

## White-winged Wood Duck – *Cairina scutalata* – the question of Indonesian albinism

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One advantageous feature of the 1967 World Wildlife Fund Project 406, the White-winged Wood Duck Conservation Project, was to focus attention on this secretive and elusive species, and to highlight the striking gaps in our information on its range and habitat (Mackenzie & Kear 1976). The status of this species is presently being investigated in detail (Green 1990 - see the previous report in this volume).

An unresolved question concerns the birds from Indonesia and the phenomenon of extensive albinism among the wild populations of Sumatra and formerly Java (see Hoogerwerf 1950). This albinism was first described by Blyth (1867) in two Indonesian specimens in the British Museum. Similarly, a number of subsequent descriptions of adults sighted in Indonesia confirmed that Wood Duck from that area were consistently whiter than mainland stock (Holmes 1977). Furthermore, a series of splendid photographs taken by the Southampton University expedition team in Way Kampas Game Reserve, south Sumatra, in 1988-89, indicate that, although there is a population of heavily albinistic White-winged Wood Duck there, there are also some birds marked as we would expect in mainland Asia, albeit often with a number of symmetrical white markings on breast and back (Figs 1 and 2).

In mainland Asian White-winged Wood Duck, the head speckling on the females tends to be more uniform than on the males, and this remains so throughout life. In contrast, there is a considerable variation of head speckling between males, with a tendency for the black speckling to disappear from the cheeks and area above the bill leaving the neck and nape speckled. Another area that becomes white is the front of the throat just above the breast. This last marking seems to be common to both sexes. Unfortunately, I cannot clearly identify the sexes of the ducks photographed in Way Kampas, but believe the obviously less

albinistic specimen to be a female and at least two of the strongly albinistic (head, neck and breast white) ones to be drakes. I am therefore tempted to ask whether further sexual dimorphism is developing in this population?

What are the reasons for the albinism? Is it due to in-breeding and island isolation, or is it an adaption to the more secondary environment of Sumatra? Or is it caused by different predation threats, or a lack of threat from certain raptors? Are we seeing the evolution of a separate race of White-winged Wood Duck?

I am not convinced by the isolation/inbreeding suggestions for albinism made by previous authors. The populations of Indonesia were, until recently, too large for inbreeding to be more extensive than in the mainland. Primary environmental devastation, and the resulting isolation of sub-groups, have been rapid and as extensive in, say, Assam as in Sumatra, although the former may possibly have been somewhat more recent. I suspect that we are seeing a second habitat onslaught in Sumatra at the present time, as there are indications of considerable primary forest clearance during past periods.

The Wildfowl and Wetlands Trust captive breeding stock, all originating from Assam, produced a number of albinistic birds (one hand-reared female of the original stock of 12 had a few randomly placed white breast feathers). This confirms the Indian White-winged Wood Duck's general potential for albinism; however, at no time during 15 years of observing wild birds in Assam did I see or hear of an albinistic adult, nor has this phenomenon been reported among sightings of ducks from any other mainland forests. For some time now, most surviving populations of White-winged Wood Duck on mainland Asia have been isolated, and yet apparently have not featured albinistic adults among their numbers.

In 1967-68, at which time Project 406 was

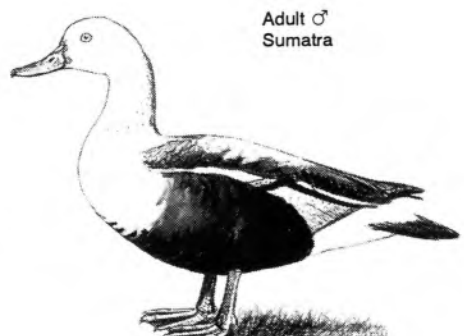
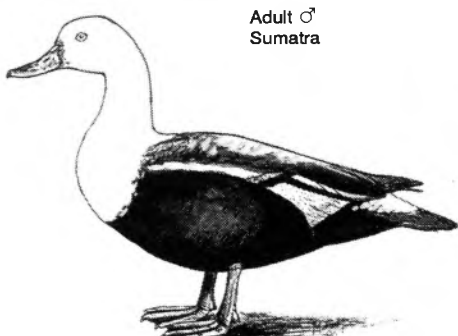
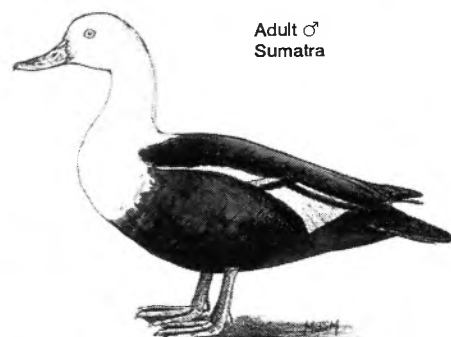
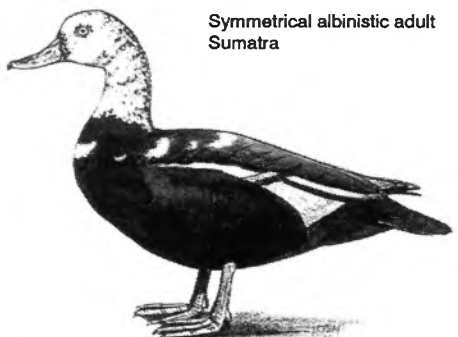


