Alpine Meadow Ecosystems in China and Impacts of Global Changes

By Zhao Xinquan. 2009. Science Press, 16, Donghuangchenggen North Street, Beijing, China, 100035. 337 pages. 88.00 CNY.

The alpine meadow refers to grassland dominated by the cold- and dry-resistant mesic geophytic and hemicryptophytic perennials, distributed mainly between the timberline and ice-snow line of the alpine zone. The alpine meadow is extensively distributed in the eastern Qinghai-Tibet Plateau and its surrounding mountainous area, being one of the most typical and unique types of vegetation in that area. The alpine meadow of Qinghai-Tibet Plateau with an area of about 700 000 km^2 accounts for nearly 50% of the available area of grassland in Qinghai-Tibet Plateau. In the alpine meadow, the constructive and the subordinate species are mainly the arctic-alpine components and the China-Himalayan components, adapted to conditions of high altitude and cold climate. The constructive synusia are mainly composed of the perennial rhizomatous or bunch grass species with low and short rhizomes or dense clumps, like *Kobresia*, *Carex*, and some non-clonal grass species. The alpine meadow, with its low-stature grass, simple composition, unobvious differentiation of storey, unique energy flow and material cycling, is very different from the intrazonal meadows that are extensively distributed in the low-altitude areas of China.

The process of global changes influences every ecosystem in the world, but the ecosystems in the area of high-altitude and high-latitude are definitely very sensitive to its impacts. This is especially the case for the Qinghai-Tibet Plateau, known as the "roof of the world" or the "Third Pole of the Earth", as it is a special geographical area with unique features of the climate system and ecological traits. For a long time, the Qinghai-Tibet Plateau has been an ideal natural laboratory for carrying out research in many fields of related subjects. The composition of plant species, the structure and function, as well as the dynamics of succession of the alpine meadow in Qinghai-Tibet Plateau, tend to be sensitive to the large-scale process of global changes, thus, the alpine meadow in Qinghai-Tibet Plateau could be regarded as a typical model for studying the impacts of global changes on ecosystems. Practically, such an in-depth and extensive study would be of importance for scientific and sustainable management of the alpine meadow.

In such a background, the book *Alpine Meadow Ecosystems in China and Impacts of Global Changes* was published recently. The book systematically summed up the results of the long-term field investigation, transect research, located and controlled experiments in the alpine meadow ecosystems of Qinghai-Tibet Plateau in response to global climate changes.

The main contents of the book are as follows, Chapter 1: The characteristics of the ecological environment of the alpine meadow area of Qinghai-Tibet Plateau; Chapter 2: The response and adaptation mechanism of the typical species in the alpine meadow of Qinghai-Tibet Plateau to the global climate change; Chapter 3: The relationship between the biological diversity and the functions of the alpine meadow ecosystems in Qinghai-Tibet Plateau in the background of global changes; Chapter 4: The interactions between the productivity of the alpine meadow ecosystems in Qinghai-Tibet Plateau and the processes of global change; Chapter 5: The carbon biogeochemical cycles in the alpine meadow ecosystems in Qinghai-Tibet Plateau; Chapter 6: The analysis on the stability of the alpine meadow ecosystems in Qinghai-Tibet Plateau; Chapter 7: The impacts of global changes on the safety of alpine meadow ecosystems in Qinghai-Tibet Plateau and the ecological countermeasures.

The book should become a good reference for researchers or teachers and students engaged in research on global ecology, grassland ecology and other related fields, and other persons who are interested in this field. Hopefully, the book would also become a reference for the policy makers in charge of state responses to global changes and ecological compensation, and for officers or technicians in charge of international negotiation for carbon trading or in the fields of management.

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ENVIRONMENT

The Link: Uncovering Our Earliest Ancestor

By Colin Tudge (with Josh Young). 2009. Little, Brown and Company (a division of Hachette Book Group, Inc.), P.O. Box 8828, Boston, Massachussets 02114 USA. 272 pages. 28.99 CAD, Cloth.

Every scientist has a dream of making a big discovery with great impact on his or her field of research. Perhaps no better is this epitomized by a palaeontologist discovering a pristine fossil with possibly grand importance on the evolution of animal life and bearing on our own evolution as human beings. In

Erratum The Canadian Field-Naturalist 126(4)

In response to the review of *Contributions to the History of Herpetology*. CFN 126(3): 344-345, the book's editor Kraig Adler pointed out (personal communication to FRC 12 May 2013): "Only one small correction. Mrs. Martof used a kitchen knife, not a gun. She told the police she slipped while cutting some pizza. But Bernie was stabbed up under his rib cage several times!"

Erratum The Canadian Field-Naturalist

It has come to our attention that sections of many of the book reviews by Li Dezhi and Qin Aili were copied from sources without attribution. The journal and the authors apologize for this oversight.