APPENDIX 4

National Common Reptile Survey
Department of Applied Biology and Biotechnology
Leicester Polytechnic, Scraptoft Campus
Leicester, LE7 9SU
tel. : 0533 551551 ext. 7726

NATURE CONSERVANCY COUNCIL

Dear Recorder,

Thank you for your interest in the Nature Conservancy Council Common Reptile Survey.

*Enclosed is the **SIMPLE RECORD FORM** on which to enter your observations, and the British Herpetological Society leaflet for information on the basic ecology of the animals, and how to survey for them.*

*If you would like to record much more detailed habitat information, please let us know and we shall send a **HABITAT DESCRIPTION FORM** on which to describe the vegetation, substrate, weather conditions etc. associated with the sighting.*

Please return the completed form to Dr M Swan at the above address, preferably by 31st December, 1990.

Good Hunting !

Best Wishes,

Dr RS Oldham & Dr MJS Swan

NCC NATIONAL COMMON REPTILE SURVEY *SIMPLE RECORD FORM*

post 1970 observations

Recorder Name : **Address :**

	Species (1)	County	Grid Reference	Locality (2)	Date of Sighting	Nature of Record (3)	Type of Observation (4)	No. Seen	Predominant Land Use at Place of Sighting (5)
e.g.	*G*	*Norfolk*	*TL862834*	*Thetford Golf Course*	*11/5/89*	*A D*	*M*	*1*	*G W*

KEY TO RECORD ENTRY :-

(1) Common Lizard = C, Slow-worm = S, Grass snake = G, Adder = A

(2) Name of nearest town/village/district

(3) Adult Individual = A, Juvenile = J, Hatchling = H, Eggs = E, Slough = S, Dead on Road = D, If other, please specify.

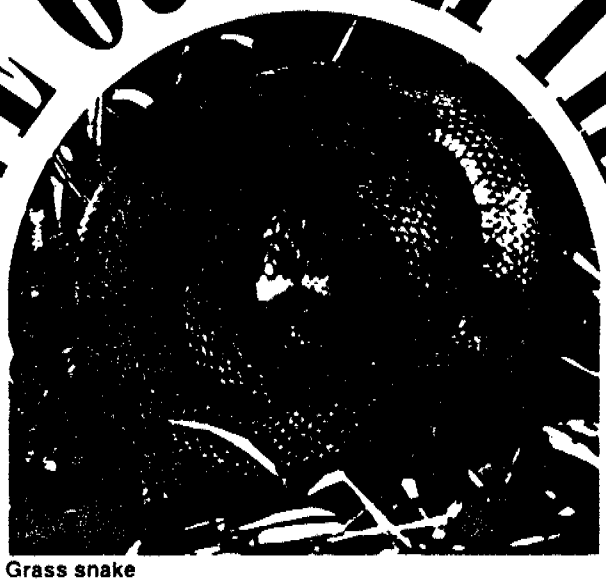
(4) Memory = M, Incidental Recent Observation = I, Thorough Systematic Search = T

(5) Grassland = G, Heath/Moor = H, Park/Garden = P, Woodland = W, Mineral Extraction = M, Wetland = Wt, Sand Dune = S, Arable = A, Other (please specify)

Please use reverse of form to record any other relevant information (eg threats to site)
but if you have more detailed habitat descriptions, please complete the HABITAT DESCRIPTION FORM
Please return completed form(s) to :-

Dr M Swan, National Reptile Survey, Dept of Applied Biology, Leicester Polytechnic, Scraptoft Campus, Leicester, LE7 9SU.

