The Comeback of South Georgia

By Eric Hoffman Photographs by Frans Lanting

Black-browed albatross, one of 30 marine birds that nest on South Georgia.

The whalers and sealers are long gone—and wildlife is thriving.

With a dozen members of his expedition following closely, Larry Hobbs, a marine biologist and tour leader for Society Expeditions, walks up onto the Salisbury Plain on the northeast side of South Georgia Island. The frigid wind spits rain in Hobbs' face, signaling the approach of a fierce summer storm. Undaunted, Hobbs presses on. He is pleased because by South Georgia standards the weather isn't all that bad, and the people he is leading will soon witness one of the most impressive displays of wildlife in the world.

Located about 930 miles north of Antarctica, South Georgia lies in the southern Atlantic Ocean more than 1,200 miles east of Tierra del Fuego, the southern terminus of South America. With no airstrip, this remote and challenging destination can only be reached after several days' travel by ship across perpetually stormy seas.

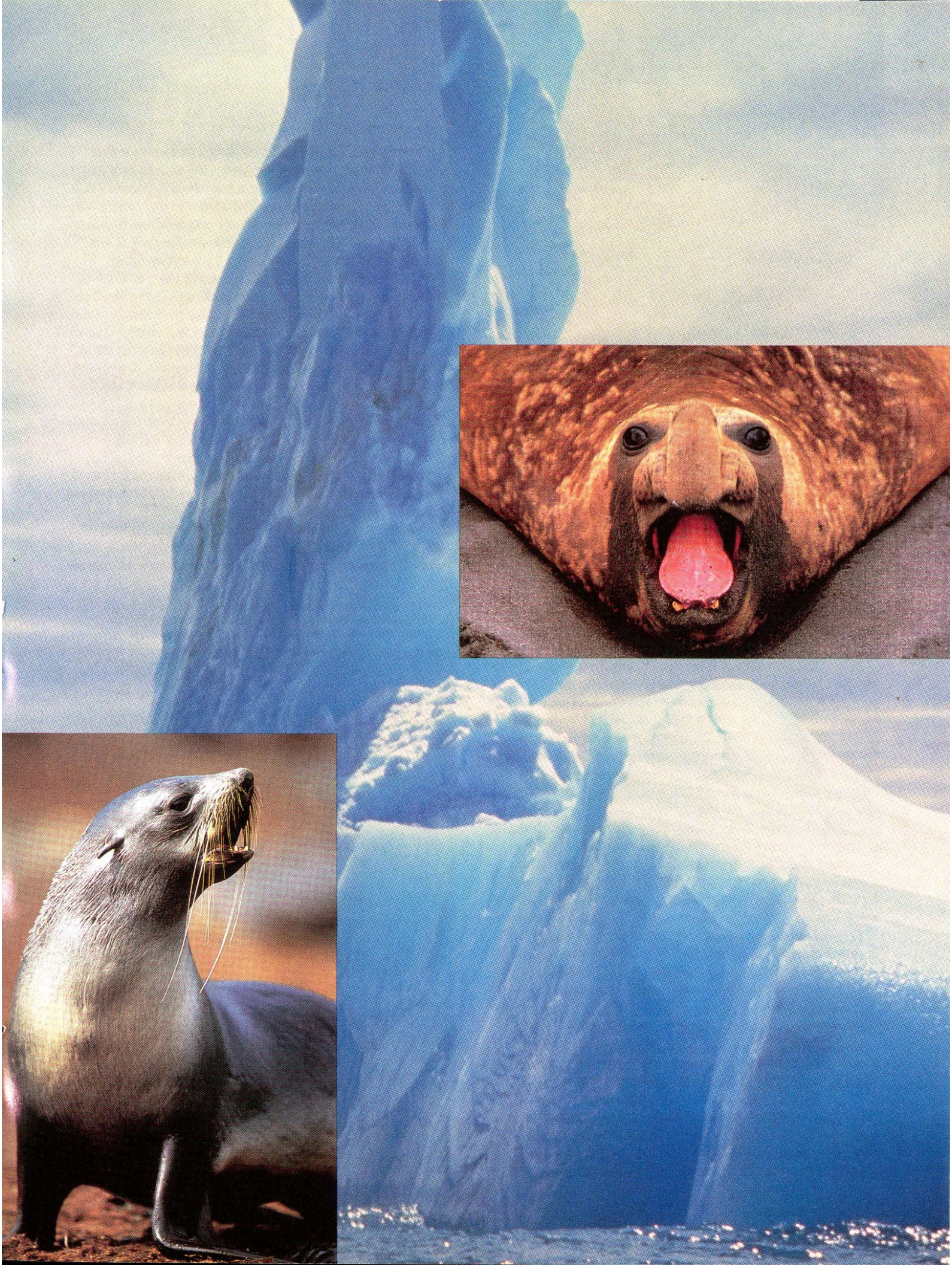
The vantage point provided by the Salisbury Plain overwhelms most people who come here. Explains Hobbs, "People are in speechless awe, probably with feelings akin to those experienced by the first Europeans to view the American great plains when they were covered with multitudes of buffalo and associated predators." South Georgia, Hobbs says, is one of the most incredible unspoiled wild areas on earth—populated with species people don't often see for themselves.

