

Appendix: Environmental Stewardship Options

This appendix summarises the options available in Environmental Stewardship (the main agri-environment scheme in England) that may directly, or indirectly, benefit reptiles. Similar options may be available under schemes in other countries of the UK. Natural England's website on Environmental Stewardship provides guidance and handbooks, which include payment rates and application procedures www.naturalengland.org.uk/ourwork/farming/funding/es

Environmental Stewardship Following the last EU reform of the Common Agricultural Policy, a range of farm subsidies was simplified into the Single Payment Scheme. This pays eligible farmers and land managers for complying (through what is known as cross compliance) with certain environmental standards. Environmental Stewardship is in addition to this basic support. Older schemes, such as the Environmentally Sensitive Areas (ESA) scheme and the Countryside Stewardship Scheme (CSS), are still running their course, but are no longer open to new applicants. Environmental Stewardship has two main strands: Entry and Higher Level.

Entry Level Stewardship (ELS) ELS is a five-year agreement involving basic work to improve the general environment on farms and can provide many benefits for reptiles in the wider countryside. ELS is divided into:

- Entry Level Stewardship (ELS).
- Organic Entry Level Stewardship (OELS).

Most farms enter either ELS or OELS, but both can also be located on the same farm. Where land occurs in Severely Disadvantaged Areas, both types of agreement can also include Uplands Entry Level Stewardship (UELS) elements. UELS may cover part of a holding or the entire farm.

A minimum points target must be met to qualify for ELS. This target is based on the size of the farm, with a certain number of points/ha being required. This points total then determines an annual payment. Basic ELS applicants currently need 30 points per ha. For example, a 100 ha farm would have a target of 3000 points; if achieved or exceeded, the annual payment would be £3000 per year for five years. The OELS requirement is 62 points/ha, while the target ranges from 8 to 92 points/ha for UELS agreements. Applicants select from a wide range of point-scoring management

options (e.g. hedgerow maintenance, taking field corners out of production, etc). Selection of entry level options is facilitated by a Farm Environment Record (FER), a simple survey map that indicates all features of environmental interest, such as hedges, woods, ponds, etc. All farms that meet certain basic requirements are guaranteed an ELS agreement.

Higher Level Stewardship (HLS) HLS is run for Defra by Natural England and involves much more targeted and specific options, many of which are absolutely crucial for the conservation of reptiles and their habitats. For example, the main funding mechanism for the vast majority of lowland heathland management in England is now HLS. HLS agreements may be:

- Combined with ELS or OELS agreements, either of which may also include UELS elements. In this situation, there is still a requirement to meet the ELS points target. Once this has been achieved a range of more specific HLS options can then be selected.
- Stand alone HLS agreements, generally for land of high environmental value where it would not otherwise be possible to gain any entry level points. Most lowland heathland is entered into HLS by means of this type of agreement.

HLS options involve straight payments per unit of measurement, e.g. £ per ha or £ per m and many are available only under this scheme. Some entry level options may also be used in HLS, in which case they become paid options too. Unlike ELS, a range of capital works is available under the HLS scheme. HLS options and capital items are linked to 'features' on the holding, which are all recorded on a Farm Environment Plan (FEP). The FEP includes a detailed spreadsheet for recording relevant features, plus maps to show their location, along with a range of background information about historical features and farming practices. The specific features that need to be recorded are grouped into 12 categories, with various sub-groups, all of which are listed in Natural England's FEP manual.

HLS is a competitive, ten-year scheme and entry depends on meeting certain criteria that are summarised in regional targeting statements and theme statements available on Natural England's website. Rare species and habitats, such as sand lizards and lowland heathland are among the specific features targeted. The HLS options selected

will be governed by the features identified in the FEP. Natural England advisors produce prescriptions for HLS options, and capital works, and these list the actions to be undertaken by the agreement holder. Where appropriate, relevant prescriptions can be specifically tailored to reptile conservation, but a wide range of general Environmental Stewardship options may also benefit reptiles.

Environmental Stewardship options that may benefit reptiles Note that the details below are subject to change by Defra as the scheme develops. A range of additional capital items that may be relevant to reptile habitat management are also available under HLS. All options have a general group code (e.g. B1, C25, etc) and, depending on the scheme they apply to, they will also have one or more of the prefixes below.