SAVE OUR REPTILES

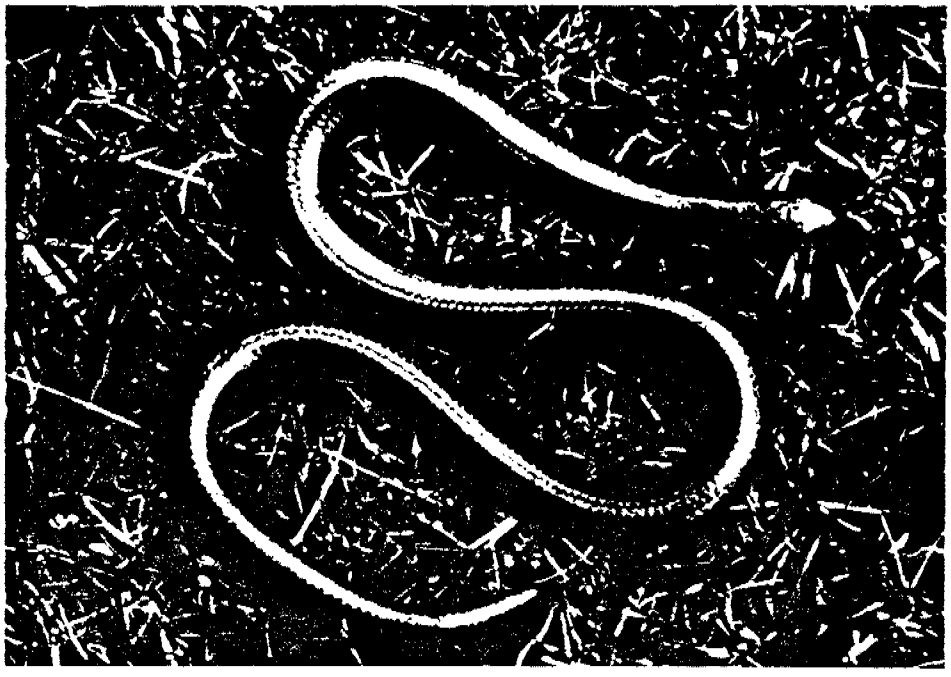


Grass snake

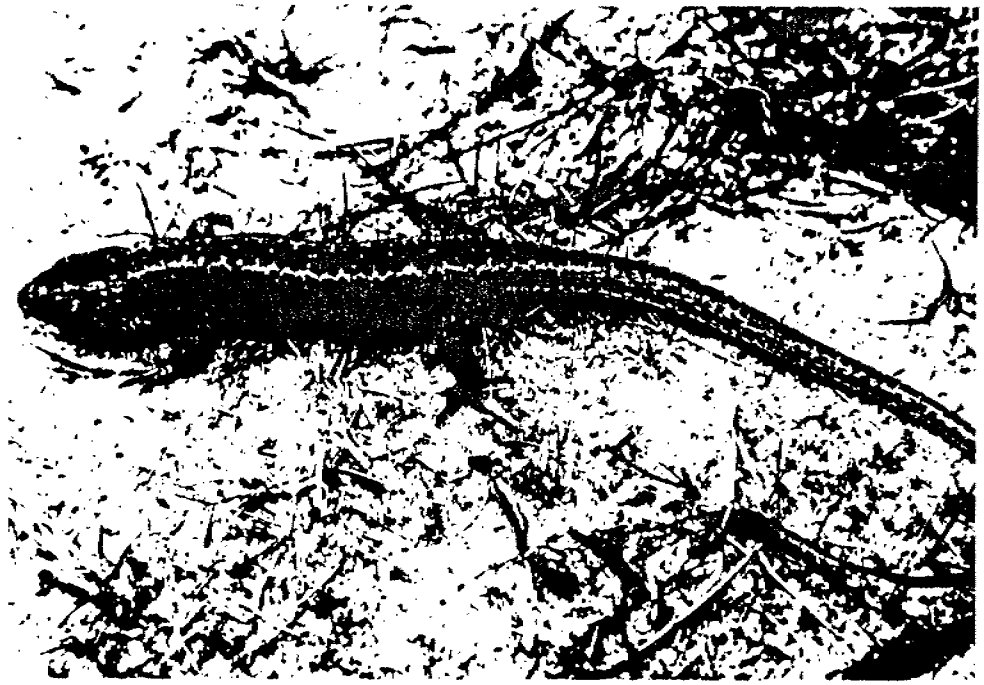
An advisory leaflet issued by the British Herpetological Society Conservation Committee

assisted financially by the Nature Conservancy Council

BRITISH HERPETOLOGICAL SOCIETY



Slow-Worm



Above: **Male sand lizard.**

Left: **New-born sand lizard.**

Below: **Female sand lizard.**

Save our Reptiles

Reptiles represent an ancient life form. Dinosaurs roamed the planet over 65 million years ago. Descendants of early reptiles evolved to become mammals and birds. Living reptiles include tortoises and turtles, crocodiles and alligators, lizards and snakes. Only six species (3 lizards and 3 snakes) are native to Britain. All are in decline and two so seriously threatened that they may become extinct. Reptiles must be able to warm themselves to maintain their body temperature and those that lay eggs must have heat to hatch them. In winter, British reptiles become torpid and hibernate in holes etc. safe from severe frost. Cold reptiles move slowly, if at all, and are easily killed by birds, cats and other predators. Places where lizards and snakes can shelter to escape such risks and also find warmth are continually destroyed by farming, building, road making, afforestation and other developments so help is urgently needed to save as many as possible of these and create new ones. These operations conserve other wildlife too. The aims of this leaflet are to give some details of the natural history of British reptiles, to describe ways of finding them and to suggest methods to ensure their survival.

Lizards

There are several families of lizards, most of which occur in areas with climates warmer than that of Britain. Most lizards have strong legs and can run swiftly; however some families include species with reduced limbs and a few that are completely limbless.

The Common or Viviparous Lizard *(Lacerta vivipara)*

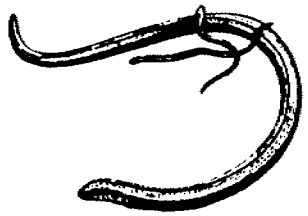
This is widely distributed in Europe and may be found in many habitats throughout the UK and Eire. Though reduced in numbers, it is quite common still in hedgerows, woodland clearings, grassy banks, downland, moors and heaths. The male is generally brown with many lighter spots, the underside orange or yellow and also spotted: the female is lighter with a marked darker stripe along the back, the underside often plain pale yellow. Black specimens are not rare. Mating occurs in April and May. Young (usually 4-10) are retained within the female until about late July: they are then born in a membrane from which they soon break free and become self-supporting. At first they are black, the adult pattern gradually appearing during the first year. This lizard may reach as much as 17cm in total length but is usually about 11cm. The unbroken tail is longer than the body. Parts of the tail can easily be shed at pre-determined breaks in the vertebrae; the lost tail continues to move for a while, perhaps distracting a predator and enabling the animal to escape. A new gristly tail soon grows: this cannot be broken. Common lizards live mainly on insects and spiders: their main predators are birds and domestic cats.

The Sand Lizard
(Lacerta agilis)

The sand lizard in Britain is confined to habitats containing open sand which it requires to provide heat enough to hatch the eggs. For this reason, also, banks with a southerly aspect are greatly favoured. Destruction of sand dune and heathland areas particularly since about 1960 has made sand lizards rare: their very survival depends on active conservation measures. They are especially vulnerable to fires which kill them directly and destroy their habitat. Distinct forms inhabit sand dunes in Merseyside and southern heathlands in Dorset and Surrey. The sand lizard is longer (up to 22cm+) and bulkier than *L. vivipara:* the massive head is particularly obvious, even in the young. The male has brilliant green flanks, especially in spring, with many small spots: the female is brown or grey with well-marked black and white spots and other irregular blotches or markings. The unbroken tail is longer than the body and can be lost and partly regrown as in the common lizard. Sand lizards mate from late April to early June and the female digs holes to lay eggs (1-17) in June and July. Incubation may take from 7-12 weeks, depending on the weather. The young are well-marked with spots, the shape of the head readily distinguishing them from small common lizards. The lizards feed mainly on insects and spiders.

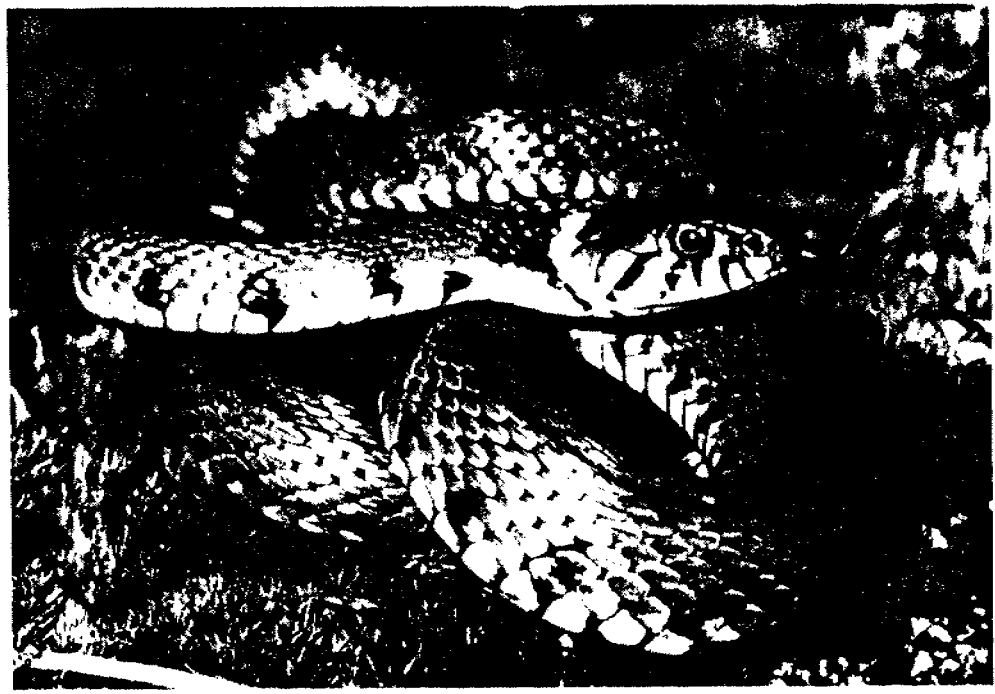
The Slow-Worm
(Anguis fragilis)

