views of an adult Brown Violet-ear (*Colibri delphinae*) with a fledgling. We watched for several minutes as the adult hummingbird fed at nearby flowers and attended the young violet-ear. The fledgling retained protruding tufts of down, especially on the head and neck. Efforts by other observers to relocate the birds on subsequent days were unsuccessful, and I know of no further sightings of this species from Tobago.

This discovery marks the first sighting, as well as the first probable nesting, of the Brown Violet-ear on Tobago. Elsewhere the species ranges from Guatemala to western Ecuador, northern and eastern Bolivia, northeastern and eastern Brazil, the Guianas, and Trinidad (rarely) in tropical and subtropical zones (de Schauensee and Phelps 1978, Stiles and Skutch 1989).

Any additional information on sightings of either of these hummingbird species on Tobago would be appreciated. Especially welcome would be a photograph of a White-tailed Sabrewing, of which none seem to exist.

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TERCER REGISTRO DE *DUMETELLA CAROLINENSIS* EN PUERTO RICO

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En marzo 17 de 1985, mientras me encontraba en el Bosque de Carite (Cayey), en compañía de mis estudiantes del curso de ornitología, observé un ave posada sobre una hoja de palma real (*Roystonea borinquena*) que con la ayuda de una guía de campo identifiqué como un Zorzal Gato (*Dumetella carolinensis*). Varias semanas después le comenté la observación al colega José Colón, y este me indicó que

semanas antes, habían atrapado en una red a una de estas aves en el bosque de Guánica, el cual se encuentra a 85 km de Carite. Aparentemente, esta es la misma ave, que indica Raffaele (1989) que se capturó el 25 de febrero de 1985.

El 11 de abril de 1991, mi colega Manuel Soto, me indicó que había observado en su propiedad, que esta localizada en el Bo. Las Lomas, sector Tres Caminos de Barranquitas, un pájaro gris obscuro, de cabeza negra, aproximadamente del tamaño de un Pitirre (*Tyrannus dominicensis*) que no había podido identificar. Le mencioné una serie de especies, como la presunta ave, con las cuales Soto no quedó conforme. Al asunto no le dimos mayor importancia y lo olvidamos. El 3 de mayo de 1991, mientras observaba las actividades de un nido de Jilguero (*Euphonia musica*), cerca de la localidad antes mencionada, comencé a oír el sonido de un ave, que no pude identificar. Mientras trataba de buscar el origen del sonido, el ave voló al árbol en donde estaban anidando los Jilgueros. Pude observarla cuidadosamente, mientras se movía de una rama a otra, parando la cola entre saltos. Esta vez por la coloración gris obscuro, la corona negra y el patrón de conducta, pude identificarla sin ningún problema como un Zorzal Gato. Cuando mi compañero de trabajo regresó a buscarme, le indiqué de mi avistamiento y le enseñe un dibujo del ave en la guía de campo de Peterson (1980). Soto inmediatamente me indicó que era el ave que el había observado en su finca el 11 de abril. Estos avistamientos resultan ser el tercer informe del Zorzal Gato en Puerto Rico, y los más tardes para la especie en la Isla.

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Research Report

A COMPARISON OF DNA FINGERPRINTS FROM HISPANIOLAN AND PUERTO RICAN PARROTS

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The Puerto Rican Parrot (*Amazona vittata*) is one of the world's most critically endangered species of birds. Currently, less than 30 wild birds and approximately 65 captive birds survive. The captive breeding program was established to prevent extinction of the species and to bolster the wild population through releases of captive-produced parrots. In addition to the Puerto Rican Parrots, a captive breeding program for the less threatened and taxonomically related Hispaniolan Parrot (*A. ventralis*) was established. These Hispaniolan Parrots serve as surrogate incubators for Puerto Rican Parrot eggs, surrogate parents for Puerto Rican Parrot chicks, and a models for testing new or different avicultural

practices.

Each captive flock of parrots was essentially founded by four individuals. However, differences between the two species in reproductive success (e.g., the average annual productivity rate from 1980 to 1990 was 12.2 for the Hispaniolan Parrot flock and 5.8 for the Puerto Rican Parrots) suggested that inbreeding may be a limiting factor in Puerto Rican Parrot productivity. Anecdotal evidence of inbreeding in the wild population of Puerto Rican Parrots further suggested that productivity differences in captivity may not have been just species differences. Therefore, DNA fingerprints were used to estimate the degree of relatedness among the parrots. Two minisatellite probes, human 33.6 and the mouse periodicity gene, *Per*, were used to generate DNA fingerprints from *Alu*I digested genomic DNA extracted from whole blood. Standard techniques were used for restriction enzyme digests, gel electrophoresis, southern blotting, and autoradiography.

