



CONTENTS

Acknowledgements	6
Photographic credits	6
Introduction	7
About this book	7
Safety first	8
Respecting natural habitats and a coastal code of conduct	9
Glossary	10
Habitat overviews	16
Sandy beaches and dunes	16
Shingle	20
Estuaries and saltmarshes	24
Cliffs	26
Machair	30
Maritime heath	32
Manmade	34
Conservation	36
Species accounts – trees and shrubs	40
Species accounts – wildflowers	54
The Isles of Scilly – a botanical hotspot	324
Arctic and Alpine flora meet the coast	328
Species accounts – non-flowering plants	330
Further reading	343
Useful addresses	343
Index	344

INTRODUCTION

The British coast has always been important for its island inhabitants. In the past, its greatest significance was as a source of food and place to earn a living, and of course this continues to this day. However, it also acts like a magnet to visitors from inland and there can be few British people who don't visit the coast at least once a year. Since nowhere is said to be more than 70 miles from the sea, the coast's allure is set to increase with the prospect of staycations seeming more attractive than ever before.

Some visitors are attracted by the intrinsic beauty of our rocky coastlines or the sheer scale and lonely isolation of many estuaries and northern beaches. A sense (sadly misplaced these days) that these landscapes and habitats are in some ways untamed and unaffected by man is part of the attraction. Scenery is important of course, but wherever you go on the coast it is impossible to ignore the contribution made by coastal flowers, whatever the time of year. Subliminally or consciously the floral influence is integral to why so many people gravitate towards the sea.

About this book

This book is a celebration of coastal flowers, concentrating on Britain and Ireland. Our southern coasts have floral elements in common with France and further south, while northern shores share species with northern mainland Europe including Scandinavia. Consequently, reference is made to mainland northwest Europe as well, allowing continental readers and British and Irish visitors venturing abroad to benefit from the book's content.

The book's aims are twofold. Firstly, by helping casual visitors identify flowers we hope their appreciation of the natural world will be enhanced. Secondly, by providing an opportunity for seasoned botanists to hone their skills, we hope it will inspire them to make more detailed observations, and submit records of their findings. The bulk of this book deals with the identification of coastal flower species. In addition, the region's main habitat types are discussed in the introduction, and to whet the appetite of enthusiasts the Isles of Scilly (pages 324–327) and northern specialities (pages 328–329) are showcased separately.

When choosing the species for the book we have included both coastal specialities and plants that are common elsewhere but which thrive within sight of the sea. We have used the 4th edition of Clive Stace's definitive *New Flora of the British Isles* (the botanical Bible) to guide us regarding overall classification, currently employed species names and plant status.

Great care has gone into the selection of photographs for this book and in many cases the images have been taken specifically for this project. Preference has been given to photographs that both illustrate key identification features of a given species, and emphasise its beauty. In many instances, additional accompanying photographs illustrate features useful for identification that are not shown clearly by the main image, and leaf cut-outs are included where these help the reader.

The maps provide a general indication of species distributions, with relative geographical abundance or scarcity indicated by intensity of colour. Given the small size at which the maps are printed, the distribution of species with entirely coastal ranges have been exaggerated for ease of reference. The generalised nature of the maps means they are best interpreted with reference to information about location and habitat preferences in the text. When used in this way they can help inform decisions about identification of field discoveries by reference to a given species' range. If the reader wants to plan a trip in order to see specific plants, then the best approach is to study the extremely detailed and interactive maps that can be accessed via the BSBI (Botanical Society of Britain and Ireland) website. Species' status information accompanies each map. B&I is an abbreviation for Britain and Ireland; the NW European range extends from the west coast of France to southern Scandinavia, including the Baltic.



Hoary Stock *Matthiola incana* growing on a crumbling chalk cliff-edge on the Isle of Wight, within inches of a sheer drop to oblivion. Extreme caution is needed when admiring this plant.

Safety first

The coast is a wonderful place for study, exploration and relaxation but it is not without its challenges. There are inherent dangers associated with some areas of shoreline and the sheer power of the sea and tides should always be respected, and never underestimated. The need for a liberal dose of caution cannot be stressed too highly. Maritime terrain and the sea can be unforgiving and a tiny mistake, which inland would be without consequence, can have dire repercussions in the coastal environment. And remember that it is not just you that will be affected if you get into difficulties: somebody will have to come to your rescue, putting themselves, and potentially the lives of others, at risk.

When it comes to cliffs and precipitous coastal slopes, most people have the good sense to keep well away from edges and drops. But remember that invariably the grass or clifftop vegetation will be more slippery, and the soil often more friable, than you expect: a small slip could potentially result in a slide to oblivion. That may sound melodramatic but caution is the watchword when walking on cliffs and steep coastal slopes.

Another threat to safety comes from the sea itself, in the form of rising and falling tides. These days there is no excuse for not knowing the state of the tide at any given location, and at any given time of day: tide timetables can be bought in book form, information is available online, and with apps and websites it is instantly accessible on mobile phones. Remember that in some parts of Britain, on gently-shelving sandy shores for example, it is impossible to out-run the incoming tide.

Cliff bases are often excellent for interesting plants but again caution and common sense are required when it comes to exploration. Cliff faces are constantly eroding and, depending on the substrate, this might involve dramatic rock-falls without warning. An awareness of a habitat's substrate is also vital when exploring saltmarshes. In some locations the ground may appear stable but, without warning, you can find yourself sinking up to your knees in squelchy mud, from which it can be a real challenge to extract yourself.

Respecting natural habitats and a coastal code of conduct

Many coastal habitats are fragile and easily damaged by trampling underfoot, and by more invasive and intrusive forms of leisure activity. Before you start exploring, consider your own physical impact on the environment, and respect any site advice and warnings aimed at minimising the effects of your visit. Sand dunes are a particular case in point, along with seabird colonies. This really is a warning that needs to be heeded, and please trek but don't trample.

