CHAPTER SIX

THE LATIN AMERICAN TURN

NATURE PROTECTION IN THE WESTERN HEMISPHERE

The perpetuation of the wild life of the world is a duty which nations in the forefront of civilization cannot ignore with due regard to the needs of mankind! . . . We must all remember that we are trustees for the generations of the future, and no more species should be allowed to go the way of the Passenger Pigeon, the Heath Hen, the South African Quagga, the Antarctic Wolf of the Falklands, and the Dodo.

HAROLD J. COOLIDGE, 1939

LOOKING SOUTHWARD

In 1920, the ornithologist Alexander Wetmore left Washington, D.C., for an extended ornithological reconnaissance of Argentina, Chile, Paraguay, and Uruguay. His trip came after the U.S. Senate had passed an unusual resolution calling for a treaty to protect North American birds that spent part of the year below the Rio Grande.[1] A thirty-two-year-old assistant biologist with the Bureau of the Biological Survey, Wetmore was a logical choice not only to assess the current status of migratory birds in that region of the world but also to gage the prospects for an international agreement aimed at safeguarding them.

Wetmore had experienced a passion for birds since the age of five, when his mother gave him a copy of Frank Chapman's *Handbook of Birds in Eastern North America*.[2] By the age of thirteen, he authored his first publication, a paper entitled "My Experience with the Red-Headed Woodpecker" that appeared, fittingly enough, in Chapman's *Bird-Lore*. After earning his B.A. from the University

FIGURE 32. Alexander Wetmore in Riacho Pilagá, Formosa, Argentina, 1920. Wetmore later became the foremost expert on Central and South American birds and one of the forces pushing the American Committee to become more involved with Latin American conservation. Courtesy of the Smithsonian Institution Archives, Record Unit 7006, image no. SIA2008-2355.

of Kansas, in 1912, he joined the Biological Survey as a field agent. By dint of hard work, determination, and dedication, he received regular promotions, while earning his M.A. (1916) and Ph.D. (1920) from George Washington University. Nearly three decades later, an admiring colleague nicely captured a sense of who he was: "The quiet soft-spoken Wetmore is a striking figure, whether speaking before a scientific meeting, or collecting a birds in the heart of a tropical forest. . . . About him there is an air of quiet modesty, but of hidden strength, emphasized by his clean-shaven jaw, wide firm mouth, and slightly uptilted nose. His deep, drawling voice and earnest manner command respect, and he seldom speaks at length unless he has something worth telling. Although he likes the company of men, particularly scientists, he is happiest when he is with the birds."[3]

His early years provided a solid foundation for an extraordinary scientific career. Before his death in 1978, he was to author 6 major books and more than 700 scientific papers, describe 189 new species and subspecies, collect more than 25,000 skins, and prepare more than 4,000 anatomical specimens. Colleagues recognized his exceptional achievement in avian paleontology, biogeography,

and systematics by electing him to membership in countless societies, by granting him numerous awards, and by naming no less than fifty-six new biological organisms after him, a group he fondly referred to as his "private zoo."[4] He managed to accomplish so much while assuming a heavy administrative burden. In 1924, he transferred from the Biological Survey to serve a brief stint as superintendent of the National Zoological Park before accepting a position as assistant secretary (1924–44) then secretary (1944–52) of the Smithsonian Institution.

Wetmore had already begun to show signs of promise when he was recruited to survey the state of South American birds in 1920. He finished his yearlong tour with the impression that the "protection of birds in these countries is about the same stage as it was in the United States thirty years ago." While Argentina led the four nations he visited in the number of game laws, the public largely ignored them. Moreover, agricultural settlement was increasing apace, and many recent colonists came from the "south of Europe, where sentiment for the protection of birds, particularly the smaller species, is wanting." Plume birds faced exploitation from commercial hunters, and in one restaurant, Wetmore had even been served the increasingly rare upland plover. The situation was only a little rosier in Uruguay, where support for avian conservation seemed stronger, but in Paraguay there was "not much bird protection" and in Chile "everything is shot."

Given what he had observed, Wetmore reached a pessimistic conclusion: in the near future, treaties between the United States and Argentina, Paraguay, or Chile would accomplish little in the way of protecting migratory birds. Even if the governments of these nations agreed to negotiate a treaty, they lacked the commitment needed to put it into operation. While a protective treaty might be secured with Uruguay, few North American birds actually migrated there. "After a year in the field," Wetmore concluded, "it is my candid opinion that no legislation will serve to preserve some of these birds . . . or in most cases prevent their decrease. . . . Personally I consider the outlook for some of our birds as decidedly gloomy."[5]

Wetmore's dim prognosis was one of several factors that led U.S. officials not to immediately press for a treaty protecting birds that migrated to Central and South America. In Mexico, the winter home to many species of North American waterfowl, continued political upheaval and efforts to nationalize the oil industry chilled relations with the United States, leading to the severance of diplomatic ties. Here and throughout most of Central America, the repeated intervention of U.S. troops fostered an atmosphere of suspicion and hostility rather than the mutual trust necessary to successfully conclude an agreement protecting birds that crisscrossed national boundaries.[6] The general lack of conservation sentiment

and protective legislation in most Latin American nations represented the final straw. U.S. naturalists and governmental officials seemed to agree with Wetmore, who felt that even if a migratory bird treaty could be arranged with one or more Latin American countries, the region's social and political climate provided little hope that it would be enforced. E. W. Nelson, the former chief of the Bureau of the Biological Survey, spoke for many of his colleagues when he admitted privately in 1924 that "I am distinctly opposed to entering into negotiations for a treaty on migratory birds merely for the purpose of having a treaty when at the same time we know that such a treaty would be completely ineffective."[7]

Prospects for agreement on this and other conservation fronts improved with the implementation of the Good Neighbor Policy in the 1930s, as heavy-handed U.S. military intervention in Latin America gave way to more subtle forms of influence and persuasion. Accompanying this foreign policy shift was a crash in North American waterfowl populations, the result of drought, habitat destruction, and overhunting. Finally, thanks to a large-scale cooperative banding program, scientists at the Biological Survey began to draw more precise maps delineating the migration patterns of North American birds. The net effect of these political, ecological, and scientific transformations was a growing interest in the plight of Latin American wildlife among U.S. conservationists. Although this interest would never seriously challenge the attention devoted to species considered native to their own continent, it was nonetheless substantial.

