

Imperative Call

any scientists and birders share the daydream of slipping the leash of civilization, vanishing into the wilderness to study and enjoy nature without restraint or interruption. The great escape is still possible, but it requires

Nature lured Alexander Skutch to the tropics and Costa Rica, giving the world a rich, important voice for birds.

> a single-mindedness that borders on passion. One must hear the call.

Alexander F. Skutch heard it while a youngster in the Piedmont hills of Maryland. The siren lured him to the tropics, and he has spent most of the last five decades watching birds in a remote valley in south-central Costa Rica. From there, Skutch has launched a series of books and papers, charming and important, that place him high in the pantheon of tropical naturalists.

In the foreword to one of

his most popular books, The Imperative Call, Skutch writes: "Two voices summon men with a call so imperative that few who hear clearly can resist. One is the voice of religion, which bids us abandon all mundane pursuits and seek holiness, God, and life everlasting. The other is the voice of nature, which invites us to fill our spirits with its beauty and wonder and challenges us to disclose some of its closely hidden secrets. Obeying either of these voices, we may neglect nearly everything that prudent men esteem and strenuously seek: wealth, security, solid comfort, and social status. We may even abandon family, friends, and homeland to follow the call into a wilderness where perils lurk."

Because of his books, including A Bird Watcher's Adventures in Tropical America and A Naturalist in Costa Rica, the story of how a shy, introspective boy from the

Maryland suburbs became the shy, introspective leading authority on the birds of Mesoamerica is well known.

At the age of 16, in 1920, young Alec was spending a lot of time alone in the hardwoods behind his home, reading.

"After reading Shelley's poetry and essays, I could not continue to eat the flesh of slaughtered animals, a refusal that brought me into conflict with my father and the family doctor, my uncle, who predicted, falsely, that my health would suffer," remembers Skutch.



er at the rtch farm in Costa Rica.

This was well before vegetarianism was in the least fashionable. Skutch now supposes that "it put me apart a bit (from society), which probably made it easier for me to spend all those years alone." The refusal to willingly cause the death or injury of a fellow creature also became a central plank on which Skutch has built a fascinating and controversial personal philosophy.

Skutch went to

John Hopkins University in pursuit of a degree in botany. A graduate school field trip took him to Jamaica. It was his first time in the tropics. He was hooked. Before long, he was on a United Fruit Company steamer bound for Panama with a fellowship to study the banana plant.

Upon arrival in Panama City, Skutch drank in the sensory vapors of the fecund land. Later he wrote: "As I look back across the years, I think it was here that I first succumbed to the fascination of Latin America, its romantic scenery, its tragic history, its vast variety of animal and vegetable life; I believe it was here that I began to fall under that Circe's spell which at various difficult periods in the following years I tried in vain to exorcise."

He stayed in a company camp beside the Changuinola Lagoon on Panama's Caribbean Coast. The plant life attacked both his senses and his confidence. He recalls: "An overwhelming profusion of strange plants and animals, for which I lacked field guides, induced a state of pleasant excitement not unmixed with despair. Had anyone challenged my right to hold the doctorate in

botany that I had recently earned, I might have relinquished it without protest."

The intoxicated young botanist underwent a transformation on that Panama banana farm. His mission was to investigate the anatomy of banana plants, and he passed dutiful hours peering through a microscope at green tissue. But his attention was diverted by a Rufous-tailed Hummingbird that began building a nest outside the laboratory window. Skutch carefully recorded every stage as the nest took shape, eggs appeared, and tiny chicks pipped their way into his world. He was captivated and vowed to devote his life to probing the secret lives of tropical birds.

Skutch wandered the wild, skinny, bird-rich isthmus of Central America, living out of a knapsack, sleeping on floors. To survive, he collected and sold plant specimens. He also began sending articles north. In 1934, Bird-Lore magazine, the precursor to Audubon, published "Familiar Birds in Their Winter Homes," by Alexander Skutch.

The naturalist trekked through Costa Rica, Honduras, Guatemala and Mexico. In 1940, when the United States Department of Agriculture wanted to investigate the possibility of rubber cultivation in South America, Skutch joined the expedition as chief botanist and explored the western Amazon aboard a Peruvian gunboat.