But this pristine appearance belies a human involvment that is anything but pure. "When you look at so many creatures, it's hard to believe that some of the most intensive exploitation of sea mammals in history occurred here for the better part of a century," notes Hobbs. "About 175,000 whales of all kinds were harvested on South Georgia, and Antarctic fur seals were killed for their skins by the tens of thousands." To a lesser extent, the island's marine birds were molested by the now-defunct whaling communities that took their eggs for food.

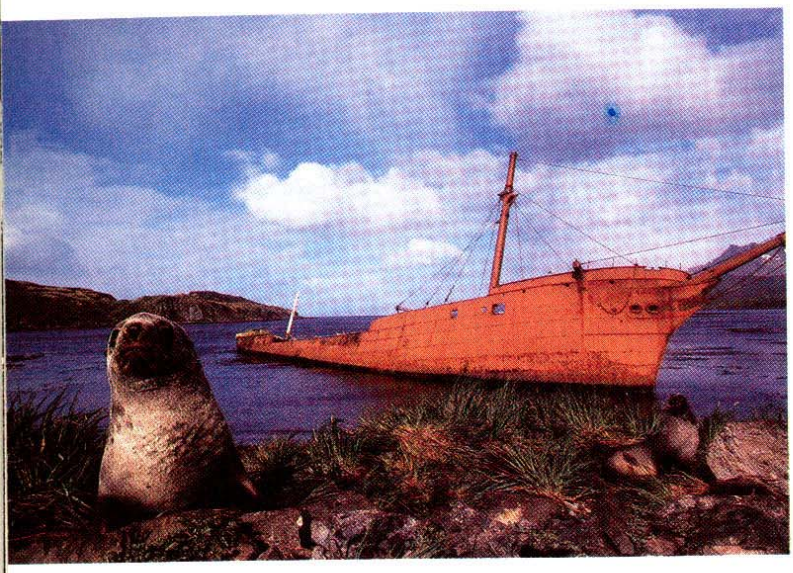
In recent times, the island has experienced a rapid resurgence of life that has astounded many scientists. British survey biologists say Antarctic fur seals increased by 17 percent annually through the 1950s and 1960s—a rate of increase that ranks among the most impressive ever recorded in large mammals.

Opposite: **The impressive icebergs off South Georgia's shores are an integral part of its ecosystem.** ***Inset, top:*** **Southern elephant seal bull.** ***Inset, bottom:*** **Fur seals are among the island's resurging wildlife.**

All photographs in this feature by Frans Lanting/Minden Pictures



South Georgia



The last Antarctic fur seals were hunted on South Georgia in 1907, when the species was near extinction. Now, about 1.5 million come ashore to mate each year.