While national and international events played a role in pushing the American Committee toward work in Latin America, Wetmore himself also proved central to this reorientation. Through extensive work in the field, research on museum specimens, and a long series of publications, he established a reputation as a renowned authority on Central and South American birds. He also earned respect as a pragmatic conservationist deeply concerned about the plight of birds and other wildlife at home and abroad. An active member of the American Committee from its founding, Wetmore became a board member in 1934, where he helped orchestrate the organization's shift in focus from African to Latin American conservation. The culmination of that transformation was the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere (1940), a landmark treaty that nineteen American republics would ultimately ratify. The American Committee proposed, drafted, and generated support for this agreement, while Wetmore chaired the U.S. Committee of Experts responsible for gathering information in support of the proposed treaty, reviewing the American Committee draft, and passing that draft on for final approval by the Inter-American Committee of Experts, which he also chaired.

REDISCOVERING THE GALÁPAGOS ISLANDS

The first inkling of the American Committee's turn toward Latin American conservation revolved around the Galápagos Islands, named after the area's massive land tortoises. As we have already seen, island species of all sorts have long attracted the interest of naturalists and conservationists. Because insular faunas tended to exhibit a great deal of endemism—species unique to a given area—they shed important light on the process of evolution; at the same time, those distinctive species often proved quite vulnerable to attack by humans and the many pests they introduced, thus eliciting concern from those concerned about wildlife extinction. Nowhere were these two tendencies—high rates of endemism and vulnerability—more evident than in the Galápagos Islands, six hundred miles west of mainland Ecuador.

Those islands also occupy a special place in the history of science.[8] Charles Darwin was not the first naturalist to venture to the area, but his visit proved the most famous, and the specimens he collected there in the mid-1830s played a critical role in the formulation of his ideas about evolution by natural selection. By the end of the nineteenth and the beginning of the twentieth centuries, collectors from around the world were flocking to the remote archipelago to secure examples of its unique tortoises, iguanas, birds, and other flora and fauna. In the decade between 1897 and 1908, for example, Walter Rothschild, Stanford University, and the California Academy of Sciences each sponsored major Galápagos expeditions that returned home with thousands of specimens.[9] During the early 1920s, the number of visitors to the region further increased after the New York Zoological Society's flamboyant curator of birds, William Beebe, made a highly publicized visit. In a series of popular articles and a book, *The Galápagos: World's End*, Beebe portrayed the islands as an enchanting cradle of evolution, a "place of infinite variety and charm."[10] With the appearance of Beebe's book, the completion of the Panama Canal, and the continuation of a post–World War I yachting craze, a rash of wealthy easterners began venturing to the area. Many of those came simply "to sightsee or fish" but some also hosted a "veneer of naturalists, having a zoo or museum sponsor and publishing accounts of the adventure."[11] Whatever their motivation, many Galápagos visitors ended up destroying native species.

By the 1920s, American scientists realized that the flora and fauna of the region faced growing danger. Once again, a naturalist associated with the New York Zoological Society played a leading role in sounding the alarm. In 1924, Charles H. Townsend, the longtime director of the society's New York Aquarium, authored a short article warning of the "Impending Extinction of the Ga-

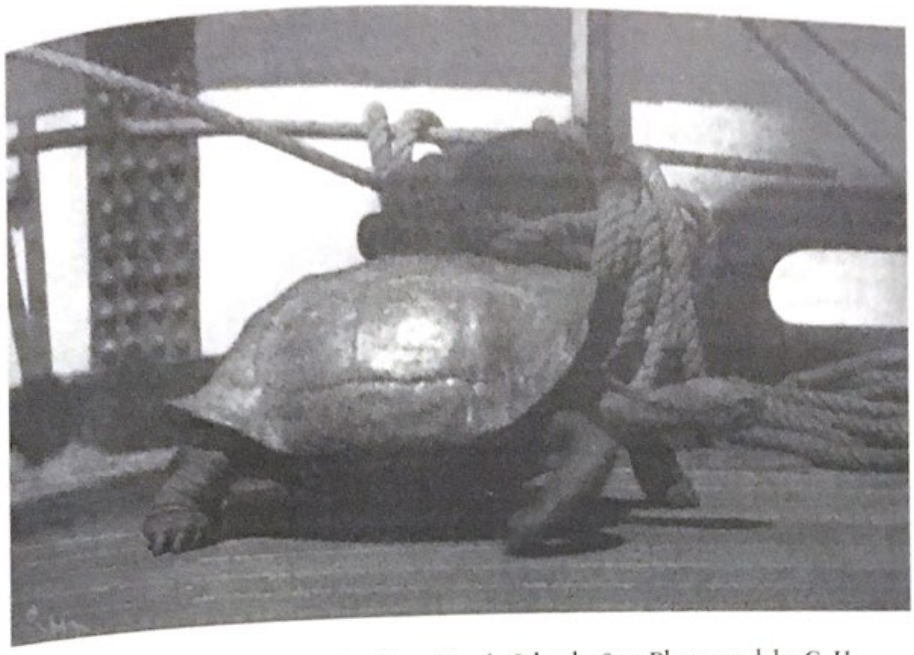

FIGURE 33. Galápagos tortoise from Pinzón Island, 1891. Photograph by C. H. Townsend. The Galápagos tortoise, the largest living land tortoise, once inhabited nine islands in the archipelago. The species served as an important food source for ships plying the region, leading to a dramatic decline in its population and complete loss on some of the islands. From Charles H. Townsend, "Impending Extinction of the Galápagos Tortoises," *Zoological Society Bulletin* 27, no. 2 (1924): 56.

lápagos Tortoises," one of the first publications to express concern about the threatened status of a species other than a bird or mammal.[12] An enthusiastic naturalist from his youth, Townsend was a onetime employee of Ward's Natural Science Establishment, where he met William T. Hornaday, Frederic A. Lucas, and others who would occupy important positions in American natural history institutions.[13] Following his departure from Ward's, he spent several years at the Academy of Natural Sciences in Philadelphia, where by his own admission he "dabbled in ornithology and other zoologies, with great personal satisfaction but to little scientific effect."[14] Over the next two decades, he held a variety of governmental posts, including a stint on the *Albatross* (1886–89), which cruised the Galápagos while undertaking deep-sea explorations in the Pacific. The Pribilof fur seals proved one of his special interests; for years, Townsend made annual inspections of the seal rookeries for the U.S. government, and he served on the Fur Seal Advisory Board, which played an important role in the passage of the North Pacific Fur Seal Convention of 1911.

