Environmental Physiology of Animals. 2nd Edition

Description:
This new and updated edition, with two entirely new chapters, provides a comprehensive coverage of the comparative physiology of animals, in a strongly environmental context.

It provides full analysis of the basic principles of physiological adaptations, in both vertebrates and invertebrates. It now also includes new chapters on the control systems (nervous and sensory systems, muscles, and hormones) and how they allow integration with the environment, suitable for introductory courses on excitable tissues.

But it is unique in also providing detailed and integrated reviews of how animals sense, react to and cope with particular environments – the marine and freshwater worlds, the particularly challenging seashore and estuarine zones, the different kinds of terrestrial habitat, and the parasitic environment. In this way, physiology is for the first time properly integrated with ecological principles and with behavioural responses used by animals in coping with environmental challenges.

The book provides a stand-alone core text for undergraduate courses in comparative physiology, animal physiology, or environmental physiology, but also provides key material for integrating across modules in any environmental biology degree.

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