

# RISK *and* PRECAUTION

Alan Randall



CAMBRIDGE

# Risk and Precaution

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and  
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# Acknowledgements

My interest in the limits of utilitarian welfare economics as a normative theory dates back at least as far as my work on a panel assembled by the Center for Philosophy and Public Policy at the University of Maryland, on the project that led to Bryan Norton's edited book *The Preservation of Species* (Princeton, 1986). There followed a project on the normative foundations of benefit–cost analysis and its uses in policy and management, sponsored by the National Science Foundation's program in Ethics and Values in Science in the late 1980s, and a series of book chapters and refereed articles in the 1990s, many of them with Michael Farmer, exploring the rationale for a conservation constraint on the domain of utilitarian principles for management of natural resources. One branch of this work placed the question in the more inclusive frame of sustainability, and led to a series of papers and publications, most recently Randall (2008).

This book began with a residency at the Rockefeller Study and Conference Center, Bellagio, Italy early in the spring of 2008. In that idyllic atmosphere, I was able to complete and submit a rudimentary book proposal, while enjoying rich interaction with a small but intellectually diverse group of scholars and artists. There followed a series of seminars on three continents that helped me develop and refine my argument, and an article (Randall 2009) that while standing alone served also as a detailed outline, in 15,000 words, for this book.

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# Acronyms

A	Asymmetric
AM	Adaptive management
BAU	Business-as-usual
BC	Benefit–cost (often an adjective)
BCA	Benefit–cost analysis
BLM	Bureau of Land Management
D	Disproportionate
DOI	Department of the Interior
E	Evidence
E(.)	Expected (.)
EPA	Environmental Protection Agency
ESA	Endangered Species Act
EU	Expected utility*
EU	European Union*
EV	Expected value
FDA	Food and Drug Administration
FS	Forest Service
GHG	Greenhouse gases
GM(O)	Genetically modified (organism)
MSY	Maximum sustainable yield
MTBE	Methyl tertiary-butyl ether
NGO	Non-governmental organization
NI	Novel intervention
NI <sub>1</sub>	Novel intervention <i>ex ante</i>
NI <sub>2</sub>	Novel intervention <i>ex post</i>
ORM	Ordinary risk management
OSY	Optimal sustainable yield
P	Prohibit
PBDE	Polybrominated diphenyl ether
PCB	Polychlorinated biphenol

PP	Precautionary principle
PRT	Pre-release test(ing)
PV	Present (i.e. discounted) value
QSR	Quarantine and stepwise release
R	Remedy
R	Release
SMS	Safe minimum standard of conservation
STEPS	System for Thalidomide Education and Prescribing Safety
STS	Screen(ing), pre-release test(ing), and post-release surveillance
T	Threat
T	Test
US(A)	United States (of America)
USDA	United States Department of Agriculture
WTP	Willingness to pay
WTA	Willingness to accept (compensation)

\* Let context be your guide.

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# Part I

**The precautionary principle – why so much fuss about such a simple idea?**

