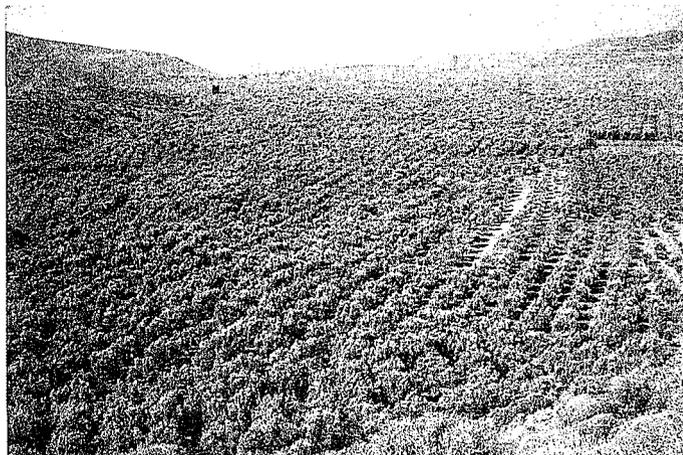

Agricultural land and artificial landscapes



Cultivated or built-up areas under the overwhelming influence of human activity; the natural vegetation cover has been totally replaced as a result of agricultural practices, urbanization or industrialization. A natural flora and fauna subsists mainly in areas of extensive and traditional cultivation and dwelling. Wild plants may grow among crops, in hedges, along roads, on walls and in fallow fields. Many animals have, during the course of the past few thousand years, adapted to these man-created habitats.

(Fuller, 1982; Philipps, 1986; Way and Greig-Smith, 1986; Ellenberg, 1988; de Rougemont, 1989; Morrison, 1989; Noirfalise, 1989; Oberdorfer, 1990)

81 Improved grasslands

81 Improved grasslands

Heavily fertilized or reseeded permanent grasslands, sometimes even treated by selective herbicides, with very impoverished flora and fauna.

81.1

DRY IMPROVED GRASSLANDS

Dry or mesophile intensive pastures.

81.2

HUMID IMPROVED GRASSLANDS

Humid intensive pastures, often scored with drainage ditches, and capable of harbouring breeding waders or wintering waterfowl, in particular, geese.

82 Crops

Fields of cereals, beets, sunflowers, leguminous fodder, potatoes and other annually harvested plants. Faunal and floral quality and diversity depend on the intensity of agricultural use and on the presence of borders of natural vegetation between fields. If a tree layer is present, it can be indicated by simultaneous use of a code of 83 or 84 with the present one.

- 82.1 UNBROKEN INTENSIVE CROPLAND**
Intensive cultivation, involving moderate to high chemical or organic fertilization and/or systematic use of pesticides, with complete ground occupation on dry land.
- 82.11 FIELD CROPS**
Cereal and other crops grown on large, unbroken surfaces in open field landscapes.
- 82.12 MARKET GARDENS AND HORTICULTURE**
Intensive cultivation of vegetables, flowers, small fruits, usually in alternating strips of different crops.
- 82.2 FIELD MARGIN CROPLAND**
Intensively treated crops interspersed with strips of spontaneous vegetation.
- 82.3 EXTENSIVE CULTIVATION**
Traditionally and extensively cultivated crops, in particular, of cereals, harbouring a rich and threatened flora of field weeds including *Agrostemma githago*, *Centaurea cyanus*, *Legousia speculum-veneris*, *Chrysanthemum segetum*, *Calendula arvensis*, *Adonis spp.*, *Consolida spp.*, *Delphinium spp.*, *Nigella spp.*, *Papaver spp.*; their varied range of associations can be indicated by subdivisions.
- 82.4 FLOODED CROPS**
Rice fields and other inundated or inundatable croplands.
- 82.41 RICE FIELDS**
- 82.42 WATERCRESS BEDS**

83 Orchards, groves and tree plantations

Ligneous crops. Extensive orchards and old plantations may support a rich flora and fauna; it is, in particular, the case of ancient olive groves and old poplar plantations with tall herb undergrowth.