Although snake-like in appearance, the slow-worm is a lizard easily recognized as such by having eyelids, a flat lightly-forked tongue and the ability to shed its tail. It is perhaps the commonest British reptile and can be found in all mainland counties and some islands. Other British lizards may live for up to 8 years, but the slow-worm has been known to survive for more than 50 years. The fragile tail does not regenerate well. Mating occurs in spring and the (usually 6-12) young are born in late summer or early autumn. They are a beautiful golden colour, dark underneath, with a dark stripe down the back including part of the head. In males the markings disappear with age but persist more or less in females. Adult males are almost uniformly brown or bronze on back and sides, lighter beneath, whilst adult females are somewhat striped and have dark undersides. A blue-spotted male form occurs in some areas. Black specimens have been found. This lizard will forage actively at temperatures well below those suitable for most reptiles. Slow-worms frequently burrow and may do so in numbers together before the onset of winter. Most adults are 30-40cm in length, but longer specimens have been found. The principal foods are slugs, worms, spiders and insect larvae. Their enemies include birds, cats, snakes and hedgehogs. All lizards periodically shed their skins, usually piecemeal: the sloughs from slow-worms are often concertinaed, forming thick rings.



Snakes

Snakes have lizard ancestors: most have lost all trace of limbs. They have no eyelids, deeply forked tongues and imperfect hearing apparatus. Female British snakes grow larger than males and have obviously shorter tails. Snakes periodically shed their skin, which is turned inside-out. The slough is useful for identification especially in the three British species, which are as follows.

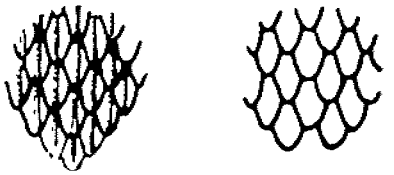


Grass snake

The Grass Snake
(Natrix natrix)

This reptile was once much commoner than at present but is found quite often in many counties south of the Scottish border. It occurs in many habitats and does well in wetlands where, being an excellent swimmer, it can seek prey such as frogs, newts and fish in dykes and ponds. Drainage for agriculture or building is one cause of the snake's decline; another is thought to be a shortage of piles of manure and rotting vegetation in which eggs are laid and hatching is accelerated by the heat of decomposition. This is the largest British snake, attaining a length of more than 150cm. It is olive-green, olive-brown or greyish above with regularly-placed black spots on the back and sides: the most obvious feature is a bright yellowish collar behind the head, making the animal unmistakable in the field. The shed slough has keeled scales. Grass snakes seldom bite but if cornered will coil in a threatening

posture, hissing and repeatedly striking. On first handling, the reptile exudes from its cloaca an evil-smelling fluid that is difficult to remove. They may "play dead" when handled. Mating occurs in April and May and from 8 to more than 40 eggs are laid in late June or early July, often in manure, compost heaps, sawdust or piles or vegetation. Young emerge from late August onwards.



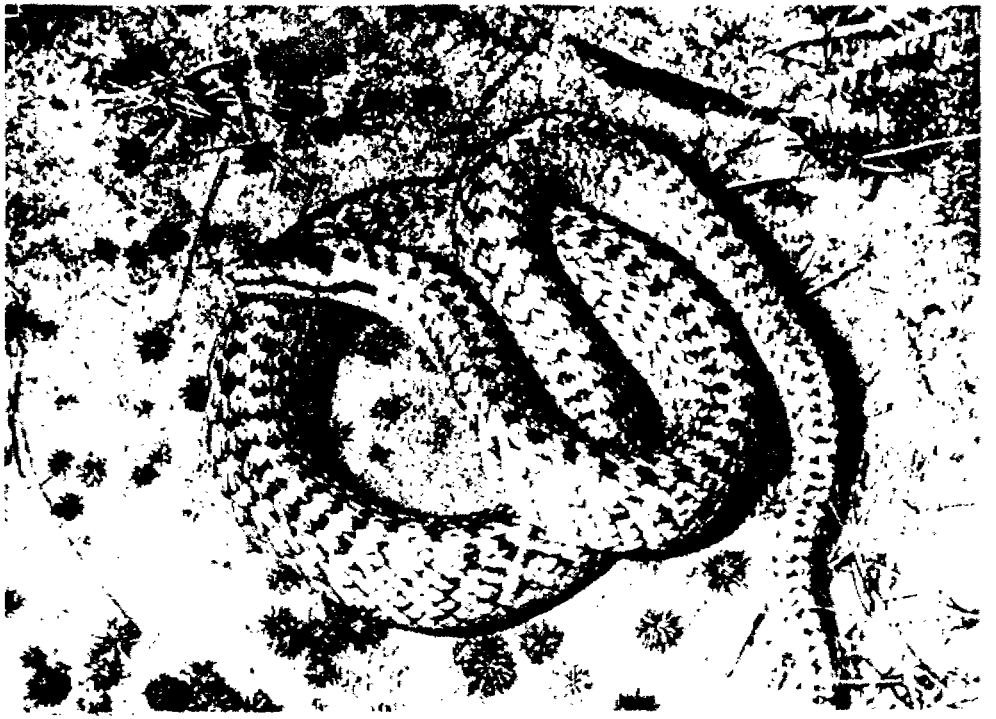
Keeled and unkeeled snake dorsal scales

The Smooth Snake
(Coronella austriaca)

This is the rarest British reptile. A British Herpetological Society (BHS) survey over the years 1984-7 found only 261 different snakes on 192 sites in Dorset, Hampshire and Surrey, concluding that the total population was probably numbered only in thousands. The preferred habitat is dry southern heathland, particularly in East Dorset. This has been massively lost in recent times for building, road making, conifer planting and mineral extraction. Although efforts by conservationists have slowed the rate of decline it is unlikely that more than a fraction can finally be saved, so that *Coronella* in Britain may be truly threatened with extinction, especially since heath fires regularly occur in dry weather. *Coronella* is a small snake; the record measured British specimen was 72.5cm long. The colour above is brown, grey or reddish with characteristic black patch patterns on the head and back: a dark streak runs along the head, passing through the eye. The patterns are so varied that they can be used to identify individuals. The underside is grey, brown or reddish and may be mottled with white. The slough can be identified readily, since the scales are smooth (not keeled as in the adder and grass snake). This snake is secretive: it can only occasionally be seen lying completely in the open and is more often found beneath metal pieces or other rubble that may retain heat. The BHS survey observed mating under a metal sheet in August: the only other British mating record is for May. Young are born alive. There is direct evidence that in the wild smooth snakes can live for at least 20 years. When caught, smooth snakes often exude a fluid less offensive than that from grass snakes: they will bite repeatedly but are capable of only a slight wound. The chief prey items are lizards and small mammals (especially nestlings).

