PROMOTING NATURE IN CITIES AND TOWNS A Practical Guide

By Malcolm Emery for the Ecological Parks Trust



CROOM HELM
London • Sydney • Dover, New Hampshire

Contents

I	List	10		
i		of figures	13 14	
l		List of tables		
I		nowledgements	15	
ĺ	rore	word E.M. Nicholson	16	
ı	PA	RT ONE: HOW TO START UP NEW SITES		
ŀ	1	Introduction — why urban nature conservation?	19	
ı	1.1	Personal benefits	19	
ĺ	1.2		20	
ı	1.3		20	
۱		Benefits to wildlife	21	
l		Economic benefits	23	
l	1.6	References	23	
l	2	How to begin. Establishing a (local) wildlife group		
l	2.1		25	
ı	2.2	U U	25	
ı	2.3	Suggestions for an efficient group structure	27	
ı		2.3.1 Group officers	28	
ı		2.3.2 Sub-committees and teams	29	
I		2.3.3 Working with volunteers	29	
۱	2.4	Communication	. 30	
İ		2.4.1 Newsletters	30	
i		2.4.2 Other tools of communication	31	
I	2.5		32	
I		2.5.1 Preparation of the first public meeting	32	
I		2.5.2 The first public meeting	34	
		2.5.3 Group meetings	35	
I	2.6	External relations	37	
I		2.6.1 Relations with local authorities	37 38	
1		2.6.2 Relations with other wildlife and amenity groups2.6.3 Relations with academic and professional institutions	38	
ı	2.7	·	39	
	2.7			
	2.9	Group organisation Finance and fund-raising		
Ì	2.9	2.9.1 Applying to charitable trusts	40 41	
		2.9.2 Grants from local and central government	42	
		2.9.3 Applying to industrial and commercial organisations	42	
		2.9.4 Covenants and legacies	42	
ı		<u> </u>		

	2.9.5 Fund-raising locally	42
	2.9.6 House-to-house and street collections	42
	2.9.7 Events	42
	2.9.8 Re-cycling	44
	2.9.9 Trading	44
	2.9.10 Recommended sources of advice and further information	44
	References.	45
2.11	Useful organisations	46
3	Legal considerations and constraints	47
3.1	The establishment of local groups	47
	3.1.1 The constitution	47
	3.1.2 Group organisation	49
	3.1.3 Charitable status	52
	3.1.4 Responsibilities for public activities	57
	3.1.5 Responsibilities as an employer	59
	3.1.6 Fund-raising and group accounts	60
3.2	The use of sites	62
	3.2.1 Tenure	62
	3.2.2 Planning and building regulations	63
3.3	Insurance	66
	3.3.1 Fire, theft, loss or damage	67
	3.3.2 Group liabilities	67
	3.3.3 Vehicles	68
	3.3.4 Special events and activities	69
3.4	Wildlife and the law 3.4.1 Trees and the law	69
	•	71
۰.	3.4.2 Further reading	72
3.5	Sources of legal advice	73
•	3.5.1 Using solicitors	74
3.6	References	74
3.7	Useful organisations •	<i>7</i> 5
4	Site surveying and selection	77
4.1	Preliminary research	77
	4.1.1 Sources of help and information	78
	4.1.2 Site uses and requirements	80
	4.1.3 Site record sheets and instructions for volunteers	85
4.2	Conducting the survey of the area	97
	4.2.1 Volunteer briefing and organisation	97
	4.2.2 Maps [†]	97
	4.2.3 Surveying in the field	98
	4.2.4 Survey back-up	102
4.3	Interpreting area survey results	104
4.4	Detailed site surveys	105
	4.4.1 Subterranean features	105
	4.4.2 Soil features	106

