## Index

A-Efficiency scores 138  
Acutt, M. 45  
Adamowicz, V. 49, 133  
Adamowicz, W.L. 2, 3, 45, 49, 106, 109, 135, 150, 156, 163, 169, 178, 180, 198, 207, 209, 220, 258, 277, 278, 282, 284, 320, 321  
advising and planning 188–9  
Aftab, A. 48  
age variable 206, 208–9  
Agenda 2000 130  
agri-environmental schemes 13–17, 30–35, 318  
agri-forestry landscape variable 137, 141, 142  
agricultural environmental safety in Italy 44  
agriculture 253–4  
agro-biodiversity conservation in Hungary 32–3  
air traffic disturbance in Sweden 28–9, 52  
Akaike Likelihood Ratio Index ($\hat{\rho}^2$) 155, 161, 260, 261, 283  
alternative specific constant 109, 189–90, 264  
forest recreation in United Kingdom 233, 234, 237, 238, 239, 240, 243  
river management in Poland 276–7, 278, 282, 283, 284  
Alvarez-Farizo, B. 23–4, 26, 47, 48, 51, 133  
Andrews, R.L. 155, 156, 260–61  
Angelakis, A. 250  
animal welfare vs. biotechnology (GM food) issues 19  
annoyance level 301, 309, 311, 312  
anthropocentric segments 182, 184–5, 189–93  
arachaeological features 14  
arachaeological sites 84  
Arrow, K. 122, 152, 204, 220, 227  
Arsenio, E. 28, 29, 53  
Ashok, K. 150  
atitudinal variables 94, 320, 321, 322  
forest biodiversity conservation in Finland 182  
forest recreation in United Kingdom 227  
rail noise abatement in Italy 309, 311, 312, 313  
Water Framework Directive: Greece 259, 262, 267  
Australia 2, 133, 156–7, 168, 202  
Austria 133  
awareness 95  
Azevedo, C. 209  
Backer, G.A. 160, 168  
badger conservation vs control of bovine tuberculosis in cattle in England and Wales 15, 34–5  
Barberán, R. 48  
Barbier, E.B. 249, 250  
Bardley, M. 139  
Barreiro, J. 297  
base value 199, 213  
Bateman, I.J. 2, 3, 227, 256, 262, 278, 280, 285  
Bayes' Rule 69  
Bayesian estimation approach 70  
Bayesian Information Criterion 72, 73, 155, 161, 260, 261  
beef from hormone-treated and/or GM-fed cattle 18  
beef production 36  
behavioural characteristics 321  
Ben-Akiva, M. 148, 150, 151, 152, 154, 169, 198  
benefit attribute 1  
benefits transfer method 267, 322  
Bennett, J. 2, 7, 120, 133, 178, 198–214, 218–19, 254, 256, 271, 280  
Bennett, R. 14, 15, 34
Benson, J.F. 220
Bergland, O. 199
Bergmann, A. 26, 54, 254
Bergson, A. 122
Bergstrom, J.C. 200, 201
Bertoni, G. 147
Bhat, C.R. 70–71
Bienabe, E. 2
binary logit regression 210
Biodiversity Action Plans 14
biodiversity attribute:
river management in Poland 278–89, 319
biodiversity conservation in England 33–4
Birds Directive (79/409/EEC) 8, 13, 251, 267, 272
Bishop, K.D. 220
Black, A. 48
Blamey, R. 2, 120, 178, 256, 280
Bolduc, D. 198
Bonnieux, F.A. 106
bootstrapping procedure 209, 211, 212
Borda rule 124, 125, 321
Borrini-Feyerabend, G. 179
Boxall, P.C. 2, 49, 150, 156, 163, 169, 180, 182, 184, 258, 277, 278, 284, 320, 321
Boyle, K.J. 201
Bozdogan Akaike Information Criterion 155, 161, 260
Brakenridge, G.R. 271
Brander, L.M. 249, 254
Bristow, A.L. 28, 52, 53, 294, 297
broadleaved and mixed woodland 83, 84, 86–7, 88, 95, 100
Brouwer, R. 200, 201, 249, 254, 272
Brown, G. 69
Brownstone, D. 68
Bruno, L. 156
Bullock, C.H. 30, 84, 85, 100, 102
Bureau, J. 147
Burnham, T.A. 160, 168
Burton, M. 17, 18, 35, 40, 149, 156
business-as-usual policy scenario 84, 99
Calatrava-Requena, J. 44
Campbell, D. 4, 58–79
Canada 146, 156–7, 182
carbon dioxide attribute 203, 205, 208–9, 210, 212, 318
Carlsson, F. 18–19, 20, 22, 28–9, 37, 41, 43, 52, 156, 265, 272
Carson, R.T. 204
cattle production 15
Che, P. 249, 250
Chiemaditida Wetland Management Fund 255–6
chicken and beef production in Sweden 41–2
Child, D. 159–60
Chilton, S. 59
choice card 88
choice set 186, 257, 280
choice task 224–5, 227
Christie, M. 7–8, 14, 33, 209, 220–46, 272
Cicia, G. 133
claim fishing management in Italy 22, 43
Clark, D.E. 297
Clawson, M. 220
CLM 277, 282, 283, 284
cluster-wise logit model 151
Colombo, S. 5, 24, 44, 48, 82–104, 254, 322
Common Agricultural Policy 4, 13, 107, 130
Mid-Term Review 130–31
Rural Environment Protection Scheme in Ireland 58, 59, 60, 79
compensating surplus 98–101, 120–21, 122–3, 264, 265, 321
Conditional Logit (Multinomial) Model 277, 282, 283, 284, 319, 320, 321
cultural landscapes and rural heritage in Spain 136, 139, 141
forest biodiversity conservation in Finland 189
forest recreation in United Kingdom 226, 232
landscape valuation in France 109, 114
<table>
<thead>
<tr>
<th>Topic</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>rail noise abatement in Italy</td>
<td>299</td>
</tr>
<tr>
<td>river management in Poland</td>
<td>276</td>
</tr>
<tr>
<td>Severely Disadvantaged Areas in England</td>
<td>94</td>
</tr>
<tr>
<td>value inference and forests in Spain</td>
<td>207, 208, 209</td>
</tr>
