

Dowlais Flying Start, Dowlais

Landscape Management and Maintenance Plan



Revision -

November 2021

Blaenau-Gwent County Borough Council • Community Services

Floor 1 • Municipal Offices • Civic Centre • Ebbw Vale • NP23 6XB



Introduction

The maintenance plan has been developed to accompany the planning application for the new Dowlais Flying Start as requested by Merthyr Tydil County Borough Council (MTCBC).

Site description prior to development

The site is situated on the grounds of Dowlais Primary School, on the corner of High Street and Gwernllwyn Road, East of Merthyr Tydil Town.

The current site is comprised of Dowlais Primary School to the south, an established woodland to the north and to the east intensively managed amenity grassland.

Set within an urban environment surrounded by housing and connecting roads.



Figure 1 – Aerial image of site boundary. ©2021 Bluesky, infoterra Ltd.

Aims and objectives of the landscape maintenance plan

This document aims to meet the requirements of an appropriate Landscape and Maintenance Management Plan (LMMP) covering at least the first 5 years post project completion.

The overall aim is to secure ongoing monitoring, management and maintenance of the site, its immediate habitat and ecological features, to ensure intended outcomes are realized for the long term.

The LMMP has the following objectives:

1. To ensure a successful establishment and management of the proposed landscaping and wildlife habitats in line with all relevant local and national legislation;
2. To offer a work timetable for the establishment and management works and to specify responsibilities.

Responsibilities

Merthyr Tyfil County Borough Council and their appointed contractors will be responsible for the LMMP actions during construction.

Post-construction, the administrators of the learning centre will take over responsibility of the actions shown in the timetable of works.

Post-development landscapes

The LMMP will cover the installation and a 5-year management prescriptions for the following:

- a. Trees;
- b. Wild flowers and grasses;
- c. Protected species provision;
- d. Additional measures for the improvement of long term biodiversity.

A. TREES

Description

New tree planting will be planted in line along Gwernllwyn Road boundary, as indicated on the Site Modifications drawings. Collectively the tree line will measure approximately 40m.

Installation

For the planting scheme specification - refer to Table 1 and drawing number TS1428 PA-03.

Table 1 – Native species tree mix.

#	Ref	Species	Girth cm	Height cm	Clear Stem cm	Root Condition
	Bp	<i>Betula pendula</i>	8-10 1x	200-350	80-120	BR
	Ca	<i>Corylus avellana</i>	8-10 1x	200-350	80-120	BR
	Fs	<i>Fagus sylvatica</i>	8-10 1x	200-350	80-120	BR
	Qp	<i>Quercus petraea</i>	8-10 1x	200-350	80-120	BR
	Sc	<i>Salix caprea</i>	8-10 2x	200-350	80-120	BR

- All trees will be of British provenance.
- Trees to be planted as indicated on drawing number TS1428 T-26 in tree pits (1200 x 1200 x 600mm) with 550mm approved topsoil / compost mix backfill over 250mm free-draining sandy subsoil.
- Any root-balled trees will be staked with a short double stake and cross bar. All planted trees will be fitted with an irrigation / aeration pipe and inlet.
- Tree guards will be used where appropriate to protect against rabbit damage.
- Ideally, trees will be planted in the frost-free winter period (October to April), well-watered until established and thereafter watered when required.
- However, container-grown plants can be planted at any time of the year, although trees planted in the summer months will require more extensive watering.

Ongoing management for at least the first 5 years following the development

- Trees to be inspected in spring and autumn.
- Ties will be adjusted to avoid stem-constriction. Where there has been enough root growth to anchor the trees sufficiently. Tree ties can be removed (typically after two growing seasons).
- Dead, dying, diseased, damaged or vandalised trees will be removed and replaced with specimens of equivalent species, age and size.
- Regular watering will be undertaken to meet the needs of the onsite planting – adjusted depending on the prevailing weather conditions (e.g., more watering during periods of hot, dry weather).
- Tree stakes and cross bars will be checked twice yearly and repaired/repositioned as appropriate.
- All bark mulch will be maintained at the depth originally specified when installed (i.e., 75mm). The levels will be checked twice yearly and topped up as required.
- The use of herbicides are prohibited anywhere on site. Weed control to be carried out by hand.
- Any trimming/pruning/cutting back will be carried out during the autumn and winter months and outside the bird nesting season (between the beginning of March and end of August, albeit birds have been known to nest outside these dates in suitable conditions). If this work has to be undertaken during the nesting season, a breeding bird survey will be required and must be carried out by a suitably qualified person. Any active nests identified will be protected until the young have fledged. Where a schedule 1 species (as defined in the Wildlife and Countryside Act) is involved, compensation for impacts, e.g., loss of nesting sites, will be devised and implemented.
- All species will be maintained with sympathetic cutting every 2-3 years to allow the plants to form a second and third year growth to facilitate flowering and fruiting for the benefit of wildlife.