The Adder or Viper
(Vipera berus)

This is Britain's only venomous snake: it is also the most widely found and the most tolerant of cold climates, occurring in Europe North of the Arctic Circle. Adders can be found throughout mainland Britain, the Isle of Wight, Anglesey and some of the Inner Hebrides. They can be found on heaths, moorland, rough grassland



Smooth snake

(particularly with associated scrub or hedgerows) and in open woodland. They may enter marshy places, especially in hot summers. One reason for the recent decline in numbers has been the conversion of much moorland to conifer plantations and downland pastures to arable land. Adders rarely exceed 60cm in length, although some females may attain over 75cm. The zig-zag back pattern can be seen at once in all except black specimens which are not uncommon in some districts. The marking together with the ^ shape on the head, are black in males in which sex the upper background is usually grey, bluish or almost white especially in spring after sloughing. Females often have an overall brown, reddish or sandy background colour with darker back and head patterns. Mating takes place in April and early May and is often preceded by ritualized behaviour, one form of which is an apparent trial of strength between two males. These partially twine together more or less vertically and then each attempts to force the other to the ground. The loser may renew the trial but finally glides away, leaving the victor to "court" the female, who can often be seen apparently watching the performance. 6-20 young are born alive, usually in August. Adders are timid and seldom, if ever, attack people. They may bite if trodden on or handled; they may also bite questing dogs. Although the bite can be most unpleasant it is rarely fatal, even to children. If left alone these snakes are not dangerous. Their principal food is small mammals, which are first immobilised by the venom then swallowed whole. They may also eat frogs, lizards etc. In Britain hibernation (often in holes made by mammals) may last for 140-150 days.

Surveying for Reptiles

Since the late 1960's BHS members have undertaken surveys to determine the status of Britain's two rarest reptile species, the sand lizard and smooth snake. This work was amongst the earliest to emphasise the importance of heathland to these creatures. Lowland heaths are also important habitats for rare birds, insects, spiders and plants and many of the best are now protected as Sites of Special Scientific Interest (SSSIs). The BHS has a policy of preserving as much suitable lowland heathland as is possible to do either by buying outright or leasing sites and thereafter maintaining a management programme to ensure habitat and species survival. The commoner species have been largely neglected however and there is a great need now to determine whether they are still widespread. A co-ordinated survey will provide this information and will indicate if any species require further protection. Such work is also likely to result in the discovery of sites that are particularly important for the commoner reptiles, which could be protected by the designation of SSSIs for instance.

Records

For any survey to be worthwhile it is essential that detailed records be made. A good plan is for the observer to carry a notebook and to write down at once what is seen and what the weather conditions are at the time. As soon as convenient, preferably not later than the same day, this information should be transferred to a fieldwork form. This will specify the information needed for the type of survey and will include space for a map for showing the position of animals seen on the site. Details should be set down whilst the memory is fresh; they are vital if the survey is to be continued and especially if the results are to be used, for example, as evidence for conservation of all or part of the site. Surveys done without making and keeping proper records are no more than reconnaissance and guide to future work. The BHS Conservation Committee (BHSCC) has appropriate fieldwork forms and can supply them.

Methods of Survey

It is most profitable to search for our reptiles on cool, sunny or partially sunny days throughout the active season, i.e. from March to October and especially in early spring. The observer should slowly approach places such as banks, hedgerows, the edges of bushes or other cover as quietly as possible, scanning especially spaces exposed to the sun and trying to keep the body's shadow behind the direction of search. Do not neglect the possibility that some reptiles might be on the move and can be seen running or crawling in the open.

The best conditions for seeing lizards are on days with little or no wind and especially in sunshine after rain. Then common lizards can be seen basking on objects such as stones or pieces of wood or in open spaces between the vegetation. The lizards see and hear well and the observer's approach should be slow and such as not to rustle plant cover. Take time for visual search, for the reptiles' camouflage is good, and listen for moving lizards which may soon return to bask if not too much disturbed. A marker left near a spot where a lizard is suspected can be quietly approached later with a good chance that the reptile has re-appeared. To a large extent these remarks apply also to sand lizards, but these more often bask on or within vegetation, rather than in open spaces. They also tend to come out at the edges of stands of heather, running in as the observer approaches. Sand lizards live in colonies, so if one lizard is found it is often worthwhile to make a longer and closer search in its neighbourhood. Adult slow-worms can be seen basking amongst and sometimes on vegetation in spring and on cool sunny days in late summer. Immature animals will be found only under cover such as wood, metal, fabric or plastic. Indeed, when searching for slow-worms, it is helpful to make sure that such cover is present: this will also sometimes attract snakes.

Snakes are also most likely to be visible on sunny days: perhaps because they hear badly, they are less sensitive to wind but must be approached so as not to cause ground vibrations which they easily detect. Their close vision is acute, so the observer should look as far ahead as possible when searching for them. It is easy almost to tread on a basking snake before seeing it move away: consider this possibility as you search. A sit-and-wait tactic can sometimes result in snake sightings. For example, adders may emerge from refuges while the observer sits motionless nearby and grass snakes may come swimming in ponds or dykes in the presence of watchers on the margins, even in hot weather. Snakes about to shed their skins are almost blind: they can be closely approached at these times. The best season to see grass snakes and adders is early spring on sunny days soon after the reptiles emerge from hibernation However they can be found all through the season, early mornings being the best times for search. All British reptiles are hard to find in hot weather and during drought.

Conservation

The Law. The sand lizard and smooth snake are protected under the Wildlife and Countryside Act 1981. Despite this, in some instances they and their habitat are destroyed by development. Except to save them from imminent death or injury it is an offence to catch or even seriously disturb them without a licence to do so from the Nature Conservancy Council (NCC). All other British reptiles may not legally be offered for sale without a licence. It is an offence deliberately to kill any lizard or grass snake.

