



Left: Red-legged Honeycreeper (*Cyanerpes cyaneus*). Right: Green Honeycreeper (*Chlorophanes spiza*) taken during the 108th CBC.

All photos by Karl Kaufmann

Birders of Paradise *The History of CBCs in Panama*

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Panama certainly has a lot going for it these days. The Latin American country has a stable government, a strengthening economy, and is embarking on a huge project to increase the capacity of its famous canal by widening the channel and installing new locks. Nature tourism is becoming a big business, so environmental protection needs to go hand-in-hand with economic development. Situated between North and South America, the country holds flora and fauna treasures from both continents: toucans and parrots fly about the capital city, and Harpy Eagles and jaguars live in the mountains less than an hour's drive from the airport. Panama has thus recently become one of the top places for U.S. baby boomers to retire, with new houses and condominiums popping up all over. But managing the rapid growth of Panama's economy while preserving the natural riches that

attract so many is a great challenge, and the 38-year record of Christmas Bird Counts is one of the elements that can help remind people of the great diversity that needs protection.

Birding in the Canal Area

When I first arrived in Panama just after Christmas in 1984, five years had passed since the 1979 treaty had returned the old Canal Zone to Panama. Thanks to the protection provided during the Canal Zone era, there was an extensive tropical forest within a short distance of a large group of avid birders. The Panama Audubon Society (PAS) was then in the process of completing its 15th set of Christmas Bird Counts.

Three count circles were arrayed along the Panama Canal: the Pacific, Central, and Atlantic areas. "Atlantic Area" may sound like a strange name for a count circle that is nowhere near the

Atlantic Ocean, but the name is related to the ships and the canal. The Panama Canal Commission, the U.S. military, the Smithsonian Tropical Research Institute, and the canal-related businesses had all contributed to the old Canal Zone culture, and one of those contributions was the business-oriented names of "Atlantic Side" and "Pacific Side" to indicate the destinations of ships passing through, not just the locations of the nearest beaches.

I spent many Saturdays in the late 1980s birding with friends in the forests along the canal. This included the world famous Pipeline Road, named after an oil pipeline installed during World War II as a backup method to transport fuel for naval vessels across the isthmus. It extends 17 kilometers through good secondary and some primary forest along Lake Gatun and is now part of Soberanía National Park. Achote Road

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on the Atlantic side was almost as famous as Pipeline Road for birding and is the most productive location for the Atlantic count circle. In a day of birding on these roads, you might see one or two other groups of birders, but more often you would have the road to yourself. The extensive and easily accessible forests that I found in 1984, with their huge biodiversity and unusual tropical birds were truly a paradise to someone from New Jersey.

The Beginnings of CBC Participation

The record of CBCs in Latin America begins rather abruptly. There are no recorded count circles outside of the United States and Canada from at least the 60th to the 72nd CBC. Presumably there were very few, if any, before the 60th. But in the 73rd CBC, held in December 1972 and January 1973, there are records in *American Birds* of two counts in Mexico, one in Guatemala, one in Belize, and one in El Salvador. In the 74th CBC, three count circles from Panama are first recorded: the Atlantic Area, the Central Area, and the Pacific Area. It turns out that Panama actually conducted counts starting with the 70th CBC, but they were

not considered official and were not entered into the CBC records. Perhaps there were earlier informal counts in the other countries as well, and their appearance in the 73rd CBC simply reflects the decision to start including them that year.

Participation in the Panama counts had started several years after the Panama Audubon Society was established as a chapter of the Florida Audubon Society in 1968. Members responsible for chartering this new chapter included Robert Ridgely, then a second lieutenant in the U.S. Army, and Horace Loftin, the Director of the Florida State University Center for Tropical Studies in Panama. The group had 26 initial members and a goal of reaching 100 by the end of the year. Ridgely, who soon completed his tour of duty, went back to school at Princeton University, where his interest in Panama's birds led him to write *A Guide to the Birds of Panama*, one of the first and best modern guides to birds in Latin America. But this interest in natural history was not new in Panama. The forerunner of the PAS, the Canal Zone Natural History Society, was active from 1931 to at least 1963. Ornithological studies in Latin America had been focused on Panama since before the