Usually he had no agenda except the one set by the bird in his view at the moment. Much of what Skutch recorded in his detailed journals was new to science. The birds of Mesoamerica were little known at the time. There were no field guides other than Bertha Bement Sturgis' Field Book of Birds of the Panama Canal Zone (1928) and James Bond's Birds of the West Indies, which was published eight years later.

In order to identify birds, Skutch took impeccable notes, and then—sometimes years later in a museum or library—he combed the literature and sorted stuffed specimens to put a name to the word pictures he had drawn. Even in the largest libraries, references to tropical birds were scant. Skutch's best ally at the time was Robert Ridgway's encyclopedic but pictureless The Birds of North and Middle America (1901-1919).

There was an easier way, of course; Skutch could have simply shot his anonymous quarry and sent the skins to a museum for identification. But his evolving philosophy, which relates to ahimsa, "an ancient Indian ethic of universal harmlessness," prevented him from resorting to birdshot. The reward for this patience was an intimate familiarity with the birds.

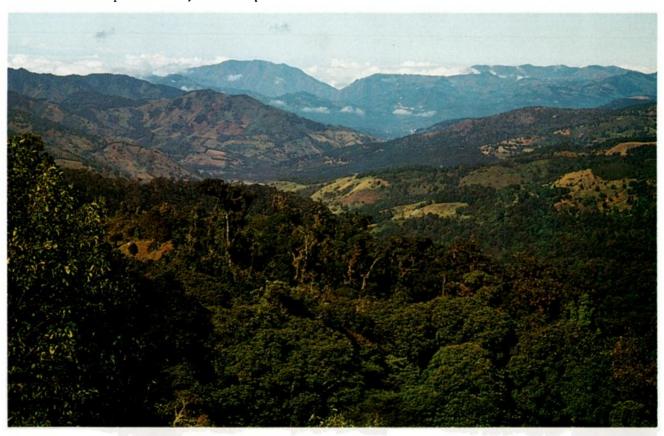
rom the beginning, Skutch has been able to make his observations in a literary style that is both useful to the scientist and popular with a broad spectrum of readers. On that Peruvian gunboat, he wrote: "The gem of all the feathered creatures that I met here was a Yellow-billed Jacamar, a slender, long-tailed, alert bird, about the size of an oriole, with a long, sharp beak. All his upper plumage was the most intense metallic green, with reflections of violet and gold. Below, he was a deep, rich chestnut, and his outer tail feathers were cinnamon. Doubtless his nest, like that of other jacamars, was hidden away in a burrow in some steep bank, or in a hard, black termitary."

With these descriptive powers and his now legendary observational skills, Skutch eventually compiled the three-volume Life Histories of Central American Birds, published by the Cooper

wintering habits)." Greenberg, director of the Smithsonian Migratory Bird Center, studies neotropical migrants in Mexico.

Though the trend has been to study large groups or populations, Greenberg says, "Skutch's observations—sometimes of an individual bird or family—have the ring of truth; some have been fundamental."

Skutch places his exploits midway on the continuum between the great pioneering naturalists such as Audubon, Wilson, and Thomas Belt (The Naturalist in Nicaragua, 1888) and today's specialized, conference-going scientists. While he came well after the pioneers, he chose a terra incognita, tropical America, where the trails were poorly marked and the wildlife virtually unknown. He remained independent and unbeholden. And Skutch conducted his studies without mist nets,



Ornithological Society, from 1954 to 1969.

These life histories are the bedrock of Mesoamerican ornithology, but some biologists undervalue them because they are written with flair, an absence of jargon, no fear of anthropomorphism, and an obvious personal attachment to the subjects.

Now, with migratory songbirds in decline, scientists are racing to understand their ecological needs, especially in the tropics. One of those scientists, Russell Greenberg, says, "For a whole range of birds, Skutch is still all we have (on their leg bands, radio telemetry, teams of assistants or computerized data bases. Even his binoculars were of the low-end variety normally seen slung around the necks of fans at stock-car races.