In his 1924 article, Townsend warned that the Galápagos tortoise (*Geochelone nigra*) had already disappeared from the "smaller and more accessible islands" in the region, although a modest number of them probably still existed on Isabela,

the largest island. What was now urgently needed was "not the collecting of more specimens for Museum purposes, but the preservation of such animals as may be living." For many years, settlers in the Seychelles, north of Madagascar, had successfully raised and bred the Aldabra tortoise in semidomestication. If some of the remaining Galápagos tortoises were transported to suitable climates and provided with adequate care, this "valuable animal" might also be saved.[15]

To learn more about the plight of the Galápagos tortoise, Townsend consulted the logbooks of whaling ships that had visited the region. His research confirmed that the animal provided an important source of fresh meat for the whalers, "serving a role not unlike that of the bison to the settlers of the great plains."[16] Although it was backbreaking work to round up the large, unwieldy reptiles, they survived well in the holds of ships and were considered fine eating, so sailors "took on board all they could get without too great of delay—sometimes a hundred or more."[17] The seventy-nine ships whose records he consulted, undoubtedly a small fraction of the total that had plied the region's waters in the middle decades of the nineteenth century, carried away a shocking thirteen thousand tortoises: "It was the abundance of the tortoises that attracted food-seeking ships for more than three centuries, an attraction that persisted until the exhaustion of the supply" in the mid-nineteenth century.[18] More recently, over-collecting and introduced animals that had gone feral—rats, goats, pigs, cats, and dogs—were wreaking havoc with the tortoises that remained.

Four years after he first sounded the alarm about the decline of the Galápagos tortoise, Townsend led a New York Zoological Society expedition aimed at transplanting the species. Over the course of about a month in 1928, Townsend's party secured 180 live tortoises on Isabela Island, individuals ranging in size from young hatchlings to large specimens nearing breeding age.[19] He distributed them to just over half a dozen zoos and aquariums in the Panama Canal Zone, Bermuda, and the southern United States in an attempt to establish captive breeding populations. Townsend hoped his efforts would rescue the Galápagos tortoise by establishing the reptile as a domesticated food source. These hopes were dashed, however, when they failed to breed well in captivity, though some of these specimens captured in 1928 remain alive to this day.[20]

Two years later, Townsend returned to the Galápagos as director of the Astor Expedition, also sponsored by the New York Zoological Society. Included among the party that Victor Astor invited to join him on his "large and speedy yacht" were not only Townsend but also Kermit Roosevelt, American Museum curator James Chapin, and eight other naturalists and adventurers. The focus of the trip was exploration of Santa Cruz Island, the second largest island in the

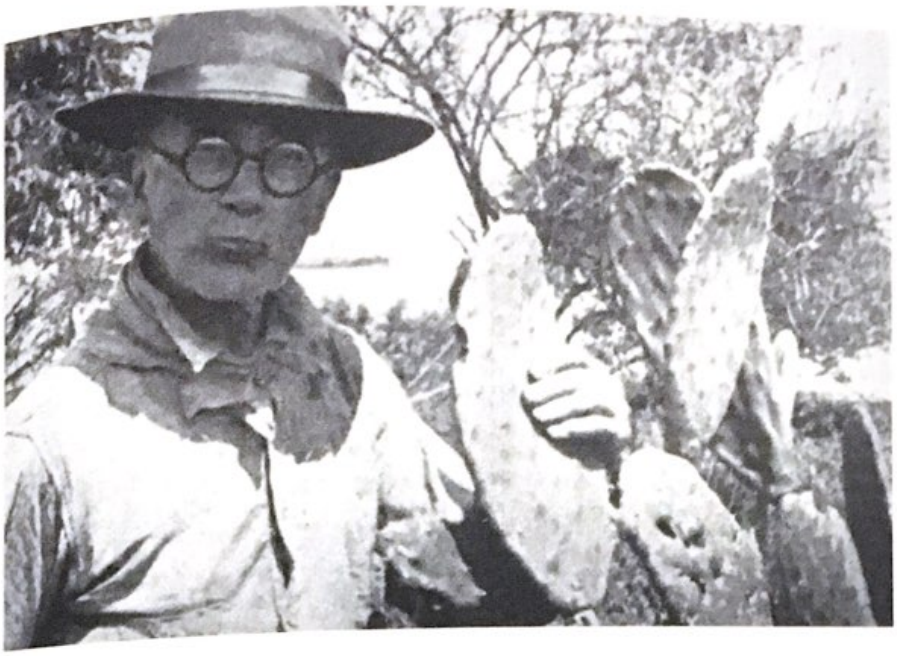

FIGURE 34. Charles H. Townsend in the Galápagos, 1927. Townsend was one of the first naturalists to call attention to the decline of the famed tortoises that inhabit the archipelago. Here he his sampling one of the species of spineless cactus favored by the reptiles. From Charles H. Townsend, "The Galápagos Islands Revisited," *Bulletin: New York Zoological Society* 31, no. 5 (1928): 160.

Galápagos archipelago but, because of its "rough volcanic terrain" and "tangled vegetation," the least well known. In two weeks, the expedition party captured so many live birds and iguanas that the upper deck of the ship resembled a "small menagerie during the return voyage." However, it managed to secure only eight tortoises, all of which were deposited in the Bronx Zoo.[21] At the end of his published report on the expedition, Townsend turned to the issue of preserving the wildlife that was struggling to survive on the Galápagos. Declaring that "the extinction of an animal useful to man is always deplorable," Townsend called for legal protection of the remaining tortoises and flightless birds, the elimination of sealing throughout the islands, the transplantation of land iguanas to islands where pigs and dogs had yet to gain a foothold, and the "control of pests."[22]

Other American naturalists also grew increasingly anxious about the plight of Galápagos wildlife. Among those was the ornithologist Harry S. Swarth, a longtime curator at the Museum of Vertebrate Zoology at Berkeley, where he collaborated with Joseph Grinnell on numerous publications dealing with the birds of California and Baja California.[23] In 1927, Swarth transferred to the California Academy of Sciences to study the institution's extensive collection of Galápagos

land birds, nearly six thousand specimens obtained during an expedition more than two decades earlier. Four years later, he published a lengthy monograph on the region's avifauna that focused on the island's puzzling finches, the same species that had once vexed Darwin. His previous research on North American birds failed to prepare him for the extreme variation he found in the Galápagos finches he so meticulously measured and compared. To sort out the complex taxonomic challenges such variation posed, Swarth called for additional fieldwork, including selective collecting and "carefully directed observations of birds amidst natural surroundings."[24]

In 1932, he received the opportunity to venture to the Galápagos as part of the Templeton Crocker expedition.[25] That visit convinced him that something had to be done soon to save the islands' unique flora and fauna, and within a year after his return he began circulating a proposal that he hoped would achieve that end. Swarth advocated designating portions of the archipelago as a "reserve" that would serve as a "sanctuary for the indigenous fauna and flora," as a "monument to Charles Darwin," and as an "out-door biological laboratory." The Galápagos Islands were "one of the most amazing *natural laboratories* of evolutionary processes on earth," Swarth declared. To protect the remnants of this unique landscape, he called for an end to settlement and a hunting ban on several of the uninhabited islands as well as a prohibition on the destruction or disturbance of many reptiles, birds, and mammals throughout the archipelago. Finally, he recommended a campaign to exterminate the feral dogs and cats that were destroying native fauna.[26] Variations on Swarth's basic proposal would continue to circulate for the next several years.

