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FIRST RECORD OF PIED-BILLED GREBE (*PODILYMBUS PODICEPS*) IN NEVIS. WEST INDIES

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Abstract. --- Michael Reid MD observed and photographed a single Pied-billed Grebe (*Podilymbus podiceps*) on the pond at Nelson's Spring located within the west northwestern quadrant of the island of Nevis, adjacent to the Caribbean Sea (IHO 1953: 14-15), in St. Thomas Lowland Parish, Nevis, The Federation of St. Christopher (St. Kitts) and Nevis, West Indies, on 22 February 2010.

Key words. --- Caribbean, Nevis, Pied-billed Grebe, Podilymbus podiceps.

PIED-BILLED GREBE (PODILYMBUS PODICEPS)

AOU (1998: 222) and Dickinson (2003: 161) do not confirm Pied-billed Grebe occurring on the island of Nevis. Raffaele *et al* (1998: 216) state: '[Pied-billed Grebe] Occurs throughout the West Indies as a common year-round resident on the larger islands, less common on medium-sized islands, and rare or absent from the smallest ones, due to scarcity of appropriate breeding habitat': Nevis is a small island of circa 93 km² (circa 36 sq. miles). Raffaele *et al* (1998: 455) does not list the species in the 'Locality Checklist' as a species known to the artificially conjoined listing of the island of St. Kitts and the island of Nevis. Caution is generally advised: What may be true for the separate island of St. Kitts may not be true for the separate island of Nevis and vice versa. A fuller description of the current ranges of Pied-billed Grebe can be found in Raffaele *et al* (1998: 216), AOU (1998: 6), and Dickinson (2003: 79).

NEVIS

Nevis is a compact oceanic island of volcanic origin with an area of circa 93 km² (circa 36 square miles), situated in the northern Lesser Antilles, in the Leeward islands of the Caribbean. Politically it is a portion of the two island independent country, The Federation of St. Christopher (St. Kitts) and Nevis. The island of Nevis rises gradually from the shore to a central peak of circa 985 meters (circa 3232 feet) and exhibits a range of natural and secondary habitats which include: elfin woodland, montane forest, palm brake, grassland, coastal scrub, dry woodland, and farmland (Robinson and Lowery 2000). There are an estimated 39 km (est. 24 mi) of shoreline punctuated with a modest few and extremely small estuarine like (wetland) areas often of a brackish nature. These wetland areas or served by intermittent streams, locally known as ghauts and their openings to the sea may also intermittent in nature.

THE RECORDED SIGHTING

On 22 February 2010, Michael Reid observed and photographed a single Pied-billed Grebe on the small pond at Nelson's Spring, Nevis, West Indies (Figure 1). The location of the sighting was circa 44 meters (c. 143 feet) from

the Caribbean Sea (the leeward side), on the island of Nevis at: Longitude $17^{0}07'43.43"$ North; and Latitude $62^{0}37'47.60"$ West. The location elevation was effectively at sea-level behind the elevation of ocean side beach sand.



Figure 1. Nelson's Spring, Nevis, West Indies. Photographic by Sallieb.

At 1709 hours and again at 1744 hours local time, the single bird was photographed by Michael M. Reid, MD with a Canon EOS 400D camera with a Canon 100mm-400mm zoom lens set at 400mm: ISO 800 f5.6 (Figures 2 & 3). Elevations and location were determined using Google Earth.

Nelson's Spring is a small surviving wetland area of an estimated area of c. 5 acres is one of the substantially altered lower elevation landscapes of Nevis. The small pond at this location is bounded on its immediate south by a new condominium/vacation rental housing development, by the Main Island Road which passes in a sharp curve c. 15 meters from the pond on its north west and another condominium/vacation rental housing complex to the immediate north. The west side of these wetlands abuts the beach from which water is exchanged during climatic events such as storms both from freshwater land runoff and ocean salt water wave action. An effort was apparently made to 'clean up' the area around Nelson's Spring for condominium marketing purposes but that effort eliminated the modest sheltering effects provided by the removed overgrowth and as a consequence fewer bird species can now be found at this location. The very modest sheltering effects were removed for esthetic purposes without consideration of the former resident and former visiting species' requirements. The area constituting the northwestern side of the pond is heavy grazed by numerous tethered cows and unrestrained sheep and goats. The planting of barrier vegetation of various heights could restore some wildlife desirability, but the economic realities of the island make that an unlikely prospect. These lower elevation areas in Nevis are in an arrested state of ecological succession and subjected to continuous grazing by introduced ungulate animal species and more concentrated human community activities. Colonial period mono-agribusinesses and other contemporary anthropogenic activities caused the denudation of most vegetation up to the c. 305 meter (c. 1000 foot) elevations on the island which resulted in substantial soil erosion which continues into the contemporary period. This arrested ecological succession is greatly impacted by the behaviors of large populations of island wide free ranging ungulate species, to include: sheep; goats; donkeys; horses; pigs; and cattle. The impacts of these introduced animal species are effectively concentrated in what is relatively small island consisting of circa 93 square km (circa 36 square miles). Large populations of historic period introduced Vervet (Green) Monkeys (Chlorocebus pygerythrus), believed to be of African origin, as well as introduced Mongooses (Family Herpestidae) further contribute to the alteration of the disfigured landscape and to the depauperate faunal composition and numbers.

This photo-documentation represents a rare record of the presence of Pied-billed Grebe (*Podilymbus podiceps*) on the island of Nevis, West Indies and is believed to be the first proper record of the species on the island of Nevis.

No action was taken to determine the subspecies, age, sex, or other physiological conditions of the individual.

This observation is part of the efforts of the newly formed Nevis Ornithological Society to document all of the species of birds to be found solely on the island of Nevis (and proximal Booby Island). Historically bird species listings have artificially conjoined the two geologically and ecologically separate and distinct islands (the island of St. Christopher (St. Kitts) and the island of Nevis): An example would be the 'Locality Checklist' within Raffaele *et al* (1998: 453-495). The Nevis Ornithological Society is also attempting to: 1) systematically review and evaluate

reported bird sightings on the island of Nevis, as well as Booby Island, with a high degree of academic rigor; and 2) provide a central repository for those accepted reports that are solely for the island of Nevis.

This documented sighing represents a first recorded vagrancy of this species on the island of Nevis: A species which is rarely or never found on the smaller Caribbean islands (Raffaele *et al* 1998: 216). A fuller significance of this sighting remains undetermined. Combined with past and future records, fuller patterns may become clearer. As in this case, and in the future, increasing numbers of bird watchers and researchers in the field, on comparatively remote and under frequented islands, for sustained periods of time, may account for increasing numbers of documented reports.

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Figure 2. Pied-billed Grebe. Photographed by Dr. Michael Reid at 1709 Nevis Time on 22 February 2010 at Nelson's Spring, St. Thomas Lowland Parish, Nevis, West Indies: The same sole individual bird in Figures 2 & 3.



Figure 3. Pied-billed Grebe. Photographed by Dr. Michael Reid at 1744 Nevis Time on 22 February 2010 at Nelson's Spring, St. Thomas Lowland Parish, Nevis, West Indies: The same sole individual bird in Figures 2 & 3.