

Symposium 38 Phenotypic plasticity and early developmental conditions in birds

Introduction

David C. HOUSTON¹, Pat MONAGHAN², Ruedi NAGER³

Ornithology Group, Institute of Biomedical and Life Sciences, Graham Kerr Building, University of Glasgow, Glasgow G12 8QQ, Scotland, UK; ¹d.houston@bio.gla.ac.uk, ²p.monaghan@bio.gla.ac.uk, ³r.nager@bio.gla.ac.uk

The phenotype of any animal is determined only partly by its genotype. The environment in which it develops can also play a major role. Phenotypic plasticity is the ability of a genotype to produce different phenotypes under different environmental conditions. During recent years there has been increasing recognition that environmental factors play an important role during early development in determining the phenotype of adults and adult fitness of offspring. The aim of this symposium was to review the

current state of knowledge on phenotypic plasticity and its evolutionary significance for birds. The papers cover such questions as how the quality of parents can influence the quality of the eggs which they lay, and the consequences for the young. They also review the influences that parental incubatory behavior has on embryonic development, and how the growth pattern of nestlings can have implications for their future fitness.