



**Butterfly  
Conservation**

Saving butterflies, moths and our environment

## **Thursday 13<sup>th</sup> April 2023**

|               |  |
|---------------|--|
| 15:00         | Onwards: registration for accommodation at Woodlands Hotel reception area, Wyboston Conference Centre. |
| 16:00         | Until 19:00: Symposium registration Woodland Hotel by reception area                                   |
| 17:00         | Until Midnight: Bar open   |
| 18:30 onwards | Dinner at Oliver restaurant, open 18.30 till 20.30   |



## Programme: Friday 14<sup>th</sup> April

|                               |  |  |
|-------------------------------|--|--|
| From<br>07.00<br>till<br>9.00 | Breakfast – Olive Restaurant, Woodlands Event Centre.  |  |
| 8.00                          | Symposium registration, Woodland Hotel by reception area   |  |
|                               | <b>Rosewood 1 &amp; 2</b>  | <b>Ebony</b>   |
| 8.50                          | Welcome Julie Williams,<br>Chief Executive<br>Butterfly Conservation   |  |
|                               | <b>Species Conservation 1</b>  | <b>Climate Change 1</b>  |
| 9:00                          | <i>Keynote lecture</i>   |  |
|                               | The paths of decline and prospects for<br>recovery of the rarest butterflies   |  |
|                               | Nick Haddad  |  |
| 9.30                          | Landscape-scale dynamics of a<br>threatened species respond to local<br>scale conservation management                  | How does the temporal manifestation<br>of life history events and hostplants<br>impact Lepidopteran phenology in the<br>UK   |
|                               | Rachel Jones   | Emily Hickinbotham   |
| 9.45                          | Conservation from theory to practice:<br>the case of <i>Zerynthia polyxena</i><br>threatened by Turin-Lyon megaproject | The conservation value of isolated<br>rear-edge populations of a cold<br>adapted butterfly, <i>Erebia aethiops</i> , in<br>Britain.  |
|                               | Irene Piccini  | Rosa Ménendez  |
| 10.00                         | 'Gardening' in sand dunes: The last<br>hope for the Tree Grayling in the<br>Netherlands                                | Butterfly community responses to<br>warming vary across four<br>Mediterranean mountain ranges  |
|                               | Albert Vliegenthart  | Guim Ursul   |
| 10.15                         | Reintroduction to prevent the<br>extinction of wet ecotype of<br><i>Coenonympha oedippus</i> in Slovenia               | The influence of climatic extremes on<br>mountain butterfly distributions  |
|                               | Tatjana Čelik  | Robert Wilson  |
| 10.30                         | Tools and best practices to inform<br>species status assessments   | Seasonal fluctuations and climate<br>change effects on Noctuidae<br>assemblage in Askot Wildlife<br>Sanctuary, Uttarakhand: a high-<br>altitude mountain ecosystem of<br>Western Himalayas |
|                               | Geena Hill   | Uttaran Bandyopadhyay  |
| 10.45                         | Coffee/tea Cedar lounge  |  |



|       | <b>Rosewood 1 &amp; 2</b>  | <b>Ebony</b>  |
|-------|--|---|
|       | <b>Climate Change 2</b>  | <b>Engaging diverse communities</b>   |
| 11.15 | Macro moths' assemblage from the Indian Trans Himalayan region, Lahaul valley: a way towards identifying the potential indicator species for monitoring climate change<br><br>Shabnam Kumari | A trial of automated feedback via personalised data stories in a butterfly citizen science project<br><br>Simon Rolph |
| 11.30 | Effects of recent climate change on butterfly beta and functional diversity in the central Iberian Peninsula<br><br>Hugo Alejandro Álvarez   | The Mothwall Project: Shedding Light on Moth Biodiversity<br><br>Joe Bowden   |
| 11.45 | Thinking about hydroregulation and water-balance stress in butterflies under rapidly changing environments<br>Hans van Dyck  | Engaging the younger generation<br>Ingeborg Vanes   |
| 12.00 | From Africa to the Alps: distribution drivers of the alien species <i>Cacyreus marshalli</i> in an alpine protected area.<br><br>Federica Paradiso   | The potential of timed area counts for monitoring butterfly populations across Europe<br><br>David Roy                |
| 12.15 | History of an invasion: spatio-temporal dynamics and niche comparison of the butterfly <i>Cacyreus marshalli</i> among native and non-native range<br><br>Francesca Martelli                 | Conserving lowland peatlands in central Scotland by volunteer action<br><br>Polly Philpott                            |
| 12.30 | Climate change and coastal erosion drive changes in populations of Sandhill Rustic <i>Luperina nickerlii</i> in Britain and Ireland<br><br>Adrian Spalding                                   | BIMAG – Farmer Insect Monitoring Agricultural Areas<br><br>Jeroen van der Brugge                                      |
| 12.45 | Alpine butterflies are getting smaller and brighter: Adaptions to rapidly warming temperatures in the German Alps<br><br>Janika Kerner   | An Artist Talk. Moth Navigation, Imposters and Other Experiences.<br><br>Finlay Taylor                                |
| 13.00 | Lunch – Olive Restaurant, Woodlands Event Centre.  |   |



