful birds had been hunted mercilessly for their feathers. Their long plumes—particularly those grown during the breeding season—were used in military uniforms and were highly prized in the



fashion world. The feather trend became so extreme that hats and fans were often decorated with full wings, or even entire birds.

Snowy Egrets, along with their larger relatives the Great Egrets, typically nest in large colonies, some including hundreds of nests. With the birds gathered together at the time when their feathers were most luxurious and desirable, hunters could easily kill them in large numbers. The adults were skinned, and the chicks left to die.



Although Snowy Egrets were considered very common before their feathers came into fashion, it didn't take long for these mass killings to seriously impact their population. By the end of the 19th century, they were critically threatened, along with a number of other birds that were also being slaughtered for their feathers.

Luckily, two women—Harriet Hemenway and her cousin, Minna Hall—set out to save the Snowy Egret. They started by hosting parties to encourage the boycott of feathers. Along the way, they launched the Massachusetts Audubon Society, which eventually grew to a national organization that helped create the first National Wildlife Refuge and the first laws protecting wildlife.



In 1918, the Migratory Bird Treaty Act was signed. To this day, it remains one of the strongest laws protecting wild birds.

Although we don't have records from St. Martin during the Snowy Egret's most difficult years, it seems probable that this species was absent or relatively rare during this period. S. J. Kruythoff cites the bird in his 1938 book, but the first official record of the species on St. Martin comes from 1952.



Today, Snowy Egrets are common again on the island and in much of the Americas. On St. Martin, they are plentiful in virtually all of our wetlands. Still, many challenges may face them going forward, including pollution, habitat destruction, droughts and other extreme weather. Let's do what we can to make sure they aren't driven to the brink again.





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