What can be done to conserve our reptiles. For common lizards and slow-worms, local authorities, farmers and landowners can be asked to leave as many rough places, hedgerows and other cover as possible. These reptiles especially favour thick grass or other vegetation which encourages their prey and provides protection against birds and other enemies. An obsession with tidiness has lost many lizards from graveyards, parks and recreation areas where they once flourished. If land is truly doomed for building, roads etc., as many reptiles as possible can be collected and put on presumably safe places: the "rough" of golf courses and well-vegetated verges of older motorways and major roads are good possibilities. A quick snatch with the whole hand (to avoid tail loss) followed by instant transfer to a container will secure most common lizards. Slow-worms are easily caught and gardens with plenty of cover and loose soil are good refuges. The reptiles will repay by eating small slugs, their favourite food: they are delightful to watch on their foraging sorties. The young can be found under stones and rubble in autumn. Largish gardens with "wild" areas would suit common lizards.

During the seasons of hibernation, the

Heathland site before BHS clearance

Same site after clearance

BHSCC regularly turns out working parties, often assisted by Conservation Volunteers and others, to clear heathland of pine, birch and gorse for the benefit of sand lizards and smooth snakes. Sand is exposed to provide egg-laying sites for the lizards. Unless this is continually done, the habitat will become overgrown and unsuitable for the rare reptiles. The Committee also tries to organise the construction of fire breaks and the spraying of bracken with selective herbicide when this is required. The BHSCC welcomes help on its management tasks, lists of which can be obtained from the address in this leaflet . BHSCC members also breed sand lizards in captivity for release to sites agreed with the NCC.

Adders will benefit from some of the measures suggested for the lizards. Grass snakes can be saved by preserving as much as possible of their wetland habitat and if rescued from "doomed" sites can be released into this. A source of frogs, newts or fish will feed them. Where grass snakes occur, it is important to leave as many piles of vegetation, sawdust or manure for as long as possible during May – October to encourage the laying and hatching of the snakes' eggs. If eggs are discovered, they should be left if safe: if not they can be hatched out in dampish conditions (e.g. in damp vermiculite) at 28 ± 4°C and the young released. It is difficult and inhumane to keep British snakes for long in small terraria: new-born snakes should be released at once into the wild.

Although our reptiles are seriously threatened, much can be done to protect them. For example, one can join or support a voluntary conservation group and so help to manage and save threatened habitats. The BHSCC maintains a "land fund" into which bequests, donations and gifts are placed by Society members and non-members who are sympathetic to the cause of preservation of our natural environment.

Further reading

Arnold, E.N. and Burton, J.A. *A field guide to the reptiles and amphibians of Britain and Europe.* Collins, London (1978)

*Braithwaite, A.C. and others. *The distribution in Britain of the smooth snake* ***Coronella austriaca*** *Laurenti.* Herpetological Journal, **Vol.** *1,* pp370-376 (1989)

Cooke, A.S. and Scorgie, H.R.A. *The status of the commoner amphibians and reptiles in Britain.* Focus on Nature Conservation No3. NCC (1983)

Frazer, D. *Reptiles and amphibians in Britain.* Collins, London (1983)

Goddard, P. *Morphology, growth, food habits and population characteristics of the Smooth snake,* ***Coronella austriaca*** *in southern Britain.* Journal of Zoology, London, **Vol.** *204,* **pp 241-257 (1984)**

Langton, Tom. *Snakes & Lizards.* **Whittet Books (1989)**

Nature Conservancy Council. *The ecology and conservation of amphibian and reptile species endangered in Britain.* NCC (1983)

Smith, M. *The British amphibians and reptiles.* Collins, London (1973)

Stafford, P. *The Adder* and *+Lizards of the British Isles.* Shire Publications, Aylesbury, Bucks. (1987 and 1989)

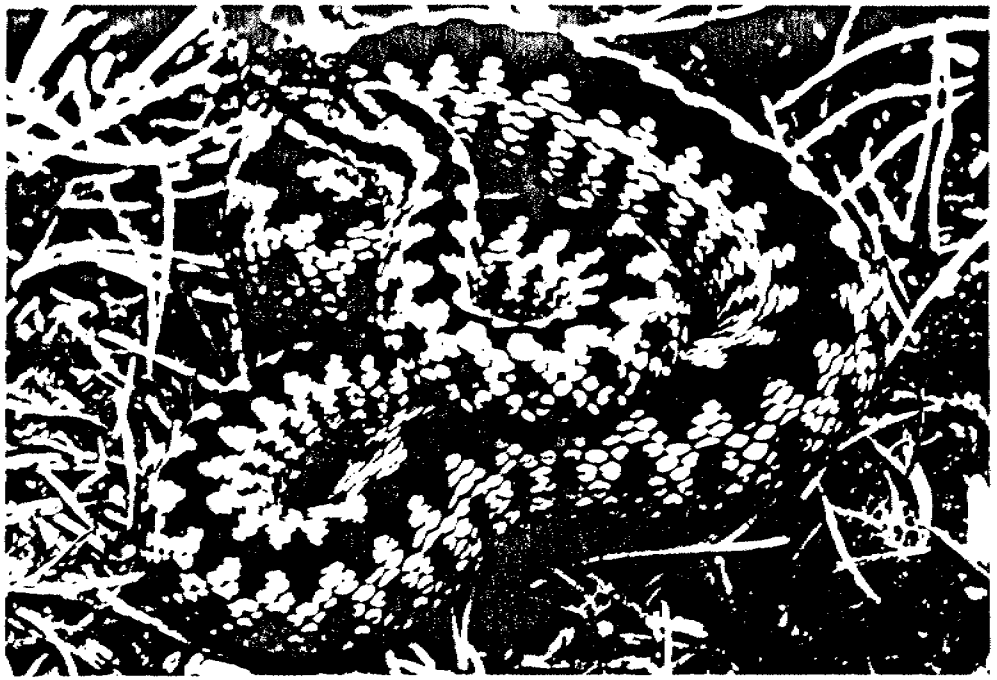
*Available from BHSCC while stocks last. +Also from BHSCC, £1.95.

