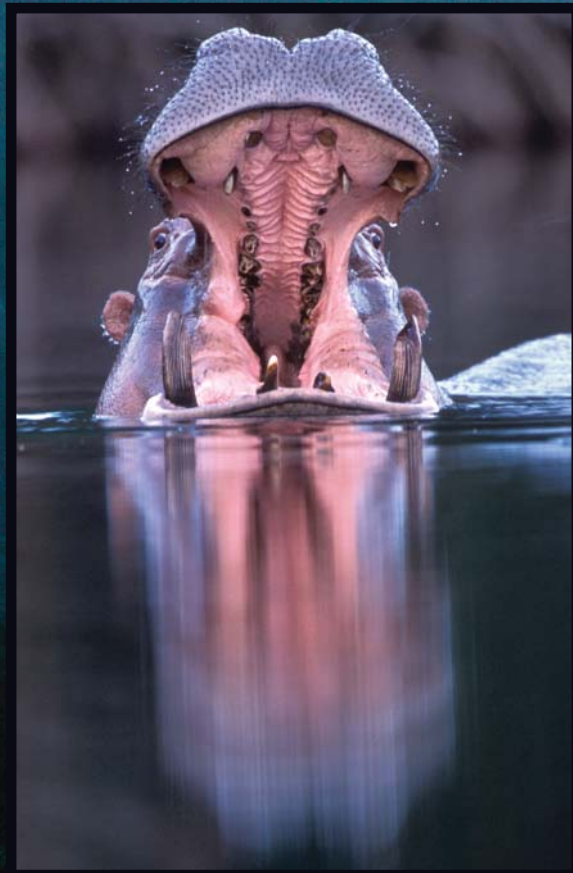
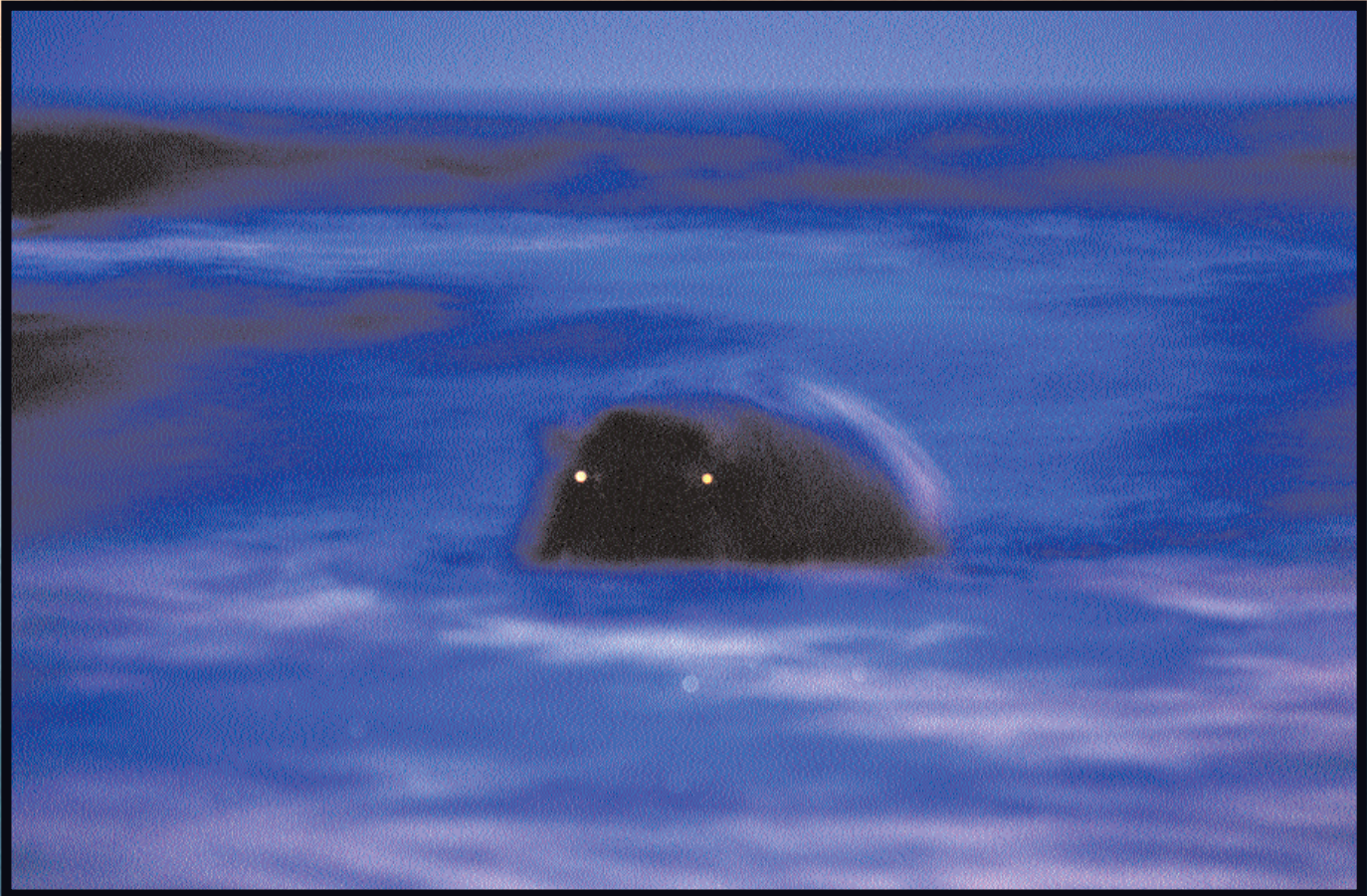