While searching for kindred spirits who might share his concern about the increasingly desperate wildlife situation in the Galápagos, Swarth stumbled onto Robert T. Moore, a research associate at the California Institute of Technology.[27] A 1904 M.A. graduate from Harvard, Moore had previously pursued a variety of business ventures, including breeding foxes, mining, and lumbering. In 1927, he accompanied the first of two ornithological expeditions to Ecuador on behalf of Cal Tech. From that point, he began agitating with various Ecuadorian officials for preservation of the Galápagos's unique wildlife. In the summer of 1932, he gained support from V. M. Egas, the former consul of the Ecuadorian Republic to Los Angeles, with whom he worked closely to draft legislation and push for its passage. In 1933, when Moore's efforts came to the attention of the American Committee, members invited him to serve on their advisory board.[28] A year later Moore agreed to chair a special Galápagos committee that the American Committee established, a position he was to hold for the next four years.

FIGURE 35. Robert T. Moore examining his bird collection. Moore, a businessman and naturalist with a keen interest in Latin American birds, served as the American Committee's point person on conservation in the Galápagos during the mid-1930s. Eventually, he would amass a collection of more than sixty-five thousand birds, most of which were from Mexico. Courtesy of John C. Hafner of the Moore Laboratory of Zoology.

CAUTIOUS CONSERVATION

While the American Committee welcomed Moore into the fold, initially it responded cautiously to calls for creating a reservation and a biological station on the Galápagos. Committee members feared that the area was too remote to serve as a proper biological laboratory and attempting to establish one there might dilute a recent campaign to support a research station on Barro Colorado Island, in the Panama Canal Zone.[29] At the same time, they initially worried that some sort of commercial enterprise might be behind the calls for setting aside part of the Galápagos as a reserve.[30]

Convinced of the sincerity of the Moore and Egas proposal, however, in May 1934 the American Committee passed a formal resolution approving a draft "Scientific Station at the Galápagos Islands Act" that the two had authored. "We are joining with the other scientific institutions throughout the world," the resolution proclaimed, "in recommending to the government of the Republic of Ecuador, the creation of certain reservations . . . in the Galápagos Islands and the preser-

vation of the rare zoological species, which exist only in this Archipelago, and which have been made famous by the visit of Charles Darwin." Like Swarth's earlier recommendation, the proposed legislation called for setting aside several of the islands in perpetuity as "inviolate refuges for all forms of zoological life," while calling for the permanent protection throughout the archipelago of many of the same species that Swarth had originally highlighted, plus eighty additional birds from the checklist included in his monograph. In addition, the legislation empowered the president of Ecuador to contract with a reputable scientific institution to oversee the preservation and breeding of all zoological species in the reservation, to establish a "Darwin Memorial Zoological Laboratory" on San Cristóbal or Isabela Island, and to hire the wardens needed to enforce the provisions of the act. Writing to the U.S. Minister in Ecuador, Coolidge indicated that his committee considered it "extremely urgent to have some definitive action taken by the government of the republic of Ecuador to preserve the endemic zoological species found on the Galápagos islands, and especially those species which have been very much reduced to a point where there is a danger of their extinction."[31] While generally supportive of the resolution, Wetmore remained characteristically gloomy about its prospects: "The Ecuadorians may do this as a gesture but I am somewhat pessimistic regarding anything coming of it."[32]

Following modifications that Ecuadorian officials requested, in August 1934 the chief executive of the Republic of Ecuador, Abelardo Montalvo, issued a decree that echoed many of the provisions in the original Moore/Egas proposal.[33] Montalvo declared several Galápagos islands to be protective refuges for resident and migratory animal life, prohibited the destruction of a pruned down list of species considered to be "in real danger of extinction," and required newly arrived visitors to land on San Cristóbal Island, where they would be required to sign a document agreeing to abide by the laws protecting the archipelago's wildlife. Violations of the decree carried heavy fines, but a specific enforcement mechanism was lacking. In an article announcing the decree, Moore pointed out that "legislation without enforcement is usually of little value" and until wardens were hired and properly equipped, "poaching may continue with more or less impunity." The decree did make it possible, however, to enforce the Vandegrift Tariff of 1930, a U.S. law that made it illegal to import any wild mammal or bird without a certificate from appropriate authorities indicating that the species had not been obtained in violation of the laws of the country from which it was exported.

The most enigmatic figure to promote Galápagos conservation during this period was the American travel writer, explorer, and adventurer Victor Wolfgang von Hagen.[34] Born in St. Louis and educated in Europe, von Hagen was only nineteen years old when he ventured on his first expedition to Africa in

1927. Six years later, he was in San Francisco promoting what he called the Darwin Memorial Expedition to the Galápagos Islands.[35] The original plan called for von Hagen and fifteen associates to spend two and a half years traveling up and down the coast of Central and South America, where they would undertake archeological, biological, and ethnological studies. To commemorate the one hundredth anniversary of Darwin's famous visit to the archipelago, the expedition party planned to erect a permanent monument on San Cristóbal Island, a bronze bust of Darwin with a short inscription written by his only surviving son, Leonard Darwin, who had given his blessing to the endeavor. Before raising the monument, von Hagen planned to travel to Quito, where he hoped to gain authorization to establish a permanent biological station on Santa Cruz Island that would promote conservation of and research on the unique fauna of the region. To finance his expedition, von Hagen charged admission to the docked ship he hoped to use, sold subscriptions to a planned journal of the expedition, and recruited individuals to join him on the venture. To fund the biological station and warden, von Hagen proposed convincing the Ecuadorian government to authorize the release of a special series of postage stamps to commemorate the Darwin-Galápagos centennial. A dealer in New York had already agreed to buy the entire issue, and the net profits from their sales would be placed in trust. If that plan failed, von Hagen would "appeal to the wealthy yachtsmen who have visited the Galápagos in the past years" for the needed funds.[36]

Von Hagen's plans fell through when he failed to raise enough money to mount his expedition. His financial prospects brightened considerably in 1933, however, when he married a well-to-do San Francisco heiress. Von Hagen and his new bride traveled to Honduras, where they managed to locate the elusive quetzal, the royal bird of the Aztecs that some feared was extinct. Although this rare bird had never been photographed before, much less captured alive, he managed to ship back nine live specimens to the Bronx Zoo.[37]

Von Hagen and his wife then traveled to Ecuador, where they spent two and one half years.[38] In Guayaquil, he joined forces with several faculty at the University of Guayas to form a National Scientific Corporation for the Study and Protection of the Riquezas Naturales (Natural Wealth) of the Galápagos Islands, an organization whose goal was to promote the establishment of biological research station on Santa Cruz Island. Von Hagen hoped that a group staffed almost entirely by Ecuadorian nationals would allay fears about outside interests interfering in the internal affairs of this proud South American republic.[39] The issue remained a sensitive one in Ecuador because of concerns that its territorial claims to the islands might be challenged and the United States might seize them for their strategic importance in defending the Panama Canal.[40]

