Figures

F.1 Interaction between built, social, human and natural capital required to produce human well-being xx
2.1 Phases of a joint ecosystem assessment and economic analysis for a single scenario 29
2.2 Marginal benefit curves for two goods 41
2.3 Change in cereals and market price assessment under a simple climate change scenario 46
2.4 Agricultural production expressed via its market price and economic value, the latter adjusting for subsidies, market distortions, etc. 47
2.5 Shadow values for various land use benefits 49
2.6 Tradeoff relationships between ecosystem stocks and depletion drivers with corresponding marginal resilience-weighted shadow values (MRSV) 55
5.1 Example choice card for the small good 115
5.2 Example choice card for the large good 116
5.3 (a) Predicted mean WTP for unique and non-charismatic (UNC) species; (b) predicted mean marginal WTP by species type 121
6.1 Regression scatterplot and parameters for Total Damage/GDP estimation for all hurricanes 137
6.2 Net primary productivity (NPP) by photosynthesis mapped as $50 trillion across the globe 141
7.1 Partial equilibrium welfare changes associated with a regional loss of pollination services in the market for a pollinator-dependent crop 152
7.2 Partial equilibrium welfare changes associated with a local loss of pollination services in the market for a pollinator-dependent crop 153
10.1 A hypothetical relationship between the density of a focal forest-dependent species and the intensity of logging (or its reduced selectivity) in its abode 232
10.2 A possible relationship between the profitability per km² from logging and its intensity (or reduced selectivity) 234
10.3 An illustration of the alternatives of (1) a combination of a protected area (A) plus a heavily logged area (B) and (2) a lightly logged (selective) area (A + C) plus a smaller heavily logged area (D) (no fully protected area exists) as ways of conserving a targeted level of the population of a forest-dependent focal species 235

10.4 Diagram used to highlight the fact that the density of a forest species following logging depends on the passage of time and the scope for a species to recolonize a logged area 238

11.1 Oku Aizu Forest Ecosystem Reserve in Fukushima, Japan 247

13.1 Changes in cultivated land area in Japan 279

14.1 Conceptual diagram for explicating the interactions between the biophysical and social systems that enable (or restrict) the provisioning of urban ecosystem services 298

15.1 Distribution of estimated total recreation values in coastal NUTS-2 regions of Europe 325

16.1 Conceptual diagram of the Gulf Coast oyster market 342

16.2 Profiles of wave height in the presence and absence of oyster reefs 348

16.3 Percent wave height and power attenuation for all wind-generated waves at Swift Tract and Barton Island in the presence of bagged shell reefs, computed at MSL, MLLW and MHHW 349

16.4 Potential for oyster reefs to protect marshes against erosion 349

17.1 Global averages for carbon pools (soil organic carbon and living biomass) of focal coastal habitats. Tropical forests are included for comparison 364

17.2 Gross carbon credit revenue potential, and average costs of protection for coastal habitats and tropical forest on a present value (PV) per hectare basis 372

18.1 Mean numbers of trees under different scenarios 385

18.2 Demand for tree seedlings amongst sampled households in Lake Victoria Basin 391