GRADUATE STUDENT
CARLTON WARD JR. HAS
COMBINED HIS LOVE OF
THE ENVIRONMENT AND
PHOTOGRAPHY TO THE
BENEFIT OF BOTH

BY JESSICA GORDON



Hippo in Lagoon
A male hippo (Hippopotamus amphibius) shows his foot-long, razor-sharp teeth as threat display from his coastal lagoon.



Hippo in the Surf

*A male hippo (Hippopotamus amphibius) lurks in the Atlantic waves.
The Gamba coastline is the only place this behavior has been observed.*

An hour after sunset on his last night in the west African country of Gabon, UF graduate student Carlton Ward Jr. made some final shots of a native hippopotamus bathing in a freshwater lagoon and began packing his camera gear.

Ward had seen hippo tracks leading to the ocean in the area known as Gamba often and knew hippos occasionally swam in the salty Atlantic Ocean, but during his 10-week stay he had yet to witness the rare sight.

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Suddenly, the 8,000-pound hippo began lumbering across the sand toward the ocean 150 yards ahead of Ward. He instinctively grabbed his Nikon camera and a 200-millimeter lens and raced toward the animal as it made its way into the surf. As dusk turned to night, Ward waded into the black water and, with the waves churning around his waist, brought the camera to his eye just as the hippo stopped on a sandbar and turned around.

The flash was just enough to silhouette the hippo's massive bulk and illuminate its piercing yellow eyes. For Ward, the picture captures Gamba perfectly — an African hippo transcending its traditional environment. It's that image and others like it in a book of his photographs due out at the end of 2003 that Ward hopes will convey to an international audience the importance of preserving Gabon's unique environment.

An eighth-generation Floridian, 27-year-old Ward has always had an interest in the ecology and history of Florida. While earning his bachelor's degree at Wake Forest University, he studied biology and anthropology. He got his first camera when he went to study abroad in Australia.

"From that time, I've been pretty much obsessed with photography," he says. "But I started turning toward environmental subjects because that's what my background and training was in."

After graduation, Ward interned in the photography department at the Smithsonian National Museum of Natural History and then honed his skills for two years in Florida and travelled to places like the Peruvian Amazon and the Andes Mountains. In fall 2000, he returned to school. He chose UF's Natural Sciences Department because of the strength of its master's program and his lifelong interest in Florida ecology. The program allowed Ward to do his course work and training in science but his thesis through another college. Ward chose the College of Journalism and Communications, where he became the first UF graduate student to combine his environmental studies with photojournalism.

"There obviously is a subfield of environmental journalism," says Stephen Humphrey, director of the School of Natural Resources and Environment. "Carlton's photography is based on ecology at its intellectual core. This sort of journalism requires a very good understanding of ecology experimentation and practice. His journalistic view is grounded in the scientific field that he works with."

Although his passion for the environment was always present, a way to present his pictures as stories didn't always come naturally.