B. WILD FLOWERS and GRASSES MEADOW MIXTURE

Description

ESF2 – Wild Pollen and Nectar Flowers Mixture at a sowing rate of 0.2 g/m² combined with ESG2 – Fine Grassland Mixture at a sowing rate of 2 g/m² will cover the designated area of 100m².

Installation

For the planting scheme specification for the species areas – refer to Table 2 and drawing number TS1457-PL-21 Revision A.

Table 2 – Wild flowers and grasses species mix.

#	%.	Common name	Latin name
Wild Flowers			
	6	Yarrow	<i>Achillea millefolium</i>
	15	Common Knapweed	<i>Centaurea nigra</i>
	5	Wild Carrot	<i>Daucus carota</i>
	6	Field Scabious	<i>Knautia arvensis</i>
	8	Oxeye Daisy - (Moon Daisy)	<i>Leucanthemum vulgare</i>
	10	Birdsfoot Trefoil	<i>Lotus corniculatus</i>
	8	Musk Mallow	<i>Malva moschata</i>
	8	Cowslip	<i>Primula veris</i>
	8	Selfheal	<i>Prunella vulgaris</i>
	10	Meadow Buttercup	<i>Ranunculus acris</i>
	15	Red Campion	<i>Silene dioica</i>
	1	Wild Red Clover	<i>Trifolium pratense</i>
	50		
Grasses			
	8	Common Bent	<i>Agrostis capillaris</i>
	28	Crested Dogtail	<i>Cynosurus cristatus</i>
	15	Sheep's Fescue	<i>Festuca</i>
	24	Red Fescue	<i>Festuca rubra</i>
	15	Chewing's Fescue	<i>Festuca</i>
	5	Smaller Cat's-tail	<i>Phleum bertolonii</i>
	20	Smooth-stalked Meadow-grass	<i>Poa pratensis</i>
	50		

The seeds will be surface sown and broadcast by hand. Do not incorporate or cover the seeds, but firm in with a roll, or by treading, to give good soil/seed contact.

Ongoing management for at least the first 5 years following the development

- Remove all weeds by repeated cultivation, dig to bury the surface vegetation, rake to produce a medium tilth and roll or tread producing a firm surface.
- Control weeds in the first year by topping or mowing.
- Mow the newly sown areas regularly throughout the first year of establishment to a height of 40-60mm, removing cuttings if dense.
- After flowering in July or August take a 'hay cut': cut back with a scythe, or petrol strimmer

to c 50mm. Leave the 'hay' to dry and shed seed for 1-7 days then remove from site.

- Regular watering will be undertaken to meet the needs of the onsite planting – adjusted depending on the prevailing weather conditions (e.g., more watering during periods of hot, dry weather).
- No herbicides will be used anywhere onsite. Weed control will be undertaken by hand.
- Any trimming/pruning/cutting back will be undertaken in autumn or winter and outside of the bird nesting season (generally from 1st March until 31st August, although birds are known to nest outside of these dates in suitable conditions). If this type of work has to be undertaken during the nesting season, a breeding bird survey will be required and must be carried out by a suitably qualified person. Any active nests identified will be protected until the young have fledged. Where a Schedule 1 species (as defined in the Wildlife and Countryside Act) is involved, compensation for impacts, e.g., loss of nesting sites, will be devised and implemented.