Of course, it is important that people continue to visit the coast, and explore, observe and marvel at its wildlife spectacles. Because only with the enthusiasm of people who appreciate coastal flowers, and wildlife generally, is there a chance that wholesale exploitation and disturbance of these precious habitats can be averted. Although individuals can always make a difference, generally a more powerful way of putting forward the conservation message comes from belonging to a wildlife organisation, one that campaigns for wildlife on behalf of its members.

As student naturalists visiting the coast, heed any advice given by custodians of nature reserves in particular, especially when it comes to searching for rare plants. Wherever possible stick to existing paths and avoid the temptation to stray into virgin vegetation. A case in point might be those who search for Dune and Lindisfarne Helleborines, dune specialist orchids found on the northwest and northeast coasts of Britain respectively. With a little homework on the internet and by contacting local botanists it is usually possible to discover precise locations for individual plants whose admiration by enthusiasts will not cause problems of disturbance. Using helleborines as examples, if you can, please avoid the temptation to wander off the beaten track in search of 'your own' specimen – who knows how many non-flowering helleborine spikes, not to mention other species, will be inadvertently trampled as a consequence.



Habitats that are vulnerable to disturbance and damage from visitors are often signposted, with guidelines and routes to follow. Please take care to adhere to any on-site instructions.

INDEX

Italicised page numbers refer to stand-alone photographs.

- Acaena novae-zelandiae* 140
Achillea maritima 250
 millefolium 247
Acrocephalus scirpaceus 307
Adder's-tongue 337
 Dwarf 337
Adiantum capillus-veneris 338
Admiral, Red 62
Aeonium arboreum 326
Agaricus devoniensis 17
AGAVACEAE 53
Agrostis 305
Agrostis capillaris 305
 stolonifera 305
Aira praecox 318
AIZOACEAE 63
Ake-ake 327
Alexanders 184
Allium ampeloprasum 263
 roseum 261
 schoenoprasum 261
 scorodoprasum 262
 triquetrum 262
 vineale 261
Allseed 86
 Four-leaved 86
Alopecurus bulbosus 319
 geniculatus 319
Althaea officinalis 109
AMARYLLIDACEAE 261–263
Ammophila arenaria 16, 316
Anacampsis laxiflora 287
 morio 288
 pyramidalis 286
Anagallis arvensis 134
Anaptychia runcinata 342
Anogramma leptophylla 338
Anthoxanthum odoratum 317
Anthyllis vulneraria 150
Ant, Red-barbed 32
Aphanes arvensis 143
 australis 143
APIACEAE 180–192
Apium graveolens 190
ARALIACEAE 179
Arctium lappa 228
 minus 228
Armeria arenaria 101
 maritima 100
Arrowgrass, Sea 223
Artemisia absinthium 252
 campostris 251
 crithmifolia 251
 maritima 251
 vulgaris 252
Ascochyllum nodosum 331
ASPARAGACEAE 258–260
Asparagus officinalis 260
 prostratus 260
Asparagus, Garden 260
 Wild 260
Asplenium marinum 336
 ovovatum 337
ASTERACEAE 224–257
Aster, Goldilocks 246
 Sea 244
Aster linioides 246
 tripolium 244
Astragalus danicus 144
Atriplex glabriuscula 64
 laciniata 66
 littoralis 65
 longipes 65
 patula 66
 pedunculata 39, 67
 portulacoides 24, 67
 praecox 66
 prostrata 64
 x gustafssoniana 65
Avens, Mountain 329
Barley, Sea 304
 Wall 304
Bartsia, Red 211
 Yellow 210
Beard-grass, Annual 321
Bedstraw, Heath 217
 Lady's 217
Beetle, Lundy Cabbage Flea 121
Beet, Sea 70
Bellis perennis 247
Bembecia ichneumoniformis 155
Bent, Common 305
 Creeping 305
Bent-grasses 305
Bermuda-grass 303
Beta vulgaris 70
Betonica officinalis 203
Betony 203
Bindweed, Sea 199
Bird's-foot 157
Orange 157
Bird's-foot-trefoil, Common
 30, 154
Greater 153
Hairy 153
Narrow-leaved 155
Bittersweet 198
Black-banded 29
Blackstonia perfoliata 198
Blackthorn 44
Bluebell 258
Blue, Common 155
Blysmus rufus 302
Bog-rush, Black 301
Bolboschoenus maritimus 300
Bombus distinguendus 31
BORAGINACEAE 200–202
Brachythecium albicans 335
Bracken 336
Bramble 138
Branta bernicla 25, 293
Brassica nigra 124
 oleracea 122
BRASSICACEAE 113–128
Briza maxima 323
 media 323
Bromus hordaceus 305
Brookweed 132
Broom 26, 170
Broomrape, Bedstraw 214
 Common 212
 Ivy 214
 Oxtongue 214
 Sea Carrot 212
 Sea-holly 212
 Thyme 213
 Yarrow 215
Buckler-fern, Hay-scented 336
Buddleja davidii 46
BUDLLEJACEAE 46
Bumblebee, Great Yellow 31
Bupleurum baldense 185
 tenuissimum 185
Burdock, Greater 228
 Lesser 228
Buttercup, Bermuda 327
 Bulbous 55
 Celery-leaved 57
 Creeping 54
 Hairy 54
 Jersey 56