Skutch is tall and thin, with a faintly aristocratic bearing. Almost 90, he still walks the trails looking for birds, graciously receives unexpected visitors, and seems to be increasing his writing output. Having just published Origins of Nature's Beauty, he is now correcting the galley-proofs of A Naturalist in Costa Rica-in Spanish. He did the

Costa Rican coun tryside near the e of Alexande Skutch and his land has been co erted from fore to farmland.

translation of his 1971 classic years ago and finally found an eager publisher.

hile his opinions are strongly held and have been elucidated in writing, Skutch ventures them quietly in conversation—a retiring evangelist. He knows that some are controversial and that his presentation of data, which blends technical and aesthetic information, is unorthodox.

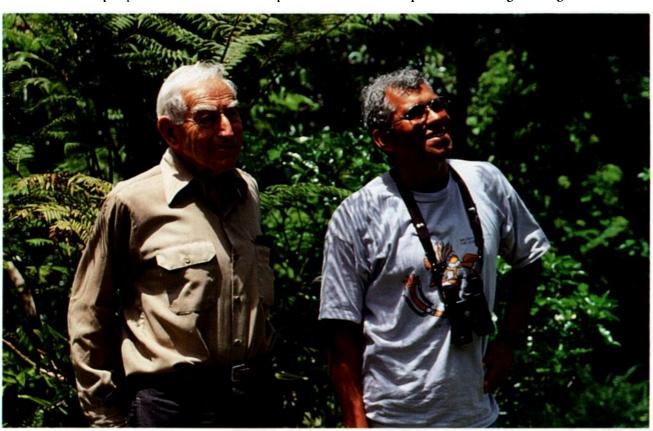
"Ornithology," he complains gently, "has fallen under the spell of mathematics. You can't get a paper published these days unless it is laden with tables and graphs."

Still, Skutch seems to believe that science is in good hands. "If we cannot ourselves carry the torch that symbolizes our aspirations to the final goal," he wrote in Life Ascending, "we may, to paraphrase a verse of Lucretius, pass it still burnSánchez says of the man he considers a mentor. "Skutch is unique, a classic naturalist in the modern era. He is an Audubon for this region."

While traipsing around the tropics and probing the lives of birds, Skutch began asking classic survey questions. For example, seasonal changes in coloration are rare among the resident birds of tropical America; does this mean that equatorial males are more likely to participate in household chores than their temperate-zone counterparts? The answer, he discovered, is no.

Do most tropical birds, even those living in the cool highlands, lay smaller sets of eggs than closely related species at higher latitudes? Yes. The questions continued.

Skutch believes that one of his most profound contributions to ornithology was documenting "cooperative breeding" among some kinds of



exander Skutch at his homestead.

ing brightly to others, like runners in a torch race." When asked who is qualified to accept the torch, Skutch quickly offers names: Gary Stiles, at a university in Bogota, Colombia; Julio Sánchez, a Costa Rican ornithologist. Pulling books from his shelves, Skutch points to authors, such as David Snow. He finds no lack of torchbearers.

Sánchez, the curator of birds at Costa Rica's national museum, is embarrassed by the suggestion that he is an heir to the Skutch legacy.

"I couldn't ever compare to what he's done,"

birds. In 1935, he described the complex lifestyles of Brown Jays, Banded-backed Wrens and Bushtits, where young birds stay with their parents for up to five years, helping defend the territory and feed later broods.

According to Skutch, "This is the most closely knit family life of any animal except humans." After a pause he adds, "And these days I'm not sure how competitive we would be."

Skutch has written extensively on altruism in birds, a subject that fits with his belief that all creatures great and small should be striving toward harmony. He argues that birds show more "promising developments" toward this end than other groups of animals. Birds demonstrate "active cooperation among pairs or larger groups, a complex social structure, a capacity for strong personal attachments and at least the first glimmerings of aesthetic appreciation."

"Now that he is less active in the field, Skutch is concentrating on synthesizing what he has learned over the years," says Iulio Sánchez.

Sánchez recently visited Skutch, driving from San José, the capital city of Costa Rica, on the Panamerican Highway through the Talamancan cordillera, a mountain range with peaks to 12,000 feet. Although it is the most famous farm in Costa Rica, Los Cusingos-named for the Fiery-billed Araçari—is arduous to reach, difficult to find. Sánchez pauses at the unmarked forks in the gravel road that passes through pastures and coffee and sugar cane fields to the patch of rainforest that hides Los Cusingos.