C. PROTECTED SPECIES PROVISION (Bat and Bird Boxes)

Description

The following bat roosting box and bird nesting boxes will be installed on site:

- 1x Miramare Woodstone Bat Box;
(<https://www.wildcare.co.uk/miramare-woodstone-bat-box-11268.html>);
- 1x Sparrow Terrace Nest Box;
(<https://www.nestbox.co.uk/products/sparrow-terrace-nest-box>);
- 2x Swift Nest Box.
(<https://www.nestbox.co.uk/products/swift-nest-box>);

Installation

Miramare Woodstone Bat Box (*fixed to tree within woodland*)

The box will be securely fixed to the tree (without harming the health and longevity of the tree) sited in the west of the nursery building (as indicated with red arrow, on the figure 2 below) with one of the entrances oriented to the south. There will be no illumination of the bat boxes and no nearby illumination along the northern boundary of the site.

Lighting elsewhere on the site will conform to the following guidance:

Bats and artificial lighting in the UK: *Bats and the Built Environment* series. Guidance Note 08/18.

Bat Conservation Trust and the Institute of Lighting Professionals.

(<https://cdn.bats.org.uk/pdf/Resources/ilp-guidance-note-8-bats-and-artificial-lighting-compressed.pdf?mtime=20181113114229&focal=none>)



Figure 2 – Extract image of landscape drawing TS1457 –PL21

1no. Sparrow Terrace Nest Box, 2no Swift Nest Box (*on buildings*)

The boxes will be securely fixed to the building at a height of 3m and set in the location as indicated on the TS1457 –PL21. (Location shown in light blue)

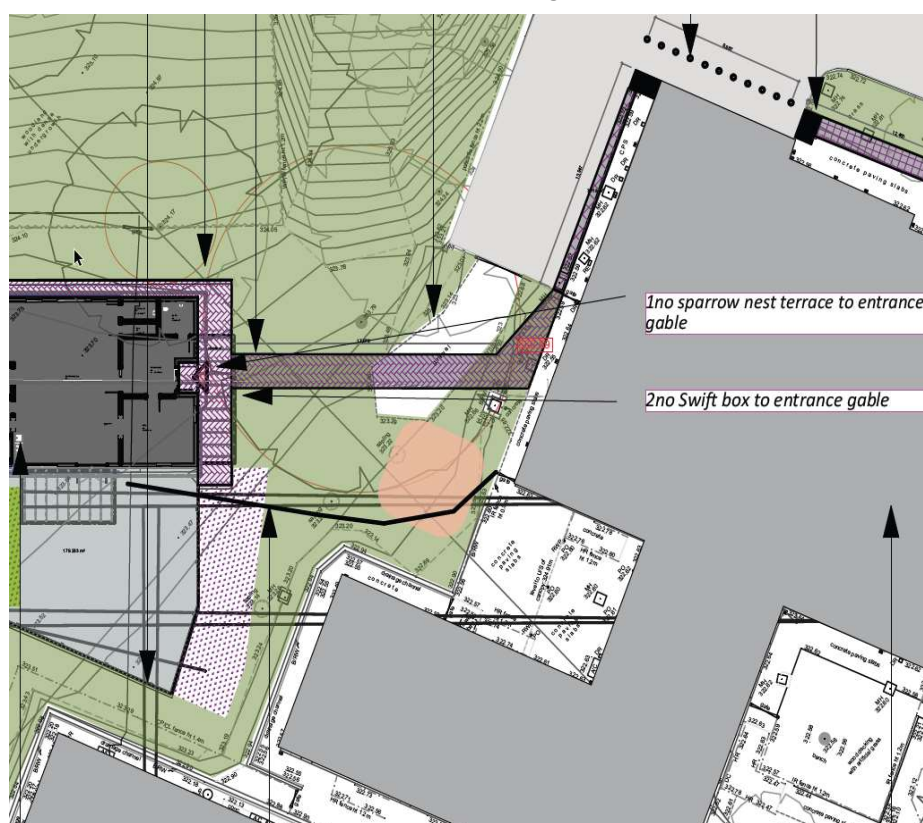


Figure 3 – Extract image of landscape drawing TS1457 –PL21

Ongoing management for at least the first 5 years following the development

Monitoring surveys of the bat box will be undertaken in Years 2 and 5 following the completion of the development, inclusive of monitoring of the roosts within the buildings.

The monitoring surveys will be undertaken by a suitably qualified and licensed bat ecologist.

Any old bird nests should be removed from the bird boxes following the nesting season.

