

NOVEL FEEDING TECHNIQUE OF THE WOODPECKER FINCH

WILLIAM GREENHOOD¹

*Florida Museum of Natural History
University of Florida, Gainesville, Florida 32602 USA*

ROBERT L. NORTON,²

*Department of Natural Sciences
Santa Fe Community College
Gainesville, Florida 32606 USA*

Abstract.—A Woodpecker Finch *Geospiza pallida* was observed using bark or a wood chip as a plectrum. A feeding behavior, described as scraping and flipping epiphytes with a plectrum in a side-to-side motion, is reported for the first time among the Geospizinae of the Galapagos Islands.

TÉCNICA NOVEL DE ALIMENTACIÓN POR PARTE DE *GEOSPIZA PALLIDA*

Sinopsis.—Se observó a un individuo de *Geospiza pallida* utilizar un pedazo de corteza y una astilla de madera como plectro. La conducta alimentaria observada se basa en raspar y voltear epifitas con la corteza o la astilla utilizando un movimiento de lado a lado. Este es el primer informe de este tipo de conducta en los pinzones (Geospizinae) de la Islas Galápagos.

Of the Geospizine finches known from the Galapagos archipelago (Lack 1947, Grant 1986), the Woodpecker Finch *Geospiza pallida*, is most recognized for its use of tools to acquire food (Gifford 1919, Lack 1947). This tool use includes modification of implements such as twigs and thorns (Erhlich et al. 1988) to create a probe of particular length. Captive birds also have been recorded as doing this (Millikin and Bowman 1967). The probe is inserted into holes or crevices in wood to dislodge insects. Other finch species in the Galapagos, including Mangrove Finch (*Cactospiza heliobates*) and Warbler Finch (*Certhidia olivacea*), are also known to use tools to obtain food (Curio and Kramer 1964). Hundley (1963) observed a Warbler Finch on Santa Cruz using a leaf petiole or flower stem to dislodge insect larvae from holes or crevices.

Here we describe what appears to be the first use of a plectrum-like object by the Geospizinae and a novel use of the object as a tool by a bird species to aid in prey capture. On 12 Jul. 1996, Greenhood and other observers using binoculars observed a Woodpecker Finch in the highlands near Los Gemelos, Santa Cruz at approximately 400 m elevation in the *Scalesia-Miconia* vegetation zone (Jackson 1993). At a distance of 20 m and approximately 4 m up in a tree, the finch was observed with a plectrum (a bark or wood chip roughly the size of a guitar pick) in its beak moving continuously away from the tree trunk along a lateral

¹ Current address: Department of Natural Sciences, Santa Fe Community College, Gainesville, Florida 32606 USA.

² Current address: Alachua County Environmental Protection Department, 226 S. Main St. Gainesville, Florida 32601 USA.

branch. The finch scraped and flipped epiphytes (e.g., mosses) in a side-to-side motion from the upper surface of the branch and inspected the area as it went. This activity was observed for several minutes before it flew off. The size of the prey item, if any, could not be determined. A Woodpecker Finch returned to the same site without a plectrum moments later.

Morse (1968) described Brown-headed Nuthatches (*Sitta pusilla*) using bark scales as levers to lift other bark scales, but not for flipping epiphytes. In a search of the literature on the feeding habits of the Geospizine finches, we failed to find any reference to the use of plectrum-like objects as tools. DeBenedictis (1966) after six weeks in the archipelago remarked that no Geospizinae was known to sweep its bill when foraging as the ground-feeding Galapagos mockingbirds (*Neomimus* spp.) do (DeBenedictis 1968). Hundley (1963), however, observed an individual *G. pallida* using its head to push or pry back bark until it could use its feet or bill to dislodge the bark in a manner similar to the bill-bracing feeding of *Geospiza conirostris* (DeBenedictis 1968). Thus, certain *G. pallida* may be familiar with holding bark chips in their bills at least.

Further observations of *G. pallida* and other Geospizinae are needed to confirm the use of plectrum-like objects to aid prey capture, and to see whether the practice of plectrostelgy is restricted among these birds as occurs with other novel foraging behaviors that they use. For example, *G. difficilis* on Wolf and Darwin Islands manipulate and roll seabird (*Sula nebouxii*) eggs against rocks to crack their shells so the birds can use their bills to make holes and extract the yolk and albumen (Grant 1986). The species is not known to do this on the other islands where it lives (Grant 1986).

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