The house is not visible from the road, and there is no sign or driveway, just a small opening in the screen of trees. Sánchez finds Skutch and his wife Pamela sitting on the back porch watching birds take nips of fruit from a platform feeder. Many birders have lengthened their life lists at Skutch's famous feeder. Recently, a group of visitors that included George Hall, an American Birds regional reporter, held their collective breath as a Red-headed Barbet and Speckled Tanager traded places at the feeder. A Graynecked Wood-Rail and wild pigeons were on the ground. A Green Honeycreeper and Palm Tanager made forays to the fruit.

Skutch watched each new arrival as eagerly as his visitors, even though he has probably passed more time looking at these species than any other living soul.

The Skutches have about 250 acres of forest, recovering forest, and garden plots of bananas and corn. When he was shopping around for a place to settle, the idealistic young naturalist chose this rugged and then-isolated valley as a proving ground for his dream of living harmoniously with all things. Later he wrote: "I yearned intensely to dwell at peace with all creatures, destroying no living thing. I was fully aware that

the perfect realization of this ideal is incompatible with the preservation of life by animals whose needs are as large and varied as ours; but I was convinced that, by trying hard, I could come much nearer its fulfillment than people commonly do. And while making this effort, I desired to do something even more difficult; to penetrate, as far as possible, to the secret springs of this multiplex phenomenon called life, to understand its significance in the whole vast drama of cosmic evolution. Here I

hoped to have leisure to mature my thoughts on these baffling problems."

The experiment has been largely a success. The Skutches offer an attractive model of the low-impact lifestyle. They grow much of their own food, grinding corn into meal. Their vegetarianism allows them to eat eggs but now, Skutch tells Sánchez, the chickens are gone, victims of a tayra, a fierce, weasel-like animal. They have no phone, no car, no electricity.

The Skutches communicate with the outside world through the post office in a

nearby town. San Isidro has grown so much, Skutch says, that "there is no place to park a horse," so, occasionally, they take the bus into the village. They are isolated, but not out of touch.

There is nothing accidental about this lifestyle; it has been considered and directed. Skutch writes: "Sometimes a person is called unsocial because he spends little time with other people, but, if you investigate his social circle, you may find that it includes a substantial segment of the natural world or, perhaps, minds that lived long ago... He seeks a society much wider than that of mankind."

Although Skutch lived some years alone on the farm, surviving Costa Rica's brief revolution in 1948, he has had Pamela's company for most of his time at Los Cusingos. The British-born Pamela is the daughter of C.H. Lankester, a well-known naturalist with a particular fondness for orchids. Lankester had a coffee plantation



Turquoise-browed Hotmot lives on the north Pacific coast of Costa Rica. Skutch calls the motmot family "ornate enough to satisfy the most exacting eye."

and orchid garden in Costa Rica that attracted roving botanists, including young Alec Skutch. Pamela is vivaciously charming, with English manners untarnished by years on the frontier. She seems to harbor no regrets about trading London's (or San José's) social whirl for a life of contemplating tropical nature, although she allows to Julio Sánchez, "If we didn't have visitors, we might go around the bend."

he wilderness that Skutch chose is no longer a dark frontier: tourism is Costa Rica's second



Pamela and Alexander Skutch often watch birds from the porch of

largest industry. Of the 500,000 visitors arriving this year, many will be lured by the country's fabled biodiversity, which includes more species of birds (830) than can be found in all of North America. The birders come carrying The Birds of Costa Rica, co-authored by Skutch and Gary Stiles. Some travelers can paraphrase or even quote passages from Skutch's books. Recently, a gaggle of French tourists

successfully sought out Skutch using only the clues found in his literature.

Sánchez made this visit to ask if he can bring a large group of Costa Rican daytrippers for a visit later in the month. Since Los Cusingos is incommunicado, most visitors arrive unannounced. Skutch doesn't mind. He writes: "I can share my knowledge and insights with countless others without diminishing my store of them, and I can enjoy beauty yet leave it undiminished for the delectation of others. The economy of the spiritual world is exempt from the harsh limitations that cramp the material world."