<tr>
<td>Condorcet rule</td>
<td>124, 125, 321</td>
</tr>
<tr>
<td>conservation contract</td>
<td>188</td>
</tr>
<tr>
<td>consumer choice models</td>
<td>258, 274</td>
</tr>
<tr>
<td>consumer market segmentation</td>
<td>146–50</td>
</tr>
<tr>
<td>consumer theory</td>
<td>136</td>
</tr>
<tr>
<td>Contingent Valuation Method</td>
<td>1, 3, 322</td>
</tr>
<tr>
<td>cultural landscapes and rural heritage in Spain</td>
<td>132, 133</td>
</tr>
<tr>
<td>landscape valuation in France</td>
<td>106</td>
</tr>
<tr>
<td>rail noise abatement in Italy</td>
<td>296–7</td>
</tr>
<tr>
<td>river management in Poland</td>
<td>272</td>
</tr>
<tr>
<td>Severely Disadvantaged Areas in England</td>
<td>84</td>
</tr>
<tr>
<td>Convention on International Trade in Endangered Species of Wild Fauna and Flora</td>
<td>253</td>
</tr>
<tr>
<td>cost attribute</td>
<td>112–13, 203, 208–9, 211</td>
</tr>
<tr>
<td>cost and bargain concerns</td>
<td>160, 162</td>
</tr>
<tr>
<td>cost-benefit analysis</td>
<td>119, 122, 200, 265–6, 296, 319, 321</td>
</tr>
<tr>
<td>Cox, V.</td>
<td>22, 48, 254, 272</td>
</tr>
<tr>
<td>Crabtree, B.</td>
<td>30</td>
</tr>
<tr>
<td>cultural heritage attribute</td>
<td>61–2, 64, 73, 75, 77, 86–7, 95, 100, 103</td>
</tr>
<tr>
<td>cultural landscapes and rural heritage in Spain</td>
<td>130–44, 318</td>
</tr>
<tr>
<td>case study area</td>
<td>134–5</td>
</tr>
<tr>
<td>data</td>
<td>136–8</td>
</tr>
<tr>
<td>empirical specification</td>
<td>139</td>
</tr>
<tr>
<td>methodology</td>
<td>135–6</td>
</tr>
<tr>
<td>previous studies</td>
<td>132–4</td>
</tr>
<tr>
<td>results</td>
<td>139–41</td>
</tr>
<tr>
<td>willingness to pay estimation for programme attributes</td>
<td>141–3</td>
</tr>
<tr>
<td>Currim, I.S.</td>
<td>155, 260–61</td>
</tr>
<tr>
<td>cycling</td>
<td>221, 222, 228–9, 232, 233, 245</td>
</tr>
<tr>
<td>D-Efficiency scores</td>
<td>138</td>
</tr>
<tr>
<td>Dachary-Bernard, J.</td>
<td>5–6, 106–28</td>
</tr>
<tr>
<td>Davis, R.</td>
<td>220</td>
</tr>
<tr>
<td>de Blaeyij, A.</td>
<td>43</td>
</tr>
<tr>
<td>De Civita, P.</td>
<td>200</td>
</tr>
<tr>
<td>De Kuizenaar, Y.</td>
<td>296</td>
</tr>
<tr>
<td>Del Giudice, T.D.</td>
<td>19–20, 37</td>
</tr>
<tr>
<td>demographic variables</td>
<td>94, 227, 259, 281</td>
</tr>
<tr>
<td>see also socio-demographic variables</td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td>45</td>
</tr>
<tr>
<td>denomination of origin</td>
<td>134–5</td>
</tr>
<tr>
<td>deontological conception</td>
<td>118–19</td>
</tr>
<tr>
<td>DeSarbo, W.S.</td>
<td>151</td>
</tr>
<tr>
<td>Deshazo, J.R.</td>
<td>321</td>
</tr>
<tr>
<td>Desvousges, W.H.</td>
<td>200, 201</td>
</tr>
<tr>
<td>DETMAX algorithm</td>
<td>138</td>
</tr>
<tr>
<td>Diamandopoulos, E.</td>
<td>250</td>
</tr>
<tr>
<td>Diamond, P.A.</td>
<td>204</td>
</tr>
<tr>
<td>Dijkstra, B.R.</td>
<td>179</td>
</tr>
<tr>
<td>Dillon, W.R.</td>
<td>151</td>
</tr>
<tr>
<td>Directive 75/268/EEC</td>
<td>5, 82</td>
</tr>
<tr>
<td>Directive 91/440</td>
<td>295</td>
</tr>
<tr>
<td>Directive 92/43/EEC</td>
<td>13</td>
</tr>
<tr>
<td>Directive 96/62/EC on air pollution</td>
<td>28</td>
</tr>
<tr>
<td>Directive 1829/2003 on GM labelling</td>
<td>146</td>
</tr>
<tr>
<td>Directive 1830/2003 on GM labelling</td>
<td>146</td>
</tr>
<tr>
<td>Directive 1999/31/EC</td>
<td>27</td>
</tr>
<tr>
<td>Directive 2001/18/EC</td>
<td>17</td>
</tr>
<tr>
<td>Directive 2001/77/EC</td>
<td>26</td>
</tr>
<tr>
<td>Directive 2002/49/EC on noise pollution</td>
<td>9, 28</td>
</tr>
<tr>
<td>Disadvantaged Areas</td>
<td>82</td>
</tr>
<tr>
<td>see also Severely Disadvantaged Areas</td>
<td></td>
</tr>
<tr>
<td>distance attribute</td>
<td>231, 239–40, 260, 262</td>
</tr>
<tr>
<td>Doremus, H.</td>
<td>179</td>
</tr>
<tr>
<td>$D_{p}$-optimality criterion</td>
<td>65–6</td>
</tr>
<tr>
<td>Drake, L.</td>
<td>132–3</td>
</tr>
<tr>
<td>drive attribute</td>
<td>203, 205, 208–9, 210</td>
</tr>
<tr>
<td>Droste-Franke, B.</td>
<td>297</td>
</tr>
<tr>
<td>dry stone dykes</td>
<td>14, 84</td>
</tr>
<tr>
<td>Duffield, W.</td>
<td>204</td>
</tr>
<tr>
<td>ecocentric segments</td>
<td>182, 184–5, 189–93</td>
</tr>
<tr>
<td>ecological factors</td>
<td>254, 265, 267</td>
</tr>
<tr>
<td>economic benefits</td>
<td>254</td>
</tr>
<tr>
<td>economic costs</td>
<td>271, 274</td>
</tr>
<tr>
<td>economic value</td>
<td>277</td>
</tr>
<tr>
<td>ecosystem services restoration</td>
<td>14</td>
</tr>
<tr>
<td>education</td>
<td>95, 309, 311, 312</td>
</tr>
<tr>
<td>GM labelling policy</td>
<td>162, 163, 164</td>
</tr>
</tbody>
</table>
value inference and forests in Spain
205
Water Framework Directive: Greece
260, 262, 319
effects coding 109, 113, 115
Efron, B. 209
Ek, R. van 272
El Jaouhari, A. 297
Emerson, H.J. 59