"This is among the truly phenomenal stories of wildlife recovery," says *National Geographic* photographer Frans Lanting, who, after spending considerable time on the island, puts the bird life there in a class by itself. "South Georgia is to marine bird life what the African Serengeti is to species of antelope."

Today the beaches near the plain where Hobbs stands are literally hidden beneath crowds of Antarctic fur seals so dense that reaching the water would require walking on their backs. During mating season an unbelievable 1.5 million fur seals haul themselves onto the island. In the carping mass, bulls—known as beach masters—challenge and fight one another in ill-tempered squabbles over mating rights. The bulls are so fearless that they will even charge people who venture too near the colonies.

At another place along the water's edge comes the hoarse bellowing of southern elephant seal bulls. Two males bare their teeth while bobbing and weaving at one another like immense boxers. Elephant seal confrontations are often ferocious and bloody, but rarely fatal to the combatants. The loser is usually driven back into the sea, often at the expense of pups who have the life crushed out of them when the bulls bulldoze everything in their path during battle.

Near the seals are thousands of king penguins standing vigilantly next to their gluttonous fluffball chicks who can each consume six pounds of squid a day. With glistening black-and-white plummage highlighted by gold patches under the beak and on the sides of their heads, the stately parent penguins look like fops in tuxedos and ascots with matching ear muffs, waiting for their mates to relieve them from sentry duty.

Wandering albatross sit silently on their nests, apparently unperturbed by human intruders. Nestled on their eggs, they look like huge sea gulls; but when an albatross runs clumsily downhill and displays its 12-foot wingspan, one quickly recognizes the bird as the ultimate graceful glider.

Elsewhere on the island, Hobbs and his group of ecotourists witness a mob of macaroni penguins as they march down a glacial creek. The macaronis—whose golden tufts of macaronilike feathers poke out of the sides of their heads—nest in the difficult-to-reach rocky areas behind the five-foot tussock grasses. They head en masse to feed in the sea and hopefully avoid the jaws of nine-foot-long leopard seals.

There are more than 30 species of marine birds nesting on South Georgia and another 30 species that visit the island. An estimated 70 million individual birds nest on South Georgia annually, including the sooty-headed albatross, snow petrel, blue-eyed shag, and penguins galore. Gentoos, kings, macaronis, and chinstraps are the most numerous penguins, but occasionally emperors and rock hoppers appear, too.

To the human way of looking at things, South Georgia is remote, formidable, and inhospitable. During the six- to eight-month winter the entire island is covered in snow. During the brief spring and summer, which occurs from November to February, there is a thaw that allows 40 percent of the island to emerge from its white mantle.

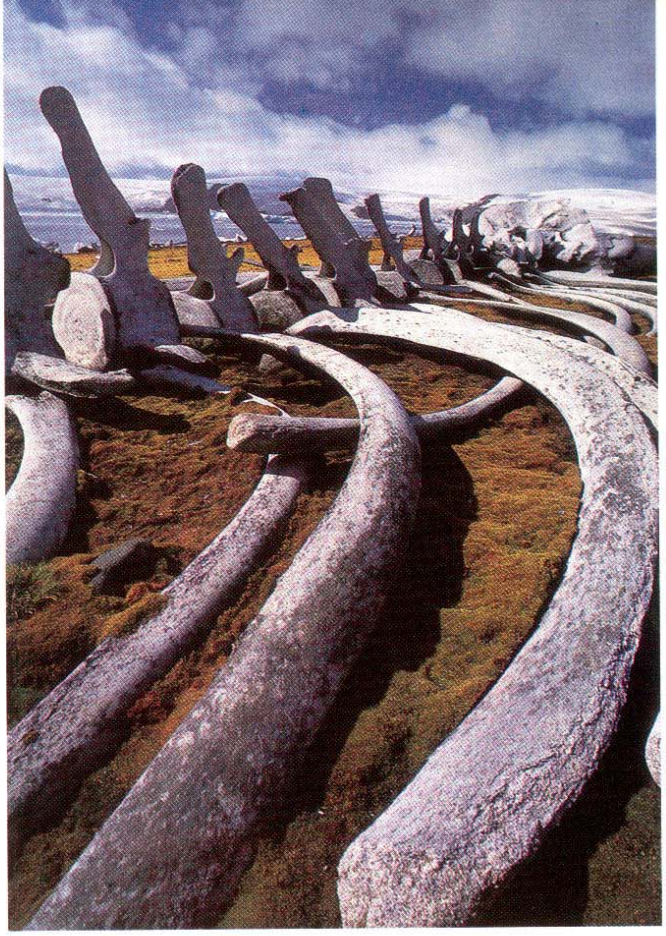
The island's topography is no more amicable than the