Photography: M Langford, M. Dolton, M. Preston, W. Whitaker Drawings J. Buckley

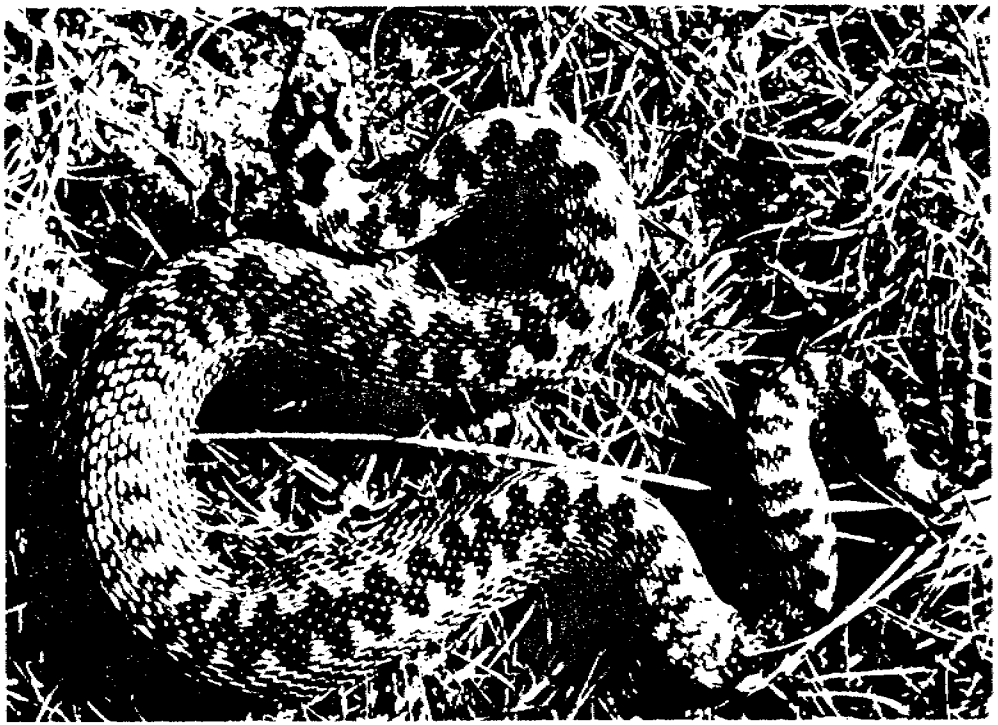
Male Common Lizard

Common Lizard Giving Birth

Further copies of this leaflet and advice from
BHSCC, 28 Old Fort Road, Shoreham-by-Sea, Sussex BN43 5RJ
Also available from BHSCC:
Garden ponds as amphibian sanctuaries and *Surveying for amphibians* (s.a.e., not less than 25 x 18cm) *and Newts of the British Isles* (Shire Publications, £1.95)



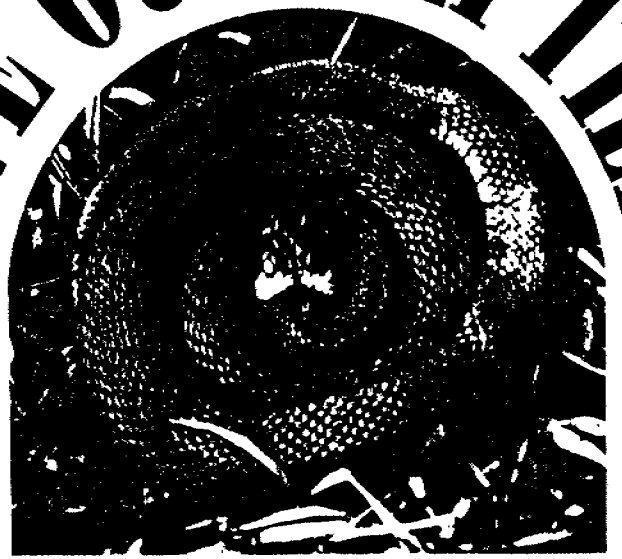
Male Adder



Female Adder

DESIGN: GRAPHIC TRAFFIC (0273) 454199 • TYPESETTING: SETWELL (0273) 462398 • PRINT: PRESTIGE PRINT (0273) 452633

SAVE OUR REPTILES



Grass snake

An advisory leaflet issued by the British Herpetological Society Conservation Committee

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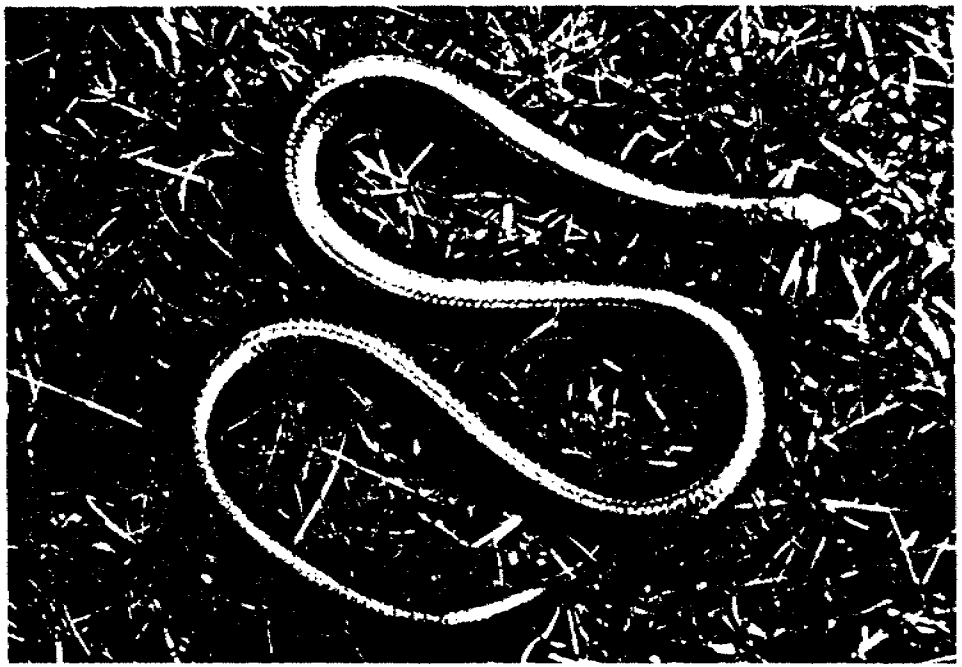
BRITISH HERPETOLOGICAL SOCIETY



Slow-Worm

APPENDIX 5

NCC COMMON REPTILE SURVEY : HABITAT DESCRIPTION

Part A, describing the gross habitat characteristics need only be filled-in once for repeated sightings within the same survey area. **Part B**, detailing the precise location, conditions and behaviour must be completed for every observation.

PART A

1.1 RECORDER DETAILS

Name .....

Address .....

1.2 GENERAL LOCATION OF SURVEY AREA

County Locality (name of nearest town/village/district/nature reserve etc.)

....

1.3 LANDSCAPE IN WHICH SURVEY AREA SITUATED

1.3.1 PLEASE DESCRIBE THE LANDSCAPE BRIEFLY IN WORDS BELOW : -

.....

.....