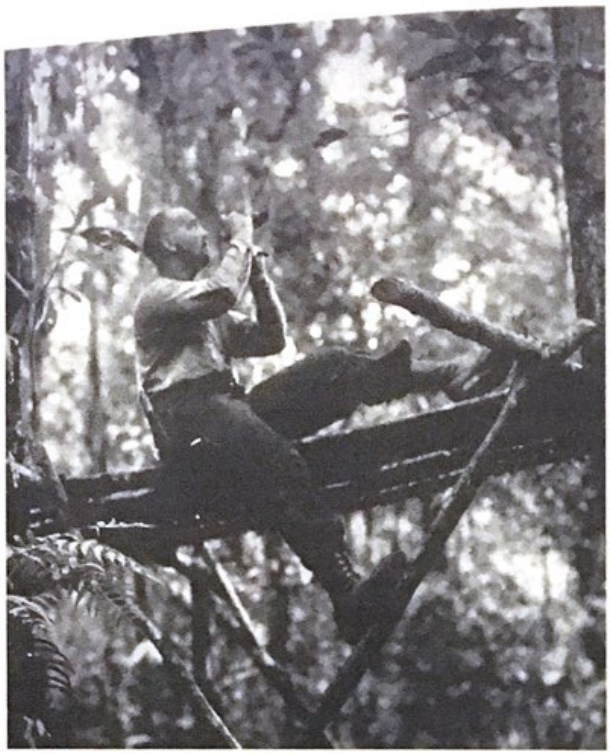

FIGURE 36. Victor Wolfgang von Hagen observing the quetzal in Honduras, ca. 1937. The enigmatic von Hagen was the first naturalist to photograph and capture wild quetzals. He was also an important promoter of conservation on the Galápagos Islands. From V. Wolfgang von Hagen, "Capturing the Royal Birds of the Aztecs," *Travel* 72 (December 1938): 38.

Meanwhile, American Committee members grew increasingly concerned about political developments in Ecuador and increasingly suspicious of von Hagen. The small South American nation had long suffered from political instability, but a newly enacted constitution (the thirteenth in just over a century), the formation of a series of new political parties, and the havoc of the Great Depression ushered in a turbulent period that was unusual even by Latin American standards.[41] As one measure of that ongoing political turmoil, fifteen different individuals served as chief executive of the troubled nation during the 1930s, and not one of them managed to complete a single term of office.

Worried about the lack of enforcement mechanism in the original decree and fearful that future chief executives might reject it, Moore and Egas began working on revised legislation.[42] Following a personal appeal from von Hagen, who had authored his own proposal, the newly installed Chief Executive Frederico Páez, issued a new decree in May 1936.[43] Its preamble declared that the fauna of the "Archipielago de Colón" was "in danger of being totally extinguished by the depredations of unscrupulous travelers and tourists," and if this state of affairs continued, it would represent "an irreparable loss to Science."[44] Páez declared a number of Galápagos Islands as "National Reserve Parks," but eliminated the specific list of protected species found in the earlier decree. The Páez decree also authorized the creation of a provisional five-person committee charged with selecting a permanent board of directors that would oversee the protection of

the flora and fauna of the islands, establish research stations, and find suitable national and foreign scientific institutions to sponsor those stations. Von Hagen issued a bilingual pamphlet reproducing the contents of the decree under the sponsorship of the Comité Provisional para la Protección de la Fauna del Archipiélago de Colón. Although he did not explicitly claim as much in this pamphlet, the implication was that he had secured appointment to the official provisional committee created by Páez's decree.

Unsure what to make of the new decree and increasingly leery of von Hagen, American Committee members were initially at a loss as to how to respond. As we have already seen, when the committee first learned of the Darwin Memorial Expedition several years earlier, they feared that it was ultimately a moneymaking venture. Concerns about von Hagen's motives heightened in 1935, when the U.S. Department of State began investigating his efforts to obtain British funding for a research station in the Galápagos and when he protested an American naval vessel's planned visit to the archipelago.[45] Writing to Julian Huxley, who had inquired about von Hagen that same year, Coolidge answered diplomatically that he thought von Hagen was a "fair naturalist" who "seemed honest" but that he was also a "soldier of fortune" who appeared motivated by "personal publicity."[46] Especially troubling were statements von Hagen had made during a visit to Washington in 1937, including claims to Smithsonian curators that they would need a permit from him before they could land on any of the Galápagos Islands.[47] At this point, Ecuadorian officials began denying that von Hagen had authorization to act in any official capacity, and they launched an investigation into his background.[48] A Better Business Bureau report revealed that, in the early 1930s, he had failed to return rental equipment and had issued several bad checks.[49] Even more damning, in 1932, he faced arrest in Mexico City for using the apparently forged signature of a prominent governmental official to obtain financial backing for a planned expedition to Monte Alban, in southern Mexico. With their suspicions about von Hagen confirmed, American Committee members began circulating a photostat of the newspaper article describing his arrest with the hope of eroding any support he might still enjoy.[50]

The situation grew more tense in the spring of 1937, when von Hagen traveled to England to seek backing from the British Association for the Advancement of Science's (BAAS) Galápagos Committee, formed in 1935. Claiming to be a member of the official provisional committee named in the 1936 decree, von Hagen said he would post the various islands that had been designated as reserves and turn over the money raised from the sale of Ecuadorian stamps to the BAAS Committee so it could establish a biological station and warden on the islands. When O. J. R. Howarth, secretary of the BAAS committee, wrote to

the American Committee asking for support for the plan, Moore drafted a reply in which he expressed profound doubt that von Hagen had any formal connection to the Ecuadorian government and described his previous failed efforts in San Francisco to obtain sponsorship from the University of California, Stanford University, and the California Academy of Sciences.[51]

The BAAS Committee then began circulating a new proposal that would commemorate Darwin's visit while preserving the unique biological organism on the islands. To achieve those goals, the committee proposed a fundraising campaign to establish the Darwin Memorial Biological Station on Santa Cruz Island, where a suitable house had already been located. The hope was that a "warden possessing biological qualifications appointed and supervised by the committee" would review applications to undertake scientific research on the islands and report any violations of the decrees protecting Galápagos wildlife. The committee estimated that a capital fund of between £40,000 and £50,000 would be needed to establish, equip, and staff the proposed station. Before Moore could formally respond to this initial proposal, Howarth sent two mildly revised versions of the BAAS Committee plan seeking support from the American Committee.[52]