A survey by a suitably qualified ecologist will be undertaken to determine whether the box is still in use.

Only when it has been determined not to be in use will the next box be removed for cleaning. Boiling water will be used to kill any remaining parasites. Insecticides and flea powders are prohibited. Any unhatched eggs or deceased young birds may be disposed of.

D. ADDITIONAL MEASURES FOR THE IMPROVEMENT OF LONG TERM BIODIVERSITY

Refer to Table 3 for additional measures to be implemented with the aim of improving long term biodiversity.

Table 3 - Additional measures for the improvement of long term biodiversity on site.

Ref	Additional measure for the improvement of long term biodiversity
1	The principal contractor will nominate a Biodiversity Champion with the authority to influence site activities and ensure that detrimental impacts on site biodiversity are minimised in line with the recommendations and enhancements suggested by the Suitably Qualified Ecologist (refer to the Ecological Appraisal - The Neighbourhood Learning Centre (September 2021).
2	Training will be provided for the entire site workforce to ensure they are aware of how to avoid damaging site ecology during operations on-site. Training will be based on the findings and recommendations for protection of ecological features highlighted within this Landscape Management Plan and the Ecological Appraisal (September 2021).
3	The principal contractor will record actions taken to protect biodiversity and monitor their effectiveness throughout key stages of the construction process. The principal contractor will make records available where publicly requested.
4	Bat and bird boxes incorporated into the site for mitigation/compensation or as enhancement represent new ecologically valuable habitat, which is appropriate to the local area.
5	The contractor will programme site works to minimise disturbance to wildlife: • If habitat suitable for nesting birds are to be removed, then any vegetation clearance will take place outside of the bird nesting. • Gaps (13cm x13cm) should be left at the bases of all on-site fences/walls including site boundaries to allow passage of hedgehogs across the site. In addition, cautious working is advised to prevent killing or injury to this species.
6	A partnership will be set up by the design team with the local Wildlife Trust. The aim will be to provide, ongoing support and advice to the school to help manage, maintain and develop the outdoor space in the longer term in terms of biodiversity.

APPENDIX I – LEGISLATION

Planning and biodiversity

Local Authorities have a requirement to consider biodiversity and geological conservation issues when determining planning applications under the following planning policies.

Planning Policy Wales (2018) and Technical Advice Note 5 (2009);

Planning Policy Wales (Edition 10, December 2018) sets out the land use planning policies of the Welsh Government, integrating with the Environment (Wales) Act 2016.

TAN 5 (Welsh Government, 2009) specifically provides advice about how the land use planning system should contribute to protecting and enhancing biodiversity and geological conservation. The TAN provides advice for local planning authorities on the key principles of positive planning for nature conservation; nature conservation and Local Development Plans; nature conservation in development management procedures; development affecting protected internationally and nationally designated sites and habitats; and development affecting protected and priority habitats and species.

Under Section 2.4 within the TAN 5, 'when deciding planning applications that may affect nature conservation local planning authorities should':

- Pay particular attention to the principles of sustainable development, including respect for environmental limits, applying the precautionary principle, using scientific knowledge to aid decision making and taking account of the full range of costs and benefits in a long term perspective;
- Contribute to the protection and improvement of the environment, so as to improve the quality of life and protect local and global ecosystems, seeking to avoid irreversible harmful effects on the natural environment;
- Promote the conservation and enhancement of statutorily designated areas and undeveloped coast;
- Ensure that appropriate weight is attached to designated sites of international, national and local importance;
- Protect wildlife and natural features in the wider environment, with appropriate weight attached to priority habitats and species in Biodiversity Action Plans;
- Ensure that all material considerations are taken into account and decisions are informed by adequate information about the potential effects of development on nature conservation;
- Ensure that the range and population of protected species is sustained;
- Adopt a step-wise approach to avoid harm to nature conservation, minimise unavoidable harm by mitigation measures, offset residual harm by compensation measures and look for new opportunities to enhance nature conservation; where there may be significant harmful effects local planning authorities will need to be satisfied that any reasonable alternative sites that would result in less or no harm have been fully considered.