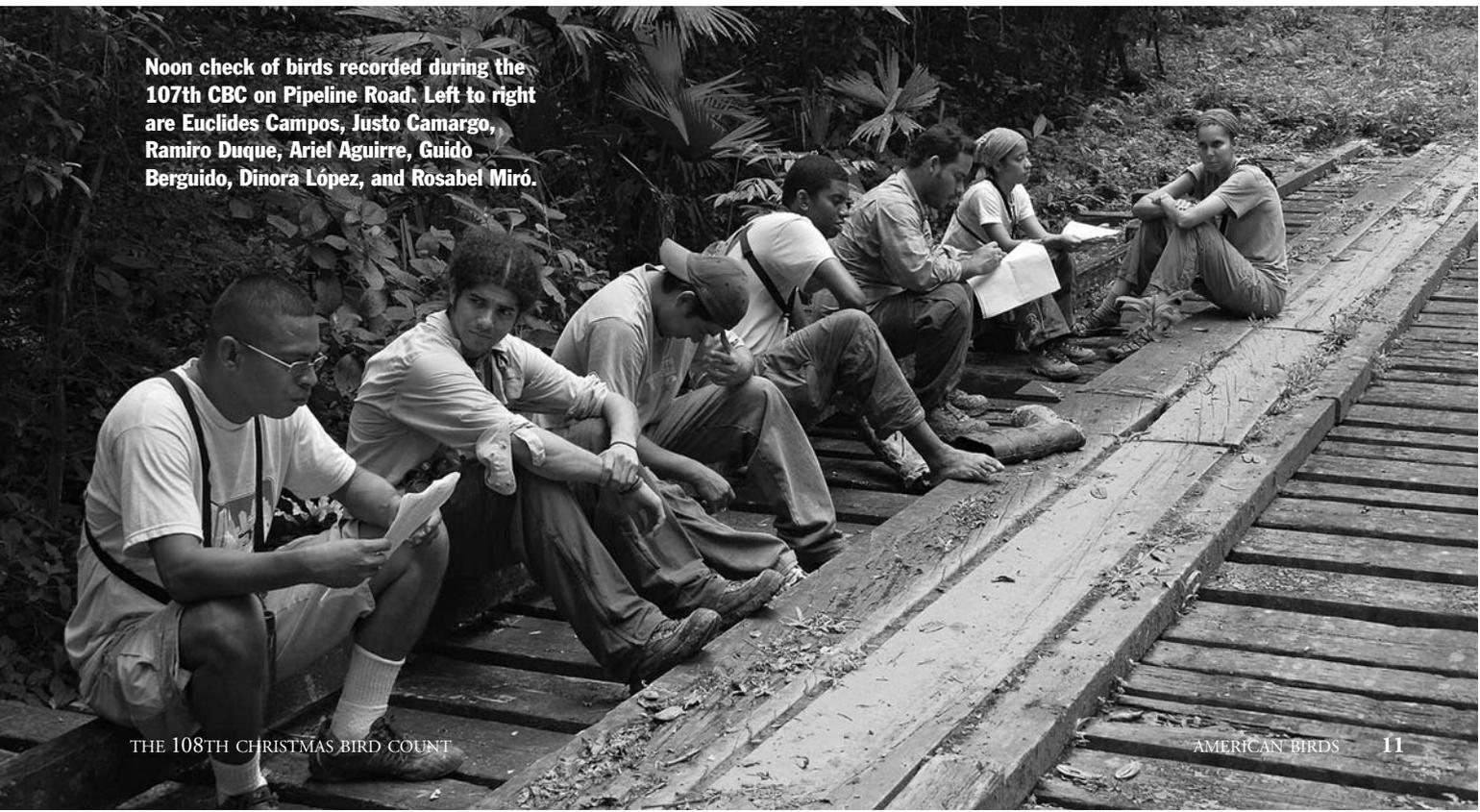
canal was built but were greatly expanded with the accessibility provided after construction of the canal began.

Top Count Circle for 20 Years

In the first year that Panama was listed in CBC records, the Atlantic circle counted 265 species, more than any count circle anywhere. In each of the following two years the Atlantic count increased its total as the participants gained more experience, but it was not the highest overall count. Then, starting in the 76th CBC, Panama began a string of 20 consecutive years where one of its count circles was the top circle, with the Atlantic count being first for 19 of those years. Several times the three Panama counts finished first, second, and third for species total, and the Central count, usually behind the other two, was never less than the fifth-ranked count circle in the entire CBC.