ELS prefixes (used to earn points toward the minimum entry level points target):

E = entry level
 O = organic entry level
 U = uplands entry level
 UO = organic uplands entry level

HLS prefixes (paid per unit of measurement, e.g. £ per ha or £ per m):

H = higher level
 OH = organic higher level
 UH = Uplands higher level
 UOH = organic uplands higher level

B Boundaries

EB1/EB2 or OB1/OB2: Hedgerow management on both sides/one side.
 EB3 or OB3: Enhanced hedgerow management.
 EB4/EB5, OB4/OB5, UB4/UB5 or UOB4/UOB5: Stone-faced hedge bank management on both sides/one side.
 EB6/EB7 or OB6/OB7: Ditch/half ditch management.
 EB8-EB10 or OB8-OB10: Combined hedge and ditch management options.
 EB11, OB11, UB11 or UOB11: Stone wall protection and maintenance.
 EB12/EB13, OB12/OB13, UB12/13 or UOB12/UOB13: Earth bank management on both sides/one side.
 UB14 or UOB14: Hedgerow restoration.
 UB15 or UOB15: Stone-faced hedge bank restoration.
 UB16 or UOB16: Earth bank restoration.
 UB17 or UOB17: Stone wall restoration.
 HB11/12: Management of hedgerows of very high environmental value on both sides/one side.
 HB14: Management of ditches of very high environmental value.



HLS requires adequate surveys. This seemingly average hedge bank is, actually, of historic importance and supports excellent adder and common lizard populations. It was therefore recorded as a high environmental value boundary in the FEP (Paul Edgar)

C Trees and woodland

EC4, OC4, HC4 or OHC4: Management of woodland edges.
 EC24, OC24, HC25 or OHC24: Hedgerow tree buffer strips on cultivated or rotational land.
 EC25, OC25, HC25 or OHC25: Hedgerow tree buffer strips on grassland or organic grassland.
 UC5 or UOC5: Sheep fencing around small woodlands.
 UC22, UOC22, UHC22 or UOHC22: Woodland livestock exclusion.
 HC7/HC8: Maintenance/restoration of woodland.
 HC9/HC10: Creation of woodland in/outside Severely Disadvantaged Areas.
 HC11: Woodland livestock exclusion supplement.
 HC12/HC13/HC14: Maintenance/restoration/creation of wood pasture and parkland.
 HC15/HC16/HC17: Maintenance/restoration/creation of successional areas and scrub.
 HC18: Maintenance of high-value traditional orchards.
 HC19/HC20/HC21: Maintenance/restoration/creation of traditional orchards.

D Historic and landscape features

ED2, OD2, HD2 or OHD2: Take out of cultivation archaeological features currently on cultivated or rotational land.
 ED4, OD4, HD4 or OHD4: Management of scrub on archaeological features.
 ED5, OD5, HD4 or OHD5: Management of archaeological features on grassland or organic grassland.
 HD7: Arable reversion by natural regeneration.
 HD9: Maintenance of designed/engineered water bodies.
 HD10/HD11: Maintenance/restoration of traditional water meadows.

E Buffer strips

EE1-EE3, OE1-OE3, HE1-HE3 or OHE1-OHE3: 2, 4 or 6 m buffer strips on cultivated or rotational land.

EE4-EE6, OE4-OE6, HE4-HE6 or OHE4-OHE6: 2, 4 or 6 m buffer strips on intensive or organic grassland.

EE7, OE7, HE7 or OHE7: Buffering in-field ponds in improved permanent grassland or organic grassland.

EE8, OE8, HE8 or OHE8: Buffering in-field ponds in arable or rotational land.

EE9 or OE9: 6 m buffer strips on cultivated or rotational land next to a watercourse.

EE10 or OE10: 6 m buffer strips on intensive or organic grassland next to a watercourse.

HE10: Floristically enhanced grass buffer strips (non-rotational).

HE11: Enhanced strips for target species on intensive grassland.



