

Purple Emperor (*Apatura iris*)

Areas and status: Primarily central southern and south east England, with scattered populations in East Midlands and introductions in Warwickshire and East Anglia. Significant declines in distribution (-47%) 1976-2014.

Woodland type: Lowland Broadleaved Woodland; PAWS.

Preferred habitat niches: Moist woodland, including woodland developing over heathland, downland, meadows or ex-arable; strongest populations found in extensive woodlands on heavy clay soils, especially those combining mature woodland with younger growth. Breeds on broader, larger-leaved species and hybrids, favours partially shaded medium-sized or tall sallows.

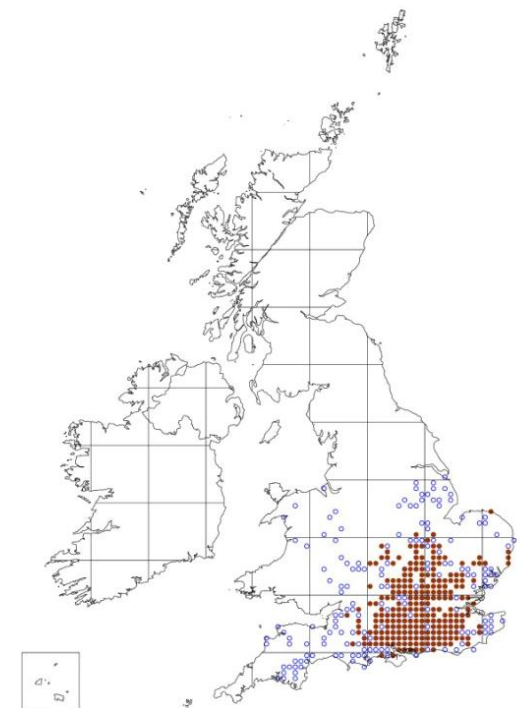
Potential habitat management issues associated with decline:

- Removal of sallows along rides and woodland edges and in young plantations
- Lack of sallow regeneration within woodlands
- Loss of sallow in neglected or mature closed-canopy woodland, due to competition from adjacent tall trees
- Deer or stock browsing of young sallows
- Loss of rides and glades due to overshadowing by trees or planting programmes
- Decline in coppicing and felling programmes
- Drainage of wet woodlands
- Habitat fragmentation and loss of connectivity leading to isolation of surviving populations

Potential habitat management solutions:	
Prescription	Comment
Glades, Rides	Identify and retain 'master trees'. Ensure continuous supply of medium-tall, partially shaded sallows with sufficient space to mature. Cut in 3 zones: 3 on a 5-10 yr rotation. Sallows overhanging rides and impeding access may be pollarded, providing they are not exposed to full sun, but ideally should not be removed. If sallows must be removed, ring-bark in late May first then fell in autumn. If sallows are restricted to rides, widening or glade creation may be required; width should be >1.5 times the height of nearby trees; scallop ride edges to create sheltered conditions ensuring tall trees to the south. Creating new east-west rides and box junctions within woods can be valuable especially where they link existing breeding areas.
Rotational coppice/Small group clear-fell	Manage 50x50m to 70x70m coupes on 15-20 yrs coppice or 20-30 yrs clear-fell rotations. Retain sallows and 1-2 oak standards. Locate these coupes adjacent to rides and glades.
Grazing	Limit excessive grazing and browsing as this can impact on sallow regeneration and suitability of retained bushes.
Woodland creation (natural regeneration/colonisation, native species, and/or variable density planting)	On areas of low ecological interest, allow natural regeneration or plant locally sourced sallows alongside rides, glades and woodland edges, plant woodlands to enlarge existing woodland or connect fragmented woods. Manage drainage to ensure the presence of some damper areas.
Connectivity	Manage woodlands on a landscape-scale. Retain sallows within shelterbelts, tree lines and high hedges linking woodlands.



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● Pre 2005
● 2005 – 2014

Source: Butterfly Conservation