## CONFIRMATION OF THE OLIVE-THROATED PARAKEET (ARATINGA NANA) IN THE DOMINICAN REPUBLIC

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IN EL PITIRRE 9(3), P. WILLIAM SMITH REPORTED a flock of 10 Olive-throated Parakeets (Aratinga nana) 9-11 kms east of El Aguacate border post in the Sierra de Bahoruco, Dominican Republic. Here we confirm the presence of A. nana in Hispaniola with further observations, and speculate as to their origin.

A flock of at least 10 A. nana was observed at about 800 m elevation along the Accitillar sector of the Sierra de Bahoruco National Park near Los Mercedes, Pedernales Province. These birds were first located by Eduardo Vasquez and Kate Wallace of the Club de Observadores de Aves while working with Latta on a study of bird communities along an altitudinal gradient in the Bahorucos. These A. nana have been present from at least November 1996 to March 1997 and have since been seen by numerous viewers including the authors. The area where the parakeets are found is one of mixed land uses, including agricultural areas, young second-growth broadleaf forest, older moist broadleaf forest, and pine forest beginning at about 850 m elevation. These birds occur in a mixed flock of A. nana and A. chloroptera, the Hispaniolan Parakeet. However, the species appear to segregate in that they always appear to perch in separate trees or separate branches of the same tree. It is unknown if these birds are the same flock of A. nana that Smith reported near Aguacate, but it seems likely that this is a second group. Both flocks appear relatively sedentary, are at least 25 km apart, and are on opposite sides of a northern range that reaches 2680 m in elevation in this area.

Another example of A. nana was found by Francisco Rivas and Nicolás López on the Mirador del Sur park in the southwestern part of the city of Santo Domingo. A single bird was repeatedly seen throughout December 1996 and January 1997 in a flock of 15 A. chloroptera. Unlike the Bahoruco flocks, however, in this case the A. nana was always accompanied by an A. chloroptera individual and they were observed to be courting one another. Flocks of up to 60 A. chloroptera are not uncommon in the city, but it is unknown if these other flocks also contain A. nana individuals or if interbreeding occurs.

The morphological differences between A. chloroptera and A. nana are easily seen in these mixed-species flocks. The best field marks to help with identification are size, the color

of the plumage, and the color of the bill. Aratinga nana is smaller than A. chloroptera, a characteristic that is difficult to see in flight, but which is obvious when the two perch near one another. The plumage of A. nana is bright green, but darker than that of A. chloroptera. with the breast, belly, and part of the face olive-green appearing brown at a distance. The primaries of the wing of A. nana are dark blue, but this characteristic is not easily appreciated when the birds are in the shade. The absence of red in the wings of A. nana is deterministic, but among the juveniles and perched birds it is difficult to easily see this color. Finally, the bill of A. nana is grayish-white, whereas that of A. chloroptera is a mixture of pinks and oranges.

Like Smith we do not know the origin of these A. nana individuals. The occurrence of a single bird in the capitol city might easily be dismissed as an escapee or a released bird. But it is more difficult to assume that one, much less two or more, flocks of A. nana in the remote Bahorucos are introduced individuals. Pedernales is more than 300 km from Santo Domingo and nearly as far from Puerto Principe, Haiti. It seems unlikely that an introduced species would become established here and not in any intermediate sites between the Sierra de Bahorucos and likely points of introduction (i.e., the capitols). In contrast, because of the geologic history of Hispaniola, the Bahorucos are the center of endemism on the island, and the Bahorucos are certainly the most likely locality to expect a second native parakeet species to occur. It is possible that A. nana has been simply overlooked by the few ornithologists that have visited this area. As Smith points out though, we will not know the true origin of these birds without careful study. We suggest, however, that a DNA analysis may be more informative than comparison of study skins. We are hopeful of obtaining DNA material from the Bahoruco birds so that these relationships can be tested.

Our observations also suggest the need to determine the impact of *A. nana* populations on the endemic parakeet populations. We do not know if one species dominates the other, or may displace the other from feeding or nesting sites. Nor do we know if inter-breeding has occurred. Now that we know these populations exist, however, they can be monitored and we can be alert to these possibilities.