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Meadow 35	<i>stablosa</i> 229	Clover, Alsike 158
Rough-fruited 56	<i>Centaurium erythraea</i> 193	Bird's-foot 164
Small-flowered 56	<i>littorale</i> 194	Clustered 161
Butterfly-bush 46	<i>portense</i> 195	Crimson 165
Butterfly-orchid, Lesser 284	<i>pulchellum</i> 194	Hare's-foot 160
Buttonweed 241	<i>tenuiflorum</i> 193	Knotted 162
Cabbage, Isle of Man 122	Centaury, Common 193	Long-headed 2, 3, 165
Lundy 121	Dumpy 193	Red 159
Wallflower 122	Guernsey 195	Rough 160
Wild 122	Lesser 194	Sea 166
Cabbage-palm 53	Perennial 195	Starry 165
<i>Cakile maritima</i> 128	Seaside 194	Strawberry 164
<i>Callophrys rubi</i> 168	Slender 193	Subterranean 163
<i>Calluna vulgaris</i> 130	<i>Centranthus ruber</i> 216	Suffocated 163
<i>Caloplaca marina</i> 340	<i>Cerastium arvense</i> 80	Twin-headed 161
<i>Calystegia soldanella</i> 199	<i>diffusum</i> 79	Upright 162
CAMPANULACEAE 215–216	<i>fontanum</i> 1, 80	Western 159
<i>Campanula rotundifolia</i> 30, 215	<i>glomeratum</i> 80	White 158
Campion, Moss 328	<i>semidecandrum</i> 79	Zigzag 159
Red 87	<i>tomentosum</i> 80	Club-rush, Grey 301
Sea 88	<i>Ceutorhynchus contractus pallipes</i> 121	Round-headed 301
Shetland Red 87	<i>Chaenopetalum integrifolius</i> 46	Sea 300
White 88	<i>microphyllus</i> 46	<i>Cochlearia anglica</i> 117
CAPRIFOLIACEAE 47	Chaffweed 133	<i>danica</i> 117
<i>Capsella bursa-pastoris</i> 115	<i>Chamaemelum nobile</i> 250	<i>officinalis</i> 116
<i>Carduus crispus</i> 226	<i>Chamaenerion angustifolium</i> 172	Cock's-foot 317
<i>pycnoccephalus</i> 225	Chamomile 250	<i>Codium tomentosum</i> 333
<i>tenuiflorus</i> 225	CHENOPODIACEAE 64–77	<i>Coeloglossum viride</i> 276
<i>Carex arenaria</i> 299	<i>Chenopodium chenopodioides</i> 68	<i>Coincyia monensis</i> 122
<i>distans</i> 300	<i>glaucum</i> 69	<i>wrightii</i> 121
<i>divisa</i> 298	<i>rubrum</i> 69	<i>Colias croceus</i> 245
<i>extensa</i> 299	<i>vulvaria</i> 68	<i>Conisania andalusica</i> 29
<i>maritima</i> 298	Chickweed, Common 79	<i>Conium maculatum</i> 183
<i>punctata</i> 300	Upright 82	CONVOLVULACEAE 199
<i>Carlina vulgaris</i> 224	<i>Chilodes maritima</i> 307	<i>Corallina officinalis</i> 334
<i>Carpobrotus edulis</i> 63	Chives 261	<i>Corallorrhiza trifida</i> 273
Carrot, Moon 189	Chough 29	Cord-grass, Common 313
Sea 188	<i>Chrysanthemum segetum</i> 246	Small 313
Wild 188	<i>Cicindela hybrida</i> 19	Smooth 313
CARYOPHYLLACEAE 78–91	Cinquefoil, Creeping 142	Townsend's 313
<i>Catapodium marinum</i> 319	<i>Cirsium acaule</i> 224	Cord-grasses 312
<i>rigidum</i> 319	<i>arvense</i> 227	<i>Cordyline australis</i> 53
Catchfly, Nottingham 91	<i>palustre</i> 227	Corncrake 31
Sand 90	<i>vulgare</i> 226	Cornel, Dwarf 329
Small-flowered 90	CISTACEAE 110–111	<i>Cornus suecica</i> 329
White Sticky 88	<i>Cladonia</i> 339	Coronet, Barrett's Marbled 29
Car's-ear 230	Clary, Wild 206	Coronet, Marbled 89
Smooth 230	<i>Claytonia perfoliata</i> 78	<i>Corriola litoralis</i> 87
Spotted 231	Clearwing, Six-belted 155	<i>Corynephorus canescens</i> 318
Cat's-tail, Sand 322	Thrift 29	<i>Cosmopterix pulchrimella</i> 63
Celery, Wild 190	<i>Clematis vitalba</i> 49	<i>Cotoneaster cambricus</i> 46
<i>Centaurea aspera</i> 230	Cloudberry 328	Cotoneaster, Entire-leaved 46
<i>calcitrapa</i> 230		Small-leaved 46
<i>nigra</i> 229		Wall 46
		Wild 46
		Cotoneasters 46