England:
Environmentally Sensitive Areas 133
landfill waste disposal 27–8, 51
recycling 54
transport mode and cycling facilities
50–51
water company service
improvements 45–7
water quality improvements 45
water services vs environment 42–3
see also Severely Disadvantaged Areas
Enneking, U. 20, 36
environmental attitudes 257, 260
environmental concerns 160, 162
environmental consciousness index
258, 260, 262
environmental costs 271
environmental good 3
environmental impacts from wind farm
construction in Spain 51
environmental pollution 26–9, 50–54
Environmental Protection Agency 300, 302
environmental variable 137, 141, 142
Environmentally Sensitive Areas 14,
30, 59, 84, 93, 133
erosion attribute 203, 205, 208–9, 210,
212, 318
ethical concerns 159, 162, 163, 164, 167
European Agricultural Guidance and
Guarantee Fund 130
European Commission 249–50, 294
European Council (Berlin) 130
Expected Annual Cost 62, 64, 65–6, 72
experimental auctions 148
experimental design techniques 256
extensive policy option 84

farm buildings attribute 88, 112, 113,
117, 119–20, 126–7
farm woodlands 14
farming methods, traditional 16
Farmland Foresting Programme 200
farmyard tidiness attribute 61, 62, 64,
73, 75, 76, 77
Fennell, G. 152, 156, 169
Ferrini, S. 62, 64, 67
field boundaries 86–7, 88, 95, 100, 103
Finland 14–15, 16, 133
forest management 25, 272
moose management 16, 31–2
nature conservation 30–35
see also forest biodiversity
conservation in Finland
flood risk attribute 278–89
flood risk reduction vs. habitat
conservation in Poland 8, 271–89,
319
case study area 273–4
case experiment method 274–8
policy implications 288–9
results 282–5
survey design and administration
278–82
willingness to pay estimates 285–8
food cautious segment 162, 163, 164,
165, 166, 167, 168, 169
food labelling 4, 17–21, 35–42, 318, 323
see also GM labelling policy
food optimists segment 162, 164, 165,
166, 167, 168, 169
food production systems in England
35–6
food safety concerns 160, 162, 163, 165
Forest Action Plan 7–8, 221, 245–6,
318
forest biodiversity conservation in
Finland 6–7, 49–50, 178–95, 318
data collection 181–2
heterogeneity of preferences 182–5
cluster analysis 184–5
factor analysis 182–4
policy implications 193–5
results 186–93
attitude segments 189–91
choice modelling 186–9
welfare impacts 191–3
Forest Biodiversity Programme for
Southern Finland (METSO) 179,
187–8
<table>
<thead>
<tr>
<th>Topic</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest management</td>
<td>25–6</td>
</tr>
<tr>
<td>Forest recreation in the United Kingdom</td>
<td>7–8, 49, 220–46, 318</td>
</tr>
<tr>
<td>Choice experiment method</td>
<td>223–32</td>
</tr>
<tr>
<td>Common attributes</td>
<td>230–31</td>
</tr>
<tr>
<td>Example of choice task</td>
<td>224–5</td>
</tr>
<tr>
<td>Variable attributes</td>
<td>228–9</td>
</tr>
<tr>
<td>Facilities improvement</td>
<td>221–3</td>
</tr>
<tr>
<td>Policy implications</td>
<td>245–6</td>
</tr>
<tr>
<td>Results</td>
<td>232–44</td>
</tr>
<tr>
<td>Cyclists</td>
<td>233–6</td>
</tr>
<tr>
<td>General forest users</td>
<td>242–4</td>
</tr>
<tr>
<td>Horse riders</td>
<td>236–9</td>
</tr>
<tr>
<td>Nature watchers</td>
<td>239–42</td>
</tr>
<tr>
<td>Forest resources management</td>
<td>49–50</td>
</tr>
<tr>
<td>Forestry Commission</td>
<td>222</td>
</tr>
<tr>
<td>Forestry conservation and management</td>
<td>321</td>
</tr>
<tr>
<td>Forestry Strategy</td>
<td>4, 25</td>
</tr>
<tr>
<td>Forests in Spain</td>
<td>7, 198–214, 218–19, 318</td>
</tr>
<tr>