- 83.1 HIGH-STEM ORCHARDS**
Tree crops of standards, cultivated for fruit production.
- 83.11 OLIVE GROVES**
Mediterranean formations of *Olea europaea* ssp. *europaea*.
- 83.111 Traditional olive groves**
Ancient olive groves, often made of very old trees shading herbaceous layer, extensively treated. Greek olive groves are an important habitat of the very restricted sylviid *Hippolais olivetorum*, as well as of many orchids.
- 83.112 Intensive olive groves**
Other formations.
- 83.12 CHESTNUT GROVES**
- 83.13 WALNUT GROVES**
- 83.14 ALMOND GROVES**
- 83.15 FRUIT ORCHARDS**
High-stem orchards of apple, pear, plum, apricot, peach and other Rosaceae.
- 83.151 Northern fruit orchards**
High-stem orchards of apple, pear, cherry of temperate Europe, often extensively treated.
- 83.152 Southern fruit orchards**
Thermophilous Mediterranean and sub-Mediterranean fleshy-fruit Rosaceae orchards, usually intensively treated.
- 83.16 CITRUS ORCHARDS**
- 83.17 DATE PALM GROVES**
- 83.18 OTHER HIGH-STEM ORCHARDS**
- 83.2 SHRUB ORCHARDS**
Ligneous plantations of dwarf trees, shrubs, espaliers and climbers.
- 83.21 VINEYARDS**
Plantations of vine.
- 83.211 Traditional vineyards**
Vineyards that have preserved their characteristic accompanying flora, generally lightly treated.
- 83.212 Intensive vineyards**
Vineyards usually cleared of their herb layer, intensively treated.
- 83.22 LOW-STEM ORCHARDS**
Other small tree crops, in particular, espaliers of various Rosaceae.

- 83.3 PLANTATIONS**
Cultivated ligneous formations planted most often for the production of wood, composed of exotic species or of native species out of their natural range and habitat.
- 83.31 CONIFER PLANTATIONS**
- 83.311 Native conifer plantations**
Plantations of European conifers outside of the conditions described under 'reforestation' in the relevant subdivisions of 42.
- 83.3111 European fir, spruce, larch plantations**
- 83.3112 European pine plantations**
- 83.3113 European cypress and juniper plantations**
- 83.312 Exotic conifer plantations**
Plantations of non-European species of conifers.
- 83.3121 Exotic spruce, fir, douglas fir, deodar plantations**
- 83.3122 Exotic pine plantations**
- 83.3123 Other exotic conifer plantations**
- 83.32 PLANTATIONS OF BROAD-LEAVED TREES**
- 83.321 Poplar plantations**
- 83.3211 Poplar plantations with megaphorb herb layer**
Old poplar plantations with a tall herb-rich undergrowth, substitution habitat for some riparian forest species of plants and animals.
- 83.3212 Other poplar plantations**
- 83.322 Eucalyptus plantations**
- 83.323 Exotic oak plantations**
- 83.324 Locust tree plantations**
Plantations and spontaneous formations of *Robinia pseudacacia*.
- 83.325 Other broad-leaved tree plantations**

84 Tree lines, hedges, small woods, bocage, parkland dehesa

Wooded habitats of small size, arranged in a linear, reticulated or insular manner, closely interwoven with grassy or cultivated habitats. Also, combinations of such elements and mixed agricultural formations, containing both ligneous and herbaceous layers. Landscapes in which pastures, crops and woodland elements are intimately mixed can be described by use of the first three codes below (if useful, specified by codes from 31.8, 41, 42 and 83) in conjunction with other codes from Section 8 and other open habitat sections. Extensive surfaces characterized by mixed agricultural formations, and in particular, those that combine ligneous and herbaceous elements on the same surfaces can be designated by one of the codes 84.4, 84.5 or 84.6 and their elements specified by use of other codes from Section 8 or any other.

- 84.1 TREE LINES**
- 84.2 HEDGEROWS**
- 84.3 SMALL WOODS**
- 84.4 BOCAGE**
Reticulated landscape of tree lines, hedgerows, small woods, pastures and crops, characteristic, in particular, of southern England and western France.
- 84.5 PARKLAND**
Park-like grassland dotted with trees, characteristic of the British Isles.
- 84.6 DEHESA**
A characteristic landscape of the south-western quadrant of the Iberian peninsula in which crops, pasture land or Mediterranean scrub, in juxtaposition or rotation, are shaded by a fairly closed to very open canopy of native oaks, *Quercus suber*, *Q. rotundifolia*, *Q. pyrenaica*, *Q. faginea*. It is an important habitat of raptors, including the threatened Iberian endemic eagle *Aquila adalberti*, of the crane *Grus grus*, of large insects and their predators and of the endangered felid *Lynx pardina*.

