Record Nr. UNINA9910458603203321 Autore Grubb Thomas C Titolo Ptilochronology [[electronic resource]]: feather time and the biology of birds / / Thomas C. Grubb, Jr Oxford,: Oxford University Press, 2006 Pubbl/distr/stampa **ISBN** 1-280-87023-0 0-19-151626-0 1-4294-7112-3 Descrizione fisica 1 online resource (189 p.) Collana Oxford ornithology series;; no. 15 Disciplina 571.818 Ptilochronology Soggetti Birds - Development Birds - Growth Birds - Nutrition Birds - Nutrition - Requirements Feathers - Growth Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references. Nota di bibliografia Contents; Part I. Basic Ptilochronology; 1 Introduction; 1.1 Nota di contenuto Ptilochronology, nutritional condition, and fitness; 1.2 Other indices of nutritional condition; 1.3 Feather growth as an index of nutritional condition: 1.4 Criticisms of ptilochronology: 1.5 Summary: 2 Can reduced nutritional condition really cause narrowed growth bars?; 2.1 Summary: 3 Does any factor other than nutritional condition control feather growth?; 3.1 Annual cycles; 3.2 Non-nutritional response to cold temperature and wind; 3.3 Follicle history; 3.4 Summary; Part II. Applied Ptilochronology; 4 Habitat quality 4.1 Territory size4.2 Successional stage: 4.3 Moisture: 4.4 Anthropogenic modifications; 4.5 Summary; 5 Nutritional consequences of self-cached food; 5.1 Summary; 6 Social behavior; 6.1 Intraspecific social behavior; 6.2 Interspecific social behavior; 6.3 Summary; 7 Individual quality; 7.1 Sexual selection and natural

selection; 7.2 Growth bar width as an honest signal; 7.3 Feather

pigment color as an honest signal; 7.4 Feather structural color as an honest signal; 7.5 Carotenoids versus melanins; 7.6 Multiple signals of quality; 7.7 Fluctuating asymmetry; 7.8 Summary; 8 Reproductive effort 8.1 Brood size8.2 Breeding and molting; 8.3 Tests of theories of reproductive effort; 8.4 Summary; 9 Nestling condition; 9.1 Summary; 10 Prolonged brood-care; 10.1 Adult nutritional condition; 10.2 Nutritional condition of retained offspring; 10.3 Summary; 11 Taking stock and looking ahead; 11.1 Conceptual issues; 11.2 What causes growth bars?; 11.3 On 24-hours' worth of feather growth per growth bar; 11.4 Linking growth bar width and nutritional condition; 11.5 Potentially confounding factors; 11.6 Original versus induced feathers; 11.7 Controlling for structural body size 11.8 Feather growth lag times11.9 Relations among growth bar width, feather length, and feather mass; 11.10 Ptilochronology and fitness; 11.11 Ptilochronolgy and conservation biology; 11.12 Correlation versus causation; Appendix 1; Appendix 2; References; Index; A; B; C; E; F; G; H; I; J; M; N; O; P; Q; R; S; T; V; W

## Sommario/riassunto

This book reports and summarizes the findings of several dozen studies that have used ptilochronology (the study of feather time) as a research tool. It provides a practical resource as well as a source of understanding of how the technique can be used to address important questions in avian biology.