Sánchez is concerned about the health and welfare of the Skutches, but finds that their only molestia is a plague of petty thieves. They can't walk from one end of the house to the other without locking doors behind them. The delinquents have even lifted the binoculars given to Skutch as part of Audubon magazine's Hal Borland award for excellence in communications. Sánchez also wants to help the Skutches find a way to give permanent protection to their sanctuary while providing for their adopted son, Edwin, a roving country musician. (See Overview, page 16.)

According to Sánchez, Los Cusingos is both an ornithological shrine and an important island of habitat. Like most of Central America, the area around the Skutch place has been converted from forest to agriculture: beans, corn, coffee, cattle, sugar—all environmentally degrading and all, with the exception of export crops such as bananas, strikingly inefficient. The clearing began before Skutch salvaged his piece of rainforest and continues today-although the logging is now just mopup operations, erasing the few surviving woodlots.

The sound of every falling tree echoed painfully through Skutch: "At intervals throughout the mornings, I would hear the dying groan of some great tree as it began to strain the shrinking band of wood between the axe cuts on opposite sides. Then came the billowy swish of myriad leaves rushing madly downward through the air and a thunderous, earth-quivering thud that reverberated far across the valley as the huge tree crashed down upon its final resting place."

One can't view the exhausted tropical farmlands without agreeing with this quote from Skutch, found pinned over the desk of a Costa Rican agronomist: "It is a fallacy productive of much unhappy maladjustment to suppose that every able-bodied man will make good as an independent farmer...The state will not allow a man to practice medicine, pharmacy, or law, or even to drive an automobile, until he has demonstrated by passing adequate tests that he knows what he is about. But it does permit any incompetent agricultural bungler to do just as he pleases with the soil, a substance as complex and delicately balanced as any of the living organisms it supports, easily ruined but slow and difficult to regenerate, and the ultimate foundation of the nation's prosperity and continued existence."

As the human population doubled again and again, Skutch watched the animals disappear from his farm. The big mammals went first, the cats and tapirs and deer. Then the birds began to wink out. He misses the "great flocks of macaws" that would go screeching over the house. This year he found no Summer Tanager, no Yellow-bellied Flycatcher. Even though he is not in a flyway, he regularly recorded 18 or 19 species of migrants. This year, he found only the Olive-sided Flycatcher, Northern Oriole, and Tennessee, Chestnut-sided, and Black-and-white warblers.

Although he is only half Skutch's age, Sánchez, too, has seen enough bird habitat razed. Like his mentor, Sánchez finds more in nature than research subjects and is pained by its needless destruction. Sánchez is both a student and a devotee of nature. Like Skutch, Sánchez has spurned security and promotions in order to spend more time in the woods. He sees Skutch as a model of dedication, organization, and lifestyle.

One of Skutch's most important contributions, says Sánchez, is having made so much information accessible to so many people. "He can capture what he sees in writing.'

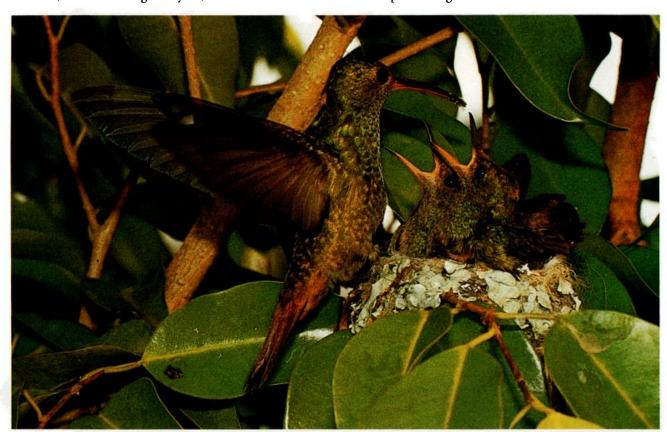
If you could run your hand over the topography of Skutch's prose, it might feel like a renaissance sculpture—classically smooth curves, nothing sharp or unseemly.

"His style is elegant and almost formal; some have called it Edwardian," says author Frank Graham, himself an elegant stylist, who wrote a

awarding a golden apple to the Earth's most gorgeous family, I would not trust any of these to win the beauty prize. With greater confidence, I would support some of our exquisite miniatures, our multihued wood warblers, our little gemlike tanagers, or our scintillating hummingbirds, in the belief that they alone could bring the trophy to our own hemisphere."