<i>Cotoneaster horizontalis</i> 46	<i>Disphyma crassifolium</i> 326	<i>Ervilia sylvatica</i> 145
Cottonweed 250	Dittander 120	<i>Eryngium campestre</i> 180
<i>Cotula coronopifolia</i> 241	Dock, Broad-leaved 97	<i>maritimum</i> 6, 180
Couch, Sand 323	Clustered 97	Eryngo, Field 180
Sea 322	Curled 95	<i>Erysimum cheiri</i> 113
<i>Crambe maritima</i> 4, 23, 126	Fiddle 96	EUPHORBIACEAE 173–174
Crane's-bill, Bloody 176	Golden 99	<i>Euphorbia paralias</i> 174
CRASSULACEAE 135–138	Northern 95	<i>peplis</i> 173
<i>Crassula tillaea</i> 138	Shore 98	<i>portlandica</i> 173
<i>Crataegus monogyna</i> 45	Dodder, Common 199	<i>Euphrasia arctica</i> 209
<i>Crepis foetida</i> 39, 236	Dog-rose 141	<i>officinalis</i> 209
<i>Crepis vesicaria</i> 236	Dog-violet, Heath 112	<i>Eupithecia pulchellata</i> 208
Cress, Hoary 119	<i>Draba aizoides</i> 115	<i>venosata</i> 89
Shepherd's 118	<i>Drosanthemum floribundum</i> 326	Evening-primrose, Common
<i>Crex crex</i> 31	<i>Dryas octopetala</i> 329	172
Cricket, Scaly 21	<i>Dryopteris aemula</i> 336	Fragrant 172
<i>Crithmum maritimum</i> 34, 182	Dulse 333	Everlasting-pea, Broad-leaved
<i>Crocosmia x crocosmiiflora</i> 264	Pepper 333	148
Crocus, Sand 265	Earthstar, Dwarf 17	<i>Exaculum pusillum</i> 195
<i>Cucullia asteris</i> 244	Tiny 17	Eyebright 209
Cudweed, Jersey 241	<i>Echium piniana</i> 327	Arctic 209
CUSCUTACEAE 199	<i>plantagineum</i> 201	FABACEAE 144–171
<i>Cuscuta epithymum</i> 199	<i>vulgare</i> 201	FAGACEAE 50–51
<i>Cymbalaria muralis</i> 210	Eelgrass 292	Feather-moss, Whitish 335
<i>Cynodon dactylon</i> 303	Dwarf 293	Fennel 183
<i>Cynoglossum officinale</i> 202	Eggar, Oak 169	Hog's 192
CYPERACEAE 298–302	ELAEAGNACEAE 40	Fern, Jersey 338
<i>Cytisus scoparius</i> 26, 170	Elder 47	Maidenhair 338
<i>Dactylis glomerata</i> 317	<i>Eleocharis</i> 302	Royal 338
<i>Dactylorhiza</i> 277	<i>Eleocharis palustris</i> 302	Fern-grass 319
<i>Dactylorhiza fuchsii</i> 30, 278	<i>uniglumis</i> 302	Sea 319
<i>incarnata</i> 280	<i>Elymus viridis</i> 293	Fescue, Bearded 311
<i>kerryensis</i> 282	<i>Elytrigia atherica</i> 322	Dune 311
<i>maculata</i> 279	<i>junccea</i> 323	Red 310
<i>praetermissa</i> 281	Emerald, Sussex 22	Rush-leaved 310
<i>purpurella</i> 282	<i>Epidalia calamita</i> 18	Sheep's 310
<i>traunsteinerioides</i> 283	<i>Epipactis atrorubens</i> 270	Squirrel-tail 311
<i>viridis</i> 276	<i>dunensis</i> 269	<i>Festuca arenaria</i> 310
Daffodil, Sea 263	<i>helleborine</i> 270	<i>ovina</i> 310
Daisy 247	<i>palustris</i> 268	<i>rubra</i> 310
Cape 327	<i>phyllanthes</i> 271	Figwort, Balm-leaved 222
Oxeye 249	<i>sancta</i> 269	Common 222
Seaside 245	<i>Equisetum arvense</i> 335	Water 223
Dandelions 238	<i>variegatum</i> 336	<i>Filipendula ulmaria</i> 141
<i>Daucus carota</i> 188	ERICACEAE 130–131	Flat-sedge, Saltmarsh 302
Dead-nettle, Red 204	<i>Erica ciliaris</i> 131	Flax, Fairy 175
<i>Delairea odorata</i> 327	<i>cinerea</i> 131	Pale 175
Dewberry 139	<i>vagans</i> 131	Fleabane, Blue 243
Dewplant, Pale 326	<i>Erigeron acer</i> 243	Common 243
Purple 326	<i>glaucus</i> 245	Fleawort, Field 329
<i>Dianthus gallicus</i> 91	<i>Erodium aethiopicum</i> 179	South Stack 257
<i>superbus</i> 91	<i>cicutarium</i> 178	<i>Foeniculum vulgare</i> 183
<i>Digitalis purpurea</i> 208	<i>lebelii</i> 179	Fog, Yorkshire 308
<i>Dilsea carnosa</i> 333	<i>maritimum</i> 178	<i>Fomitiporia hippophaeicola</i> 40
<i>Diplotaxis tenuifolia</i> 123	<i>moschatum</i> 177	Forget-me-not, Early 202
DIPSACACEAE 216	<i>Erophila verna</i> 115	<i>Formica rufibarbis</i> 32

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Foxglove 208
Foxtail, Bulbous 319
 Marsh 319
Fragrant-orchid, Marsh 284
FRANKENIACEAE 113
Fritillary, Glanville 28
Fucus serratus 331
 spiralis 330
 vesiculosus 331
Fumaria bastardii 61
 muralis 60
 occidentalis 61
 officinalis 60
FUMARIACEAE 60–61
Fumitories 60
Fumitory, Common 60
Galatella linosyris 246
Galeopsis angustifolia 203
Galium saxatile 217
 verum 217
Garlic, Rosy 261
Geastrum minimum 17
 schmidelii 17
Genista pilosa 171
 tinctoria 171
GENTIANACEAE 193–198
Gentian, Autumn 196
 Dune 197
 Early 197
 Field 196
Gentianella amarella 196, 197
 anglica 197
 campestris 196
 uliginosa 197
GERANIACEAE 176–179
Geranium maderense 325
 purpureum 177
 robertianum 176
 sanguineum 176
Germander, Water 206
German-ivy 327
Gladiolus communis 327
Gladiolus, Eastern 327
Glasswort, Common 72, 74
 Glaucous 74
 Long-spiked 75
 One-flowered 72, 73
 Perennial 72, 73
 Purple 72, 74
 Shiny 75
 Yellow 75
Glassworts 71
Glaucium flavum 58
Glax maritima 133
Glebionis segetum 246
Gnaphalium luteoalbum 241
Goat's-beard 233
Goldenrod 242
Goose, Brent 25, 293
Goosefoot, Oak-leaved 69
 Red 69
 Saltmarsh 68
 Stinking 68
Gorse 168
 Dwarf 167
 Western 169
Gortyna borelii 192
Grass, Hare's-tail 321
Grass, Lyme (moth) 303
Grass-of-Parnassus 135
Greenweed, Dyer's 171
 Hairy 171
Ground-hopper, Cepero's 28
Groundsel 254
 Heath 255
 Sticky 254
Gutweed 332
Gymnadenia densiflora 284
Hadena albimacula 91
 confusa 89
Haematopus ostralegus 22
Hair-grass, Early 318
 Grey 318
Hair-streak, Green 168
Hard-grass 320
 Curved 320
Hare's-ear, Slender 185
 Small 185
Harebell 30, 215
Hawk-moth, Privet 41
Hawk's-beard, Beaked 236
 Stinking 39, 236
Hawkbit, Autumn 231
 Lesser 232
Hawthorn 45
Heath, Cornish 131
 Dorset 131
Heather 130
 Bell 131
Hedera helix 179
 hibernica 179
Hedge-parsley, Knotted 191
Helianthemum apenninum 111
 nummularium 110
 olandicum 110
Heliotrope, Winter 239
Helleborine, Broad-leaved 270
 Dark Red 270
 Dune 269
 Dutch 270
 Green-flowered 271
 Lindisfarne 269
Marsh 268
Tyne 269
Young's 270
Helminthotheca echioides 35, 232
Hemlock 183
Hemp-nettle, Red 203
Heracleum sphondylium 190
Herb-Robert 176
 Giant 325
Hernaria ciliolata 86
Himanthalia elongata 331
Himantoglossum hircinum 290
Hippophae rhamnoides 40
Hogweed 190
Holcus lanatus 308
 mollis 308
Honckenya peploides 18, 78
Honewort 191
Hordeum marinum 304
 murinum 304
Horehound, White 205
Horn, Velvet 333
Horned-poppy, Yellow 58
Hornungia petraea 118
Horsetail, Field 335
 Variegated 336
Hottentot-fig 63
Hound's-tongue 202
Houseleek, Tree 326
Hutchinsia 118
Hyacinthoides x massartiana 258
Hyacinth, Tassel 259
Hycanthoides non-scripta 258
Hydrocotyle vulgaris 186
Hygrocybe conicoidea 17
HYPERICACEAE 109
Hypericum maculatum 109
 perforatum 109
 tetrapherum 109
Hypochaeris glabra 230
 maculata 231
 radicata 230
Idaea ochrata 22
Inula conyzae 240
 critmoides 240
IRIDACEAE 264–265
Iris foetidissima 264
 pseudacorus 264
Iris, Stinking 264
 Yellow 264
Isoetes histrix 338
Ivory, Sea 339
Ivy, Atlantic 179
 Common 179
Jacobaea erucifolia 256
 maritima 256

