

Contents

	<i>List of Contributors</i>	page vii
	<i>Foreword: Towards Evidence-Based and Risk-Weighted Strategies for Biosecurity</i>	xi
	David M. Richardson	
1	The Allocation of Inspection Resources	1
	Owen Jones, Andrew P. Robinson, Martin Shield and Jessica Sibley	
2	Tools for Designing and Evaluating Post-Border Surveillance Systems	17
	Susan M. Hester, Cindy E. Hauser and John M. Kean	
3	Control Charts for Biosecurity Monitoring and Surveillance	53
	David R. Fox	
4	Open-Source Intelligence Gathering and Open-Analysis Intelligence for Biosecurity	84
	Geoff Grossel, Aidan Lyon and Mike Nunn	
5	Predicting Distributions of Invasive Species	93
	Jane Elith	
6	Mapping Risks and Impacts of Invasive Alien Species with Dynamic Simulation Models	130
	Denys Yemshanov, Frank H. Koch, John W. Coulston and William D. Smith	
7	Models for Understanding Disease Dynamics	152
	Michael P. Ward, M. Graeme Garner, Joanne M. Potts and Brendan D. Cowled	
8	Bayesian Networks for Import Risk Assessment	181
	Ann E. Nicholson and Kevin B. Korb	
9	Getting the Message Right: Tools for Improving Biosecurity Risk Communication	206
	Jane Gilmour, Ruth Beilin, Tamara Sysak and Marta Hernández-Jover	
10	Cost–Benefit Analysis for Biosecurity Decisions	229
	Tom Kompas, Tuong Nhu Che, Pham Van Ha and Hoang Long Chu	
11	Valuing Protection against Invasive Species Using Contingent Valuation	252
	John Rolfe and Jill Windle	

12	Management of Invasive Species: Info-Gap Perspectives Yakov Ben-Haim	266
13	Decisions with Relative Robustness Colin J. Thompson	287
14	Optimising Resource Allocation Cindy E. Hauser and Tracy M. Rout	294
15	Value of Information Analysis as a Decision Support Tool for Biosecurity Michael C. Runge, Tracy M. Rout, Daniel A. Spring and Terry Walshe	308
16	Declaring Eradication of an Invasive Species Tracy M. Rout	334
17	Surveillance for Detection of Pests and Diseases: How Sure Can We Be of Their Absence? Tony Martin	348
18	Some Questions to Ask Yourself Rob Cannon	385
	<i>Index</i>	407