The hummingbird, he writes, is "a fairylike bird, with a tiny body of slender grace, that hovers, miraculously suspended between two broad sectors of misty light, like the separate halves of a halo, giving forth now and then a bright glint of green from its back..."

Style aside, Skutch is a great communicator because he has something to say, some of it controversial. On a trail near the house, Skutch and Sánchez see a damp scattering of feathers. Sánchez



profile of Skutch for Audubon magazine in 1979.

Skutch is consistent, so for a fair sample of his prose, one can let the book fall open at random. Here, he praises small birds: "We have in the western world no family of large or middle-sized birds, particularly our own, that rivals in splendor of plumage the birds of paradise and the pheasants of the Eastern Hemisphere. Our orioles, our motmots, and our jacamars seem ornate enough to satisfy the most exacting eye; but should some bird-loving Paris be assigned the difficult task of is immediately intrigued. What happened here? Skutch barely pauses. He knows that another of his beloved wild pigeons has fallen to a predator, and he disapproves. This is where Skutch parts company from most of his far-flung colleagues: He thinks predation is "a great evil that a wise or benevolent creator would have avoided."

"Earth has no more distressing spectacle than that of a predator suddenly striking down some defenseless creature innocently singing or attending its young, no sight more pitifully repulsive Rufous-tailed Hummingbird, at species that can ured Skutch's attention as a young botanist in Panama.

than the hideously mangled remains of what, a few hours before, was a beautiful animal enjoying its life."

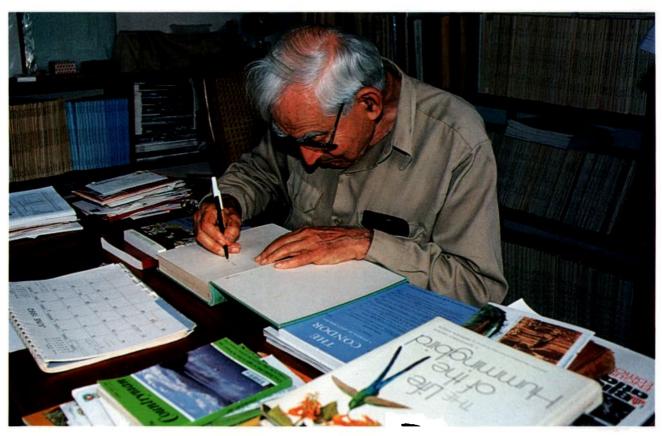
Skutch tells Sánchez that the only raptor he really appreciates is the Laughing Falcon—a pair of which nest near his house-because this bird dines largely on snakes. It is entirely fair for people to be judgmental of nature, Skutch claims, because we are a part of it. But he is well aware that this is not a universal attitude among naturalists.

"I can't imagine how nature would work without predation," Sánchez says, weighing his words carefully so that none hit a note of disrespect.

Skutch can imagine such a world, and he has begun to describe it in recent books. Predators, he maintains, are not necessary for population control or to strengthen the gene pool, at least among birds. Birds use territorial systems and deferred the Earth would have become "the abode of a vast diversity of creatures dwelling in concord (instead of) a place of mixed character, where beauty and ugliness, peace and fear, happiness and horror, mingle together in the most perplexing contrasts."

What attitude, Skutch asks, should we have toward evolution? "That evolution has accomplished much that is splendid and admirable, it would be ungrateful to deny. That the means it has employed have often been ruthlessly harsh is a proposition to which every compassionate person will attest."

In a new book, Origins of Nature's Beauty, Skutch notes that in many cases evolution seems to be on the right track. Through a rudimentary sense of aesthetics and preferential mating, especially among birds, some animals are making themselves progressively more beautiful, far



breeding to limit population growth. Skutch has been arguing since 1947 that tropical birds do not always opt for maximum production—and that the drive for fecundity, like predation, is evidence of evolution gone awry.

"The evolutionary impulsion to increase fecundity, technically known as fitness, at whatever cost is responsible for most of the ugliness, strife, and suffering that afflict the living community on the fairest planet illuminated by the Sun."