Well-sited Environmental Stewardship options have the potential to create excellent reptile habitat and link isolated populations. These arable buffer strips link other local reptile habitat (Paul Edgar)

F Arable land

EF1, OF1, HF1 or OHF1: Management of field corners.

EF2, OF2, HF2 or OHF2: Wild bird seed mixture.

EF4, OF4, HF4 or OHF4: Nectar flower mixture.

EF7, OF7, HF7 or OHF7: Beetle banks.

HF12: Enhanced wild bird seed mix plots (non-rotational plots are preferable for reptiles).

Other arable options, such as those for unfertilised/unharvested cereal headlands, uncropped areas on cultivated land or low input spring cereals, can provide indirect benefits to adjacent reptile populations by reducing chemical inputs and generally increasing prey species.

J Soil and water protection

EJ5, OJ5, HJ5 or OHJ5: In-field grass areas to prevent erosion and run-off.

EJ9, OJ9, HJ9 or OHJ9: 12 m buffer strips for watercourses on cultivated or rotational land.

EJ11, OJ11, HJ11 or OHJ11: Maintenance of watercourse fencing.

UJ3 or UOJ3: Post and wire fencing along watercourses.

UJ12, UOJ12, UHJ12 or UOHJ12: Winter livestock removal next to streams, rivers and lakes.

HJ3/HJ4: Arable reversion to grassland with low fertiliser input/unfertilised grassland to prevent erosion and run-off.

HJ8: Nil fertiliser supplement.

K Grassland outside the Severely Disadvantaged Areas (SDAs)

EK1, OK1, HK1 or OHK1: Take field corners out of management.

EK2/EK3, OK2/OK3, HK2/HK3 or OHK2/OHK3: Permanent grassland with low/very low inputs.

EK4, OK4, HK4 or OHK4: Management of rush pastures.

HK6/HK7/HK8: Maintenance/restoration/creation of species-rich, semi-natural grassland.

HK9/HK11/HK13: Maintenance/restoration/creation of wet grassland for breeding waders.

HK10/HK12/HK14: Maintenance/restoration/creation of wet grassland for wintering waders and wildfowl.

HK15/HK16/HK17: Maintenance/restoration/creation of grassland for target features.

HK19: Raised water levels supplement.

L Upland rough grassland and moorland inside the Severely Disadvantaged Areas (SDAs)

EL1, OL1, HL1 or OHL1: Take field corners out of management in SDAs.

EL2/EL3, OL2/OL3, HL2/HL3 or OHL2/OHL3: Permanent grassland with low/very low inputs in SDAs.

EL4, OL4, HL4 or OHL4: Management of rush pastures in SDAs.

EL5, OL5, HL5 or OHL5: Enclosed rough grazing.

EL6, OL6, HL6 or OHL6: Unenclosed moorland rough grazing.

UL17, UOL17, UHL17 or UOHL17: No supplementary feeding on moorland.

UL18, UOL18, UHL18 or UOHL18: Cattle grazing on upland grassland and moorland.

UL22, UOL22, UHL22 or UOHL22: Management of enclosed rough grazing for birds.

UL23, UOL23, UHL23 or UOHL23: Management of upland grassland for birds.

HL7/HL8: Maintenance/restoration of rough grazing for birds.

HL9/HL10/HL11: Maintenance/restoration/creation of moorland.

HL12: Supplement for management of heather, gorse and grass by burning, cutting or swiping.
HL13: Moorland re-wetting supplement.
HL15: Seasonal livestock exclusion supplement.



Environmental Stewardship options can fund reduced livestock densities on overgrazed moorland, thereby encouraging recovery of this habitat. Such support allows consideration of factors other than commercial pressures, such as biodiversity and flood control, while still allowing food production (Paul Edgar)

O Lowland heathland (HLS options only)

HO1/HO2: Maintenance/restoration of lowland heathland.
HO3: Restoration of forestry areas to lowland heathland.
HO4: Creation of lowland heathland from arable or improved grassland.
HO5: Creation of lowland heathland on worked mineral sites.