1	4.4.3 Topography and landscape features	111		
	4.4.4 Habitats, communities and species	112		
4.5	References .			
4.6	Useful organisations			
5	5 Principles of site design			
5.1	-			
J.1	5.1.1 The individual	117 117		
	5.1.2 The community	118		
	5.1.3 Competition, stress and disturbance	122		
	5.1.4 Site survey and analysis in the design process	122		
	5.1.5 Management implications of design	129		
5.2	Principles covering site use	132		
	5.2.1 Site form and appearance	132		
	5.2.2 Choice of habitats for particular uses	133		
	5.2.3 Zonation, rotation of access and path layout	133		
5.3	Economics of design with nature	136		
5.4	Sources of advice and further information	140		
5.5	References	141		
	RT TWO: DEVELOPING SITES — ECOLOGICAL PRINCIPI D PRACTICES	ES		
6	Creation of habitats	145		
6.1	Grassland/meadow			
		145		
	6.1.1 Ground preparation	145 146		
	6.1.1 Ground preparation6.1.2 Choice of species			
	6.1.1 Ground preparation6.1.2 Choice of species6.1.3 Sources of seed	146		
	6.1.2 Choice of species6.1.3 Sources of seed6.1.4 Sowing the seed	146 147 151 160		
	 6.1.2 Choice of species 6.1.3 Sources of seed 6.1.4 Sowing the seed 6.1.5 Immediate after-care 	146 147 151 160 161		
	 6.1.2 Choice of species 6.1.3 Sources of seed 6.1.4 Sowing the seed 6.1.5 Immediate after-care 6.1.6 Propagation of wild plants 	146 147 151 160 161		
	 6.1.2 Choice of species 6.1.3 Sources of seed 6.1.4 Sowing the seed 6.1.5 Immediate after-care 6.1.6 Propagation of wild plants 6.1.7 Turf transplants 	146 147 151 160 161 161 163		
	 6.1.2 Choice of species 6.1.3 Sources of seed 6.1.4 Sowing the seed 6.1.5 Immediate after-care 6.1.6 Propagation of wild plants 6.1.7 Turf transplants 6.1.8 References 	146 147 151 160 161 161 163 164		
62	6.1.2 Choice of species 6.1.3 Sources of seed 6.1.4 Sowing the seed 6.1.5 Immediate after-care 6.1.6 Propagation of wild plants 6.1.7 Turf transplants 6.1.8 References 6.1.9 Useful organisations	146 147 151 160 161 161 163 164 165		
6.2	6.1.2 Choice of species 6.1.3 Sources of seed 6.1.4 Sowing the seed 6.1.5 Immediate after-care 6.1.6 Propagation of wild plants 6.1.7 Turf transplants 6.1.8 References 6.1.9 Useful organisations Scrub/woodland	146 147 151 160 161 161 163 164 165		
6.2	 6.1.2 Choice of species 6.1.3 Sources of seed 6.1.4 Sowing the seed 6.1.5 Immediate after-care 6.1.6 Propagation of wild plants 6.1.7 Turf transplants 6.1.8 References 6.1.9 Useful organisations Scrub/woodland 6.2.1 Ground preparation 	146 147 151 160 161 161 163 164 165 165		
6.2	6.1.2 Choice of species 6.1.3 Sources of seed 6.1.4 Sowing the seed 6.1.5 Immediate after-care 6.1.6 Propagation of wild plants 6.1.7 Turf transplants 6.1.8 References 6.1.9 Useful organisations Scrub/woodland	146 147 151 160 161 161 163 164 165		
6.2	6.1.2 Choice of species 6.1.3 Sources of seed 6.1.4 Sowing the seed 6.1.5 Immediate after-care 6.1.6 Propagation of wild plants 6.1.7 Turf transplants 6.1.8 References 6.1.9 Useful organisations Scrub/woodland 6.2.1 Ground preparation 6.2.2 Choice of species	146 147 151 160 161 161 163 164 165 165 168 169		
6.2	6.1.2 Choice of species 6.1.3 Sources of seed 6.1.4 Sowing the seed 6.1.5 Immediate after-care 6.1.6 Propagation of wild plants 6.1.7 Turf transplants 6.1.8 References 6.1.9 Useful organisations Scrub/woodland 6.2.1 Ground preparation 6.2.2 Choice of species 6.2.3 Sources of trees and shrubs 6.2.4 'Growing your own' 6.2.5 Fertilisers	146 147 151 160 161 163 164 165 165 168 169 177 180 193		
6.2	6.1.2 Choice of species 6.1.3 Sources of seed 6.1.4 Sowing the seed 6.1.5 Immediate after-care 6.1.6 Propagation of wild plants 6.1.7 Turf transplants 6.1.8 References 6.1.9 Useful organisations Scrub/woodland 6.2.1 Ground preparation 6.2.2 Choice of species 6.2.3 Sources of trees and shrubs 6.2.4 'Growing your own' 6.2.5 Fertilisers 6.2.6 Planting out	146 147 151 160 161 163 164 165 165 168 169 177 180 193 194		
6.2	6.1.2 Choice of species 6.1.3 Sources of seed 6.1.4 Sowing the seed 6.1.5 Immediate after-care 6.1.6 Propagation of wild plants 6.1.7 Turf transplants 6.1.8 References 6.1.9 Useful organisations Scrub/woodland 6.2.1 Ground preparation 6.2.2 Choice of species 6.2.3 Sources of trees and shrubs 6.2.4 'Growing your own' 6.2.5 Fertilisers 6.2.6 Planting out 6.2.7 Immediate after-care	146 147 151 160 161 163 164 165 165 168 169 177 180 193 194 207		
6.2	6.1.2 Choice of species 6.1.3 Sources of seed 6.1.4 Sowing the seed 6.1.5 Immediate after-care 6.1.6 Propagation of wild plants 6.1.7 Turf transplants 6.1.8 References 6.1.9 Useful organisations Scrub/woodland 6.2.1 Ground preparation 6.2.2 Choice of species 6.2.3 Sources of trees and shrubs 6.2.4 'Growing your own' 6.2.5 Fertilisers 6.2.6 Planting out 6.2.7 Immediate after-care 6.2.8 Hedges	146 147 151 160 161 161 163 164 165 165 168 169 177 180 193 194 207 210		
6.2	6.1.2 Choice of species 6.1.3 Sources of seed 6.1.4 Sowing the seed 6.1.5 Immediate after-care 6.1.6 Propagation of wild plants 6.1.7 Turf transplants 6.1.8 References 6.1.9 Useful organisations Scrub/woodland 6.2.1 Ground preparation 6.2.2 Choice of species 6.2.3 Sources of trees and shrubs 6.2.4 'Growing your own' 6.2.5 Fertilisers 6.2.6 Planting out 6.2.7 Immediate after-care	146 147 151 160 161 163 164 165 165 168 169 177 180 193 194 207		