Moore then sent a letter to the Galápagos Committee of the American Committee requesting input on the most recent British proposal. There he warned that "report after report" confirmed the continued destruction of the fauna on the islands; unless something were done soon, "immediate extinction of species is threatened." "The British *have a program* and are ready to act," Moore continued, and he strongly urged his fellow committee members to approve the British initiative with only minor changes.[53] The American Committee became skittish, however, when State Department officials objected to "any foreign nations having a hand in the collecting of funds" for such a project. Representatives from the State Department promised to take up the matter of Galápagos conservation at the next Pan American Conference.[54] Although the British Galápagos Committee continued fund-raising for the project, World War II soon intervened. Not until nearly two decades later were the plans for a Darwin Research Station that were first developed in the 1930s finally brought to fruition.[55]

Meanwhile, the situation in the Galápagos continued to deteriorate. In 1937, the Swedish zoologist Rolf Blomberg offered a gloomy assessment following a recent visit to the islands. Especially distressing was an incident during his return to the mainland, when the sailors on an Ecuadorian gunboat killed an "enormous number of sea-lions" for their valuable hides, even though the area was supposedly protected. Two years later, David Lack, a British ornithologist who would soon author a major study on Darwin's Galápagos finches that was destined to become a classic, issued a similarly bleak report on wildlife conditions

in the islands. The Ecuadorian government had passed regulations that required visiting expeditions to obtain permission on the mainland before landing in the Galápagos, mandated fees for collecting larger animals, and instituted a strict limit for the number of specimens of each species that could be legally taken. Yet, the number of private yachters, settlers, and soldiers on the islands had continued to mount, wreaking havoc on the wildlife. As a result, the "undoubtedly well intentioned" regulations proved entirely "ineffective."[56]

In 1941, only four days after the bombing of Pearl Harbor, U.S. troops from the Canal Zone occupied the islands with the "grudging consent of the Ecuadorian government," thus revealing the limitations of Roosevelt's Good Neighbor Policy. Over the next year, U.S. forces built an airbase on Baltra and erected more than two hundred buildings for the one thousand or so troops stationed there. The result was ecological devastation, including the loss of the islands' iguana population, which has never recovered.[57] During the war, the American Committee repeatedly pressured the U.S. military to protect the unique flora and fauna of the islands and even considered issuing a booklet "to arouse interest in the Galápagos and the conservation of its wildlife."[58] They abandoned that plan, however, after military officials advised them to drop the matter.[59]

BIRDS WITHOUT BORDERS

Concern about the plight of endangered Galápagos fauna in the years surrounding the centennial of Darwin's visit to the region provided one entry point for U.S. naturalists to begin engaging more actively with Latin American conservation. Fears about avian species that migrated southward represented another. As early as 1913, when conservationists first discussed the prospect of using a treaty to shield recently enacted federal migratory bird legislation from potential judicial override, they considered opening negotiations with Mexico. That nation was experiencing deep political turmoil, however, and the Huerta administration, which came to power following a coup that same year, proved openly hostile to conservation.[60] Negotiations with British officials on behalf of Canada, with whom the United States enjoyed relatively cordial relations, seemed a much surer route to success.

Once Canada had been brought on board, interest in Latin American wildlife protection grew again. But those who argued for extending treaty protection to migratory birds that wintered in Central and South America faced a critical challenge: a lack of reliable data not only about the species they sought to protect but also of existing game laws in the region. Writing to Pearson in 1920, Biological Survey Chief Edward W. Nelson argued that despite the recent Sen-

FIGURE 37. E. A. Goldman and Indian guide, Mount Turnbull, Arizona, 1916. During many trips to Mexico, Goldman became acquainted not only with the fauna of the region but also many prominent Mexican naturalists and conservationists. Both proved important during the negotiations that led to the 1936 Convention for the Protection of Migratory Birds and Game Mammals. Courtesy of the National Archives and Records Administration, Record Group 22-WB, Box 47, no. 16974.

ate resolution, there was no chance for the negotiation of appropriate treaties until his agency could complete the necessary background investigations.[61] As we have seen, in 1920, he sent Alexander Wetmore on a year-long reconnaissance to begin addressing this lacuna. While Wetmore expressed pessimism about the prospects for a meaningful treaty with all but one of the four Latin American nations he visited, his report did provide a better sense of where various species resided and their current status.

The Bureau of the Biological Survey also continued to sponsor exploration in Central America, particularly in Mexico. A central figure here was E. A. Goldman, who quit his job as a California vineyard foreman in 1891 to go exploring with Nelson.[62] Nelson became an important mentor for Goldman, who had long shown an interest in natural history, despite a lack of formal training. For the next fourteen years, the two naturalists roamed widely across the Mexican countryside on behalf of the Biological Survey, collecting specimens, making observations, and writing up reports. Both became widely recognized experts on the fauna of Mexico, particularly mammals, and both went on to long careers at the Bureau of the Biological Survey, with Nelson becoming chief of the agency

in 1916. Goldman continued to make regular visits to the region over the next three decades.

In addition to dispatching naturalists southward to learn more about the status of North American birds that migrated to Central and South America, the Bureau of the Biological Survey also initiated a large-scale bird banding project. That project involved placing small aluminum bands on the legs of birds—either fledgling young or trapped adults—with a brief message asking those who later trapped or shot the bird to contact the agency. Wetmore initiated the agency's first banding studies during the early years of World War I, while researching an outbreak of duck sickness in the Bear River Marshes of Great Salt Lake.[63] In 1920, faced with the task of enforcing the recently enacted Migratory Bird Treaty Act, Nelson arranged for his agency to take over the work of the American Bird Banding Association, which had been active since 1909. He then hired Frederick C. Lincoln, a curator of ornithology from the Colorado Museum of Natural History, to oversee a corps of several hundred volunteer banders, a number that soon increased to about two thousand.[64] The hope was that analysis of return records would place management of waterfowl populations on a sounder scientific basis. While sifting through the growing stream of migration data flowing into his office, Lincoln developed the concept of flyways, ancestral migration routes, rarely more than fifty to one hundred miles wide, that large numbers of bird species seemed to follow each year. According to Lincoln, North America contained four major flyways—the Atlantic, the Mississippi, the Central, and the Pacific—and the birds that utilized one of them rarely, if ever, used the others.[65] While return records from Latin America remained relatively rare, they did help fill in the considerable gaps in knowledge about waterfowl movements in the Western Hemisphere.

Once the United States restored formal relations with the Mexican government in 1923, pressure increased to implement the Senate resolution calling for migratory bird treaties with Latin American nations.[66] A year later, Biological Survey naturalists drew up a rough draft of a treaty for State Department review, while United States and Mexican officials initiated informal discussions on the subject. Negotiations quickly reached an impasse, however, when the Mexican government insisted on linking bird and fisheries conservation in a single treaty. They expressed particular concern about the depredations of commercial fishermen from California, who were developing increasingly efficient means to capture fish off of Mexican waters while avoiding custom duties on their catches. Negotiations continued in fits and starts over the next decade, but the issue of linkage between bird and fish regulation proved an insurmountable obstacle to progress, despite strong pressure from American conservationists, who contin-

ued to argue that a migratory bird treaty would strengthen the 1916 agreement with Canada while cultivating greater conservation sentiment among the Mexican people.

