1. Record Nr. UNINA9910760293303321 Autore Ritchison Gary Titolo In a Class of Their Own . Volume 1 : A Detailed Examination of Avian Forms and Functions / / Gary Ritchison Cham, Switzerland: ,: Springer, , [2023] Pubbl/distr/stampa ©2023 **ISBN** 3-031-14852-5 Edizione [First edition.] Descrizione fisica 1 online resource (2516 pages) Collana Fascinating Life Sciences Series Disciplina 571.318 Soggetti Birds - Anatomy Birds - Physiology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Chapter 1. Origin and Evolution of Birds -- Chapter 2. Skeleton and Nota di contenuto Skeletal Muscles -- Chapter 3. Integument -- Chapter 4. Nervous System -- Chapter 5. Locating, Ingesting, and Digesting Food --Chapter 6. Cardiovascular and Immune Systems -- Chapter 7. Respiration -- Chapter 8. Endocrine System -- Chapter 9. Urinary System, Salt Glands, and Osmoregulation -- Chapter 10. Energy Balance and Thermoregulation -- Chapter 11. Avian Locomotion: Flying, Running, Walking, Climbing, Swimming, and Diving -- Chapter 12. Sound and Vocal Production and Function -- Chapter 13. Migration -- Chapter 14. Navigation and Orientation -- Chapter 15. Mating Systems -- Chapter 16. Avian Reproduction: Timing, Anatomy, and Eggs -- Chapter 17. Avian Reproduction: Nests and Nest Sites --Chapter 18. Avian Reproduction: Clutch Sizes, Incubation, and Hatching -- Chapter 19. Avian Reproduction: Post-hatching Parental Care and Blood Parasitism. Sommario/riassunto With more than 10,000 species that vary in size, use diverse habitats that extend across latitudes and altitudes, consume a wide variety of food items, differ in how they fly (or not), communicate, and reproduce, and have different life histories, birds exhibit remarkable variation in

form (anatomy) and function (physiology). Our understanding of how natural selection has generated this variation as birds evolved and as different species adapted to their unique circumstances has grown

considerably in recent years. In In a Class of Their Own: A Detailed Examination of Avian Forms and Functions, this variation is explained in great detail, beginning with an overview of avian evolution and continuing with information about the structure and function of the avian skeleton, muscles, and the various body systems. Other chapters focus on avian locomotion (including flight), migration, navigation, communication, energy balance and thermoregulation, and various aspects of avian reproduction, such as nests and nest building, clutch sizes, and parental care. In a Class of Their Own: A Detailed Examination of Avian Forms and Functions will be must reading for anyone, professional or non-professional, who needs or wants to learn more about birds.