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Source: Journal of Wildlife Diseases, 16(2) : 271-274

Published By: Wildlife Disease Association

URL: <https://doi.org/10.7589/0090-3558-16.2.271>

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## HAEMATOLOGY OF THE WOOD DUCK, *Chenonetta jubata*

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**Abstract:** Haematologic values have been determined for the wood duck, *Chenonetta jubata*, captured in the western fringes of Sydney. Values for females were usually slightly higher, and this follows the pattern for other species sampled in the pre-nesting period. The differences in haematological values between males and females were not statistically significant.

### INTRODUCTION

The wood duck (*Chenonetta jubata*) is a nomadic duck favouring lightly timbered country near water.<sup>3</sup> Haematologic values for many of the anatids, including this species, have not been reported.

This paper presents haematologic values for the wood duck, a member of the tribe *Cairinini*.

### MATERIALS AND METHODS

In Autumn 1977, during May, six female and nine male adult wood ducks were captured at Bringelly, New South Wales. Methods of capture and housing have been described previously.<sup>7</sup>

Blood was collected from the brachial vein and analysed within 2 h of collection. Haematology and statistical methods used in this study also have been described.<sup>7</sup>

### RESULTS

Table 1 presents haematologic values for 15 wood ducks. Differences between male and female values were not statistically significant although values for females generally were slightly higher.

### DISCUSSION

Differences between sexes for haematologic parameters previously have been reported for various species of ducks.<sup>1,2,5,8</sup> More recently<sup>7,9</sup> these differences have been shown to be not

statistically significant for the black duck (*Anas superciliosa*) and the Mallard (*Anas platyrhynchos platyrhynchos*). Haematologic values for the wood duck (*Chenonetta jubata*) (Table 1) show slight sex differences, with values for females usually higher. However, these differences were not statistically significant and may only reflect seasonal changes.<sup>4,9</sup>

Values for packed cell volume (PCV), haemoglobin (Hb), total erythrocyte count (RBC) and mean corpuscular haemoglobin concentration (MCHC) have been shown to be higher in females of various species in the pre-nesting period.<sup>4,7,9</sup> Data presented for the wood duck in this study conforms to this finding with the exception of RBC.

The Hb value for females is higher but RBC lower than values for males (Table 1). This result is explained by the higher MCV, MCH and MCHC of females and is supported by findings in other species sampled in autumn.<sup>7,9</sup>

The total leucocyte count (WBC) (Table 1) is higher than reported for the black duck<sup>7</sup> due to increased numbers of granulocytes, but very similar to values reported for the Mallard.<sup>6</sup> An increase in heterophil numbers in the fall has also been noted for the Mallard.<sup>9</sup> Although WBC counts and differential counts are very variable for ducks of the same species the birds sampled in this work were clinically healthy and the means and standard deviations shown give an indication of the normal range.

TABLE 1. Composite data ( $\bar{X} \pm \text{S.D.}$ ) of haematology for 15 wood ducks.

Parameters	Males	Females	Total Group
n	9	6	15
Hb (g/100 ml)	14.66 $\pm 1.35$	15.66 $\pm 0.57$	14.95 $\pm 1.22$
PCV (%)	45.78 $\pm 2.99$	45.00 $\pm 4.69$	45.54 $\pm 3.41$
Erythrocytes ( $\times 10^6/\text{mm}^3$ )	2.88 $\pm 0.28$	2.59 $\pm 0.13$	2.79 $\pm 0.28$
MCV ( $\mu\text{m}^3$ )	160.09 $\pm 13.45$	173.58 $\pm 13.51$	164.24 $\pm 14.43$
MCH (pg)	51.32 $\pm 6.19$	60.28 $\pm 2.40$	54.08 $\pm 6.74$
MCHC (%)	32.09 $\pm 3.14$	34.88 $\pm 2.62$	32.95 $\pm 3.17$
Leucocytes ( $\times 10^3/\text{mm}^3$ )	23.57 $\pm 6.02$	23.63 $\pm 5.85$	23.58 $\pm 5.72$
Heterophils ( $\times 10^3/\text{mm}^3$ )	8.09 $\pm 1.57$	9.28 $\pm 4.41$	8.45 $\pm 2.59$
Lymphocytes ( $\times 10^3/\text{mm}^3$ )	13.67 $\pm 1.42$	12.40 $\pm 4.55$	13.28 $\pm 1.77$
Monocytes ( $\times 10^3/\text{mm}^3$ )	1.10 $\pm 0.68$	0.95 $\pm 0.79$	1.05 $\pm 0.68$
Eosinophils ( $\times 10^3/\text{mm}^3$ )	0.47 $\pm 0.41$	0.59 $\pm 0.56$	0.51 $\pm 0.06$
Basophils ( $\times 10^3/\text{mm}^3$ )	0.24 $\pm 0.16$	0.29 $\pm 0.19$	0.41 $\pm 0.23$

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*Received for publication 4 June 1979*

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