The consistent high ranking was the result of several factors. First, of course, is that there are more species in the tropics than in temperate areas, particularly in the winter when all of our birds that fly north to breed come back home. So how many species are there to count in our CBC circles? Panama has 972

Noon check of birds recorded during the 107th CBC on Pipeline Road. Left to right are Euclides Campos, Justo Camargo, Ramiro Duque, Ariel Aguirre, Guido Berguido, Dinora López, and Rosabel Miró.



species in all, according to the latest count in the *Annotated Checklist of the Birds of Panama*, a publication by frequent CBC participant George Angehr and published by the Panama Audubon Society. Of those, pelagics, highland and foothill species, and species found only in eastern or western Panama would not be expected in the three canal area counts, leaving 478 possible species for the Atlantic slope and 410 for the Pacific slope, not counting the odd vagrant that turns up each year.

A second factor producing high counts was the wide variety of habitats, including primary, secondary, and gallery forests; grasslands, ponds, swamps, and mangroves; and coastlines in both the Atlantic and Pacific count circles. The Central count circle has a much higher proportion of forest but lacks marine areas and has fewer roads, so it rarely produces as many species as the other two. What is lacking in all three of these circles is altitudinal diversity, and that factor eventually led to Panama's loss of its position at the top of the count circle list. In December 1996, a fourth count circle, Volcan, was added to Panama's list. But this circle also lacks altitudinal diversity, being almost entirely in the western highlands and with a pool of only 399 species.

When I became active in the counts in the early 1990s, the Atlantic count would start with a potluck dinner at the house of the compilers, Dodge and Lorna Engleman. Dodge had started participating in the CBCs in 1970 using borrowed binoculars that were so far out of alignment he had to put a lens cap on one side and just use one barrel. In June of 1981 Dodge met his future wife, Lorna, and by that December she was participating in the counts. At the potluck, Dodge would hand out maps showing the route for each group, with detailed lists of the species to find, and sometimes even the particular tree to be searched. We would spend the morning in our assigned areas and then meet for lunch at a restaurant just below the spillway on the dam across the Chagres

River. The Atlantic circle straddled both sides of the canal, and to cross at the drawbridge at Gatun Locks you sometimes had to wait for up to an hour until the ships, which had first priority, were cleared. Though this wait was a loss of valuable birding time, it was necessary for everyone to meet at lunch to compare lists and see which species had been missed so that a group could be sent out to get them in the afternoon. Continuing the long string of Panama's top counts was very much on everyone's mind.

In 19 of the 20 years that Panama birders could boast of having the highest species total, the Atlantic circle was first with a total usually between 330 and 357. The one exception was during the 90th CBC when the U.S. invasion of Panama to remove Manuel Antonio Noriega from power curtailed the Atlantic side count. With the Pacific and Central counts finished, U.S. troops took over control of Panama just before Christmas and by December 30, the day of the Atlantic count, there were soldiers at checkpoints all over the canal area looking for suspicious activity. A carload of birders with scopes and binoculars was not a normal sight in Panama at that time, and one would not expect U.S. soldiers to immediately recognize them as harmless. Nevertheless, a group of nine observers, led by Dodge and Lorna Engleman, felt it was important to keep Panama's perfect record of participation in all three count circles going, and they spent the entire day birding. No doubt they had to explain their mission many times at checkpoints, but they ultimately recorded 310 species, the second highest CBC count that year, finishing just behind the Pacific count, which had recorded a very good total of 335 species.

Transition to Panamanian Hands

By 1995, Dodge and Lorna were getting ready to retire and move to the United States but wanted to make sure that there were people trained to carry on the CBC tradition. The Pacific and Central compilers were looking for



Waiting for the drawbridge during the 108th CBC at Gatun Locks on the Panama Canal.

replacements as well, so Dodge and Lorna, now living back on the Pacific side, set up a training class for three prospective Panamanian compilers to explain all the details of organizing the three counts. Lorna wrote up a two-page protocol for the new Christmas Count Committee. The couple also made up a checklist for each count with a list of the more common species with both Spanish and English names, followed by a more compact list of the rare species. To remind the new compilers of the position of the PAS within the CBC, Dodge and Lorna even had a bunch of coffee cups made with the CBC logo and a toucan wearing a red Christmas cap on one side and a big "#1" opposite it.