Figure 1. Adult White-winged Wood Duck, from various localities, showing progressive albinism.

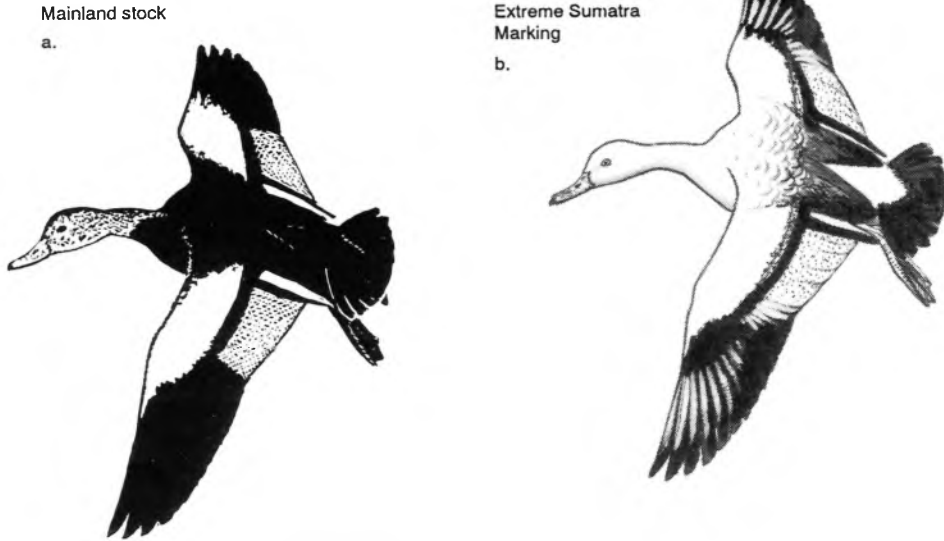


Figure 2. White-winged Wood Duck in flight.

concentrating on the collection of captive stocks, the only description of a White-winged Wood Duck duckling was that of Schuy (1937) following a successful breeding of a pair of birds originating from Indonesia. His description lacks an eye stripe and may just have been vague; however, that seems strange when one considers the obvious head markings of young Assamese White-winged Wood Duck chicks. Is it possible that Schuy's description was indeed accurate (Fig. 3) and that the chicks of Wood Duck in Indonesia are less distinctly

marked, or darker in coloration, than those from mainland Asia?

The fact that both dark and white birds are present in Sumatra brings the idea that there is a separate Indonesian race into question. Regrettably, the time could come when a captive breeding programme must be established for Indonesian White-winged Wood Ducks. If for no other reason, it is desirable to clarify any question of racial distinction. Further extensive field observations in Indonesia, especially, could prove useful in clarifying the situation.

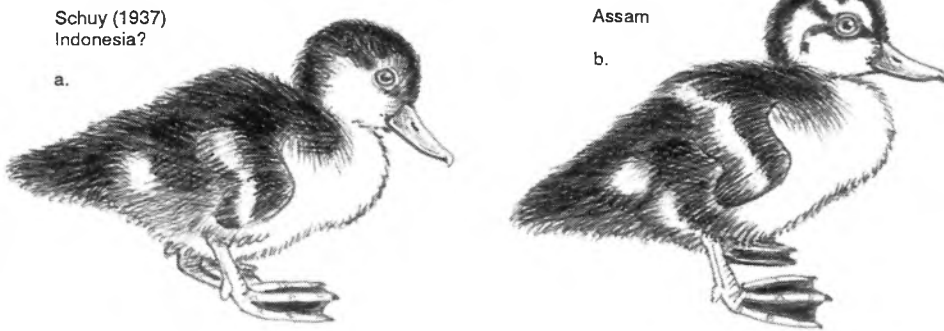


Figure 3. The downy White-winged Wood Duck a) based on Schuy's (1937) description b) a bird from Assam.

**References**

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