Legislation and biodiversity

Certain species of animals and plants found in the wild in the UK are legally protected from being harmed or disturbed. These species are listed in the Wildlife and Countryside Act 1981 (as amended) or are named as European Protected Species (EPS) in the Conservation of Habitats and Species Regulations 2017. These two main pieces of legislation have been consulted when writing this report and are therefore described in detail within this section.

Other relevant legislation and policy documents that have been consulted include – The Environment (Wales) Act 2016; The Countryside and Rights of Way Act 2000; The Hedgerow Regulations 1997; Biodiversity Action Plans, both UK-wide (UKBAP) and Local plans (LBAPs), and The National Planning Policy Framework (NPPF).

There is also legislation that legally protects certain animals - for example, the Protection of Badgers Act (1992) protects badgers and their setts, and the Deer Act (1991) places restrictions on actions that can be taken against deer species.

Environment (Wales) Act 2016

Section 6 of the Act places a duty on public authorities to 'seek to maintain and enhance biodiversity' so far as it is consistent with the proper exercise of those functions. In so doing, public authorities must also seek to 'promote the resilience of ecosystems'. The duty replaces the section 40 duty in the Natural Environment and Rural Communities Act 2006 (NERC Act 2006), in relation to Wales, and applies to those authorities that fell within the previous duty.

Public authorities will be required to report on the actions they are taking to improve biodiversity and promote ecosystem resilience.

Section 7 replaces the duty in section 42 of the NERC Act 2006. The Welsh Ministers will publish, review and revise lists of living organisms and types of habitat in Wales, which they consider are of key significance to sustain and improve biodiversity in relation to Wales.

The Welsh Ministers must also take all reasonable steps to maintain and enhance the living organisms and types of habitat included in any list published under this section, and encourage others to take such steps.

Wildlife & Countryside Act 1981 (as amended)

The Wildlife & Countryside Act 1981 (as amended) [WCA] is the primary legislation for England and Wales for the protection of flora, fauna and the countryside. Part I within the Act deals with the protection of wildlife.

Most European Protected Species offences are now covered under the Conservation of Habitats and Species Regulations (see below), but some 'intentional' acts are still covered under the WCA, such as obstructing access to a bat roost.

The WCA prohibits the release to the wild of non-native animal species listed on Schedule 9 (e.g. Signal Crayfish and American Mink). It also prohibits planting in the wild of plants listed in Schedule 9 (e.g. Japanese Knotweed and *Rhododendron ponticum*) or otherwise deliberately causing them to grow in the wild. This is to prevent the release of invasive non-native species that could threaten our native wildlife.

The provisions relating to animals in the Act only apply to 'wild animals'; these are defined as those that are living wild or were living wild before being captured or killed. It does not apply to captive bred animals being held in captivity. There are 'defences' provided by the WCA. These are cases where acts that would otherwise be prohibited by the legislation are permitted, such as the incidental result of a lawful operation which could not be reasonably avoided, or actions within the living areas of a dwelling house.

Licensing: certain prohibited actions under the Wildlife and Countryside Act may be undertaken under licence by the proper authority. For example, scientific study that requires capturing or disturbing protected animals can be allowed by obtaining a licence – e.g. bat surveys.

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (came into force on EU exit day – 31st January 2020). These regulations are the principal means by which the EC Habitats Directive is transposed in England and Wales) update the legislation and consolidate all the many amendments which have been made to the Regulations since they were first made in 1994.

These regulations provide for the:

- Protection of European Protected Species [EPS] (animals and plants listed in Annex IV Habitats Directive which are resident in the wild in Great Britain) including bats, dormice, great crested newts, and otters;
- Designation and protection of domestic and European Sites - e.g. Site of Special Scientific Interest [SSSI] and Special Area of Conservation [SAC]; and
- Adaptation of planning controls for the protection of such sites and species.

Public bodies (including the Local Planning Authority) have a duty to have regard to the requirements of the Habitats Directive in exercising their function – i.e. when determining a planning application.

There is no defence that an act was the incidental and unavoidable result of a lawful activity.

Licensing: it is possible for actions which would otherwise be an offence under the Regulations to be undertaken under licence issued by the proper authority. For example, where a European Protected Species has been identified and the development risks deliberately affecting an EPS, then a 'development licence' may be required.

Species protection

The following protected species information is relevant to this report. Legislation is only discussed in relation to planning and development; other offences may exist.