<td>Benefit transfer</td>
<td>200–202</td>
</tr>
<tr>
<td>Equivalence test of models</td>
<td>207–8</td>
</tr>
<tr>
<td>Research design</td>
<td>202–8</td>
</tr>
<tr>
<td>Choice experiment method</td>
<td>202–4</td>
</tr>
<tr>
<td>Contingent valuation method</td>
<td>204–5</td>
</tr>
<tr>
<td>Sample</td>
<td>205–6</td>
</tr>
<tr>
<td>Results</td>
<td>208–12</td>
</tr>
<tr>
<td>Choice experiment results</td>
<td>208–10</td>
</tr>
<tr>
<td>Contingent valuation results</td>
<td>210–12</td>
</tr>
<tr>
<td>Value inferences</td>
<td>200–202, 212–13</td>
</tr>
<tr>
<td>Formann, A.K.</td>
<td>151</td>
</tr>
<tr>
<td>Foster, V.</td>
<td>119</td>
</tr>
<tr>
<td>Fox, J.A.</td>
<td>36</td>
</tr>
<tr>
<td>France 36, 317</td>
<td></td>
</tr>
<tr>
<td>See also Landscape valuation in France</td>
<td></td>
</tr>
<tr>
<td>Freeman, A.M. 3, 296</td>
<td></td>
</tr>
<tr>
<td>Frequency-based choice task</td>
<td>223, 226</td>
</tr>
<tr>
<td>Frykblom, P. R.</td>
<td>37, 41, 43</td>
</tr>
<tr>
<td>Fulton, M.</td>
<td>147</td>
</tr>
<tr>
<td>Future directions</td>
<td>322–3</td>
</tr>
<tr>
<td>Future Noise Policy (Green Paper)</td>
<td>294</td>
</tr>
<tr>
<td>Galbraith, R.</td>
<td>198</td>
</tr>
<tr>
<td>Garcia, C.</td>
<td>199</td>
</tr>
<tr>
<td>Garrod, G.D. 27, 42–3</td>
<td>51, 84, 85, 100, 102</td>
</tr>
<tr>
<td>Gender variable</td>
<td>206, 208–9, 211</td>
</tr>
<tr>
<td>General forest visitors</td>
<td>221, 223, 228–9, 232</td>
</tr>
<tr>
<td>Germany 20–21, 36–7</td>
<td></td>
</tr>
<tr>
<td>Giannakas, K.</td>
<td>147</td>
</tr>
<tr>
<td>Gillmor, D.A.</td>
<td>59</td>
</tr>
<tr>
<td>GM content attribute</td>
<td>158</td>
</tr>
<tr>
<td>GM labelling policy</td>
<td>6, 17–21, 35–42, 146–71, 318, 320</td>
</tr>
<tr>
<td>Consumer market segmentation</td>
<td>146–50</td>
</tr>
<tr>
<td>Estimation</td>
<td>159–67</td>
</tr>
<tr>
<td>Best-fit specification</td>
<td>161–5</td>
</tr>
<tr>
<td>Choice attributes</td>
<td>165–7</td>
</tr>
<tr>
<td>Latent perceptual and attitudinal variables</td>
<td>159–60</td>
</tr>
<tr>
<td>Latent segment model estimation</td>
<td>160–61</td>
</tr>
<tr>
<td>Latent segment model 151–7</td>
<td></td>
</tr>
<tr>
<td>Conceptual framework</td>
<td>151–3</td>
</tr>
<tr>
<td>Econometric model</td>
<td>153–5</td>
</tr>
<tr>
<td>For evaluation labelling policies</td>
<td></td>
</tr>
<tr>
<td>Market segmentation analysis</td>
<td>155–7</td>
</tr>
<tr>
<td>Study design and implementation</td>
<td>167–70</td>
</tr>
<tr>
<td>GM opponents segment</td>
<td>162, 164, 165, 166, 167</td>
</tr>
<tr>
<td>GM&lt;sub&gt;content&lt;/sub&gt; attribute</td>
<td>162, 164, 165, 166, 167</td>
</tr>
<tr>
<td>GM-free meat products</td>
<td>18–19</td>
</tr>
<tr>
<td>GM&lt;sub&gt;zero&lt;/sub&gt; attribute</td>
<td>162, 164, 165, 166, 167</td>
</tr>
<tr>
<td>Gonzalez, M.</td>
<td>142</td>
</tr>
<tr>
<td>Gorman, M.</td>
<td>58</td>
</tr>
<tr>
<td>Government Office Regions 17–18, 83, 89, 92, 95, 100, 101, 103, 321</td>
<td></td>
</tr>
<tr>
<td>Gray, R.</td>
<td>147</td>
</tr>
<tr>
<td>Greece 8</td>
<td></td>
</tr>
<tr>
<td>See also Water Framework Directive (EC No. 2000/60): Cheimaditida Wetland</td>
<td></td>
</tr>
<tr>
<td>Green energy 26–9, 50–54</td>
<td></td>
</tr>
<tr>
<td>Greene, W.H. 3, 59, 67, 69, 70, 71, 73, 109, 136, 151, 155, 156, 258, 276, 277, 299, 320</td>
<td></td>
</tr>
<tr>
<td>Groundwater protection in Denmark</td>
<td>45</td>
</tr>
<tr>
<td>Gruère, G.P.</td>
<td>147, 169</td>
</tr>
</tbody>
</table>
Choice experiments informing environmental policy