Finally, in 1934, a series of events renewed hopes for a wildlife treaty with Mexico. On the Mexican side, the most important change was the election of President Lázaro Cárdenas, a populist reformer who made conservation "one of the top priorities of his administration."[67] Among his notable accomplishments in this area, Cárdenas established the first autonomous conservation agency in Mexico—the Department of Forestry, Fish, and Game (founded in 1935)—and increased the number of Mexican national parks from two to forty-two. On the U.S. side, the adoption of the Good Neighbor Policy and the appointment of the sportsman and political cartoonist Jay "Ding" Darling to head the Bureau of the Biological Survey also brightened prospects for an agreement.[68] Though not a biologist, Darling proved a capable leader who was not only deeply committed to waterfowl conservation but also quite adept at wresting funds from President Franklin Roosevelt amid an increasingly severe economic depression. Even before being sworn into office, Darling began prodding American officials to act on the proposed treaty with Mexico. His initial optimism quickly faded, however, when he discovered that Cárdenas appeared uninterested in rapid resolution.[69]

In an effort to break the continuing deadlock, in January 1935 Darling gained State Department approval for a plan to dispatch Goldman to Mexico City. But even with his intimate knowledge of the region's wildlife and personal relationships with many of the principals involved in the discussions, Goldman quickly grew discouraged.[70] He and other U.S. officials in Mexico City faced numerous challenges in their effort to nail down the terms for a treaty.[71] The small but well-connected community of Mexican sportsmen feared the proposed agreement was a veiled attempt to curtail recreational hunting, the high turnover rate among Mexican officials disrupted the continuity of the discussions, and Mexican negotiators remained committed to the concept of "patrimony," the idea that wildlife properly belonged to one nation or another. This idea stood in opposition to the U.S. claim that ownership of migratory wildlife could not be rightfully claimed by any particular nation.[72] Finally, and perhaps most importantly, the Mexican government remained more interested in a treaty covering fisheries—which had immediately obvious economic implications—than in one protecting migratory birds, while powerful California fishermen blocked forward motion on the fisheries front.[73] A frustrated Darling lashed out: "The commercial fisheries of California are denuding the waters off Point San Lucas and the Lower Gulf of California as ruthlessly as the lumber barons raped the forests of North America. If Mexico were big enough, she'd be justified in knocking our block off."[74]

The deadlock finally broke in September 1935, when Juan Zinzer, head of the game division of the newly created Department of Forestry, Fish, and Game, introduced a proposal for a bird treaty that looked much like the one the Americans had originally suggested.[75] Although several sticking points remained, negotiations moved quickly from then on, as both parties seemed anxious to trumpet their achievement at the first North American Wild Life Conference in Washington, D.C., scheduled for several months hence. Goldman returned to Mexico City in early 1936 and soon finished ironing out the remaining sticking points. Officials from both governments signed the treaty on February 7, 1936, and later that day, Darling received a thunderous round of applause when he announced the fruitful conclusion of treaty negotiations to the delegates attending the conference.[76] Finally, nearly two decades after the idea of a bird treaty with Mexico had first been seriously raised, success seemed at hand.

The initial euphoria quickly dissipated, however, when the specifics of the secretly negotiated treaty began to circulate. The Convention for the Protection of Migratory Birds and Game Mammals did declare it "right and proper" to prevent from being "exterminated" the birds that moved seasonally between the United States and Mexico.[77] To achieve this lofty goal, the pact called for the establishment of closed seasons for migratory birds, the end of spring hunting for waterfowl, the creation of safe "refuge zones" where hunting would be banned, the introduction of strong restrictions on the killing of insectivorous birds, and the prohibition of hunting from aircraft. But the treaty also declared that the mechanisms used to protect migratory species should permit "the utilization of said birds rationally for the purposes of sport, food, commerce and industry."[78]

Not surprisingly, some U.S. conservationists squawked at a convention that seemed to sanction the commercial use of avian species, especially when the wildlife protectionists had been struggling for decades to end the American trade in wild birds. When he learned of the clause the day before the treaty was signed, Assistant Secretary of Agriculture Rexford Tugwell fired off a letter urging the Departments of State and Agriculture not to approve it in its current form. The U.S. government, Tugwell asserted, had always claimed that "it is impossible to preserve from extermination or undue depletion any species of migratory birds when that species is permitted to be utilized *commercially* or *industrially*."[79] The strident conservationist Rosalie Edge proved even more blunt, declaring in one of her characteristically blistering pamphlets that the treaty was an example of "double-crossing conservationists and migratory birds."[80] Rather than building on the success of the earlier convention with Canada, Edge and others viewed the treaty with Mexico as a giant step backward. Despite its shortcomings, however, the agreement did highlight the possibility of successful negotiations regarding

wildlife between the United States and a Latin American nation, and in doing so, it helped push the American Committee into high gear in the region.

THE LIMA RESOLUTION

In February 1935, Coolidge wrote to Julian Huxley praising Lord Onslow, president of the Society for the Preservation of the Wild Flora of the Empire, for his broad conservation vision. He was particularly impressed with Onslow's recent call for a conference to negotiate an Asiatic wildlife protection treaty modeled on the convention that had been concluded for Africa two years previously. In the same letter, Coolidge expressed pessimism regarding the possibility of a similar "Pan American plan," at least in the near future: "Perhaps in a few years the picture will have changed, and if the other conferences have proved successful, our Latin American neighbors may wake up. I think they are rather more likely to do this if they think it is fashionable rather than for the good that the conservation may do them. In many ways they are like the Chinese with little regard for human life and less for animals and birds."[81] Coolidge's comment was revealing not only of the condescending attitude that he and many of his colleagues shared toward Latin Americans, but also about the slim chance they saw for conservation initiatives in that region of the world.

