

SHORT COMMUNICATIONS

VARIATION IN SIZE, COMPOSITION, AND QUALITY OF RUDDY DUCK EGGS AND DUCKLINGS

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Abstract. To evaluate why ducklings hatching from large eggs generally survive better than ducklings from small eggs, we quantified egg-size-related variation in composition and quality of eggs and ducklings of wild Ruddy Ducks (*Oxyura jamaicensis*). Fresh egg mass averaged 74.1 ± 4.3 g (SD), but ranged from 60.5 to 83.8 g. Despite remarkably large egg size relative to adult female body size, and a 1.4-fold difference in mass between the smallest and largest eggs, most egg constituents increased in direct proportion to fresh egg mass, with bigger eggs producing heavier and larger ducklings. However, large ducklings had proportionately larger yolk sac stores than did small ducklings. Thus, large ducklings also had greater total lipid reserves, an advantage that could enable them to survive better than small ducklings during the first few days after hatching.

Key words: Allometry, duckling composition, egg composition, egg size, energy reserves, *Oxyura jamaicensis*, Ruddy Duck.