

## 11 Appendix

### 11.1 List of reviewed Lepidoptera reintroductions

Species	Location	Habitat	Source individuals (C = Captivity, W = Wild)	Individuals released	Use of genetic markers (Ms = microsatellites, Mt = mtDNA, Sn = SNPs)	Years passed between release and most recent monitoring	Technique for monitoring success pre-release	Post-release monitoring (S = Successful, U = Unsuccessful, I = Inconclusive)	References
<i>Aporia crataegi</i>	United Kingdom, Europe	Grassland	-	>100 individuals (unspecified)	-	-	-	U	Todisco et al, 2020
<i>Callophrys irus</i>	USA, North America	Sandhill	W	20 caterpillars	-	-	-	I	Meyer & McElveen, 2021
<i>Capricornia boisduvaliana</i>	Finland, Europe	Grassland	C	12 adult females & unknown amount of eggs	-	-	-	I	Välimäki & Itämies, 2002
<i>Carterocephalus palaemon</i>	United Kingdom, Europe	Woodland	-	50 individuals (unspecified)	-	-	-	I	Bourn, 2019
<i>Chazara briseis</i>	Czech Republic, Europe	Grasslands (steppe) with bedrock	C	124 adults & 340 caterpillars approx	-	-	-	U	Bartoňová et al, 2021
<i>Coenonympha tullia</i>	United Kingdom, Europe	Wet bogs	C	>3000 pupae	-	3	-	S	BIAZA, 2017
<i>Cyaniris semiargus</i>	United Kingdom, Europe	Grassland	W	3 females and 1 male adults	-	1	-	I	White, 2020
<i>Cyclargus thomasi bethunebakeri</i>	USA, North America	Tropical hardwood forest	C	-	Ms	-	-	I	Daniels, 2009
<i>Eriogaster catax</i>	Poland, Europe	Xerothermic grassland	W	70 caterpillars approx.	-	-	-	I	Kuźmiński et al, 2014
<i>Eumaeus atala</i>	USA, North America	Rockland and tropical hardwood forest	C	-	-	-	-	S	Koi & Daniels, 2015
<i>Euphydryas aurinia</i>	United Kingdom, Europe	Damp grassland	C	42000 caterpillars	5 Ms	9	-	S	Davis et al, 2021
<i>Euphydryas editha quino</i>	USA, North America	Scrublands	C	1,000 caterpillars	-	-	-	U	Pratt & Emmel, 2010
<i>Euphydryas editha taylori</i>	USA, North America	Grassland	C	6589 caterpillars and 107 adults	-	2	Presence and relative abundance of adults on a yearly basis	I	Linders & Lewis, 2013
<i>Euphydryas gillettii</i>	USA, North America	Conifer forests and grassland	C & W	10000 eggs approx.	-	28	-	S	Boggs et al, 2006
<i>Euphydryas maturna</i>	Czech Republic, Europe	Forest	C	3950 caterpillars	-	1	Noticing larval nests to indicate successful breeding	I	Soorae, 2021