1.3.2 EXTENT OF SURVEY AREA

(eg 5km^2 area of heathland; 1.5km^2 disused quarry; 2km strip of 50m wide coastal sand dunes.)

.....

.....

1.4 NUMBERS OF DETAILED OBSERVATIONS MADE IN THIS AREA ☐

1.4.1 CIRCUMSTANCE OF SURVEY

This/these observations are recorded from :-
(please tick relevant box/es)

memory ☐
previous written notes ☐
recent, incidental observation ☐
thorough, systematic search ☐ of ☐ km^2

1.5 GROSS HABITAT WITHIN SURVEY AREA

Please indicate the predominant habitat characteristics of your survey area by ticking the boxes belo
Some typical species have been listed for several of the habitat types. **Most** records should require completing **one** part of section 1.5, although for survey areas containing more than one landuse of equal dominance, several may have to be filled. Please complete as much of section 1.6 as is releva
The habitat classifications are essentially those of the NCC/RSNC Phase Three Habitat Mapping Manual.

1.5.1 WOODLAND

Woodland Type	**broad-leaved**	**coniferous**	**mixed**
natural/semi-natural	☐	☐	☐
plantation	☐	☐	☐
parkland (trees scattered)	☐	☐	☐
recently felled woodland	☐	☐	☐
other (please state)			
.....	☐	☐	☐

1.5.2 GRASSLAND

Grassland Type	**improved**	**unimproved**
Acidic (eg hill pasture; *Deschampsia flexuosa Nardus stricta*)	☐	☐
Neutral (eg lowland pasture; *Alopecurus pratensis, Anthoxanthum odoratum*)	☐	☐
Calcareous (eg chalk grassland; *Bradypodium pinnatus, Koeleria macrantha, Avenula pratense*)	☐	☐
Wet grassland (eg *Molinia* spp., *Juncus* spp., *Carex* spp.)	☐	☐

Other Grassland Habitats

Railway cutting/embankment	☐
Road/motorway verge	☐
Golf course	☐
Playing field	☐
Domestic garden	☐
Other (please state)	
.....	☐

1.5.3 ARABLE LAND

cereal	☐
brassica	☐
soft fruit	☐
orchard	☐
other (please state)	
.....	☐

1.5.4 HEATHLAND (Land dominated by Ericoids or dwarf gorse spp.)

	upland	lowland
dry heath - acidic	☐	☐
- basic	☐	☐
wet heath	☐	☐
dry heath/grassland mosaic	☐	☐
wet heath/grassland mosaic	☐	☐
lichen/bryophyte	☐	☐

1.5.5 COASTAL HABITATS

intertidal to just above high tide mark - mud/sand	☐
- shingle	☐
- boulders	☐
saltmarsh	☐
sand dune - sparse vegetation	☐
- vegetated - grassland	☐
- heathland	☐
- scrub	☐
cliff/slope - crevices and ledges - unvegetated	☐
- vegetated	☐

1.5.6 INDUSTRIAL/ARTIFICIAL SITES

quarry/gravel pit/chalk pit etc.	☐
spoil tip	☐
rubbish tip	☐
mine	☐
derelict urban	☐
other (please state)	
.....	☐

1.6 HABITAT FEATURES WITHIN SURVEY AREA

	abundance		**distribution**	
	scarce	frequent	continuous	patchy
1.6.1 SCRUB VEGETATION (Shrubs less than 5 metres tall, dense undergrowth. eg *Ulex europeus, Rubus fructicosus, Crataegus monogyna*, willow carr)	☐	☐	☐	☐
1.6.2 TALL HERB/FERN VEGETATION (eg *Urtica dioica, Chamerion angustifolia*)	☐	☐	☐	☐

1.6.3 UNVEGETATED AREAS

Frequency of Occurrence Within Area

	1 to 4 patches present	5 to 15 patches present	numerous	blanket (covers >50% of survey area)
rocky outcrop	☐	☐	☐	☐
scree	☐	☐	☐	☐
limestone pavement	☐	☐	☐	☐
cave	☐	☐	☐	☐
dry river bed	☐	☐	☐	☐
built-up area	☐	☐	☐	☐
other (please state)				
.....	☐	☐	☐	☐

1.6.4 WETLAND

Frequency of Occurrence Within Area

	1 to 4 water-bodies present	5 to 15 w-bodies present	numerous	blanket (covers >50% of survey area)
lake/loch/reservoir	☐	☐	☐	☐
flooded mineral extraction site	☐	☐	☐	☐
pond	☐	☐	☐	☐
ditch	☐	☐	☐	☐
canal	☐	☐	☐	☐
river/stream	☐	☐	☐	☐
bog/fen/mire/swamp	☐	☐	☐	☐
other (please state)				
.....	☐	☐	☐	☐

1.6.5 BOUNDARY TYPES

Boundaries are predominantly :-

thorn hedge	- thick, stock proof		☐
	- gappy, not stock proof		☐
fencing			☐
walling	- dry stone		☐
	- Cornish type, soil filled, vegetated		☐
ditching	- permanently wet	- overgrown	☐
		- bare/cut/grazed banks	☐
	- seasonally wet	- overgrown	☐
		- bare/cut/grazed banks	☐
other (please state)			
.....			☐

PART B : INDIVIDUAL OBSERVATION DETAILS

Please fill in this part of the form for each individual animal sighting described

2.1 GRID REFERENCE ☐☐ ☐☐☐☐☐☐

2.2 LOCATION SITE ASPECT (North etc, facing) .....

2.3 PERIOD OF SIGHTING

2.3.1 DATE ☐☐ ☐☐ ☐☐ 2.3.2 TIME OF DAY ☐☐ ☐☐ am / pm

2.3.3 LENGTH OF TIME SPENT OBSERVING ANIMAL ☐☐☐ mins

2.4 WEATHER

either :-
2.4.1 record :- **Air temperature** ☐☐ °C and **Percentage Humidity** ☐☐☐ %

or
2.4.2 tick the following which best describe the conditions of temperature and humidity associated with the sighting :-

hot ☐ warm ☐ cool ☐ cold ☐ frost/freezing ☐ clear sky ☐ overcast ☐

drought conditions ☐ dry ☐ damp ☐ wet ground surface ☐ puddles ☐ raining ☐

rain within 5 hours prior to sighting ☐ other (please state) ..... ☐

2.5 ANIMAL DETAILS NB Use this form to describe observations of live animals only please.

2.5.1 SPECIES : *common lizard* ☐ slow-worm ☐ grass snake ☐ adder ☐

2.5.2 NATURE OF RECORD : adult ☐ juvenile ☐ hatchling ☐

2.5.3 SEX : male ☐ female ☐ gravid female ☐

2.5.4 ANIMAL BEHAVIOUR : basking ☐ fleeing ☐ on the move, not apparently fleeing ☐

foraging ☐ swimming ☐ under cover ☐ hibernating ☐ egg-laying ☐

other (please state) ..... ☐

2.6 DETAILED DESCRIPTION OF HABITAT WITHIN 2.5M RADIUS OF THE ANIMAL

2.6.1 Please describe the vegetation structure in words and the animal's position relative to it briefly.

.....

