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| **MEMORANDUM** | | | |
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| FOR | : | THE ASSISTANT DIRECTOR, BIODIVERSITY MANAGEMENT BUREAU | |
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| FROM | : | THE REGIONAL EXECUTIVE DIRECTOR AND CONCURRENT EXECUTIVE DIRECTOR OF THE PASIG RIVER COORDINATION AND MANAGEMENT OFFICE | |
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| SUBJECT | : | **ENDORSEMENT OF DNA Barcoding Results for LPPWP AIV Monitoring** | |
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| Respectfully endorsing the DNA Barcoding results of samples collected from the Las Piñas-Parañaque Wetland Park (LPPWP), as part of the Protected Area Management Office's (PAMO) Avian Influenza Virus (AIV) monitoring activity. These results were submitted to the Barcoding Laboratory, Institute of Biology, University of the Philippines Diliman (UPD) in April 2025 and released on July 8, 2025.  DNA barcoding successfully identified the feather samples, with most showing high matches (over 98%) to species listed in the GenBank and BOLD reference databases. Thirteen samples matched their initial field identifications, including Marsh Sandpiper (*Tringa stagnatilis*), Common Redshank (*Tringa totanus*), Wood Sandpiper (*Tringa glareola*), Zebra Dove (*Geopelia striata*), Spotted Dove (*Spilopelia chinensis*), and Brown Shrike (*Lanius cristatus*). However, Sample 15, initially identified as an Arctic Warbler (*Phylloscopus borealis*), was genetically confirmed as a Clamorous Reed Warbler (*Acrocephalus stentoreus*) based on its DNA sequence match.  This precise identification through DNA barcoding is crucial for accurate species-specific monitoring and understanding of Avian Influenza Virus (AIV) dynamics at LPPWP, especially as different bird species can have varying susceptibilities or act as different types of reservoirs (e.g., wild waterfowl are often natural reservoirs).  For your information and record. | | | |
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|  | | | **ATTY. MICHAEL DRAKE P. MATIAS** |

A blue pair of tweezers

AI-generated content may be incorrect.

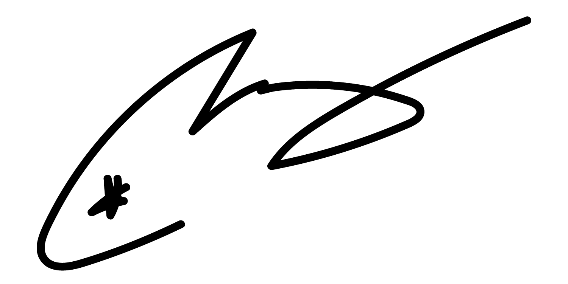
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|  | | | **A black background with a black square  AI-generated content may be incorrect.ATTY. MICHAEL DRAKE P. MATIAS** |

July 11, 2025

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|  | | | **AIDA E. ESGUERRA** |