<i>Eustroma reticulatum</i>	United Kingdom, Europe	Woodland	W	190 caterpillars	-	2	-	I	Hooson & Haw, 2008
<i>Glaucopsyche lygdamus palosverdesensis</i>	USA, North America	Coastal scrub	C	861 adults and 2527 caterpillars	-	-	-	I	U.S. Fish and Wildlife Service, 2014
<i>Gortyna borellii lunata</i>	United Kingdom, Europe	Coastal grassland	C	Eggs and caterpillars	-	7	-	S	Gardiner et al, 2016
<i>Heraclides aristodemus ponceanus</i>	USA, North America	Dry forest	C	-	-	-	-	U	Clayborn, 2017
<i>Hesperia comma</i>	United Kingdom, Europe	Chalk grassland	-	14 larval nests	-	9	-	S	Lawson et al, 2013
<i>Lycæana helle</i>	France, Europe	Grassland & wetland	W	15 adult females & 3 males	-	>20	-	S	Meyer & Habel, 2014
<i>Lycæna dispar</i>	United Kingdom, Europe	Wetland	-	-	-	-	-	U	Thomas and Lewington, 2010
<i>Lycia zonaria britannica</i>	United Kingdom, Europe	Dune grassland	C	2030 caterpillars	-	5	-	U	Howe et al., 2004
<i>Maculinea arion</i>	United Kingdom, Europe	Dry grassland	W	550 caterpillars approx.	14 Ms	19	-	S	Andersen et al., 2014
<i>Maculinea nausithous</i>	Netherlands, Europe	Grassland	W	48 adult females & 22 males	-	10	Establishment of the butterflies at the release site	S	Jansen et al, 2012
<i>Maculinea teleiüs</i>	Netherlands, Europe	Grassland	W	53 adult females & 33 males	-	10	Establishment of the butterflies at the release site	S	Van Langevelde & Wynhoff, 2009
<i>Melanargia galathea</i>	United Kingdom, Europe	Chalk and limestone grasslands	W	500 individuals (unspecified)	-	8	-	S	Willis et al., 2009
<i>Melitæa athalia</i>	United Kingdom, Europe	Heathland and grassland	-	-	-	-	-	I	Carter et al., 2016
<i>Melitæa cinxia</i>	Belgium, Europe	Dry grassland	W	14 larval nests	-	10	-	S	van Noodwijk et al, 2012
<i>Melitæa protomedia</i>	Japan, Asia	Grassland	C	>2000 caterpillars	Ms & Mt	-	-	I	Nakahama & Isagi, 2017
<i>Paralucia spinifera</i>	Australia, Oceania	Eucalypt woodland	W	1260 caterpillars	-	3	-	I	Mjadwesch & Nally, 2008
<i>Parnassius apollo</i>	Finland, Europe	Bedrock	C	3,865 caterpillars approx.	-	8	Presence of apollo adults at least two years after the last release of captive-reared larvae	I	Fred & Brommer, 2015; Kukkonen, 2021
<i>Parnassius bremeri</i>	Korea, Asia	Forest and grassland	C	240 individuals (unspecified)	-	5	Population dispersal beyond release sites	S	Soorae, 2021
<i>Parnassius mnemosyne</i>	Finland, Europe	Grassland and deciduous forest	W	10 females	-	11	-	S	Kuussaari et al., 2015

<i>Plebejus argus</i>	United Kingdom, Europe	Lowland heathland and calcareous grassland	W	74 females and 26 male adults	-	2	-	I	Harris, 2008
<i>Plebejus melissa samuelis</i>	USA, North America	Oak savanna	-	-	-	>10	-	S	TNC, 2021
<i>Proclossiana eunomia</i>	France, Europe	Grassland & wetland	W	14 adult females	-	>30	Caterpillars staying and showing growth in the release site	S	Meyer & Habel, 2014
<i>Pseudophilotes baton schijfer muelleri</i>	Finland, Europe	Sand grassland	W	10 adult females	-	-	-	U	Marttila et al, 1997
<i>Pyrgus malvae</i>	United Kingdom, Europe	Grassland, woodland, brownfield	-	-	-	>15	-	U	Coleman, 2017
<i>Satyrrium pruni</i>	United Kingdom, Europe	Woodland	-	-	-	-	-	S	Bourn & Warren, 1998
<i>Shijimiaeoides divinus</i>	Japan, Asia	Grassland	C	Pupae	-	-	-	U	Hirabayashi et al, 2009
<i>Speyeria idalia</i>	USA, North America	Damp grassland	W	-	-	17	-	S	Shepherd & Debinski, 2005; Shepherd pers. comm. as in Bellis, 2021
<i>Speyeria zerene behrensii</i>	USA, North America	Coastal grassland	C	>1000 caterpillars, pupae and adults	-	9	-	I	Hays & Stinson, 2019
<i>Speyeria zerene hippolyta</i>	USA, North America	Coastal grassland	C	>900 caterpillars	-	-	Population of 200 - 500 individuals sustained for over 10 years	I	Soorae, 2018
<i>Trapezites symmomus</i>	Australia, Oceania	Woodland	W	172 caterpillars	-	>20	Presence of the species in the source and release site	S	Braby, 2012