

Analysis of biometric data and chest circumference of *Amazona vinacea*

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VINACEOUS-BREASTED AMAZON

This species live in large groups and eat fruits, flowers, leaves and seeds. It occurs from southern Bahia to Rio Grande do Sul, Brazil, eastern Paraguay and north of Argentina. Due to threats such as extensive habitat loss and the illegal wildlife trade *Amazona vinacea* is threatened in Brazil and worldwide (1). The species is considered extinct in many of its original area of occurrence, including the Parque Nacional das Araucárias, Santa Catarina, Brazil. As suggested in this Federal Conservation Unit Management Plan (2,3), a program to reintroduce this species locally was initiated in 2010 (4).



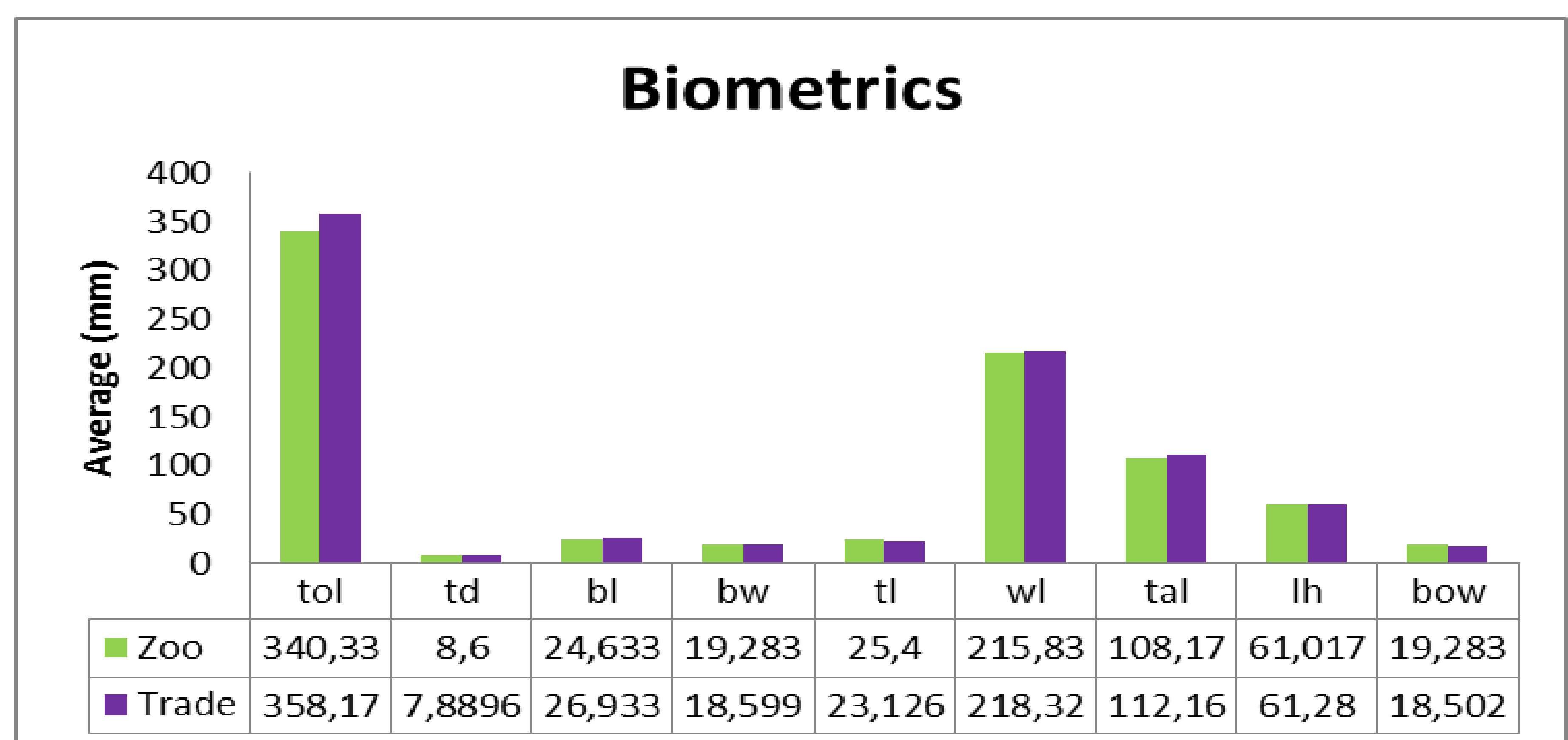
INTRODUCTION

A common pattern among closely related animal taxa is that species vary little in terms of overall size. This implies that the evolutionary process creating this pattern involves an element of internal constraints. In order to maintain a record of natural variations between individuals, we analyzed the biometrics of 96 vinaceous-breasted amazons (*Amazona vinacea*): 90 birds were illegal wildlife trade victims and six were offspring born at Curitiba Zoo. In this study we tested the hypothesis that morphometrics would be similar within the group.



METHODS AND RESULTS

All subjects were release candidates of the project “Reintroduction of the *A. vinacea* at the Araucárias National Park, Santa Catarina, Brazil”. Using a caliper and scales the following parameters were measured and average calculated: the total length (tol, 351,87mm, n=31), tarsus diameter (td, 7,94mm, n=74), beak length or culmen (bl 26,68mm, n=71), beak width (bw, 18,62mm, n= 79), tarsal length (tl, 23,55mm, n= 64), wing length (wl, 217,81mm, n= 81), tail length (tal, 11,87, n= 96), total length of the head (lh, 61,41, n=51), body weight (bow, 373, 71g, n=91). The chest circumference (cc, 27,3cm, n=42) was calculated with a tape measure. Statistical analysis using a t-test showed no significant differences between the set of individuals from wildlife trade and from the zoo (P >0.05 for all parameters) showing homogeneity of the group of individuals sampled.



CONCLUSION

Although there were no differences among groups, the study of biometrics provided important information of basic biology and natural variation between individuals of Vinaceous-breasted Amazon. Future studies may investigate how these data correlate to their natural habitat characteristics, such as tree cavities used for reproduction.

BIBLIOGRAPHY

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ACKNOWLEDGMENTS AND FUNDING

