

Ecology and Diversity Editorial

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1. Introduction

Ecology and Diversity is a scholarly, interdisciplinary, inclusive, and globally accessible journal that encompasses the study of complex natural and social systems grounded in the principles of biodiversity. It mainly focuses on knowledge innovations from fundamental theories to applied case studies, including biodiversity, cultural and economic diversity, geographical and landscape ecology, climate change, etc., on the structure and function of ecosystems. The Editor-in-Chief of *Ecology and Diversity* is Prof. Xiong You-Cai. In the initial stage of the journal, the publication period is two issues per year.

2. Foreword

Diversity is a ubiquitous concept that influences structural and functional changes in ecosystems at different levels, scales, and perspectives, influencing human well-being and sustainable development goals. The Sustainable Development Goals (SDGs), known as the Global Goals (2015-2030) adopted by the United Nations, is to face the diverse world and focus on solving the various challenges, especially land degradation, poverty and hunger, and the environment. Pollution and climate change, etc. SDGs are a fundamental requirement for the functioning and evolution of human-natural interconnected systems and play a vital role in the biosphere's healthy development and green operation.

Ecology and Diversity come into being under the above background. It emphasizes the relationship between diversity and the sustainable development of ecosystems and how to preserve every kind of diversity and ecological infestation to promote ecological protection. It also offers theoretical guidance for humans' responsible use of natural resources and the achievement of coexistence.

Preserving world diversity is a common pursuit of human values, and diversity provides the material and functional basis for ecosystem management. As human activity increasingly disturbs natural systems, the components of ecosystems are interlinked through food chains, competition and cooperation, parasitism and symbiosis, and gradually form highly dependent interrelationships. In a socio-economic-ecological complex system, each component has its unique ecosystems and functions, which are indispensable to the stability of the whole system. The lack or loss of function of any component may disrupt of the entire ecosystem's balance, affecting the system's structure and function at different levels and to different degrees, thereby affecting sustainable development.

From the evolution of the ecosystem, the maintenance of diversity is crucial to achieving the SDGs. From sustainable development, biological communities or social units with diversity are more adaptable and stable. Since the Industrial Revolution, a range of actions have been taken to address the threats faced by global ecosystems, including energy conservation and emission reduction, pollution reduction, reduction of human disturbance, adjustment of development models, and protection of wildlife habitats. Especially from the socio-economic level, legislation and enforcement have been strengthened to encourage and support sustainable development in industries and projects and educate and promote public awareness of ecological protection. However, there is a lack of specialized academic publications covering the latest knowledge, techniques, and ideas, and some effective management tools lack theoretical support.

Based on this awareness, *Ecology and Diversity*, the first diversity-based ecological journal, mainly reports on the latest research progress on the relationship between diversity and ecosystem management by exploring the role and mechanisms of diversity to maintain ecological balance and sustainable human development and achieving harmonious coexistence between humans and nature. With the collaboration between SCIEPublish and the University of Lanzhou, *Ecology and Diversity* was launched as an interdisciplinary, cross-sectoral, trans-thematic, open-access comprehensive academic journal.