A year later, however, with the successful negotiation of the treaty with Mexico to protect migratory birds, attitudes began to shift. Among the many research projects listed in a funding proposal that the American Committee prepared early in 1936 was a plan for "preliminary studies in preparation for a Pan American Conference or Conventions similar to the London Convention in the interest of promoting National Parks and the preservation of rare species in the New World."[82] This proposal suggested that this research should be undertaken in cooperation with the Pan American Institute of Geography and History, which had been established in 1928 to promote inter-American cooperation in the areas suggested by its title. In October 1935, the institute had passed a series of resolutions calling for "preservation of Nature Monuments and historic places" in Latin America. A primary mover behind these resolutions was undoubtedly Wallace W. Atwood, a geographer and geomorphologist who had served as president of the National Parks Association (1929–33) and president of the Pan American Institute of Geography and History (1932–35).[83] The American Committee funding proposal also called for a study of the "racial attitude toward nature protection in the various parts of the world." The proposal remained vague on exactly what such a study might entail, but it did suggest that consciousness

about wildlife protection might be raised in South American countries by naming protected natural areas after national heroes, who were widely revered.[84]

In May and June 1936, Phillips visited Europe to confer with his conservation-minded colleagues abroad. He came home with a renewed sense that the American Committee needed to expand its limited protective campaign in the Galápagos and begin taking more seriously the possibility of conservation in the rest of the Western Hemisphere.[85] Following his return, Phillips wrote to his brother, William Phillips, a well-connected State Department official, and to L. S. Rowe, the director general of the Pan American Union, asking if the issue of "preserving primitive areas and historic sites" in Central and South America might gain some form of "official recognition" at the next Pan American Conference, set for Buenos Aires.[86]

While it proved too late to get the issue of conservation onto the agenda for the upcoming Buenos Aires meeting, the program for the 1938 meeting (scheduled for Lima, Peru) had not yet been set. In August 1936, Phillips encouraged Wetmore to contact Assistant Secretary of State Sumner Welles "while the matter is still hot" and find out if the State Department would accept suggestions regarding conservation from the American Committee.[87] Initial signs proved encouraging, but for the next year, Phillips and Coolidge remained too preoccupied with supervising the Harper Report, fund-raising for the American Committee, and leading the Asiatic Primate Expedition to give the matter much attention. Nearly a year later, Phillips called on Atwood, encouraged him to drum up support for the idea of conservation at the next meeting of the Pan American Institute of Geography and History, and suggested Wetmore's name as a possible delegate.[88] In a follow-up letter after the meeting, Phillips also pointed out that from his recent visit with prominent Europeans interested in "international nature work" he had "gathered the impression that they thought it was up to us over here to start some real movement in South America . . . it's up to you in the United States to stir up the Latin American countries, to the end that you can eventually call an all-American Convention on nature protection and conservation of natural resources."[89]

Within a year, the Pan American Union and the Department of State granted approval for the American Committee to draft a resolution for introduction at the Lima meeting, scheduled for December 1938.[90] Initially, the committee tried to get Moore or Wetmore to attend the Lima meeting as an official delegate, but neither was able to make the long journey to Peru. Instead, the archeologist Alfred Kidder, Jr., who was Thomas Barbour's son-in-law and already undertaking excavations in the region, agreed to present the resolution on behalf of the

American Committee.[91] To provide the Department of State with background information on the resolution, the committee also assembled a large packet of documents that highlighted the success of the London Convention and other international treaties, while outlining the many conservation challenges in Latin America.[92]

The resolution approved in Lima was largely modeled on the American Committee draft.[93] The preamble declared the "American Republics" to be "richly endowed with natural scenery, with indigenous wild animal and plant life, and with unusual geologic formations, which are of national and international importance." Reflecting the ongoing concern with the notion of plenitude, the preamble also proclaimed that these nations are "desirous of protecting and preserving in their natural habitat representatives of *all species and races of their native flora and fauna* including migratory birds, in sufficient numbers, and over areas extensive enough to assure them from becoming extinct through any agency within man's control." To achieve this goal, the resolution urged nations in the Western Hemisphere to adopt appropriate measures to promote "Nature Protection and Wild Life Preservation," established an Inter-American Committee of Experts charged with drafting a convention on international cooperation among the American republics regarding "preservation of fauna and flora in their natural habitat," and called for the Pan American Union to "take the necessary steps to carry out the above provisions," whether through a special conference, at the next scheduled meeting, or simply opening them for signature.

MAINTAINING MOMENTUM

Having played a key role in the success of the Lima resolution, Coolidge moved into high gear to secure its implementation. In February 1939, he traveled to Washington to meet with Wetmore, L. S. Rowe, William Manger (counselor to the Pan American Union), and various State Department officials.[94] He emerged from those meetings convinced that "the Pan American Union is counting on our American Committee to play an extremely important part in helping them to work out this convention."[95] To draft an initial version of the agreement, Coolidge suggested appointing an informal technical advisory committee, which would include representatives from the American Committee, the National Association of Audubon Societies, the Bureau of the Biological Survey, the National Park Service, and the U.S. Forest Service. He expressed confidence that this committee's draft would be "very close" to the version that the Pan American Union planned to circulate to the Inter-American Committee of Experts, which would be charged with writing up the final version.[96]

Coolidge did his best to spin reports about the resolution and the upcoming convention in the media, lest they suggest that the United States was trying to force the initiative upon unwilling Latin American nations. Writing to W. Reid Blair, the current executive secretary of the American Committee, he complained about newspaper coverage that credited the committee for the resolution and proclaimed that the United States was a "prime mover in this hemisphere" when it came to "conservation as a whole." While Coolidge considered both statements to be true, he also thought it important not to give Central and South American nations the impression that "Americans want to put over on them an international treaty, no matter how altruistic the motives of such a treaty may be."[97] Similarly, he suggested to the American Museum ornithologist Robert C. Murphy that when it came to building support for conservation in Latin America, a "holier than thou attitude" must be avoided.[98] Coolidge thought Murphy's recently published map, "S.O.S. for a Continent," might prove a useful tool in this regard because it openly acknowledged the conservation shortcomings of the United States and Canada. That map highlighted the fate of the great auk, the heath hen, and other North American species and landscapes that had suffered at the hands of humans. The short introduction to the map was particularly unflinching in its critique: "Owing to rapid settlement and reckless exploitation, North America has suffered more from improper land use and the upsetting of Nature's balance than has any other continent within so short a span of time."[99]

Coolidge also penned an article of his own for the Pan American *Bulletin*, which represented an impassioned, if somewhat scattered, plea on behalf of nature protection in the Americas.[100] As a detailed attempt to summarize contemporary arguments for conservation, it is worth exploring at some length. He began by declaring that "conservation of natural resources, especially wild plant and animal life[,] is a matter of vital concern to every one of the American republics!" Now more than ever, strong leadership was needed to "save many important vanishing species of animals, birds and plants from total extinction at the hand of man."[101] The current push for nature protection was a "natural reaction" to the excessively "materialistic developments of the last decades" and a protest against "all needless destruction and unreasonable prodigality in land cultivation, and works for the preservation of natural beauty, virgin landscapes, and natural objects of unusual significance as being of fundamental value for the present and coming generations."[102]

Coolidge then presented a brief enumeration of the many arguments supporting nature protection, a list that had become increasingly familiar by the middle of the twentieth century.[103] As was often the case, economic considerations came first. Wild flora and fauna represented "an immeasurable capital, a capital that