

Pleistocene non-passeriform landbirds from Shiriya, northeast Japan

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Located on the eastern margin of Eurasia, the Japanese Archipelago hosts a unique modern fauna of terrestrial vertebrates including landbirds which show a high proportion of endemic species/subspecies. Despite its potential importance in taxonomy and biogeography, the Pleistocene landbird fossil record has been scarce on Japanese islands, providing little information on the history of the unique fauna in the region. In this study, fossil remains of non-passeriform landbirds from the middle-late Pleistocene (Marine Isotope Stages [MIS] 9 and 5e) of Shiriya, northernmost Honshu Island, Japan, are revised with extensive osteological comparisons. As a result, the presence of at least six non-passeriform landbird species, represented by 71 specimens, was confirmed: Syrmaticus sp., Coturnicini gen. et sp. indet., Columbidae gen. et sp. indet., Apus sp., Haliaeetus sp., and Accipitridae gen. et sp. indet. The Shiriya paleoavifauna is the first substantial Pleistocene landbird fauna reported from the central Japanese islands so far, and suggests that the overall landbird fauna in northern Honshu in the last interglacial period (MIS 5e) was not drastically different from the present one, in contrast to the presence of several extinct land mammals and seabirds in the local fauna. The occurrence of Syrmaticus despite the supposedly colder climate in that time than today suggests that the distribution of modern S. soemmerringii might not be totally defined by climatic factors, but probably affected by a biogeographic barrier at the strait between Honshu and Hokkaido islands.

Key words: Aves, Phasianidae, Columbidae, Apodidae, Accipitridae, biogeography, Pleistocene, Japan.

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