- vulgaris* 255 *heterophyllum* 119 *chinense* 49
Jasione montana 216 *latifolium* 120 Lyme-grass 303
JUNCACEAE 294–298 *ruderale* 119 *Lysimachia arvensis* 134
JUNCAGINACEAE 223 *didymum* 120 *maritima* 133
Juncus acutus 294 Lettuce, Great 253 *minima* 133
 ambiguus 298 Least 253 *tenella* 133
 articulatus 295 Prickly 253 *vulgaris* 134
 balticus 297 Sea 332 Madder, Wild 217
 bufonius 298 *Leucania putrescens* 29 Mallow, Common 107
 bulbosus 295 *Leucanthemum vulgare* 249 Dwarf 107
 capitatus 297 *Leymus arenarius* 303 *Malva arborea* 108
 conglomeratus 295 Lichen, Black 340 *multiflora* 108
 effusus 296 Crab's-eye 342 *neglecta* 107
 gerardii 297 Dogtooth 340 *sylvestris* 107
 inflexus 296 Golden Hair 341 MALVACEAE 107–109
 maritimus 294 Map 341 Marigold, Corn 246
 ranarius 298 Orange Sea 340 Marram 16, 316
 subnodulosus 295 Tar 340 *Marrubium vulgare* 205
Kelp 332 *Lichina pygmaea* 340 Marsh-mallow 109
 Sugar 332 *Ligusticum scoticum* 186 Marsh-orchid, Early 280
Kittiwake 27 *Ligustrum vulgare* 41 Irish 282
Knapweed, Common 229 *Limbara crithmoides* 240 Narrow-leaved 283
 Greater 229 *Limonium auriculae-ursifolium* Northern 282
Knotgrass 93 105 Pugsley's 283
 Equal-leaved 93 *bellidifolium* 106 Southern 281
 Northern 93 *binervosum* 104 Marsh-orchids 277
 Ray's 92 *britannicum* 105 *Matricaria discoidea* 250
 Sea 92 *dodartiforme* 105 *Matthiola incana* 8, 114
Lactuca saligna 253 *humile* 103 *sinuata* 114
 serriola 253 *hyblaeum* 106 Mayweed, Scentless 249
 virosa 253 *loganicum* 105 Sea 248
Lady's-tresses, Autumn 274 *normannicum* 105 Meadow-grass, Annual 309
 Irish 275 *paradoxum* 105 Bulbous 308
Lagurus ovatus 321 *parvum* 105 Early 309
LAMIACEAE 203–207 *procерum* 105 Meadow-sweet 141
Laminaria digitata 332 *recurvum* 105 *Medicago arabica* 156
Lamium purpureum 204 *transwallianum* 105 *lupulina* 156
Laphangium luteoalbum 241 *vulgare* 24, 25, 34, 102 *polymorpha* 156
Lasiocampa quercus 169 LINACEAE 86, 175 Medick, Black 156
Lathyrus aphaca 149 *Linaria vulgaris* 207 Spotted 156
 japonicus 21, 148 Ling 130 Toothed 156
 latifolius 148 *Linum bienne* 175 Melilot, Ribbed 151
 pratensis 149 *cartharticum* 175 *Melilotus officinalis* 151
Lavatera arborea 108 *Liparis loeselii* 272 Melitaea cinxia 28
 cretica 108 *Lithophyllum incrustans* 334 *Mertensia maritima* 200
Laver 334 Little-Robin 177 *Mibora minima* 323
Leek, Babington's 263 *Longaledes elymi* 303 Mignonette, Wild 129
 Sand 262 Loosestrife, Yellow 134 Milk-vetch, Purple 144
 Three-cornered 262 *Lotus corniculatus* 30, 154 *Moenchia erecta* 82
 Wild 263 *glaber* 155 Montbretia 264
Lenisa geminipuncta 307 *pedunculatus* 153 *Montia perfoliata* 78
Leontodon autumnalis 231 *subbiflorus* 153 Mosses, Haircap 335
 saxatilis 232 Lovage, Scots 186 Moth, Cinnabar 255
Leopard, Reed 307 Lupin, Tree 167 Emperor 33
Lepidium coronopus 120 *Lupinus arboreus* 167 Fisher's Estuarine 192
 draba 119 *Lycium barbarum* 49 Horehound Plume 205