If evolution had been guided, Skutch imagines,

beyond utilitarian needs such as camouflage. And he can't help but wonder why the fruit-eating birds, the birds of paradise, honeycreepers, cotingas, manakins, trogons and fruit doves—those harmless creatures that live in happy symbiosis with plants—are the most beautiful. Birds of prey, with their bloody talons, are rarely colorful.

The power of preferential mating has produced much that is praiseworthy: "Melodious song, like beautiful plumage, appears to be a product of intersexual selection, often supplemented by the male birds' efforts to improve their repertoires. Female birds, often so quiet and self-effacing, have powerfully influenced the course of avian evolution and contributed vastly to the beauty of birds, making them attractive not only to other individuals of their species, but to ourselves, who appeared on Earth long ages after birds arose."

All this has led Skutch to mull whether "man can advance out of his long predatory stage." He believes that evolution has dealt us some ace cards: "Aesthetic delight, wonder, scientific curiosity, sympathy, compassion, grateful appreciation of the boon of life on a beautiful planet-while perhaps not absolutely lacking, these psychic attributes appear to have been, at best, in a rudimentary state before man arose; even today they are poorly developed in much of mankind. To bring forth and perfect them was the difficult task, costly in time and pain, that awaited evolution after it had covered the planet with life in an endless variety of beautiful or bizarre forms, as it had already done many millions of years ago.

"To create beings able to understand and appreciate, capable of gratitude as well as enjoyment, appears to be the end and goal of the world process... A Universe with no single being to enjoy existence in it, celebrate its beauty, or wonder at its immensity would be a barren Universe. The cosmos achieves value and a reason for existence exactly to the measure that it contains beings who enjoy, appreciate, and understand it."

In recent years, the world's ecological crisis has been sketched in apocalyptic strokes by even conservative scientists. Many observers have concluded that the public will not move beyond debates over paper versus plastic shopping bags unless environmentalism becomes a cross-cultural and religious crusade. Skutch has begun to describe the metaphysical underpinnings of such a crusade.

"Unless a substantial fraction of mankind comes to regard nature with an attitude essentially religious, including gratitude, love, compassion, generosity, humility, and reverence, and become frugal in the use of its bounty, all the devoted efforts of a handful of earnest conservationists are doomed to fail.

"Man is the only creature capable of contemplating the superb spectacle of this planet...yet how few feel responsible for preserving it...And even for the best of us, how rare and brief are the intervals when we are fully alive to the splendor around us, when we think clearly about the meaning of our presence here!

"Our greatest claim to dignity, our most godlike attribute, is our ability to appreciate and care for everything fair or good that Earth contains.

"To awake to our privilege and responsibility to make this exceptional planet an ever more adequate expression of everything excellent that the creative process can bring forth would give human life fresh zest, new dignity, and immeasurably heightened significance.

The human species is "to Earth what Earth is to the solar system: the major expression of what evolution has so far achieved on this planet."

Not surprisingly, Alexander Skutch, the dean of tropical ornithology, holds that we can best accomplish our noble calling by observing birds.

"Certainly, for our survival, we need to know about many things that are dry, unpleasant, or revolting. But so many brilliant minds, supported by wealthy institutions, are dedicated to these investigations, that it can do no great harm if a few 'world

losers and world forsakers' devote themselves to the pursuit of the beautiful truths that enrich us spiritually even if they contribute nothing to our survival in a competitive world. Yet the study of bird life must be regarded as more than an innocent hobby; by contributing generously to our understanding of basic biological problems, it can help make our lives saner and more secure."

To answer the imperative call of either religion or nature, Skutch says, is to discover that the voices have much in common. "Both entreat us to cultivate something vaster and more enduring than men and their creations; to care more about what we do and experience than what we possess. Perhaps, if we could hear aright, we would recognize that the two voices are in fact one, calling us in different tones to release our spirit from workaday pettiness and permit it to expand widely into realms of mystery and wonder."

-Chris Wille is director of the Conservation Media Center for the Rainforest Alliance. He lives in San José, Costa Rica.



Skutch wonders why fruit-eating birds, like this Violaceous Trogon, are among the most beautiful while birds of prev are rarely colorful.