Gumbel distribution 109, 153–4, 226, 259, 299
Gyovai, A. 32
Habitats Directive (92/43/EEC) 4, 8, 13, 25, 272, 319
wetlands in Greece 251, 253, 267
habitats restoration and recreation 14
Haener, M. 198
Halton sequence 70–71
Hamell, M. 60
Hanemann, W.M. 1, 98, 136, 142, 210, 211, 226
Hanley, N. 1, 2, 5, 7–8, 14, 15, 23, 25, 26, 30, 33, 44, 45, 47, 48, 49, 51, 54, 82–104, 111, 114, 133, 180, 202, 220–46, 272, 322
Hänninen, H. 179
Harrison, R.W. 163
Hasler, B. 24, 45
Hatfield, R. 50
Hausman, J.A. 94, 204, 284
health information attribute 158
Hearne, R.R. 2
heather moorland and bog 14, 83, 86–7, 88, 95, 100, 103
hedged farmland attribute 112, 113, 117, 126–7
hedgerows attribute 61, 62, 64, 65, 72, 73, 75, 77
Hedonic Price models 2, 106, 296, 297
Hensher, D.A. 2, 3, 59, 67, 69, 70, 73, 139, 151, 156, 198, 227, 233, 282, 284, 285
Hensher, J.D. 1
Hess, S. 71
heterogeneity 258, 259, 267, 277–8, 284–5, 319–20, 322
preference 155–6, 168
heteroskedasticity 322
Hill Farm Allowance payments 5, 82–3, 99
Hiselius, L.W. 28, 29, 53
historical-cultural heritage preservation 138
history variable 137, 141, 142
Horne, P. 6, 15–16, 25, 31, 49, 50, 178–95, 272
horse riding 221, 222, 228–9, 232, 245
household recycling behaviour in United Kingdom 28
Hu, W. 156–7, 168, 263, 286
Huber, J. 67
Hudson, D. 147
Huffman, W.E. 148
humanism 182–5
Hungary 16–17
Hunt, J.D. 296
Hutchinson, W.G. 4, 58–79
Hyde, T. 33
hydropower in Sweden 26, 42
implicit prices 263, 264, 286
forest recreation in the United Kingdom 233, 235, 236, 238, 239, 241, 242, 244
Important Bird Area 253
income 94, 95
GM labelling policy 162, 163, 164
rail noise abatement in Italy 309, 311, 312
value inference and forests in Spain 205, 206, 208–9, 211
Water Framework Directive: Greece 260, 262
Income Tax 62, 64, 113
independence of irrelevant alternatives (iia) assumption 94, 154, 226, 277, 284
independent and identically distributed (iid) error terms 67–8, 226, 259
information attribute 160, 162, 164, 166, 230
inner city road traffic reduction in Portugal 29
Innes, R. 179
integrated impact assessment method 272
Ireland 317
see also Rural Environment Protection Scheme
Italy 19–20, 133
clam fishing management 22–3, 43
extra-virgin olive oil 19, 37
production and labelling of grapes, oil and oranges 40–41
James, S. 35
Japan 147
Index

Johns, H. 5, 82–104
joint probability 260
joint segmentation 160
Jones, J.W. 178
Josien, E. 106

K-means clustering 184
Kahneman, D. 3
Kalaitzandonakes, N. 146, 147, 149
Kamakura, W. 150, 151, 155, 156, 258, 260, 320
Kangas, J. 179
Kanninen, B.J. 2, 67, 136, 142, 204, 211
Karousakis, K. 8, 28, 47, 54, 249–68
Karpinnen, H. 179, 182
Kask, S.B. 201
Kay, J. 84, 85, 100, 102
kerbside recycling services in England 54
Kirchhoff, S. 199
Kline, J. 179
Kola, J. 133
Kontoleon, A. 6, 146–71
Koppelman, F.S. 198
Kosz, M. 262
Koundouri, P. 1–9, 12–54, 249–68, 271–89, 317–23
Kountouris, Y. 4, 12–54, 271–89
Kreps, D.M. 123
Krinsky, I. 209, 211, 212
Krištröm, B. 178
Krutilla, J.V. 262
Kuhfeld, W.F. 111
Kumar, A. 151
Kuuluvainen, J. 32, 49, 180
Kyoto Protocol 26, 323
labelling and certification systems 19–20
see also food labelling
labelling of packaged liver sausages in Germany 36–7
Lagerkvist, C.J. 19, 37, 41
Laitila, T. 24, 43
Lambert, J. 297
Lampi, E. 52
Lancaster, K.J. 1, 107–8, 136, 258, 274
land acquisition 188
landfill waste disposal in England 27–8, 51
landscape attributes 5–6, 64, 73, 76
Landscape Convention 2000 106
landscape management 321
landscape management in Spain 6
landscape valuation in France 106–28, 318
choice experiment implementation 110–18
case study description 110–13
landscape preferences modelling 113–18
methodology 107–9
characteristics of landscape 107–8
choice experiment method 108–9
public policy making 118–25
aggregated benefits at issue 122–5
context of policy-making processes 118–20
economic surpluses for landscape protection policies 120–22
landscapes 317–18
Langford, I. 152
Langpap, C. 179
Lapan, H. 147
latent attitudes 184
latent class model 180, 320, 321
Water Framework Directive: Greece 258–9, 260, 261, 263, 265, 267
latent segment model see GM labelling policy
latent values 182
Layton, D.F. 69
Lázaro, A. 48
Lehtonen, E. 25, 49
León, C.J. 142
Less Favoured Areas 5, 82, 86
Li, C.-Z. 14, 32, 49
Li, Q. 160
likelihood:
function 155, 259
ratio test 284
see also log-likelihood; maximum likelihood
Likert scale 181, 309, 311
Liljenstolpe, C. 43
LIMDEP 7.0 207
LIMDEP 8.0 114, 139
river management in Poland 282, 284, 286
Water Framework Directive: Greece 260, 263
LIMDEP NLOGIT 3.0 189
linear logistic model 151
living conditions attribute 158, 160, 162, 164, 165, 166
local environment protection 138
log-likelihood 155, 260
log-likelihood function 72, 73, 161, 283
log-likelihood model 234, 237, 240, 243
log-likelihood ratio test 160
forest recreation in United Kingdom 233–4, 236–7, 239–40, 242–4
landscape valuation in France 114–15
rail noise abatement in Italy 311
river management in Poland 284–5
log-likelihood value 160, 207
logit model:
mixed 154, 260, 320
multinomial 154, 155, 156
see also random parameter logit model
lognormal distributions 69–70
Loomis, J.B. 198, 199, 201
López, E. 6, 130–44
Loureiro, M.L. 6, 130–44
Lovett, J.C. 84–5, 100, 102
Luce, D. 258, 276
Lundhede, T. 45
Lusk, J.L. 18, 36, 64, 147, 148, 156
Mac Sharry reforms 1992 130
MacEvoy, J.B. 151
McFadden, D. 67, 68, 94, 108, 136, 150, 151, 152, 208, 258, 276, 284, 298, 299
McFarlane, B.L. 182, 184
McLachlan, G. 151
McMahon, P.L. 42–3
MacMillan, D. 30
McNeill, H. 146
McVittie, A. 109
Maddala, G.S. 136, 276
Madureira, L. 133
Magidson, J. 156
Manning, R. 179
Mannion, J. 58
Manski, C. 108
Manski, J. 1
marginal attribute 213
marginal values 199
Marks, L.A. 150
Marsan, P. 147
Martin, W.E. 124, 321
Martinsen, L. 45
Martinsson, P. 52
Mathieu, N. 108
Mathijs, E. 16, 32
maximum likelihood 184, 208, 211, 277
Merlo, M. 199
Milon, J.W. 178, 182
mistrust and disbelief variables 159, 162, 163, 167
Mitchell, R.C. 204
Mitchell, T.J. 138
mixed logit model 67–73, 154, 260, 320
mixture regression method for metric conjoint analysis data 151
Mogas, J. 7, 198–214, 218–19
monetary attribute 1, 112, 117, 279, 282
Water Framework Directive: Greece 255, 257
Monte Carlo integration 70
moorland attribute 83, 84, 112–17, 119, 121, 124, 126–7
moose management in Finland 16, 31–2
Moran, D. 271
Morrison, M. 2, 199, 202, 209, 254
Moschini, G. 147
Moss, J. 59
motivational characteristics 321
mountain land attribute 61, 62, 64, 73, 74, 76, 77
Mourato, S. 106–28
multi-collinearity 3
multinomial logit model 154, 155, 156
multinomial probit model 299
municipal solid waste 27
Murphy, K. 33
Index