	6.3	Freshv	vater	214
		6.3.1	Siting a new pond	214
		6.3.2		217
		6.3.3	• •	217
		6.3.4		220
		6.3.5	Ç Î	226
		6.3.6	Introduction of plants and animals	226
		6.3.7	•	232
,		6.3.8	Useful organisations	233
	6.4		_	233
			Food plants	234
			Features of a wildlife garden	235
			Bird tables and nest boxes	238
			Bat boxes	242
			Hedgehogs	243
				244
			References	247
		6.4.8		248
	7	Long-	term management	251
	7.1	Manag	gement in relation to natural succession	251
	7.2	The m	anagement plan	253
		7.2.1	Monitoring and re-appraisal	259
		7.2.2	Management of individual habitats	260
	7.3	Grass	land/meadow management	260
		7.3.1	Management by grazing	262
		7.3.2	Management by cutting	263
		7.3.3	Weeding	266
		7.3.4	Introducing new species to established grassland	266
	7.4	Wood	land/scrub management	267
		7.4.1	-	267
		7.4.2	• •	271
		7.4.3	Surveying woodland	277
		7.4.4	· ·	280
		7.4.5	Tree felling	283
		7.4.6	Coppicing for wildlife	287
		7.4.7	Glades, rides and woodland edge	290
		7.4.8	Scrub management	291
		7.4.9	Hedgerow management	293
	7.5	Fresh	water management	296
		7.5.1	Ecology of ponds and pools	296
		7.5.2		299
		7.5.3		301
		7.5.4		312
		7.5.5	Management of human impact	313
	7.6	Refere	•	313
	7.7	Usefu	l organisations	315

8	Interpre	etation	317	
8.1	Why interpret?			
8.2	-	o you interpret?	318	
8.3				
8.4		ort of message are you conveying?	318 319	
8.5		terpretive devices should you use?	319	
8.6		tive planning	320	
0.0		Burveys	320	
		Survey analysis and formulation of objectives	321	
		Choosing appropriate media	322	
		mplementation and management	322	
8.7	Referen		323	
	endix 1	Constitution of the Ecological Parks Trust	325	
	endix 2	Some useful guides to plant and animal identification	339	
	endix 3	Soil sampling and some simple field analysis techniques	342	
	endix 4	The National Tree Survey	345	
App	endix 5	The relative importance of habitat conditions and the vegetat		
	11. 6	types adapted to contend with them	349	
	endix 6	Examples of commercial seed mixes	350	
	endix 7	List of trees and shrubs for different conditions	353	
	endix 8	Scrub planting mixtures	356	
	endix 9	Woodland planting mixtures List of food plants for a wildlife garden	359	
		Garden flowers and shrubs for wildlife	366 369	
		Pesticides	370	
		Aquatic invertebrates as indicators of water pollution level	374	
		Directory of suppliers	376	
		Woodlands — forestry equipment	376	
		Wetlands — pond lining materials	376	
		Grassland — mowers	377	
		Seed suppliers	377	
		Soil analysis and testing	379	
		Hand tools	379	
		Garden tools for the disabled	379	
		Wood preservers	379	
		Timber	380	
		Miscellaneous	380	
App	endix 15	Addresses of useful organisations	380	
Inde	x	·	20-	
		•	395	