Amphibians

The common frog, common toad, common newt, and palmate newt receive limited protection under the Wildlife and Countryside Act 1981 (as amended), making it illegal to sell or trade them.

The Great Crested Newt and Natterjack Toad are fully protected under the Conservation of Habitats and Species Regulations 2017 as European Protected Species. It is illegal to:

- Deliberately capture, injure, kill, or disturb either species;
- Intentionally or recklessly obstruct access to any structure/place used for shelter or protection; or
- Damage or destroy a breeding site or resting place.

Badger

Badgers are protected in the UK under the Protection of Badgers Act 1992. Under the act it is an offence to:

- Wilfully kill, injure, take, possess or cruelly ill-treat a Badger, or attempt to do so;
- To intentionally or recklessly interfere with a sett (this includes disturbing Badgers whilst they are occupying a sett, as well as damaging or destroying a sett or obstructing access to it).

The legislation aims to protect the species from persecution, rather than being a response to an unfavourable conservation status, as the species is in fact common over most of Britain; it is not intended to prevent properly authorised development.

Bats

All British bats are classed as European Protected Species and therefore receive protection under the Conservation of Habitats and Species Regulations 2017, making it an offence inter alia to:

- Deliberately kill, injure or capture a bat;
- Deliberately disturb bats;
- Damage or destroy a breeding site or resting place of a bat.

In addition, all British bats are also listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) which contains further provisions making it an offence to intentionally or recklessly:

- Obstruct access to any structure or place which any bat uses for shelter or protection; or
- Disturb any bat while occupying a structure or place which it uses for that purpose.

If proposed development work is likely to destroy or disturb bats or their roosts, then a licence will need to be obtained from Natural Resources Wales, which would be subject to appropriate measures to safeguard bats.

Birds

In the UK, the provisions of the Birds Directive are implemented through the Wildlife & Countryside Act 1981 (as amended), the Conservation of Habitats and Species Regulations 2017. All wild birds, their nests and eggs are protected it an offence to:

- Kill, injure, or take any wild bird;
- Take, damage or destroy the nest of any such bird whilst it is in use or being built; or
- Take or destroying an egg of any such wild bird.

The law covers all species of wild birds including common, pest or opportunistic species.

Special protection against disturbance during the breeding season is also afforded to those species listed on Schedule 1 of the Act.

Common dormice

The common dormouse is a European Protected Species and therefore receives protection under the Conservation of Habitats and Species Regulations 2017, making it an offence *inter alia* to:

- Deliberately capture, injure, or kill a dormouse;
- Deliberately disturb dormice;
- Damage or destroy a breeding site or resting place of a dormouse.

In addition, the dormouse is listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) which contains further provisions making it an offence to intentionally or recklessly:

- Obstruct access to any structure or place which a dormouse uses for shelter or protection; or
- Disturb a dormouse while occupying a structure or place which it uses for that shelter or protection.

Otters

The European Otter, *Lutra lutra* is a European Protected Species and therefore receive protection under the Conservation of Habitats and Species Regulations 2017, making it an offence to:

- Deliberately capture, injure or kill any wild otters;
- Deliberately disturb wild otters;
- Damage or destroy a breeding site or resting place of an otter.

In addition, the otter is listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) which contains further provisions making it an offence to intentionally or recklessly:

- Disturbs an otter while it is occupying a structure or place which it uses for shelter or protection; or
- Obstructs access to such a place.

If proposed development work is likely to destroy or disturb otters or their resting places, then a licence will need to be obtained from Natural Resource Wales, which would be subject to appropriate measures to safeguard otters.

Reptiles

Adders, slow worms, grass snakes and common lizards are protected against killing and injuring under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). This legislation makes it illegal to intentionally kill or injure a common reptile. As a result, reptiles must be removed from areas of development and relocated onto suitable release sites before any site works can commence.

Smooth snakes and sand lizards are European Protected Species under schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2017. This makes it illegal to carry out the following activities:

- Deliberately or recklessly disturb, capture or kill these animals;
- Deliberately or recklessly take or destroy eggs of these animals;
- Damage or destroy a breeding site or resting place of such a wild animal; or
- Keep, transport, sell or exchange, or offer for sale or exchange, any live or dead animal, or any part of, or anything derived from such a wild animal.

End of text