mushrooms attribute 203, 205, 208–9, 210

mysticism 182–5

Naidoo, R. 2

National Cycling Strategy 28

National Oceanic and Atmospheric Administration 152

blue ribbon panel 204

National Park 85, 87

Natura 2000 13, 25

Nature Conservation Programme 14

nature conservation in Finland 30–35

nature conservation schemes 13–17

nature watching 221, 222–3, 228–9, 232

Navrud, S. 296, 297

Nellthorp, J. 297

Netherlands 272

Neye, S. 45

Nicholls, R.J. 271

Nielsen, A.B. 113

Nielsen, C.P. 147

Niemeläinen, P. 179

Nijkamp, P. 24, 44

NLOGIT 3.0 71, 139, 232

river management in Poland 282, 284, 286

Water Framework Directive: Greece 260, 263

noise reduction attribute 299, 300, 304

noise reduction in Portugal 53

Nomenclature of Territorial Units for Statistics 63

non-market valuation techniques 288

non-parametric indicator 212

normal distributions 69–70

North America 2, 168

see also Canada, United States

Norwood, F.B. 64

Ouissair, C. 148, 149, 160, 169

Novak, T.P. 151

Nunes, P.A.L.D. 8–9, 22–3, 43, 292–323

Oksanen, M. 184

O’Leary, T. 76

open water surface area attribute 254, 255, 257, 262, 264, 266

orthogonalisation procedure 279

Othman, J. 2, 254

Owen, K. 148, 156–7, 160, 168, 169

Ozdemiroglu, E. 5, 82–104

p-value 234, 237, 240, 243

Page, M. 50

paired comparisons model 151

Parsisson, D. 30

part-worth values 165, 166, 263, 286

pastures attribute 61, 62, 64, 65, 72, 73, 75, 77

Patterson, D. 204

Patterson, I. 31

Paulrud, A. 24, 43

Pearce, D.W. 271, 321

Pearson’s χ² test 185

Peel, D. 151

percentile method 209

pesticides attribute 158, 160, 162, 164, 165, 166

Petäjistö, L. 15–16, 31, 272

Philippidis, G. 40–41

Phillips, P.W.B. 146

picnic attribute 203, 205, 208–9, 210

Pietarinen, J. 182, 184

Poe, G.L. 119, 211, 212, 286–7

Polak, J. 71

Poland 8

see also flood risk reduction vs.
habitat conservation in Poland

Polasky, S. 179

Pommerehne, W.W. 292–323

Pope, C.A. III 178

pork production in Sweden 41

Portney, P.R. 254

Portugal 29, 53, 133

Position Paper on the European Strategies and Priorities for Railways Noise Abatement 294, 300