85 Urban parks and large gardens

Usually varied formations, created for recreational use. The vegetation, usually composed mainly of introduced species or cultivars, can nevertheless include many native plants and supports a varied fauna when not intensively managed. The heterogeneity of the habitat engenders a high faunal diversity with, however, a preponderance of common species. The frequent presence of old trees favours the installation of rarer species.

- 85.1** **LARGE PARKS**
Large, varied green spaces. Their constituting elements can be specified by use of the codes below.
- 85.11** **PARK WOODLOTS**
- 85.12** **PARK LAWNS**
- 85.13** **PARK BASINS**
- 85.14** **PARK FLOWER BEDS, ARBORS AND SHRUBBERY**
- 85.15** **PARK SUB-NATURAL COMMUNITIES**
Elements of sub-natural communities enclaved in parks or colonizing their elements; codes from sections other than 8 are to be used to specify their nature.
- 85.2** **SMALL PARKS AND CITY SQUARES**
- 85.3** **GARDENS**
- 85.31** **ORNAMENTAL GARDENS**
- 85.32** **SUBSISTENCE GARDENS**
- 85.4** **CITY BLOCK INNER SPACES**

86 Towns, villages, industrial sites

Areas used for human occupation and industrial activities. A considerable fauna has adapted to buildings. Birds such as *Apus apus*, *Tyto alba* and *Hirundo rustica* nest nearly exclusively in them, using mostly structures with traditional architecture. Other species, of montane rocky habitats, such as *Phoenicurus ochruros*, have colonized lowlands in villages and towns. Bats roost in buildings. Rock plants colonize old walls and roofs.

- 86.1 TOWNS
- 86.2 VILLAGES
- 86.3 ACTIVE INDUSTRIAL SITES
- 86.4 OLD INDUSTRIAL SITES
Abandoned industrial sites and by-products of industrial activities susceptible of colonization by semi-natural communities.
- 86.41 QUARRIES
- 86.411 Sand, clay and kaolin quarries
- 86.412 Gravel quarries
- 86.413 Hard stone quarries
- 86.42 SLAG HEAPS AND OTHER DETRITUS HEAPS
- 86.43 RAILROAD SWITCH YARDS AND OTHER OPEN SPACES
- 86.5 GREENHOUSES AND AGRICULTURAL CONSTRUCTIONS
- 86.6 ARCHAEOLOGICAL SITES

87 Fallow land, waste places

Fields abandoned or left to rest, roadsides and other interstitial spaces on disturbed ground. They are colonized by numerous pioneering, introduced or nitrophilous plants. They sometimes provide habitats that can be used by animals of open spaces.

87.1

FALLOW FIELDS

87.2

RUDERAL COMMUNITIES

88 Mines and underground passages

Artificial underground spaces. They may constitute important substitute habitats for cave-dwelling animals such as bats.

89 Industrial lagoons and reservoirs, canals

Very artificial aquatic habitats; semi-natural communities that might colonize them can be indicated by use of codes of 15, 22, 23 or 24.

- 89.1 SALINE INDUSTRIAL LAGOONS AND CANALS**
 - 89.11 SEA HARBOURS**
 - 89.12 SALTWORKS**
Active or recently abandoned salt-extraction evaporation basins.
Detailed habitats can be coded by use of the subdivisions of 15 and 23 in conjunction with 89.12.
 - 89.13 OTHER SALINE INDUSTRIAL LAGOONS AND CANALS**
- 89.2 FRESH-WATER INDUSTRIAL LAGOONS AND CANALS**
 - 89.21 NAVIGABLE CANALS**
 - 89.22 DITCHES AND SMALL CANALS**
 - 89.23 INDUSTRIAL LAGOONS AND ORNAMENTAL PONDS**
 - 89.24 SEWAGE FARMS AND SEWAGE WORKS**