Part way through the compiler training class, a fourth person, Rosabel Miró, became involved, more as an assistant than a compiler since she had little birding experience but was eager to learn and good at keeping records. Lorna, who liked to organize more than just CBCs, thought that Rosabel and I were perfectly suited for each other and suggested that I ask her to go out birding. Our first date was on Pipeline Road. Rosabel ended up falling behind at one point and missed a Great Curassow; otherwise, she seemed to enjoy herself, and we went to the movies the next day and for dinner the next. We eventually married, with Dodge and Lorna as best man and maid of honor. Rosabel turned out to be an excellent birder, and the curassow was probably the first and last time I saw a species that she didn't. In our first year together, she helped me add more than 50 species to my life list. Her Panama list is now well over 750 species and she is the executive director of Panama Audubon.

Losing the Top Spot

Up until the 94th count the year before, Panama's Atlantic side count had been comfortably ahead of any other country. But in the 91st CBC, a new circle at La Selva in Costa Rica had started and had consistently tallied over 300 species. In the 95th count, the Atlantic count had only recorded 324 species, just edging out La Selva at 322 species. The new compilers were somewhat apprehensive and wanted to do well. Ever since the signing of the canal treaty in 1979, the older experienced birders in the PAS had been retiring and moving back to the United States. But there was still a good contingent of the old guard and a few new promising Panamanians. The Atlantic count circle for the 96th count recorded 348 species, comfortably beating La Selva but being surprised by Monteverde, a new count circle in Costa Rica that recorded 347 species, just one species behind. We were still number one, but for the last time.

In the 97th count, the compilers, now supplemented by Rosabel and two young brothers, Darien and Camilo Montañez, organized a respectable count of 316 species, but Monteverde recorded 369 species, more species than had been recorded during any Panama CBC. The Atlantic count continued to score around 300 to 340 species until the 106th count, when it dipped just below 300 and has stayed there since.

It is unlikely that Panama will regain the top spot again, at least with the current set of count circles. We simply don't have a large enough pool of birds to compete with other more diverse sites. But we are also missing many of the better birders who have moved back to the states, and although there are many good Panamanian birders, many of them have become guides and they don't have time to participate during the winter tourism high season. We have also lost access to some of the prime birding areas, related to the change in use of the canal area from a very restricted single-use area for operating the canal to part of a rapidly growing metropolitan area. Panama



The hydroelectric power generating station at the spillway on the Panama Canal.

deserves great credit for preserving the forested parts of the area turned over to the country in the 1979 treaty, and so the canal area is still an excellent destination for bird tourists. However, a significant amount of the diversity in the count circles comes from the non-forested areas, the grasslands, wetlands, and partially forested areas that are now being developed.

The Panama Audubon Society has also changed, and this has affected our participation in the CBCs. Originally, the PAS was primarily a birding club consisting largely of gringos with lots of time on their hands and a great interest in birds and nature. The monthly meetings were all in English and conservation was discussed but not actively promoted. Starting in 1989, more and more board members have been Panamanian, and active work towards conservation has taken on more importance. Now, most of the members are Panamanian, the monthly meetings are all in Spanish, the PAS is recognized as an important non-governmental organization for conservation of birds and their habitats, and members spend more time on conservation activities than actual birding. The side effect of this great work is that participation in the CBCs is lower. To make matters worse, none of the active members live on the Atlantic side to keep track of the current hot spots for the rare species, so even our good birders are at a disadvantage during the Atlantic Area count.

Latin America Remains on Top

In the 103rd CBC, a new count circle in Costa Rica, the Rain Forest Aerial Tram, hit 400 species for the first time in any CBC. This record was quickly broken when Mindo-Tandayapa in Ecuador recorded 407 species in the 104th CBC, followed by Napo, also in Ecuador, recording an estimated total of 552 species in the 105th CBC.

The number of count circles in Central America increased steadily from 5 in the 73rd to 38 in the latest CBC, the 108th. South America, not represented at all in the 73rd count, had 25 count circles in the latest count. Equally impressive is the number of participants in the newer Latin American circles. With the exception of the Napo count circle, which had only 16 participants when it recorded its record count, the top circles consistently have well over 50 participants, indicating great organization and dedication.

Now that Panama is no longer competing for the top circle, we can use the sour grapes argument that counting the most species is not really the point of doing the CBCs anyway. Collecting data from thousands of count circles in the same area year after year is extremely useful for monitoring the populations of birds and is, simply put, fun to do. Panama will continue to add to its uninterrupted 38-year record for the three CBCs spanning the isthmus and its 13-year record in Volcan, and maybe even add some more count circles. Presumably the number of count circles in Latin America will continue to increase and we will all learn more about bird populations in the Americas. And I will continue to use my #1 coffee mug. 🐦

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