|       | <b>Rosewood 1 &amp; 2</b>  | <b>Ebony</b>   |
|-------|--|--|
| 14.00 | <p><i>Keynote lecture</i></p> <p>Intergovernmental and other science-policy processes and their relevance for the conservation of insects</p> <p>Josef Settle</p>                            |  |
|       | <b><i>Phengaris (Maculinea) research</i></b>   | <b>Methodological advances in monitoring and statistics</b>  |
| 14.30 | <p>Alcon Blues – habitat factors determining the persistence of an endangered butterfly in the Netherlands</p> <p>Michiel Wallis De Vries</p>  | <p>Estimating trends of butterflies and moths – statistical challenges and opportunities</p> <p>Emily Dennis</p>                             |
| 14.45 | <p>The last of the Maculineans: the rapid decline of <i>Phengaris alcon</i> in Flanders (northern Belgium)</p> <p>Dirk Maes</p>  | <p>Accounting for varying spatial scales and phenology in the production of UK butterfly abundance estimates.</p> <p>James Clark</p>         |
| 15.00 | <p>Crossing borders for the conservation of the Dusky Large Blue (<i>Maculinea nausithous</i>)</p> <p>Irma Wynhoff</p>   | <p>Using yearly butterfly monitoring data to analyse incidentally monitored areas</p> <p>Gerdien Bos-Groendijk</p>                           |
| 15.15 | <p>Adaptation to its host ants by the protected myrmecophilous butterfly <i>Maculinea teleius</i> at a reintroduction site: Analysis of vibroacoustic signals</p> <p>Luca Pietro Casacci</p> | <p>Calculating annual population numbers – a comparison between TRIM and rbms</p> <p>Martin Poot</p>   |
| 15.30 | <p>The microbiome of <i>Maculinea</i> butterflies</p> <p>Francesca Barbero</p>   | <p>A new model for fast analysis of large occupancy data sets</p> <p>Byron Morgan</p>  |
| 15.45 | Tea/coffee Cedar lounge  |  |
|       | <b><i>Phengaris (Maculinea) research continued</i></b>   | <b>Methodological advances in monitoring and statistics continued</b>  |
| 16.15 | <p><i>Maculinea teleius</i> butterfly caterpillars of a reintroduced population adapt their cuticular hydrocarbon profile to that of <i>Myrmica</i> host ants</p> <p>Magdalena Witek</p>     | <p>Adaptive citizen science: Spatially targeting recording effort by volunteers to improve biodiversity monitoring</p> <p>Michael Pocock</p> |



|       | <b>Rosewood 1 &amp; 2</b>  | <b>Ebony</b>  |
|-------|--|---|
| 16.30 | Population viability and genetic rescue considerations based on cuticular hydrocarbon profiles in <i>Phengaris alcon</i><br><br>Gerard Oostermeijer            | The role of habitat indicators in studying butterfly communities<br><br>Andreu Ubach                  |
| 16.45 | Changes in morphology and genetic structure in two populations of <i>Phengaris (=Maculinea) teleius</i> 30 years after separation<br><br>Daniel Sanchez-Garcia | The effectiveness of Pollard walks for assessing local species composition<br><br>Bas Oteman          |
| 17.00 | Do genetic diversity, inbreeding and impaired gene flow affect the viability Dutch populations of <i>Phengaris alcon</i> ?<br><br>Sheila Luijten               | Standardised moth monitoring in Europe<br><br>Chris van Swaay   |
| 17.15 |  | Monitoring spatiotemporal patterns in the genetic diversity of the Meadow Brown<br><br>Matt Greenwell |
| 18.00 | <b>Poster session 1 – Rosewood 3</b>   |   |
| 18.30 | Dinner at Oliver restaurant, open 18.30 till 20.30   |   |



