**Supplementary Information**

**Endangered Galápagos sea lions and fur seals under the siege of lethal avian flu: A cautionary note on emerging infectious viruses in endemic pinnipeds of the Galápagos Islands**

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**Table S1**. Timeline records of HPAI A(H5N1) epizootic events reported in marine mammal species from South America in chronological order during the period February 2021 to July 2024.

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| **Date** | **Outbreak description** | **References** |
|  February 2021 | First reported case of HPAI A(H5N1) in wild birds in South America. Suspected transmission to marine mammals under investigation. | (1) |
| November 2022 | An unusual mortality event among sea lions in Peru is reported. Preliminary investigations suggest a potential link to HPAI A(H5N1) infection. |  (2,3) |
| December 2022 | Detection of HPAI A(H5N1) in marine mammal carcasses in Chile, including sea lions and fur seals. A regional alert for further investigation is issued. | (4) |
| January 2023 | Significant die-off of marine mammals observed along the coast of Chile and Peru. Genetic sequencing confirms HPAI A(H5N1) in sea lions and fur seals. | (5) |
| April 2023 | Identification of migratory bird patterns showing potential links to HPAI A(H5N1) spread affecting marine mammal populations in South America. | (6) |
| August 2023  | First detection in Argentina (in Rio Grande, Tierra del Fuego Province, Argentina). | (7) |
| September 2023 | Highly pathogenic avian influenza H5N1 virus infections in pinnipeds and seabirds in Uruguay as a paradigm shift to virus transmission in South America. | (8) |
| October 2023 | Brazil reports additional cases of HPAI A(H5N1) in marine mammals, including a notable outbreak among sea lions in the southern part of the country. | (9) |
| October and November 2023 | Report of a massive mortality of southern elephant seals infected with H5N1 avian influenza in Península Valdés, Argentina | (10) |
| December 2023 | Report of the first highly pathogenic avian influenza (H5N1) outbreak in several pinniped species along the southern Brazilian coast | (11) |
| June 2024 | Publication of a comprehensive study on HPAI A(H5N1) impacts on marine mammals, including detailed maps and timelines, highlighting the importance of continued surveillance and research. | (6) |

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