Buffalo in Flight

A herd of forest buffalo (Syncerus caffer) run across coastal grassland where they often emerge from the forest to graze.

"The technical side of photography came fairly easily — I have a fairly scientific mind," Ward says. "But when I started my work at the University of Florida, I had a portfolio with a lot of pretty pictures but not so much journalism. And that's what I was trying to learn and I'm still trying to learn — incorporating a story-telling journalistic approach with photography."

Ward's graduate adviser and committee chair, journalism Assistant Professor John Kaplan, helped Ward evolve from nature photographer to photojournalist.

"When I first met Carlton, he had a strong grasp of science and the technical issues of photography, but what he was lacking was a way to connect that with telling stories and connecting with people. I think he has really worked to find that



Buffalo on the Beach

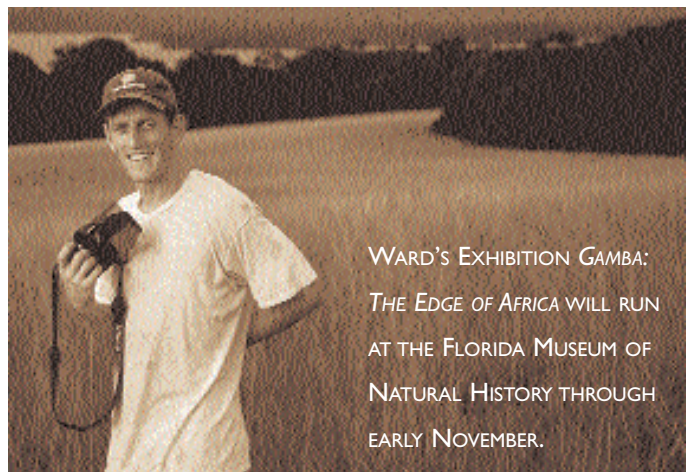
Taking advantage of a morning low tide, forest buffalo (Syncerus caffer) walk north along the beach in one of the only places remaining in Africa where large mammals can move along the coast free of human disturbance.

balance of bringing those elements together and being an effective photographer,” Kaplan says.

In the summer of 2001, Ward’s Smithsonian internship paid off with an opportunity to document the work of a team of Smithsonian scientists doing research in Gabon.

“We wanted to have a photographer full time in order to create the first database for this region and to have high-quality material to publish very quickly,” says Francisco Dallmeier, director of the Smithsonian Institution Monitoring and Assessment of Biodiversity Program (SI/MAB). “Carlton is very energetic and flexible, and he makes it happen. He was very valuable to our team.”

Ward decided to turn the Gamba project into his thesis.



WARD’S EXHIBITION *GAMBA: THE EDGE OF AFRICA* WILL RUN AT THE FLORIDA MUSEUM OF NATURAL HISTORY THROUGH EARLY NOVEMBER.

“I WANT TO HELP
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— CARLTON
WARD JR.



Forest Elephant

A young elephant (Loxodonta africana cyclotis) peers from the edge of the forest in Rabi, 30 kilometers from the coast.



Elephants by the Beach

A family of African forest elephants (Loxodonta africana cyclotis) walks beneath palms as they come to graze along the coastline in the late afternoon.

Glorious Gabon

Nowhere else in Africa does intact tropical rain forest still come right down to the ocean like it does in Gabon, a country of a little more than one million people that still has 90 percent of its tropical rain forest intact.

Bordering the Atlantic Ocean at the Equator, Gabon is sandwiched between the far-more-developed countries of the Cameroon and Congo. Once a French colony, Gabon gained independence in 1960 and now governs as a republic. Oil and mineral reserves have made Gabon fairly wealthy and allowed for the conservation of biodiversity because its economy did not have to rely heavily on logging. As oil reserves begin to decline, concerns about deforestation and poaching are very real.

