**Computational Ecology and Software** 

The Computational Ecology and Software (CES) is an open access, peer-reviewed online journal that considers

scientific articles in all different areas of computational ecology. It is the transactions of the International Society of Computational Ecology. The journal is concerned with the ecological researches, constructions and

applications of theories and methods of computational sciences including computational mathematics,

computational statistics and computer science. It features the simulation, approximation, prediction, recognition,

and classification of ecological issues. Intensive computation is one of the major stresses of the journal. The

journal welcomes research articles, short communications, review articles, perspectives, and book reviews. The

journal also supports the activities of the International Society of Computational Ecology. The topics to be

covered by CES include, but are not limited to:

Computation intensive methods, numerical and optimization methods, differential and difference

equation modeling and simulation, prediction, recognition, classification, statistical computation

(Bayesian computing, randomization, bootstrapping, Monte Carlo techniques, stochastic process, etc.), agent-based modeling, individual-based modeling, artificial neural networks, knowledge based systems,

machine learning, genetic algorithms, data exploration, network analysis and computation, databases,

ecological modeling and computation using Geographical Information Systems, satellite imagery, and

other computation intensive theories and methods.

Artificial ecosystems, artificial life, complexity of ecosystems and virtual reality.

The development, evaluation and validation of software and algorithms for computational ecology. The development and evaluation of apparatus, instruments and machines for ecological and environmental

analysis, investigation and monitoring based on the software of computational ecology.

Methodological applications of computational ecology in the researches of ecology and environmental

sciences.

Authors can submit their works to the email box of this journal, ces@iaees.org and (or) wizhang@iaees.org. All

manuscripts submitted to CES must be previously unpublished and may not be considered for publication

elsewhere at any time during review period of this journal.

In addition to free submissions from authors around the world, special issues are also accepted. The organizer of

a special issue can collect submissions (yielded from a research project, a research group, etc.) on a specific

topic, or submissions of a conference for publication of special issue.

Editorial Office: ces@iaees.org

Publisher: International Academy of Ecology and Environmental Sciences

Address: Flat C, 23/F, Lucky Plaza, 315-321 Lockhart Road, Wanchai, Hong Kong

Tel: 00852-6555 7188

Fax: 00852-3177 9906

E-mail: office@iaees.org

## **Computational Ecology and Software**

ISSN 2220-721X Volume 2, Number 4, 1 December 2012

## Articles

Bayesian parameter estimation in dynamic population model via particle Markov chain Monte Carlo

Meng Gao, XingHua Chang, XinXiu Wang 181-197

Fluctuations of population dynamics model parameters: View on the problem of climate change

L. V. Nedorezov 198-212

WORTHY: a new model for ecological ranking and evaluation

Alessandro Ferrarini 213-219

Synthetic Aperture Radar (SAR) images features clustering using Fuzzy c-means (FCM) clustering algorithm

Rashid Hussain 220-225

The International Academy of Ecology and Environmental Sciences (IAEES) is a nonprofit and registered international organization. It devotes to promote global ecology and environmental sciences and protect global ecological environments, by publishing scientific publications, conducting research activities, launching environmental programs, disseminating knowledge and technologies, sponsoring conferences, and providing information and discussion spaces, etc. The responsibility for these publications rests with the International Academy of Ecology and Environmental Sciences.

## **IAEES**

http://www.iaees.org/