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Abstracts

## FEATURE ARTICLES

### DIET OF THE ENDEMIC MADEIRA LAUREL PIGEON AND FRUIT RESOURCE AVAILABILITY: A STUDY USING MICROHISTOLOGICAL ANALYSES

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*Abstract.* We studied the temporal diet variation of the endemic Madeira Laurel Pigeon (*Columba trocaz*) and fruit resource availability in the laurel forests of northwestern Madeira Island, during 1996 and 1997. We studied a total of 224 fecal samples using microhistological methods and conducted surveys of fruiting phenology throughout a year. Fruits (pulp and seeds) represented 57% of the optical fields analyzed. Leaves and flowers constituted 38% and <1% respectively. Over 33 plant species were identified in the fecal samples. Fruits of *Ocotea foetens*, *Laurus azorica*, *Persea indica*, and *Ilex canariensis* (fruits and leaves) were the most frequently detected food items. Most seeds were defecated intact (*Ilex canariensis*, *Myrica faya*, *Visnea mocanera*, *Ocotea foetens*, and *Apollonias barbujana*), except in the case of *Laurus azorica* where most were damaged. The diet showed a marked seasonal variation. Fruits constituted the major component of the diet in winter and autumn, whereas leaves were frequent in spring and summer. The presence of fruits in the diet was concordant with their availability, and leaves and flowers became important when fruits were scarce. This fact suggests that the Madeira Laurel Pigeon is capable of dietary switching, corresponding to temporal variations in food resource availability. This microhistological technique shows promise for study of the diets of pigeons and other herbivorous bird species.

*Key words:* *Columba trocaz*, diet, fruit phenology, islands, laurel forest, microhistological analysis, seasonality.