## Programme Saturday 15<sup>th</sup> April

|                      |  |   |
|----------------------|--|---|
| From 07.00 till 9.00 | Breakfast – Olive Restaurant, Woodlands Event Centre.  |   |
| 8.00                 | Symposium registration, Woodland Hotel by reception area   |   |
|                      | <b>Rosewood 1 &amp; 2</b>  | <b>Ebony</b>  |
|                      | <b>Applying new technology</b>   | <b>Species Conservation 2</b>   |
| 9:00                 | <p><i>Keynote lecture</i></p> <p>A computer vision for globally standardised butterfly and moth monitoring.</p> <p>Toke Thomas Høye</p>  |   |
| 9.30                 | <p>Building an Autonomous Insect Monitoring System</p> <p>Simon Teagle</p>   | <p>Towards a European Red List of larger moths</p> <p>Jurriën van Deijk</p>   |
| 9.45                 | <p>Machine learning tools for automated moth monitoring</p> <p>David Rolnick</p>   | <p>Conserving Madeira's Threatened Endemic Butterflies</p> <p>Martin Wiemers</p>  |
| 10.00                | <p>Field trials with automated moth monitoring in three different habitats of Denmark</p> <p>Kim Bjerge</p>  | <p><i>Euphydryas aurinia</i> in the UK: A review of status and conservation recovery</p> <p>Caroline Bulman</p>   |
| 10.15                | <p>A non-invasive method to investigate movement patterns and dispersal barriers in butterflies - the marsh fritillary (<i>Euphydryas aurinia</i>) as an example</p> <p>Emil Grøn Jensen</p> | <p>Using photo-identification to estimate mobility, lifespan, and population size of the reintroduced Chequered Skipper <i>Carterocephalus palaemon</i> in England</p> <p>Jamie Wildman</p> |
| 10.30                | <p>Camera surveillance exposes moth pollination of red clover</p> <p>Jamie Alison</p>  | <p>Delayed effect of host ant abundance on the populations of <i>Phengaris</i> butterflies</p> <p>Piotr Nowicki</p>   |
| 10.45                | Coffee/tea Cedar lounge  |   |



|       | <b>Applying new technology continued</b>  | <b>Species Conservation 2 continued</b>   |
|-------|---|---|
| 11.15 | Analysis of automated monitoring data of insects: suggestions for seeing the forest for the trees<br><br>Marc Mazerolle   | Species recovery for three of Scotland's rarest micro-moths<br><br>Tom Prescott   |
| 11.30 | Future challenges for automated monitoring of moths<br><br>Tom August   | Multifaceted measures are needed in conservation of butterflies in Japan: Efforts to solve fundamental problems<br><br>Yasuhiro Nakamura            |
|       | <b>Biodiversity and Protected area conservation</b>   |   |
| 11.45 | The effectiveness of Natura 2000 network in preventing habitat loss and population declines of endangered species in urban area<br><br>Joanna Kajzer-Bonk                             | Two decades of monitoring and conservation of the Marsh fritillary ( <i>Euphydryas aurinia</i> ) in the Czech Republic<br><br>Vaclav John           |
| 12.00 | Mapping Important Lepidoptera Areas (ILA's)<br><br>Juan Gallego-Zamorano  | Impacts on <i>Aricia artaxerxes</i> from climate change policy in Scotland<br><br>Dave Hill   |
| 12.15 | Microreserves, a tool for the conservation of threatened butterflies in Catalonia<br><br>Guillem Mas Cornet   | Optimising the reintroduction of a specialist peatland butterfly <i>Coenonympha tullia</i> onto peatland restoration sites.<br><br>Andrew Osbourne  |
| 12.30 | Inconsistent results from trait-based analyses of moth trends point to complex drivers of change<br><br>George Tordoff  | Has intensive forest management doubled the metapopulation size of one of the most endangered butterfly species in Europe?<br><br>Marcin Sielezniew |
| 12.45 | Do butterfly distributions support the concept of the Western Palaearctic as a meaningful zoogeographical region for use in species conservation prioritisation?<br><br>Martin Davies | Assessing the Reintroduction of Chequered Skippers into England through Genetic Approaches.<br><br>Georgina Halford                                 |