The island's feral reindeer are survivors of animals brought to South Georgia by Norwegian whalers as a source of fresh meat. Few introduced animals survived the climate.

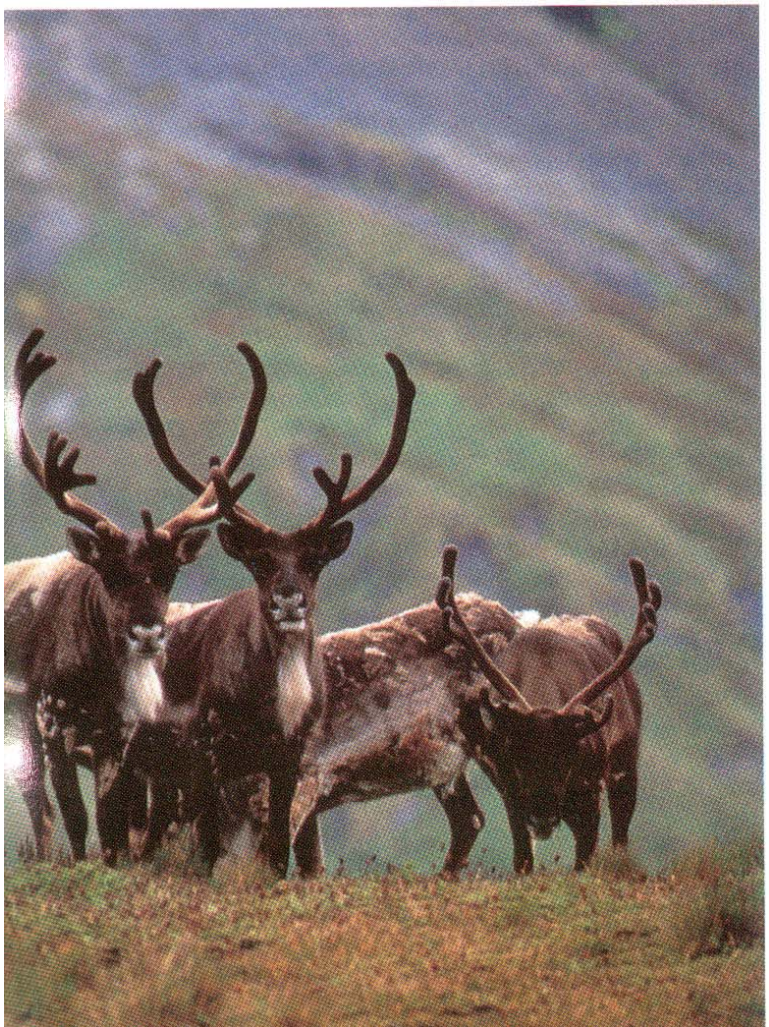
climate. Lying with a southeast-to-northeast orientation, the cigar-shaped island of mostly volcanic origins is roughly 100 miles long and 20 miles wide. Its shoreline is extremely precipitous with sculpted fjords and glaciers extending to the sea. The island's peaks run its entire length and reach nearly 10,000 feet above the ocean.