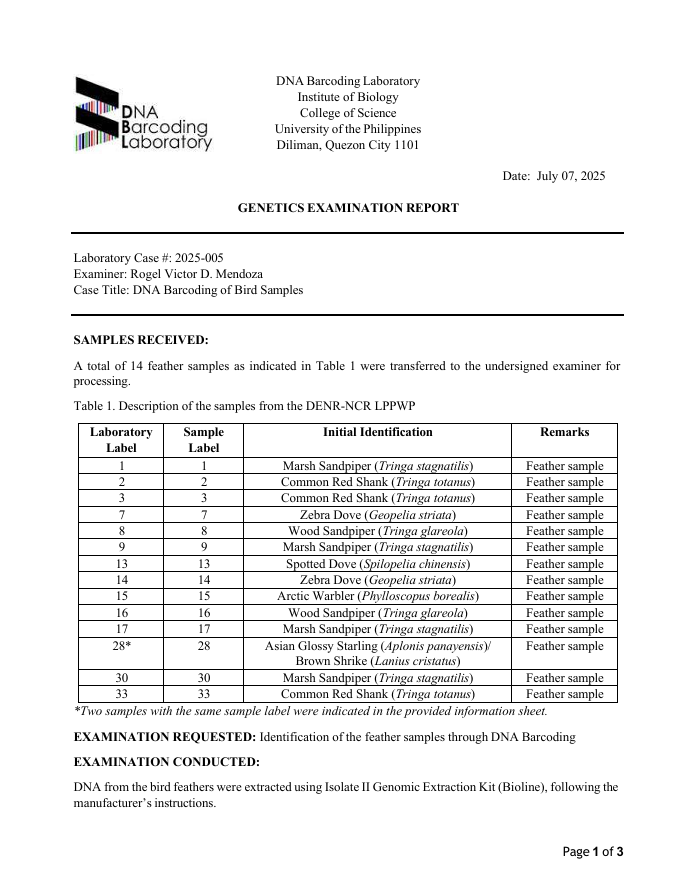
July 11, 2025

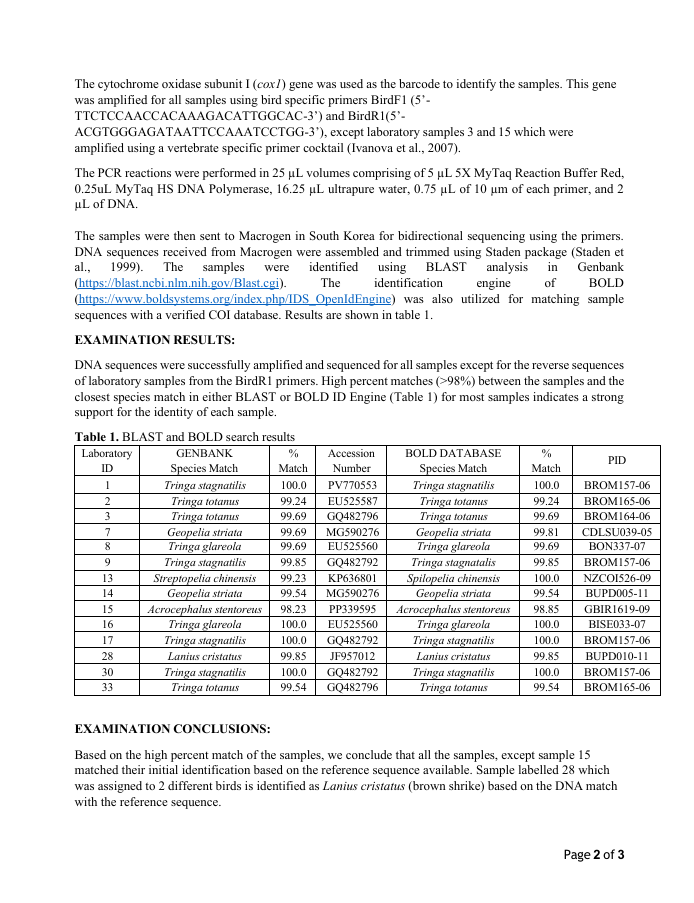
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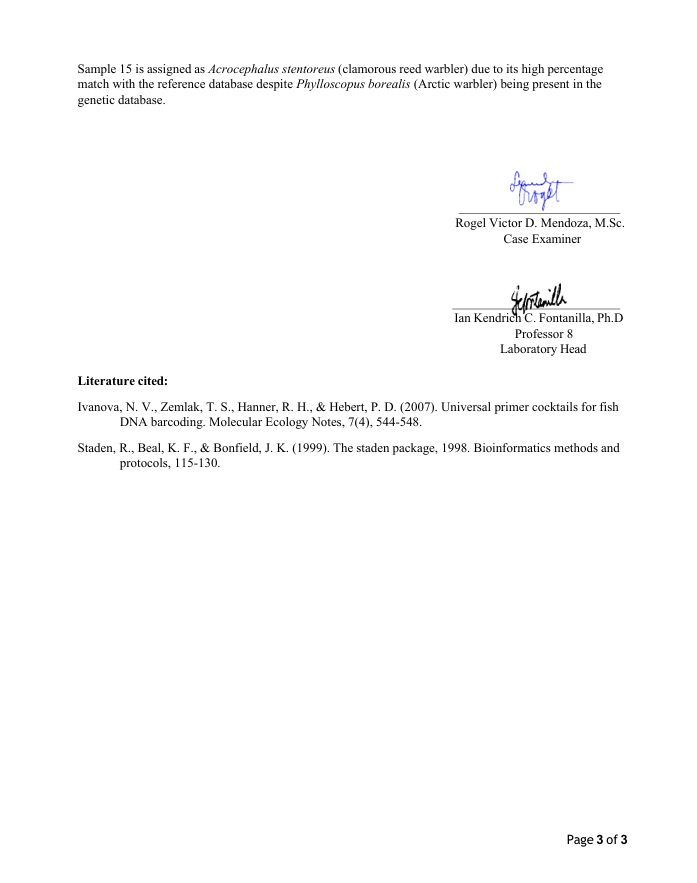


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| **DNA Barcoding Results for LPPWP AIV Monitoring** | |
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| The following details the results of DNA barcoding conducted on samples from the Avian Influenza Virus (AIV) surveillance, DNA barcoding, and bird tagging activity at the Las Piñas-Parañaque Wetland Park (LPPWP), as initially mentioned in the April 2, 2025, report. The samples were submitted to the Barcoding Laboratory, Institute of Biology, University of the Philippines Diliman (UPD) for species identification.  The results were released on July 8, 2025. DNA extraction was performed using a genomic extraction kit, followed by PCR amplification targeting the cox1 gene with bird-specific primers. Sequencing was conducted at Macrogen Korea, and species identification relied on BLAST analysis of GenBank and BOLD databases.  DNA barcoding successfully identified the feather samples, with most showing high matches (over 98%) to species in the GenBank and BOLD reference databases. Thirteen samples confirmed their initial field identifications, including Marsh Sandpiper (*Tringa stagnatilis*), Common Redshank (*Tringa totanus*), Wood Sandpiper (*Tringa glareola*), Zebra Dove (*Geopelia striata*), Spotted Dove (*Spilopelia chinensis*), and Brown Shrike (*Lanius cristatus*). However, Sample 15, initially identified as an Arctic Warbler (*Phylloscopus borealis*), was genetically confirmed as a Clamorous Reed Warbler (*Acrocephalus stentoreus*) based on its DNA sequence match.  **Recommendations:**   1. Continue integrating DNA barcoding with AIV surveillance to verify species, especially for difficult-to-identify samples. 2. Use these results to update species records and avifaunal inventories of LPPWP.   **Attached Document:** Genetics Examination Report from DNA Barcoding Laboratory  For your information and record. | |
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| Prepared by: | Reviewed by: |
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| **DIEGO MONTESCLAROS JR** APASu, LPPWP | **CHRISTOPHER C. VILLARIN** PASU, LPPWP |

**GENETICS EXAMINATION REPORT**

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