P Inter-tidal and coastal locations (HLS options only)

HP1/HP2: Maintenance/restoration of sand dunes.
HP3/HP4: Creation of coastal vegetated shingle and sand dunes on arable land/grassland.
HP5/HP6: Maintenance/restoration of coastal salt marsh.
HP10: Supplement for extensive grazing on salt marsh.
HP11: Salt marsh livestock exclusion supplement.

Q Wetland (HLS options only)

HQ1/HQ2: Maintenance of ponds of high wildlife value (less/more than 100m²).
HQ3/HQ4/HQ5: Maintenance/restoration/creation of reedbeds.
HQ6/HQ7/HQ8: Maintenance/restoration/creation of fen.
HQ9/HQ10: Maintenance/restoration of lowland raised bog.
HQ11/HQ12: Wetland cutting/grazing supplements.

Additional HLS Supplements

HL16: Shepherding supplement.
HR1: Cattle grazing supplement.
HR2: Native breeds at risk grazing supplement.
HR4: Supplement for control of invasive plant species.
HR5: Bracken control supplement.



Reptile habitat in the farmyard. The restoration of traditional farm buildings through HLS is extremely valuable in historic and landscape terms, but such work still needs to take into account the legal protection afforded to any reptiles that may occupy adjacent areas (Paul Edgar)

Examples of how Environmental Stewardship can improve farmland for reptiles



Buffer strips on grassland can be valuable for reptiles. On pasture, buffer strips may need some protection from grazing (Paul Edgar)



Although targeted at farmland birds, this non-rotational bird seed mix plot on arable land still provides cover for reptiles (Paul Edgar)



Farmers can receive payments for awkward field corners that may be difficult to work but provide excellent habitat for a range of wildlife, including reptiles (Paul Edgar)



Stone walls can increase in value for reptiles and other wildlife as they age. Decisions about the restoration of such boundaries should take this into account (Paul Edgar)



Areas of the farm that may not be included in an Environmental Stewardship agreement, such as bordering this track, can still provide valuable habitat connectivity within the holding (Paul Edgar)



A good ELS or HLS agreement will examine the potential for linking habitats, such as this remnant chalk grassland, in the wider landscape (Paul Edgar)

Amphibian and Reptile Conservation

The Amphibian and Reptile Conservation (ARC) Trust (Registered Charity No 1130188) is the UK's leading non-governmental organisation dedicated to native herpetofauna (amphibians and reptiles). Formerly named The Herpetological Conservation Trust it benefits from the experience of that organisation, which was founded in 1989. ARC's work includes:

- Protecting key sites for herpetofauna
- Improving habitat through practical conservation management
- Furthering understanding of herpetofaunal ecology and conservation
- Promoting effective legislation, policy and action for conserving biodiversity
- Raising awareness

ARC owns or manages 80 nature reserves. It has pioneered habitat management techniques for reptiles (and amphibians) and is an active member of the Lowland Heathland Habitat Action Steering Group). ARC also provides advice, training and assistance to a variety of people, including major landowners, on all aspects of reptile conservation through formal courses, workshops, site visits and guided walks.

ARC works throughout the British Isles (including the Channel Islands) in partnership with other nature conservation organisations, government bodies and institutions. Its role in promoting and developing legislative and policy mechanisms for wildlife conservation extends its remit and influence into Europe and beyond. This is achieved, in particular, through a close working relationship with the European Herpetological Society (Societas Europaea Herpetologica) and participation in the European Habitats Forum. Hence, ARC influences conservation action for threatened amphibians and reptiles in Britain and abroad.



Natural England

Natural England is an independent public body whose purpose is to protect and improve England's natural environment and encourage people to enjoy and get involved in their surroundings. The work of Natural England includes designated areas, spatial planning, licensing, and support for sympathetic farming and land stewardship.

Through its key role in biodiversity, Natural England plays a major part in the conservation of England's reptiles. It designates special sites for reptiles, advises on habitat management, and looks after a range of important populations on National Nature Reserves. Natural England's regulatory advice aims to protect reptiles from harmful activities. It runs recovery projects and communications to raise the profile of reptiles. Much of this work is done in conjunction with partners such as Amphibian and Reptile Conservation.

**Interface between woodland
and reedbed supporting all four
widespread reptile species (ARC)**