Pouta, E. 32, 49

Powe, N.A. 42–3

predictability test 212

price attribute 158, 162, 165, 166, 309

price of the programme attribute 299, 304

price variable 137, 141

primitivism 182, 183–5

proc optex 138

product choice process 160
Protected Designation of Origin 17, 19–20, 135, 144, 318, 323
Protected Geographical Indication 17, 19, 323
Pruckner, G.J. 133
pseudo-Rho2 measure of goodness-of-fit 72, 73
forest recreation in United Kingdom 233, 234, 236, 237, 239, 240, 242, 243, 244
psychometric data 321
psychometric measures 182
psychometric variables 150, 164
Psychoudakis, A. 254
quality assurance schemes in Germany 20–21
Ragkos, A. 272
rail noise abatement in Italy 8–9, 292–323
empirical findings 310–12
valuation results 310–11
welfare analysis and policy discussions 311–12
measurement of external costs of rail noise 296–7
models and results 305–10
descriptive statistics 305–7
indirect utility model specifications 307–10
political context 294–6
rail noise annoyance 308
rail noise exposure 308
rail noise perception 308
rail noise and vibrations 308
survey 298–305
choice experiment questions 303–5
instruments 301–3
modelling respondents’ behaviour 298–9
statement of noise management problem 299–301
Rambonilaza, M. 106
Randall, A. 59
random coefficients 68–9
random parameter logit model 94–5, 154, 155–6, 180, 320
mixed 151
river management in Poland 277–8, 283, 284–5, 286, 287
random parameters 68–9
random utility approach 258
random utility maximization theory 207, 226
random utility models 258, 298
random utility theory 108, 136, 274, 276
rare and unfamiliar species of wildlife 14
re-training of farmers attribute 255, 257, 262, 264, 266
realism 223
recreational benefits 318, 319
Region of Origin 19–20
Regulation:
1829/2003 17
1946/2003 17
2078/92 4–5, 13, 60, 107, 130
2080/1992 200
2081/92 17, 135
2082/92 17
Rekola, M. 32, 49
related choice model 299
relative factor score 165
renewable energy investments in Scotland 26–7, 54
research and education attribute 254, 255, 257, 262, 264, 266, 319
Revealed Preference Methods 2, 3, 296
Revelt, D. 69, 71, 284
Riera, P. 7, 198–214, 218–19
Rigby, D. 18, 40, 156
Rigby, M. 35
Rio Convention 179
river access attribute 279–89
river management attribute 23
rivers and lakes attribute 61, 62, 64, 65, 72, 73, 74, 76, 77, 79
Robb, L.A. 209, 211, 212
Rogers, M.F. 178
Rogers, M.F. 178
Rolfe, J. 2, 178, 199, 207, 209, 286
Romania 16, 32
Roosen, J. 36
Rosenberger, R.S. 198, 201
Rossetto, L. 43
rough grassland 86–7, 88, 95, 100, 103
Royal Decree 152/1996 200
Index

Ruffell, R. 220
Ruigrok, E.C.M. 201
Rural Environment Protection Scheme in Ireland 4–5, 58–79, 318
mixed logit model specification 67–71
bounding of taste intensities 69–70
estimation procedure 70–71
individual-specific conditional estimates of landscape values 69
policy implications 77–9
results 71–7
 calibration of landscape benefits 73–7
mixed logit model results 71–3
survey design 61–7
attributes used 61–2
discrete choice experiments 63–4
experimental design 64–7
sampling method 63
rural landscape management 4
rural variable 206, 208–9, 211
Russell, G. 151

Sagoff, M. 118
Sándor, Z. 64, 66–7
Santos, J.M.L. 133
SAS software 111, 138
Scarpa, R. 2, 4, 19–20, 37, 40–41, 45, 58–79, 133, 286, 322–3
Schoi, J.S. 45
Schroeder, T.C. 148
Scotland 15
Environmentally Sensitive Areas 14, 84, 133
renewable energy investments 26–7, 54
rock climbing 272
surface water quality and quantity 23
traffic-related noise levels and air quality 28, 52–3
water quality improvements 47–8
wild goose conservation 15, 30–31
Scrogin, D. 178, 182
scrub 83
Seferlis, M. 254
segment function 261
segment membership 260
segment parsimony 155
sensitivity analysis 311
sensitivity value 306–7
sequestration 318
Severely Disadvantaged Areas in England 5, 82–104, 318
landscape valuation studies 83–5
methodology 85–92
attributes selection and their levels 85–7
experimental design 88–9
questionnaire design and implementation 89–92
results 92–100
construct validity 94–8
content validity 92–3
convergent validity 98–100
experiences, perceptions and attitudes 92
Shaw, W.D. 154
Sheldon, I. 146, 147
Shogren, J.F. 201
Shonkwiler, J.S. 154
Siikamäki, J. 180
Simons, R.A. 297
Simpson, I. 30
Sinden, J.A. 178
Single Payment Scheme 82
Smale, M. 32
Smith, V.K. 201
social choice theory 123–4
social costs 271, 274
socio-demographic variables 205–6, 208–9, 309, 311
socio-economic variables 90–91, 94, 320, 322
forest biodiversity conservation in Finland 180, 181, 182, 186, 187
forest recreation in United Kingdom 227
landscape valuation in France 114
rail noise abatement in Italy 305–6, 312, 313
river management in Poland 272, 281, 285
Severely Disadvantaged Areas in England 95, 96–7

Ekin Birol and Phoebe Koundouri - 9781848441255
Downloaded from PubFactory at 09/18/2023 04:48:05AM
via free access
traffic-related noise levels and air quality in Scotland 28, 52–3
Train, K.E. 59, 67, 68, 69, 70, 71, 180, 277, 284, 320
train and track technology attribute 299, 303–5, 310, 313
transferring 200
transport mode and cycling facilities in England 50–51
transportation of hazardous material by rail in Sweden 29, 53
Travel Cost Method 2
Travisi, C.M. 8–9, 24, 44, 292–323
triangular distributions 69–70
two-segment model 260–61
uniform distributions 69
United Kingdom 14, 15, 149, 150, 157, 159
beef production 36
forest management 25
household recycling behaviour 28
rivers 202
wetland management 21–2, 48–9
see also England; Scotland
United States 18, 36, 146, 297
utilitarianism 118–19, 182–5
utility function 261
indirect 109, 201, 278, 298
unobservable 139, 141
Vägnes, M. 297
Vainio, M. 297
Value Added Tax 62, 64
value inference method 213, 267, 322
values 182
Van Bueren, M. 133
varimax rotation 184
Veisten, K. 178
visitation variable 206, 208–9, 211
Viske, D. 41
Vriens, M. 150
Wald procedure (Delta method) 263, 286–7
Wardman, M. 28, 50, 52, 53, 294, 297
Warren, J. 33
waste management 26–9, 50–54
water company service improvements in England 45–7

Soguel, N. 297
soil conservation in Spain 44–5
Sonnier, G. 70
Spain 6, 23–4, 26, 44–5, 48, 317
see also cultural landscapes and rural heritage in Spain
Spalatro, F. 40–41
SPM studies 297
sport fishing management in Sweden 43–4
SPSS software 182, 256
stated preference methods 296
Stewart, L. 59
stonewalls attribute 61, 62, 64, 73, 74, 76, 77
Strand, J. 297
Street, D.J. 89, 227
Sundqvist, T. 26, 42
surface water quality and quantity in Scotland 23
surroundings attribute 231
Swait, J.R. 135, 151, 154, 155, 160, 207, 284, 285, 322
Sweden 18–19, 22, 132
hydropower 26, 42
production of chicken and ground beef; pork chops and eggs; and milk and grain 37–9, 41–2
sport fishing management 43–4
transportation of hazardous material by rail 29, 53
wetland management 43