Mouse-ear, Common	7, 80	ORCHIDACEAE	265–290	Procumbent	81
Field	80	Orchid, Bee	265	Sea	81
Little	79	Coralroot	273	Pea, Sea	27, 148
Sea	79	Dense-flowered	289	Pellitory-of-the-wall	63
Sticky	80	Early-purple	285	<i>Peltigera canina</i>	340
Mouse-ear-hawkweed	237	Fen	272	<i>Pelvetia canaliculata</i>	330
Shaggy	237	Frog	276	Pennywort, Marsh	186
<i>Muehlenbeckia complexa</i>	326	Green-winged	288	Pepperwort, Narrow-leaved	
Mugwort	252	Lizard	290	119	
Mullein, Great	220	Loose-flowered	287	Smith's	119
Hoary	221	Pyramidal	286	<i>Petasites pyrenaicus</i>	239
Twiggy	221	White Mountain	329	<i>Petrorhagia nanteuilii</i>	91
White	220	<i>Orchis mascula</i>	285	<i>Petroselinum crispum</i>	191
<i>Muscaris comosum</i>	259	<i>Ornithopus perpusillus</i>	157	<i>Peucedanum officinale</i>	192
Mushroom, Sandy	17	<i>pinnatus</i>	157	<i>Phallus hadriani</i>	17
Mustard, Black	124	OROBANCHACEAE	212–215	<i>Phelipanche purpurea</i>	215
<i>Myosotis ramosissima</i>	202	<i>Orobanche alba</i>	213	<i>Philanthus triangulum</i>	19, 181
<i>Mythimna litoralis</i>	316	<i>artemisiae-campestris</i>	214	<i>Phleum arenarium</i>	322
Natterjack	18	<i>caryophyllacea</i>	214	<i>Phragmataecia castaneae</i>	307
Navelwort	135	<i>hederae</i>	214	<i>Phragmites australis</i>	306
<i>Neotinea maculata</i>	289	<i>minor</i>	212	<i>Pyrrhocorax pyrrhocorax</i>	29
<i>Neottia ovata</i>	271	<i>picridis</i>	214	<i>Picris echioides</i>	232
Nettle, Common	62	<i>purpurea</i>	215	<i>hieracioides</i>	233
Small	62	<i>Osmunda regalis</i>	338	<i>Pieris brassicae</i>	123
Nightshade, Woody	198	<i>Osmundea pinnatifida</i>	333	<i>Pilosella officinarum</i>	237
Oak, Holm	50	<i>Osteospermum jucundum</i>	327	<i>peleteriana</i>	237
Pedunculate	51	<i>Otanthus maritimus</i>	250	Pimpernel, Bog	133
Sessile	51	<i>Oxalis pes-caprae</i>	327	Scarlet	134
Oat-grass, Yellow	309	Oxtongue, Bristly	35, 232	PINACEAE	52
<i>Ochrolechia parella</i>	342	Hawkweed	233	Pine, Monterey	52
<i>Odontites vernus</i>	211	<i>Oxybasis glauca</i>	69	Pineappleweed	250
<i>Oenanthe lachenalii</i>	187	<i>Oxytropis halleri</i>	144	Pink, Childing	91
<i>pimpinelloides</i>	187	<i>Oxytropis</i> , Purple	144	Fringed	91
<i>Oenothera biennis</i>	172	Oystercatcher	22	Jersey	91
<i>stricta</i>	172	Oysterplant	200	<i>Pinus radiata</i>	52
Old Man's Beard	49	<i>Palmaria palmata</i>	333	Pirri-pirri-bur	140
OLEACEAE	41	<i>Pancratium maritimum</i>	263	PLANTAGINACEAE	
<i>Olearia traversii</i>	327	Pansy, Dune	30, 112	218–220	
ONAGRACEAE	172	Dwarf	112	<i>Plantago coronopus</i>	218
Onion, Wild	261	Wild	112	<i>lanceolata</i>	220
<i>Ononis reclinata</i>	152	<i>Panurus biarmicus</i>	307	<i>major</i>	218
<i>repens</i>	152	PAPAVERACEAE	58–59	<i>maritima</i>	219
<i>spinosa</i>	151	<i>Parapholis incurva</i>	320	Plantain, Buck's-horn	218
<i>Ophioglossum azoricum</i>	337	<i>strigosa</i>	320	Greater	218
<i>vulgatum</i>	337	<i>Parentucellia viscosa</i>	210	Ribwort	220
<i>Ophrys apifera</i>	265	<i>Parietaria judaica</i>	63	Sea	219
<i>fuciflora</i>	267	<i>Parnassia palustris</i>	135	<i>Platanthera bifolia</i>	284
<i>sphegodes</i>	266	Parsley	191	Ploughman's-spikenard	240
Orache, Babington's	64	Parsley-piert	143	PLUMBAGINACEAE	
Common	66	Slender	143	102–106	
Early	66	Parsnip, Wild	189	<i>Poa annua</i>	309
Frosted	66	<i>Pastinaca sativa</i>	189	<i>bulbosa</i>	308
Grass-leaved	65	Pearlwort, Annual	81	<i>infirma</i>	309
Kattegat	65	Heath	82	POACEAE	303–323
Long-stalked	65	Knotted	82	<i>Polykarpon tetraphyllum</i>	86
Spear-leaved	64			POLYGONACEAE	92–99

