

- 6 The distribution of the large blue butterfly, *Phengaris arion*, extends across Europe and Asia. It is assessed by the International Union for Conservation of Nature (IUCN) on the Red List™ as 'Near Threatened' globally and 'Endangered' in Europe.

In Europe, *P. arion* became extinct in the Netherlands in 1964 and in the United Kingdom in 1979.

Fig. 6.1 lists the conservation status categories in the IUCN Red List™.

conservation status

Extinct (EX)

Extinct in the Wild (EW)

Critically Endangered (CR)

Endangered (EN)

Vulnerable (VU)

Near Threatened (NT)

Least Concern (LC)



increasing risk of extinction

Fig. 6.1

Fig. 6.2 shows *P. arion*.



Fig. 6.2

- (a) (i) Explain how IUCN Red List™ assessments help to conserve biodiversity.

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- (ii) With reference to Fig. 6.1 and the IUCN assessments for *P. arion*, suggest how the abundance of the butterfly differs across its distribution.

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- (b)** *P. arion* has been successfully re-introduced in the United Kingdom at 12 sites. These sites were restored to flower-rich grassland.

The conservation management actions designed for *P. arion* also resulted in the re-establishment or increase of other species at the restored sites. These included 12 species of flowering plant, 8 other butterfly species and 4 species of other insects.

- (i) Use the information given to suggest why *P. arion* went extinct in the United Kingdom in 1979.

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- (ii) Outline the advantages of restoring habitats for endangered species.

[4]

[Total: 11]