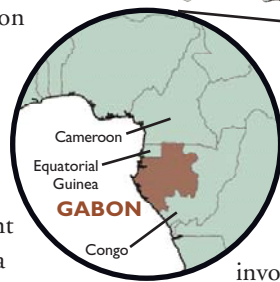
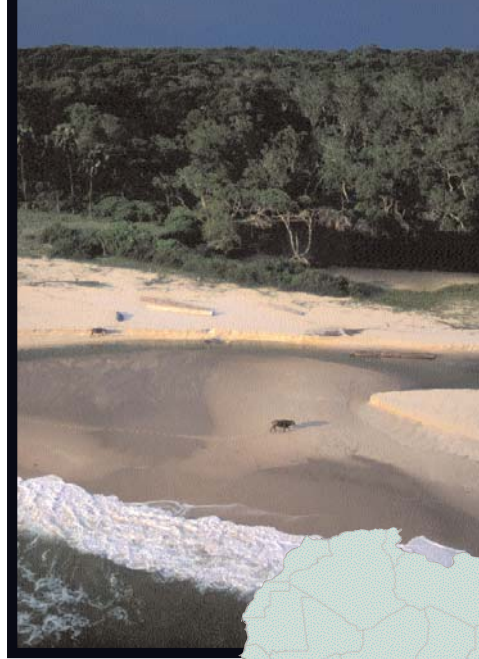
“You get this astonishing, rich diversity of plants and animals that live in the Congo Forest coming right down to a tropical beach like you would see in Florida and the Caribbean,” Ward says. “The combination of African animals with a tropical coastal landscape, elephants that go on the sand, hippos that go in the surf, chimpanzees and gorillas that are in the forest close by — there’s nowhere in the world like that because every other country in equatorial Africa now has heavy coastal development. Gamba, within Gabon, is part of the most continuous expansive undeveloped coastline and rain forest left for Africa.”

Gamba is a town in southwest Gabon surrounded by an environmental district called the Gamba Complex that is comprised of coastline, grasslands, lagoons, rivers, wetlands, mountains and tropical rain forest. The Gamba Project was developed in 1999 by SI/MAB with funding from the Shell Foundation’s Sustainable Energy Programme and Shell Gabon to assess and monitor the biodiversity in the Gamba Complex.

“I’ve been to Gabon six times since that first time in July 2001, and it has evolved from a partially, paid internship to a

full contract position with them,” Ward says. “I’ve worked with them to see the value of using imagery to communicate their research to the scientific community as well as the popular audience.”

Ward’s photographic mission in Gabon was to raise awareness both domestically and internationally about the biodiversity of



the country’s natural environment. While much of his time was spent documenting the plants and animals the scientists brought to him, Ward also sought out his own subjects, capturing large animals in their natural environment — a family of elephants skirting the lush green jungle, wild buffalo strolling along the beach against a hazy

blue fog and a startled leopard, frozen in its tracks (this one taken using a sophisticated camera trap).

“Carlton has a rare combination of intellect, scientific inquiry and ethic vision,” Kaplan says. “He has a good sense of color, and his pictures really come alive. He’s got a wonderful eye, and I think his potential is limitless.”

Ward’s work, much of which involves new species never before photographed alive, has already affected Gabon’s citizens.

“I would give slide presentations locally to the oil workers and different people, and they were always impressed by the diversity of life in these forests,” Ward says. “I want to help people understand Gabon through popular magazines, but equally important is to raise awareness within Gabon and inspire them to want to protect their resources.”

Dallmeier would like to see more of Ward’s type of photojournalism in the environmental world.

“There are so many hidden stories,” the scientist says. “By the time they get to the people, sometimes it’s too late. A physical description is a powerful tool in order to influence decisions.”

Later this year, The Smithsonian Institution expects to publish a book-length photo essay about Gabon’s biodiversity, titled *The Edge of Africa*. Ward helped coordinate the photography, layout and design, and 90 percent of the content will be his photographs accompanied by captions.

Ultimately, Ward wants to continue the path of raising awareness about environmental issues through photography and possibly explore a doctoral program that suits his goals.

“I love this idea of taking a project and trying to become an expert in the area and making a book out of it,” he says. “Gabon is a place where I’m able to make a difference because I’m doing a lot of things for the first time there, and there are not so many places left where you can do that. I imagine I’ll continue to go back to Gabon over my lifetime, but only when I find a story that needs to be told.”



TRAPPED ON FILM



Carlton Ward Jr. knew that to get the kinds of photographs he wanted of Gabon's illusive animals in their natural environment he was going to have to be innovative.

So he turned to his old friend, UF engineering student Christopher Slaughter, to help him design the camera trap and lighting he needed.