<i>Polygonum boreale</i>	93	Western	Rupturewort, Fringed 86
<i>depressum</i>	93		Rush, Baltic 297
<i>maritimum</i>	92		Blunt-flowered 295
<i>oxypermum</i>	92		Bulbous 295
<i>Polymixis xanthomista</i>	29		Compact 295
<i>Polyommatus icarus</i>	155		Dwarf 297
<i>Polypodium vulgare</i>	337		Frog 298
Polypody	337		Hard 296
<i>Polyponon monspeliensis</i>	321		Jointed 295
<i>Polysiphonia lanosa</i>	334		Saltmarsh 297
<i>Polytrichum</i>	335		Sea 294
Pondweed, Fennel	291		Sharp 294
Horned	291		Soft 296
<i>Porphyra</i>	334		Toad 298
PORTULACACEAE	78		<i>Saccharina latissima</i> 332
<i>Potamogeton pectinatus</i>	291		Sage, Wood 205
<i>Potentilla anserina</i>	142		<i>Sagina apetala</i> 81
<i>erecta</i>	143		<i>maritima</i> 81
<i>reptans</i>	142		<i>nodosa</i> 82
Primrose	132		<i>procumbens</i> 81
Scottish	132		<i>subulata</i> 82
PRIMULACEAE	132–134		SALICACEAE 42–43
<i>Primula scotica</i>	132		<i>Salicornia disarticulata</i> 73
<i>vulgaris</i>	132		<i>dolichostachya</i> 75
Privet, Wild	41		<i>emerici</i> 75
<i>Prunus spinosa</i>	44		<i>europaea</i> 74
<i>Pseudomogopistes squamiger</i>	21		<i>fragilis</i> 75
<i>Pseudorchis straminea</i>	329		<i>nitens</i> 75
<i>Psylliodes luridipennis</i>	121		<i>obscura</i> 74
<i>Pteridium aquilinum</i>	336		<i>pusilla</i> 73
<i>Puccinellia distans</i>	314		<i>ramosissima</i> 74
<i>fasciculata</i>	315		<i>Salix cinerea</i> 42
<i>maritima</i>	314		<i>repens</i> 43
<i>rupestris</i>	315		Salsify 233
Pug, Foxglove	208		<i>Salsola kali</i> 77
Netted	89		Saltmarsh-grass, Borrer's 315
<i>Pulicaria dysenterica</i>	243		Common 314
PYROLACEAE	129		Reflexed 314
<i>Pyrola rotundifolia</i>	129		Stiff 315
<i>Pyropteron muscaformis</i>	29		Saltwort, Prickly 77
Quaking-grass	323		<i>Salvia verbenaca</i> 206
Greater	323		<i>Sambucus nigra</i> 47
<i>Quercus ilex</i>	50		<i>Samolus valerandi</i> 132
<i>petraea</i>	51		Samphire, Golden 240
<i>robur</i>	51		Rock 34, 182
Quillwort, Land	338		Sand-grass, Early 323
<i>Radiola linoides</i>	86		Sandwort, Sea 18, 78
Radish, Sea	125		<i>Sarcocornia perennis</i> 73
Rags, Red	333		<i>Saturnia pavonia</i> 33
Ragwort, Common	255		Saw-wort 228
Hoary	256		<i>Saxifraga oppositifolia</i> 328
Silver	256		<i>tridactylites</i> 134
<i>Ramalina siliquosa</i>	339		SAXIFRAGACEAE 134–135
Ramping-fumitory, Common			Saxifrage, Purple 328
60			Rue-leaved 134
Tall	61		Scabious, Devil's-bit 216
RUPPIACEAE	291		
<i>Ruppia cirrhosa</i>	291		
<i>maritima</i>	291		
<i>spiralis</i>	291		

Scales, Yellow	341	<i>Senecio cineraria</i>	256	<i>spiralis</i>	274
<i>Schoenoplectus tabernaemontani</i>	301	<i>erucifolius</i>	256	Spleenwort, Lanceolate	337
<i>Schoenus nigricans</i>	301	<i>jacobaea</i>	255	Sea	336
<i>Scilla autumnalis</i>	259	<i>sylvaticus</i>	255	Spotted-orchid, Common	278
<i>verna</i>	259	<i>viscosus</i>	254	Heath	279
<i>Scirpoidea holoschoenus</i>	301	<i>vulgaris</i>	254	Hebridean	30, 278
<i>Scorzonerooides autumnalis</i>	231	<i>Serapia parviflora</i>	289	Spotted-orchids	277
Screw-moss, Sandhill	335	<i>Serratula tinctoria</i>	228	Spot, White	91
<i>Scrophularia auriculata</i>	223	<i>Seseli libanotis</i>	189	Springbeauty	78
<i>nodosa</i>	222	Sheep's-bit	216	Spurge, Portland	173
<i>scorodonia</i>	222	Shepherd's-purse	115	Purple	173
SCROPHULARIACEAE	207–223	Shields, Black	342	Sea	174
Scurvygrass, Common	116	<i>Silene acaulis</i>	328	Spurrey, Sand	84
Danish	117	<i>conica</i>	90	Squill, Autumn	259
English	117	<i>dioica</i>	87	Spring	259
<i>Scutellaria galericulata</i>	207	<i>gallica</i>	90	St John's-wort, Imperforate	
Sea-blite, Annual	76	<i>latifolia</i>	88	109	
Shrubby	76	<i>nutans</i>	91	Perforate	109
Sea-buckthorn	40	<i>uniflora</i>	88	Square-stemmed	109
Sea-heath	113	<i>viscosa</i>	88	<i>Stachys officinalis</i>	203
Sea-holly	6, 180	Silverweed	142	Stalkball, Winter	17
Sea-kale	4, 23, 126	<i>Silybum marianum</i>	224	Star-thistle, Red	230
Sea-lavender, Alderney	105	Skullcap	207	Rough	230
Broad-leaved	105	<i>Smyrnium olusatrum</i>	184	Star-wort	244
Common	24, 25, 34, 102	Snail, Looping	21	<i>Stellaria holostea</i>	80
Giltar	105	Snow-in-summer	80	<i>media</i>	79
Irish	105	Soft-brome	305	Stinkhorn, Sand	17
Lax-flowered	103	Soft-grass, Creeping	308	Stitchwort, Greater	80
Logan's	105	SOLANACEAE	49–198	Stock, Hoary	8, 114
Matted	106	<i>Solanum dulcamara</i>	198	Sea	114
Purbeck	105	<i>Sonchus arvensis</i>	235	Stonecrop, Biting	136
Rock	104	<i>asper</i>	235	English	137
Rottingdean	106	<i>palustris</i>	234	Mossy	138
Small	105	Sorrel, Common	94	White	137
St David's Head	105	Sowthistle, Marsh	234	Stork's-bill, Common	178
Tall	105	Perennial	235	Musk	177
Western	105	Prickly	235	Sea	178
Sea-milkwort	133	<i>Spartina</i>	312	Sticky	179
Sea-purslane	24, 67	<i>Spartina alterniflora</i>	313	Strapwort	87
Pedunculate	39, 67	<i>anglica</i>	313	<i>Suaeda maritima</i>	76
Sea-spurrey, Greater	84	<i>maritima</i>	313	<i>vera</i>	76
Greek	83	<i>x townsendii</i>	313	<i>Succisa pratensis</i>	216
Lesser	83	Speedwell, Germander	208	Swine-cress	120
Rock	85	Wall	208	Lesser	120
Seaweeds	330–334	<i>Spergularia bocconei</i>	83	<i>Syntrichia ruraliformis</i>	335
Sedge, Curved	298	<i>marina</i>	83	TAMARICACEAE	48
Distant	300	<i>media</i>	84	Tamarisk	48
Divided	298	<i>rubra</i>	84	<i>Tamarix gallica</i>	48
Dotted	300	<i>rupicola</i>	85	<i>Taraxacum</i>	238
Long-bracted	299	<i>Sphinx ligustri</i>	41	Tasselweed, Beaked	291
Sand	299	Spider-orchid, Late	267	Spiral	291
<i>Sedum acre</i>	136	Early	266	Teplant, Chinese	49
<i>album</i>	137	Spike-rush, Common	302	Duke of Argyll's	49
<i>anglicum</i>	137	Slender	302	<i>Teesdalia nudicaulis</i>	118
		<i>Spiranthes romanzoffiana</i>	275	<i>Teloschistes flavicans</i>	341
				<i>Tephromela atra</i>	342