Climatic and topographical features combine to make weather on this island unpredictable. R.I. Lewis Smith, a terrestrial biologist for the British Antarctic Survey, considers South Georgia's weather to be more dramatic than its wildlife. "Occasionally, fohn winds sweeping down from the mountains create atypical rushes of warm air that cause the coastal temperatures to rise as much as 20 degrees Fahrenheit in a few minutes. Katabatic winds, also generated from the mountains, can spring up as though from nowhere, with conditions changing from calm to a screaming gale in moments," says Lewis Smith.

Still, the island hosts a profusion of life – which is due to its location at the Antarctic Convergence. Here, antarctic and subantarctic waters mix together creating uplifting currents optimum for supporting vast quantities of krill, a plankton-eating, shrimplike crustacean. According to Lewis Smith, krill – the most important component of the South Atlantic food web – are the key to the existence of practically all of the area's wildlife. "In one way or another everything from seals, whales, penguins, and numerous other kinds of open-ocean seabirds are dependent on krill," he says.



Whale bones on the shore conjure up ghostly visions of Grytviken's whaling past.



South Georgia was claimed by the British in 1775 by the famous mariner Captain James Cook. From 1786, American sealers visited the island to hunt fur seals. The sealing industry reached its peak around 1880 and declined rapidly when the seal population dropped too low to pursue for economic gain. Shortly after the turn of the century, Antarctic fur seals came close to extinction.

Norwegian interests began the intense whaling activities conducted from South Georgia in 1904. This whaling era ended under Japanese stewardship in 1965, though factory ships from Japan continued to set sail after this. The peak of whaling activities came in 1936, when 39,000 whales of many different species were taken. The degree of recovery for each victimized whale species generates debate among scientists, but there is general agreement that some species, such as the blue whale, are still exceedingly rare.

The island made a brief blip on U.S. nightly newcasts during the 1982 Falklands War, when the Argentines shot up the abandoned whaling station at Grytviken and imprisoned the 15 British Antarctic Survey scientists living there. Today, the only signs of war are bullet holes in many of the dilapidated buildings and a single Argentine grave in the whaler's graveyard at Grytviken.

For wildlife, the greatest impact of the war may be the cutback in the number of scientists allowed to stay and

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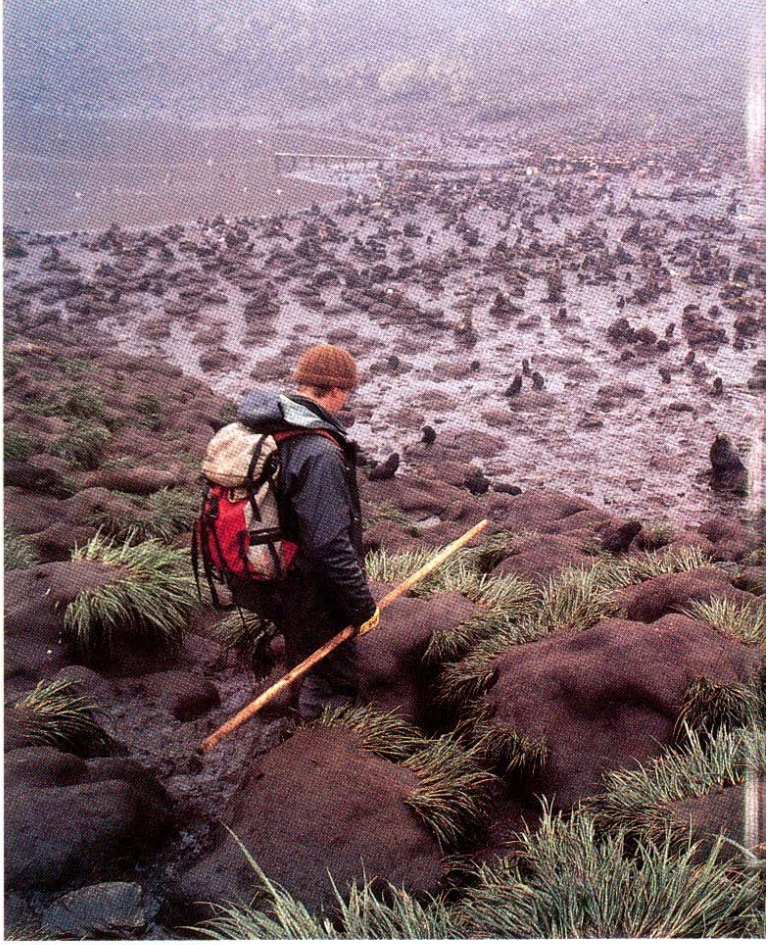
study them—collecting the data that might someday afford them protection. The former scientists' quarters are now a British military garrison. Only a tiny research station on Bird Island, located offshore from the northern end of South Georgia, and the abandoned Hasvik whaling station on South Georgia are now in use by scientists.