.....

.....

2.6.2 GROUND SUBSTRATE

exposed rock
stoney/shingly, no soil
stoney, thin soil layer
gravelly
sand
sandy soil
loam
clay
peat
leaf litter - broad leaved
- coniferous
other (please state)

.....

2.6.3 VEGETATION COVER WITHIN 2.5 M RADIUS OF THE ANIMAL

vegetation types	percentage ground cover				distribution	
	1-4	1-25	26-50	76-100	continuous	patchy
grass						
heather						
bracken						
herb - less than 50cm high						
- over 50cm high						
scrub						
cereal crop						
brassica etc crop						
soft fruit						
alpine/stonecrop/						
lichen/bryophyte						
tree - mature						
- sapling						
- whip						
wetland species						
- sedges/rushes						
- aquatic submerged						
- aquatic emergent						
bare ground						
other (please state)						
.....						

2.6.4 FURTHER DESCRIPTIVE COMMENTS

.....

.....

2.6.5 VEGETATION STRUCTURE WITHIN 2.5 M OF THE ANIMAL

height above ground (cm)	approximate percentage coverage of area by foliage at each height: 1-4	1-25	26-50	76-100	continuous	patchy
0 - 10	☐	☐	☐	☐	☐	☐
10 - 25	☐	☐	☐	☐	☐	☐
26 - 100	☐	☐	☐	☐	☐	☐
101 - 300	☐	☐	☐	☐	☐	☐
over 300	☐	☐	☐	☐	☐	☐

2.7 EXACT SUBSTRATE ON / IN / UNDER WHICH ANIMAL FOUND

2.7.1 SUBSTRATE

exposed ground substrate (as indicated in 2.6.2 above) ☐
stone/boulder ☐
wood - live tree ☐
- dead tree ☐
- log ☐
human artifact - fence ☐
- wall ☐
- board/plank ☐
- plastic bag ☐
- other (please state) ☐

..... ☐

vegetation (please state vegetation type from list in section 2.6.3)

..... ☐

water (please state water-body type from list in section 1.6.4)

..... ☐

2.7.2 ANIMAL POSITION RELATIVE TO ABOVE

on top ☐ amongst ☐ beneath ☐ buried ☐ submerged ☐

other (please state)

..... ☐

2.7.3 FURTHER COMMENTS

.....

.....

2.8 CHANGES TO SITE

2.8.1 Have you visited the site since this observation was made ? YES ☐ NO ☐

2.8.2 If YES, please state date ☐☐ ☐☐ ☐☐

2.8.3 If the site has changed significantly, please describe changes briefly.

.....

.....

.....

2.8.4 Are you aware of any threats to the site ? YES ☐ NO ☐

2.8.5 If YES, please describe briefly.

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2.9 COMMENTS

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APPENDIX 6

Reptile habitats recorded for the national survey between 1989 and 1992. Broad habitat categories analysed in Chapter 3 are indicated with "X".

HABITAT	ABBREVIATION	BROAD HABITAT CATEGORY
ARABLE	A	X
ARTIFACT UNSPECIFIED (eg fence)	At	X
BANK EARTH	Be	
BANK GRASSY	Bgr	
BANK RIVER	Br	
BANK SCRUBBY	BScr	
BANK STONEY	Bs	
BANK UNSPECIFIED	B	
BANK WOODED	Bw	
BEEHIVE	Bh	
BOG	Bg	
BRICK PIT	Bp	
BUILDING RUINED	Bf	
BUILDING UNSPECIFIED	Bd	
CAR PARK	Cp	
CARR	Cr	
CHURCH YARD	Cy	
CLAY WORKS	CW	
CLIFF	C	
COAL TIP	Ct	
COMPOST HEAP	Ch	
DEAD ON ROAD	DOR	
DITCH	Dh	
DOWNLAND CHALK	Dc	
EXPOSED ROCK	Er	
FEN	Fn	
FENCE	F	
FOREST BREAK/RIDE	Fb	
GOLF COURSE	Gc	
GRASSLAND	G	X
GRASSLAND OLD	Go	
GRASSLAND PASTURE	Gp	
GRASSLAND ROUGH	Gr	
GRASSLAND TUSSOCK	Gt	
GRASSLAND UNSPECIFIED	Gu	
GRAVEL PIT	Pg	
GRAVEYARD	Gd	
GREENHOUSE	Gh	
HEATH DRY	Hd	
HEATH/MOOR	H	X
HEDGEROW	Hg	
INDUSTRIAL UNSPECIFIED	I	X
LAKE ADJACENT	La	
LAKE IN	Li	
LAKE SHORE	Ls	
LAND FILL	Lf	
LIMESTONE PAVEMENT	Lp	
LOG	L	
MARSH	Mh	
MINE	Me	
MINERAL EXTRACTION	M	X
PARK/GARDEN	P	X
PARKLAND	Pd	
POND ADJACENT	Pa	
POND BANK	Pb	
POND IN	Pi	
QUARRY DISUSED	Qd	
QUARRY UNSPECIFIED	Qu	
QUARRY WORKING	Q	
RAILWAY CUTTING	Rc	
RAILWAY DISUSED	Rd	
RAILWAY EMBANKMENT	Re	
RAILWAY LINE	Rl	
RAILWAY UNSPECIFIED	R	X
RIVER/STREAM IN	Ri	
ROAD ALIVE	Ra	
ROAD UNSPECIFIED	T	X
ROADSIDE ALIVE	Rs	
ROCKERY	Ry	
ROCKY SHORE	Ssr	
RUBBISH TIP	Rt	
SAND DUNE	S	X
SCREE	Sc	
SCRUB	Scr	
SEA SHORE	Ss	
SEWAGE FARM	Sf	

SLAG HEAP	Sh	
STONE PILE/RUBBLE	Sp	
TREE STUMP	Ts	
VERGE GRASSY	Vg	
VERGE SCRUBBY	Vs	
WALL	Wl	
WASTEGROUND	Wgd	
WATER-BODY DRY	Dw	
WETLAND	Wt	X
WOODLAND	W	X
WOODLAND CONIFEROUS	Wc	
WOODLAND DECIDUOUS	Wd	
WOODLAND MIXED	Wm	
WOODLAND UNSPECIFIED	Wu	