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## **Book Review**

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**Understanding Human Ecology: A Systems Approach to Sustainability**  
**by: Robert Dyball and Barry Newell**  
**Published 2015**  
**by Routledge,**  
**Abingdon (UK) and New York, 214pp**  
**ISBN: 978-1-84971-383-2**

‘What makes life possible’ and ‘what makes life worthwhile?’ Human ecology’s contribution to these basic questions by humankind is that humans cannot live at all if they do not live sustainably, and that this entails living ethically, content with sufficiency.

*Understanding Human Ecology* is a textbook that has been ‘road-tested’ in university teaching at the Australian National University (ANU). It offers a conceptual framework for human ecology and a clear approach for understanding multifaceted systems of which we are a part. Its focus is on sustainability and cultural adaptation. It draws from different disciplines, by adopting ethical and justice considerations to promote sustainability. How is this done? By an interdisciplinary approach: the authors blend natural, social and cognitive sciences with system dynamics theory.

The book is divided into three major parts in 214 pages. Part 1 ‘The challenge’ introduces human ecology as an evolving discipline, exemplified by a case study on water conflicts in the Australian Snowy Mountains. Part 2 ‘Building shared understanding’ is the theoretical backbone of the book. It starts off by offering mental models and prediction, introduces system dynamics and the limits to growth, and culminates in proposing steps towards a theoretical framework for human ecology. Part 3 ‘Living in the Anthropocene’ presents traditional human ecological paradigms, from hunting and gathering via agricultural development to urbanism. They all represent different social-ecological systems during the evolution of humankind. As the Anthropocene succeeds the Neolithic, new questions need to be asked. Does limitless growth support wellbeing in the anthropocene? Definitely not, if you look at global food systems. The book concludes with a plea for a paradigm shift in favour of an Earth stewardship, which involves ethical motivations and social learning. Human ecology addresses how humankind can live in a humane and sustainable world. There is no trade-off between social and environmental goods.

Why do I recommend this book? It is an elegantly designed book, almost a classic. It is clearly organised. The chapters are well written, each one offers an introduction and a conclusion. Beyond that, the authors offer systematic and systemic steps towards a theoretical human ecological framework and collect elements to provide a useful guide for human ecologists. I consider this a valid approach that is scientifically acceptable. I gladly state that the authors do not present a unified monolithic and static system of definitions and rules, but leave room for ensuing scientific developments and evolving paradigms, a sound basis for further productive discourses.