In the ruins of Grytviken, Leith, and small settlements abandoned long ago, the ghosts of the past are evident, but nature is slowly reclaiming them. "At Grytviken," says Lewis Smith, "the largest settlement that was still processing whales in the 1960s, the wooden fencing plans onto which the whales were towed and then cut up are now partially overgrown by grasses, as are the tracks that wind among the ruined buildings and around the periphery of the station. Old boats and various low structures are gradually disappearing beneath the turf of tussock grass and other vegetation. The stations that have been abandoned the longest at Ocean Harbour (since 1920) and Prince Olav Harbour (since the 1930s) have been completely recolonized by native plants."

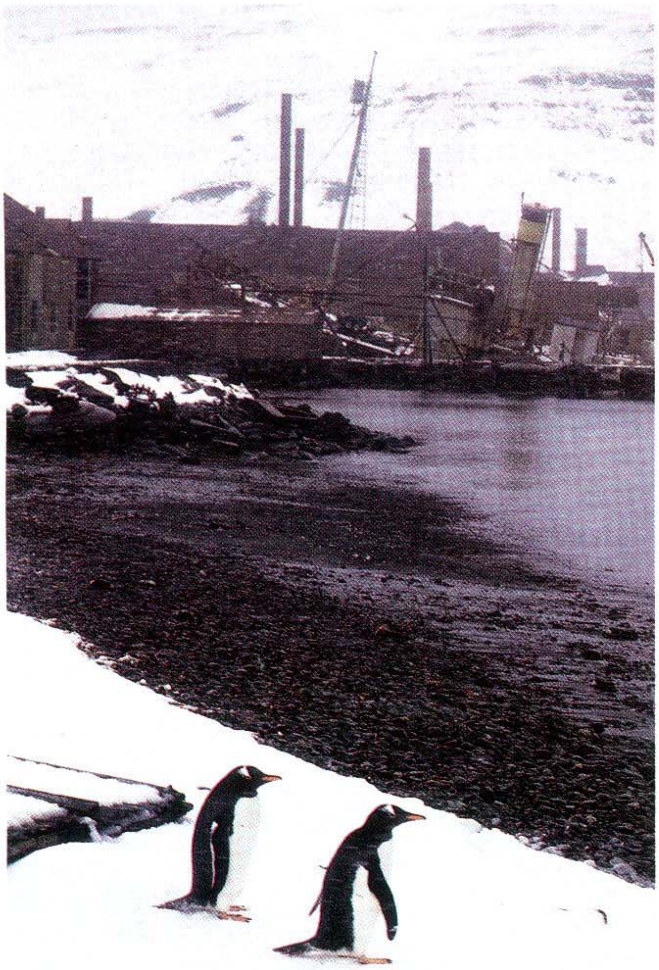
The larger stations of Grytviken and Leith, though in disrepair, still allow one to see the technology and industry that went into whaling. "Once the industry became highly mechanized, with large numbers of whale catchers bringing in a continual stream of whales for processing, these stations were a hive of industry, working 24 hours a day if the catchers were good," describes Lewis Smith. "The clamor of machinery, shouting men, noise of steam rushing from bone-cutting saws, and the constant issuing forth of smoke, oil, and grime provided a somewhat Dickensian scene from the industrial revolution against a backcloth of stark ruggedness of ice-covered mountains.