Segregation analyses of bands in the DNA fingerprints were conducted between parents and offspring in the largest pedigree of each species. Bands that were shared by both parents were excluded from the analysis. All other bands in the 2 to 21 kilobase size range of each parent were given a unique designation, and the presence or absence of each band was noted in each offspring. Bands that always co-migrated were considered linked, and bands that never co-migrated were considered allelic.

In a Hispaniolan Parrot family of 2 parents and 13 offspring, the *Per* probe identified a minimum of 13 maternal loci, and a minimum of 14 paternal loci. One "odd" band (a new length variant) was identified in one of the offspring, suggesting a mutation rate in these loci similar to other species. In the same family, the 33.6 probe identified a minimum of 17 maternal loci, and a minimum of 7 paternal loci.

In a Puerto Rican Parrot family of two parents and nine offspring, the *Per* probe identified a minimum of seven maternal loci and a minimum of eight paternal loci. In the same family, the 33.6 probe identified a minimum of 10 maternal loci and a minimum of 7 paternal loci.

Band-sharing coefficients (BSC), defined as twice the number of bands shared between a pair of individuals divided by the total number of bands scored in the 2 to 21 kilobase size range for both individuals, were estimated for Hispaniolan Parrots with confirmed pedigrees. Because *Per* gave faster and clearer autoradiographic signals, it was selected for the following analysis.

The average BSC for unrelated Puerto Rican Parrots, 0.41 (CV = 29%), was greater than the BSC for unrelated Hispaniolan Parrots, 0.19 (CV = 37%; $P > 0.05$). From 1979 to 1990, 38% of mated Puerto Rican Parrot pairs (5/13) successfully fledged offspring. Of mated pairs with BSC from 0.21–0.30, 2 of 3 were successful; 2 of 2 pairs with BSC from 0.31–0.40 were successful; 1 of 4 pairs with BSC from 0.41–0.50 was successful; and none of 4 pairs with BSC from 0.51–0.60 were successful. Of 10 mated pairs of Hispaniolan Parrots, 9 successfully produced fledglings. The majority of the successful pairs (6/9) had BSC lower than 0.30, and 3 of 9 mated pairs had BSC from 0.31–0.40. One pair that failed to breed had a BSC between 0.31 and 0.41. Therefore, the probability of successful breeding increased as the BSC of a mated pair ranged from approximately 0.21 to approximately 0.40, but there was little chance of successful breeding when the BSC of a mated pair was greater than 0.41. Unfortunately, 8 of the 13 mated pairs of Puerto Rican Parrots had BSC greater than 0.41, and only one of the pairs was successful.

The results of this study indicate that "unrelated" Puerto Rican Parrots may be as genetically similar to each other as second degree relatives. Consequently, poor reproductive success of the captive parrots may be due to inbreeding. To increase the probability of success in the captive breeding program, pairs of Puerto Rican Parrots should have BSC (*Alu*I/*Per*) lower than 0.41. Where behavioral problems or physical handicaps of the birds interfere with breeding performance, techniques such as artificial insemination may be used to breed genetically desirable pairs.

SOCIETY'S 1991 ANNUAL MEETING HELD IN ST. LUCIA

The Society of Caribbean Ornithology met at the St. Lucian Hotel in St. Lucia, 4-7 August 1991. Participating in the meetings, field trips, and festivities were 45 persons representing 17 countries, including St. Lucia, Martinique, Guadeloupe, Dominica, Montserrat, St. Vincent, Barbados, Saba, U.S. Virgin Islands, Bahama Islands, Puerto Rico, Dominican Republic, Jamaica, Turks and Caicos Islands, Cayman Islands, United States, and United Kingdom. New officers were elected, including Ms. Catherine Levy, who succeeds the founding President Jorge Moreno, and Ms. Particia F. Bradley, who takes the Secretary position formerly held by Dr. Alexander Cruz. Dr. Joseph Wunderle, Jr., was elected to the newly created office of Vice President. Allan Keith will remain as Treasurer through the end of 1991.

The next meeting of the Society will be in Puerto Rico in August 1992.

ABSTRACTS OF PAPERS PRESENTED AT THE 1991 MEETING OF THE SOCIETY OF CARIBBEAN ORNITHOLOGY, ST. LUCIA

Determination of Hematology and Serum Chemistry Values for Captive Puerto Rican Plain Pigeons (*Columba inornata wetmorei*)

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Data generated from hematology and serum chemistry analysis are often used in conjunction with clinical signs and history to access the diagnostic. In addition, these two parameters can be used to evaluate the physical condition of normal birds. Serum samples were randomly collected from 30 captive Puerto Rican