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Nota di contenuto	Frontmatter -- Contents -- Acknowledgments -- 1. Ruminants in the World -- 2. Nutritional Concepts -- 3. Feeding Strategies, Taxonomy, and Evolution -- 4. Body Size and the Limitations of Ruminants -- 5. Nonruminant Herbivores -- 6. Plant, Animal, and Environment -- 7. The Free-ranging Animal -- 8. Forage Evaluation Techniques -- 9. Minerals -- 10. Fiber and Physicochemical Properties of Feeds -- 11. Carbohydrates -- 12. Lignin -- 13. Plant Defensive Chemicals -- 14. Forage Preservation -- 15. Function of the Ruminant Forestomach -- 16. Microbes in the Gut -- 17. The Lower Gastrointestinal Tract -- 18. Nitrogen Metabolism -- 19. Intermediary Metabolism -- 20. Lipids -- 21. Intake -- 22. Mathematical Applications: Digestibility -- 23. Digestive Flow -- 24. Energy Balance -- 25. Integrated Feeding Systems -- References -- Author Index -- Subject Index
Sommario/riassunto	This monumental text-reference places in clear perspective the importance of nutritional assessments to the ecology and biology of ruminants and other nonruminant herbivorous mammals. Now extensively revised and significantly expanded, it reflects the changes and growth in ruminant nutrition and related ecology since 1982. Among the subjects Peter J. Van Soest covers are nutritional constraints, mineral nutrition, rumen fermentation, microbial ecology, utilization of fibrous carbohydrates, application of ruminant precepts to fermentive digestion in nonruminants, as well as taxonomy, evolution, nonruminant competitors, gastrointestinal anatomies, feeding

behavior, and problems of animal size. He also discusses methods of evaluation, nutritive value, physical structure and chemical composition of feeds, forages, and brosomes, the effects of lignification, and ecology of plant self-protection, in addition to metabolism of energy, protein, lipids, control of feed intake, mathematical models of animal function, digestive flow, and net energy. Van Soest has introduced a number of changes in this edition, including new illustrations and tables. He places nutritional studies in historical context to show not only the effectiveness of nutritional approaches but also why nutrition is of fundamental importance to issues of world conservation. He has extended precepts of ruminant nutritional ecology to such distant adaptations as the giant panda and streamlined conceptual issues in a clearer logical progression, with emphasis on mechanistic causal interrelationships. Peter J. Van Soest is Professor of Animal Nutrition in the Department of Animal Science and the Division of Nutritional Sciences at the New York State College of Agriculture and Life Sciences, Cornell University.
