Record Nr. UNINA9910789923403321 Autore Williams Tony D Titolo Physiological adaptations for breeding in birds [[electronic resource] /] / Tony D. Williams Pubbl/distr/stampa Princeton,: Princeton University Press, c2012 **ISBN** 1-280-49454-9 9786613589774 1-4008-4279-4 Edizione [Course Book] Descrizione fisica 1 online resource (389 p.) Disciplina 598.13/8 Birds - Reproduction Soggetti **Females** Birds - Physiology Adaptation (Physiology) Phenotype Birds - Variation Birds - Ecology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Front matter -- Contents -- Illustrations -- Abbreviations --Acknowledgments -- Chapter 1. Introduction -- Chapter 2. The Hormonal and Physiological Control of Egg Production -- Chapter 3. Timing of Breeding -- Chapter 4. Egg Size and Egg Quality -- Chapter 5. Clutch Size -- Chapter 6. Parental Care -- Chapter 7. Trade-Offs and Carry-Over Effects -- Chapter 8. Conclusions -- Bibliography -- Index Physiological Adaptations for Breeding in Birds is the most current and Sommario/riassunto comprehensive account of research on avian reproduction. It develops two unique themes: the consideration of female avian reproductive physiology and ecology, and an emphasis on individual variation in lifehistory traits. Tony Williams investigates the physiological, metabolic, energetic, and hormonal mechanisms that underpin individual variation

in the key female-specific reproductive traits and the trade-offs

between these traits that determine variation in fitness. The core of the

book deals with the avian reproductive cycle, from seasonal gonadal development, through egg laving and incubation, to chick rearing. Reproduction is considered in the context of the annual cycle and through an individual's entire life history. The book focuses on timing of breeding, clutch size, egg size and egg quality, and parental care. It also provides a primer on female reproductive physiology and considers trade-offs and carryover effects between reproduction and other life-history stages. In each chapter, Williams describes individual variation in the trait of interest and the evolutionary context for trait variation. He argues that there is only a rudimentary, and in some cases nonexistent, understanding of the physiological mechanisms that underpin individual variation in the major reproductive life-history traits, and that research efforts should refocus on these key unresolved problems by incorporating detailed physiological studies into existing long-term population studies, generating a new synthesis of physiology, ecology, and evolutionary biology.