Tahvonen, O. 32
theoretical advancements 319–22
Thurstone, L. 1, 108
Tibshirani, R.J. 209
Tinch, D. 48
Toma, L. 16, 32
Tonsor, G.T. 156
tourist tax 112
trackside barrier height attribute 299, 300, 302–5, 307–8, 310, 312–13
traditional agro-forestry landscape protection 138
traditional customs, food products and rural settlements preservation attribute 137, 138, 141, 142
Traditional Speciality Guaranteed 17

Train, K.E. 59, 67, 68, 69, 70, 71, 180, 277, 284, 320
train and track technology attribute 299, 303–5, 310, 313
transferring 200
transport mode and cycling facilities in England 50–51
transportation of hazardous material by rail in Sweden 29, 53
Travel Cost Method 2
Travisi, C.M. 8–9, 24, 44, 292–323
triangular distributions 69–70
two-segment model 260–61

uniform distributions 69
United Kingdom 14, 15, 149, 150, 157, 159
beef production 36
forest management 25
household recycling behaviour 28
rivers 202
wetland management 21–2, 48–9
see also England; Scotland
United States 18, 36, 146, 297
utilitarianism 118–19, 182–5
utility function 261
indirect 109, 201, 278, 298
unobservable 139, 141
Vägnes, M. 297
Vainio, M. 297
Value Added Tax 62, 64
value inference method 213, 267, 322
values 182
Van Bueren, M. 133
varimax rotation 184
Veisten, K. 178
visitation variable 206, 208–9, 211
Viske, D. 41
Vriens, M. 150
Wald procedure (Delta method) 263, 286–7
Wardman, M. 28, 50, 52, 53, 294, 297
Warren, J. 33
waste management 26–9, 50–54
water company service improvements in England 45–7

Vägnes, M. 297
Vainio, M. 297
Value Added Tax 62, 64
value inference method 213, 267, 322
values 182
Van Bueren, M. 133
varimax rotation 184
Veisten, K. 178
visitation variable 206, 208–9, 211
Viske, D. 41
Vriens, M. 150
Wald procedure (Delta method) 263, 286–7
Wardman, M. 28, 50, 52, 53, 294, 297
Warren, J. 33
waste management 26–9, 50–54
water company service improvements in England 45–7
Index

Water Framework Directive (EC No. 2000/60) 4, 8, 21, 23, 272, 319, 323
choice experiment data collection 256–8
choice experiment design 254–6
location map 252
policy implications 266–7
results 260–66
cost-benefit analysis 265–6
willingness to pay estimation 262–5
theoretical framework 258–60
water pollution 16, 32
water quality improvements 45, 47–8
water resources in Cheimaditida Wetland 8
water resources management 8, 21–5, 42–9
water services vs environment in England 42–3
Watkiss, P. 292
Wedel, M. 64, 66–7, 150, 151, 155, 156, 258, 260, 320
Weeks, M. 59, 70
Weibull distribution 276
Weinberger, M. 297
welfare analysis 193–4
welfare impacts 185
welfare measures 117
wet grasslands 14
wetland management 83, 84, 321
in Sweden 43
in United Kingdom 21–2, 48–9
see also Water Framework Directive (EC No. 2000/60): Cheimaditida in Greece
White, P.C.L. 84–5, 100, 102
Whitehead, J.C. 256
Whitten, S. 133
wild goose conservation in Scotland 15, 30–31
wildlife habitats attribute 61, 62, 64, 65, 72, 74, 77
wildlife schemes 13–17, 30–35
willingness to accept 1, 3
agri-environmental, wildlife and nature conservation schemes 14, 15
forest management 25
GM labelling policy 165
landscape valuation in France 119, 120
value inference and forests in Spain 204
willingness to pay 1, 3
agri-environmental, wildlife and nature conservation schemes 14, 15
air traffic disturbance in Sweden 29
cultural landscapes and rural heritage in Spain 133, 141–3
flood risk reduction vs. habitat conservation in Poland 8, 285–8
forest biodiversity conservation in Finland 191
Forestry 99
GM labelling policy 165
GM-free meat products 19
Government Office Regions in United Kingdom 17–18
household recycling behaviour 28
landfill waste disposal facility in United Kingdom 27
landscape management in Spain 6
landscape valuation in France 117, 119, 120, 123
marginal 119, 120, 202, 287
noise abatement in Italy 9
private and public attributes in Sweden 20–21
quality assurance schemes in Germany 20
rail noise abatement in Italy 297, 310, 312
Rural Environment Protection Scheme in Ireland 5, 74–5, 78
Severely Disadvantaged Areas in England 84–5, 89, 92, 93, 94, 100, 102, 103
value inference and forests in Spain 201, 204, 209, 210, 211, 212

Ekin Birol and Phoebe Koundouri - 9781848441255
Downloaded from PubFactory at 09/18/2023 04:48:05AM
via free access
water improvements in United Kingdom 23
wetland management in United Kingdom 22
Willis, K.G. 14, 15, 21–2, 23, 27, 34, 42–3, 45, 51, 84, 85, 100, 102, 220
wind farms in Spain 26
Windle, J. 286
Woodward, R.T. 249
Woodworth, G. 1
World Health Organization 294
World Trade Organization 146
Wright, R.E. 30, 33, 45, 47, 49, 54, 133
Wui, Y.S. 249
Xu, X. 198
Yabe, M. 6, 146–71
Yiannaka, A. 147
Young, T. 35
Yrjölä, T. 133
Zwerina, K. 67, 111