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| 13.00 | Lunch– Olive Restaurant, Woodlands Event Centre.  |  |
| 14.00 | <p><i>Keynote lecture</i></p> <p>Pollinators and their interactions with plants in an increasingly illuminated world</p> <p>Eva Knop</p>                                |  |
|       | <b>Light pollution impacts</b>  | <b>Habitat Conservation</b>  |
| 14.30 | <p>Street lighting has detrimental impacts on the mass, but not abundance, of nocturnally feeding butterfly caterpillars</p> <p>Michael Pocock</p>                      | <p>Butterfly and Moth Conservation: results from a global synopsis of evidence</p> <p>Andrew Bladon</p>  |
| 14.45 | <p>Impact of streetlights on moth communities under low and high light pollution at night: a citizen science approach in Belgian gardens</p> <p>Evert Van de Schoot</p> | <p>The biodiversity of a conifer-dominated forest at different stages of transformation towards Irregular High Forest</p> <p>Patrick Cook</p>              |
| 15.00 | <p>Visual impacts of artificial lighting on nocturnal moths: from perception to background selection</p> <p>Emmanuelle Briolat</p>                                      | <p>Landscape composition explains butterfly use of clear-cuts in contrasting forest-farmland mosaics</p> <p>Lars B Petterson</p>                           |
| 15.15 | <p>Dim light pollution prevents diapause induction in urban and rural Latticed heath (<i>Chiasmia clathrata</i>) moths</p> <p>Thomas Merckx</p>                         | <p>Lepidopteran Response at a Large, High-Diversity Restoration Intended to Restore Connectivity and Expand Habitat</p> <p>John Shuey</p>                  |
| 15.30 | <p>Adaptation to nocturnal light in <i>Yponomeuta cagnagellus</i></p> <p>Roy Van Grunsven</p>   | <p>Butterflies in the city: Habitat suitability and connectivity for urban woodland butterflies</p> <p>Bradley Neal</p>                                    |
| 15.45 | Tea/coffee Cedar lounge   |  |
|       | <b>Light pollution impacts continued</b>  | <b>Habitat Conservation continued</b>  |
| 16.15 | <p>Contrasting effects of wavelength and light intensity on flight-to-light behaviour of moths</p> <p>Isabel Hayes</p>  | <p>Landscape-scale impacts of conservation management on Lepidoptera: testing agri-environment scheme gradients at two spatial scales</p> <p>Jo Staley</p> |
| 16.30 | <p>Artificial light as a driver and detector of moth declines</p> <p>Avalon Owens</p>   | <p>How do ecological traits affect the responses of Lepidoptera to agri-environment scheme management?</p> <p>Marc Botham</p>                              |





|       | <b>Micro-climate studies</b>  |  |
|-------|---|--|
| 16.45 | Seasonal change in oviposition micro-habitat preferences of the High Brown Fritillary butterfly ( <i>Fabriciana adippe</i> ).<br><br>Julie Simons | Kleurkeur – From idea to a certification scheme in practice<br><br>Manon Wieringa  |
| 17.00 | Cool as a caterpillar: Differences in thermoregulatory ability between life stages of British butterflies<br><br>Esme Ashe-Jepson                 | Adding shades of grey in a black and white landscape: resource-based habitat quality influences population dynamics in the bog fritillary<br><br>Nicholas Schtickzelle |
| 17.15 | Feeling the heat: can microclimate and behaviour buffer butterflies against climate change?<br><br>Marcus Rhodes                                  | Nature-inclusive practices- The interdisciplinary approach to biodiversity restoration in different areas in the Netherlands<br><br>Nora Thierry                       |
| 17.30 | Oviposition choice in Lepidoptera: microclimate matters, but why?<br><br>Simon Braem  | Lepidoptera reintroduction in England: to reintroduce or not to reintroduce?<br><br>Simon Curson   |
| 18.00 | <b>Poster session 2 – Rosewood 3</b>  |  |
| 19.30 | Gala dinner Rosewood 1  |  |



## Programme Sunday 16<sup>th</sup> April

|                      |   |   |
|----------------------|---|---|
| From 07.00 till 9.00 | Breakfast – Olive Restaurant, