

## USE OF A SMALL WATER RESERVOIR BY LOCALLY RARE BIRDS IN THE DOMINICAN REPUBLIC

NEDRA K. KLEIN<sup>1,5</sup>, FRED H. SHELDON<sup>2</sup>, KATE WALLACE<sup>3</sup>, ELVIS CUEVAS<sup>3</sup>, AND STEVEN LATTA<sup>4</sup>

<sup>1</sup>Department of Ornithology, American Museum of Natural History, Central Park W @ 79th Street, New York, NY 10024, USA;

<sup>2</sup>Museum of Natural Science, Louisiana State University, Baton Rouge, LA 70803, USA; <sup>3</sup>Grupo Ecologista Tinglar, Inc., Calle El Vergel 33, Reparto El Vergel, Santo Domingo, Dominican Republic; <sup>4</sup>Division of Biological Sciences, 110 Tucker Hall, University of Missouri, Columbia, MO 65211, USA; <sup>5</sup>Current address: Division of Science, Truman State University, Kirksville, MO 63501, USA; e-mail—nklein@truman.edu

ON 27–28 JUNE 1997, while engaged in field work for projects on genetic relationships of Caribbean birds, all except S. Latta were camped at a small (approximately 0.1 ha [1/3 acre]), cement-sided water reservoir at approximately 1050 m in elevation along Alcoa Road in the Aceitillar zone of the Parque Nacional Sierra de Baoruco, Dominican Republic. In the late afternoon and early evening, as well as the following morning, this reservoir attracted many individuals of several bird species, some of which are otherwise uncommon, very locally distributed, and difficult to observe. All were making use of the reservoir either as a source of drinking water, or as a foraging location for insects occurring near the water surface. The reservoir is in the open understory of the *Pinus occidentalis* forest that is common at that elevation.

Our estimates of numbers of birds observed are 10–15 Antillean Siskins (*Carduelis dominicensis*) and 15–20 White-winged Crossbills (*Loxia leucoptera*) that came to drink at the edge of the reservoir. Foraging for insects near the water surface were 5–10 Golden Swallows (*Kalochelidon euchrysea*) and 20–25 Caribbean Martins (*Progne dominicensis*). These species appear to be resident in the area throughout the year, as they have also been recorded from each of the months of October to April by Latta. Latta has observed large numbers (flocks of up to 24 individuals) of Palm Crow (*Corvus palmarum*) and Plain Pigeon (*Columba inornata*). Also frequenting the area and using the reservoir are Hispaniolan Parrot (*Amazona ventralis*), Hispaniolan Parakeet (*Aratinga chloroptera*), and Olive-throated Parakeet (*A. nana*). All of these species are known to breed in the area and may do so in large numbers. We estimate at least 30 breeding pairs of crossbills regularly use the reservoir as a

source of water.

In late June, there can be quite high afternoon temperatures (>28° C) and low rainfall in this area. Low rainfall may also be expected in late winter (December–March). The small reservoir may be providing a critical resource for local birds. No other reliable and predictable sources of fresh water are available in the vicinity.

Since this small reservoir appeared to be a magnet, attracting many individuals of locally rare or potentially threatened endemic taxa, we suggest that providing more such dependable sources of fresh water would be an excellent, relatively inexpensive conservation tool. Creation of several small reservoirs at scattered locations could potentially have an extremely beneficial effect on local populations of Hispaniolan birds. However, precisely because this reservoir is a magnet for birds, it has also been a magnet for illegal hunting: Pigeons are especially sought by hunters. Whereas hunting pressure seems to have been recently reduced, remains of birds are still frequently found. We therefore suggest that in addition to construction of more reservoirs, there must also be firm control of illegal hunting. Birds using this reservoir seem especially wary. Crossbills have been seen to spend 40 minutes passing between trees lining the reservoir and making sallies over the water before finally settling and drinking.

In addition to the conservation benefits of establishing more reservoirs and reducing hunting pressure, there would also be a potential eco-tourism benefit if several localities existed where some of the uncommon endemics could reliably be found and observed.