A camera trap is an automatic system that triggers the camera when an animal breaks a beam of infrared light cast across a trail. Although the technique is commonly used by hunters and scientists to monitor animal movement, Ward needed a much higher-quality system to get the kinds of photographs he wanted.

So he and Slaughter built their own. They constructed waterproof plastic enclosures for the cameras and modified industrial-sized flashlight housings for the flash units.

The greatest challenge, especially in such a wet environment, was wiring the flashes so they would stay charged and ready for up to two weeks. Although the Nikon system he was using had a good standby mode that let the flash sleep until the camera was activated, it worked only with one flash. Most of Ward's images required two or three flashes, so he and Slaughter had to redesign all the wiring.

"Nikon gave us a wiring schematic of what National



Geographic uses," Slaughter says. "It headed us in the right direction, but there was a lot of trial and error. The benefit of ours is that it's modular — it can be used with one flash or three."

Although he worked to find trails that looked like they had a lot of activity, and estimated the best angles for shots, the system was not foolproof. Many times, he'd get only two or three pictures.

"There's no way to know if you're going to get half of an animal or whether the animal's going to be looking the other way," he says.

However little activity, the results paid off. One photograph, of a leopard in its natural habitat looking straight into the lens, exemplifies Ward's efforts.

"I could spend 10 years in the rain forest and never have

Leopard Stalking

A male leopard (Panthera pardus) captured on film by a custom-built camera trap, which uses an infrared trip beam to fire the camera and flashes.



Red-chested Owlet
Glucidium tephronotum



White-bellied Kingfisher, Alcedo leucogaster



Angola Fruit Bat
Lissonycteris angolensis

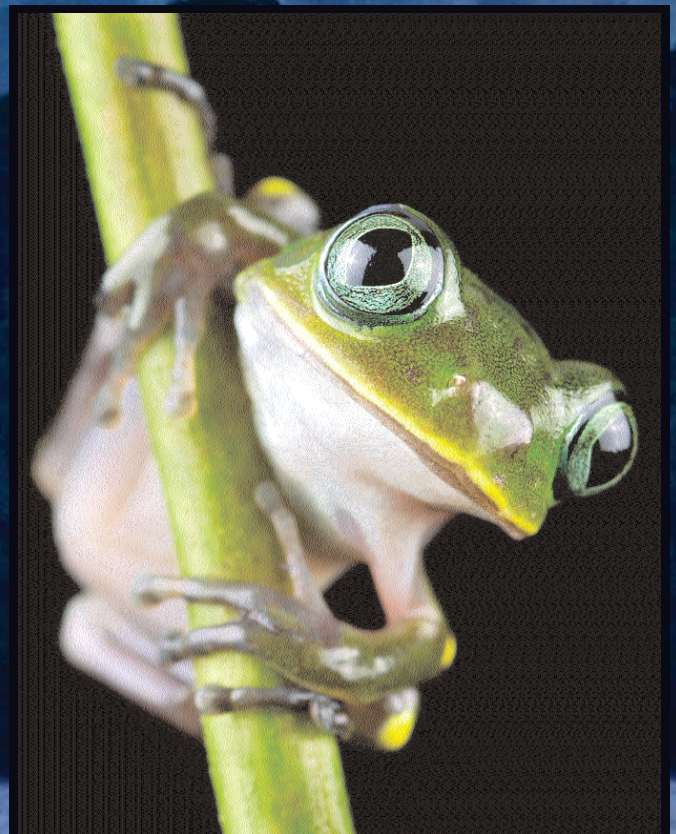
the chance to photograph a leopard that close with a camera in my hand. It's a very journalistic approach because you're photographing an animal without human interference," he says.

For small animals, including birds, reptiles and insects, Ward designed and built portable studios he could use in the field.

For insects, he used a "modular macro studio," with high-quality lighting and a macro lens to capture insects in smooth detail.

For birds and bats, Ward built a 10-foot by 4-foot portable studio out of white nylon sailcloth and black velvet. He used a lot of patience and some verbal encouragement to get birds to perch on a branch he placed in the enclosure while he photographed them.

"Part of my goal was to document the different species for biodiversity study because a lot of these species have not been photographed alive," Ward says. "But beyond just documenting, I tried to take it a step further and create pictures that will captivate a reader and get the essence of the subject."



Common Forest Treefrog, Leptopelis notatus