<i>Tephroseris integrifolia</i>	251, 329	<i>Triglochin maritima</i>	223	Purple 201
<i>Tetrix ceperoi</i>	28	<i>Trinia glauca</i>	191	<i>Vulpia bromoides</i> 311
<i>Teucrium scordium</i>	206	<i>Tripleurospermum inodorum</i>	249	<i>ciliata</i> 311
scorodonia	205			<i>fasciculata</i> 311
<i>Thalera fimbrialis</i>	22	<i>maritimum</i>	248	Wainscot, Devonshire 29
Thistle, Carline	224	<i>Tripolium pannonicum</i>	244	Shore 316
Creeping	227	<i>Trisetum flavescens</i>	309	Silky 307
Dwarf	224	<i>Truncatella subcylindrica</i>	21	Twin-spotted 307
Marsh	227	<i>Tuberaria guttata</i>	111	Wallflower 113
Milk	224	<i>Tulostoma brumale</i>	17	Wall-rocket, Perennial 123
Plymouth	225	Twayblade, Common	271	Warbler, Reed 307
Slender	225	<i>Tyria jacobaeae</i>	255	Water-crowfoot, Brackish 57
Spear	226	<i>Ulex europaeus</i>	168	Water-dropwort,
Welted	226			Corky-fruited 187
Thongweed	331			Parsley 187
Thrift	100	<i>Ulva</i>	332	Wave, Bright 22
		<i>Umbilicus rupestris</i>	135	Waxcap, Dune 17
Thyme, Wild	204	URTICACEAE	62–63	Weed, Common Pale Paint
<i>Thymus drucei</i>	204	<i>Urtica dioica</i>	62	334
Tiger-beetle, Northern Dune		<i>Urtica urens</i>	62	Coral 334
	19	VALERIANACEAE	216	Wrack Siphon 334
Tit, Bearded	307	<i>Valeriana officinalis</i>	216	Weevil, Lundy Cabbage 121
Toadflax, Common	207	Valerian, Common	216	<i>Wheeleria spilodactylus</i> 205
				White, Large 123
Ivy-leaved	210	<i>Vanessa atalanta</i>	62	Whitlowgrass, Common 115
Tongue-orchid, Small-flowered		<i>Verbascum lychnitis</i>	220	Yellow 115
	289			Willow, Creeping 43
<i>Torilis nodosa</i>	191			Grey 42
Tormentil	143	<i>Veronica arvensis</i>	208	Willowherb, Rosebay 172
<i>Tragopogon pratensis</i>	233			Wintergreen, Round-leaved
	<i>porrifolius</i>			129
Traveller's-joy	49	<i>Vernonia maura</i>	340	Wireplant 326
Tree-mallow	108	<i>Vertebrata lanosa</i>	334	Wolf, Bee 19, 181
		Vetch, Bithynian	147	Wormwood 252
Trefoil, Hop	166			
<i>Trentepohlia</i>	341	Common	146	Dune 251
<i>Trifolium arvense</i>	160	Kidney	150	Field 251
	<i>bocconei</i>	Spring	146	Sea 251
	<i>campestre</i>	Tufted	147	Wrack, Bladder 331
	<i>fragiferum</i>	Wood	145	Channelled 330
	<i>glomeratum</i>	Vetchling, Meadow	149	Egg 331
	<i>hybridum</i>			Serrated 331
	<i>incarnatum</i>	Yellow	149	Spiral 330
	2, 3, 165	<i>Vicia bithynica</i>	147	<i>Xanthoria parietina</i> 341
	<i>medium</i>			Yarrow 247
	159	<i>cracca</i>	147	Yellow, Clouded 245
	<i>occidentale</i>	<i>lathyroides</i>	146	Yellow-rattle 211
	159	<i>lutea</i>	145	Greater 211
	<i>ornithopodioides</i>	<i>sativa</i>	146	Yellow-vetch 145
	164	<i>sylvatica</i>	145	Yellow-wort 198
	<i>pratense</i>	<i>Viola canina</i>	112	<i>Zannichellia palustris</i> 291
	159			ZOSTERACEAE 292–293
	<i>repens</i>	<i>kitabeliana</i>	112	<i>Zostera marina</i> 292
	158			<i>noltei</i> 293
	<i>scabrum</i>	<i>tricolor</i>	30, 112	
	160	VIOLACEAE	112	
	<i>squamosum</i>	Viper's-bugloss	201	
	166			
	<i>striatum</i>	Giant	327	
	162			
	<i>strictum</i>			
	162			
	<i>subterraneum</i>			
	163			
	<i>suffocatum</i>			
	163			