"Now all this is a thing of the past, never to be experienced again—a good thing from the point of view of a whale!" Lewis Smith comments.



Scientific research and tourism are now regulated to protect South Georgia's wildlife.

The island's penguin populations have also rebounded since the departure of sealers and whalers who disturbed colonies to take eggs.



The human legacy on the island may ultimately be the introduction of rats. Though rarely seen by the casual visitor, rats have had some negative impact on a small, endemic bird—the pippet—and small petrels that nest underground.

Aside from two herds of reindeer established on the island about 80 years ago as a source of fresh meat for Norwegian whalers, the island is free of many of the feral animals associated with the wholesale destruction of island communities throughout the world. It wasn't that the sealers and whalers didn't bring cats, rabbits, horses, goats, and pigs to the island. South Georgia simply proved to be too harsh for these species, and animals that became feral did not survive.

The comeback of the Antarctic fur seals from near extinction isn't the island's only dramatic species revival. According to John Croxall, a scientist with the British Antarctic Survey, penguins are doing well, too. The macaronis number between 3 and 5 million birds. The Gentoos are about 100,000 strong, as are the king penguins. And the chinstraps number about 10,000.

No census was ever taken of most of these species

during the sealing and whaling period. It is known, though, that the hunters disturbed colonies to procure eggs. The king penguins have been counted over the last couple of decades. If their population trends during this time period are an indication of what has happened to other penguin species, the news is good. In the 20 years since the kings were first counted, their numbers doubled.

There is an ongoing debate among scientists over how greatly the depletion of whale species has contributed to the rapid resurgence of birds and seals, which compete with the whales for krill. Still, the future looks bright for nature's marine bastion known as South Georgia.

The island is governed by a British-appointed commissioner who also governs South Sandwich Island, and this is part of the reason that South Georgia is respected by visitors. The island's resources are protected by the Falklands Islands Dependencies Conservation Ordinance. This includes three kinds of conservation zones: one partially restricts human visitation; another allows limited access for organized tour-expeditions; and the third grants access only for compelling scientific research. Without an effective means of enforcement readily available, the cooperation of tour groups and captains of fishing vessels that visit the island is crucial.

Though wildlife is resurging on South Georgia, there are still problems and concerns related to human activities. So far, heavy krill fishing by East European fisheries outside the 12-mile limit has not affected the upper end of the food web. During normal oceanic conditions it is assumed that krill are still plentiful enough to accommodate both the fisheries and local animal life. But nobody knows when this might change.

The equipment used and lost by the fisheries, however, has already caused documented problems. "An increasing problem with krill and finfish fishery ships is the bycatch of fur seals and seabirds, notably albatross and giant petrels," says Lewis Smith. "In 1988-89 more than 200 fur seals on Bird Island were hauled out with wrapping plastic and parts of net twisted tightly around their bodies."

Lewis Smith speculates that the fisheries, together with recurring changes in ocean currents known as El Niño, could undo the equilibrium of the food web at South Georgia. El Niño causes such abrupt changes that it adversely affects the abundance of food sources for species such as seals and penguins.

But Lewis Smith agrees that on balance South Georgia's wildlife is now much like it was prior to man's 80 years of unbridled exploitation. For the time being, this natural fortress will serve as a beacon for people like Hobbs' ecotourists and others who are interested in seeing wildife that have gotten a break from the continual onslaught of humankind.

Eric Hoffman writes frequently on wildlife and related subjects. His latest book, Adventuring in Australia, *was published by Sierra Club Books/Random House.*

Elephant seal bulls engage in ferocious battles to defend harems of about 50 females.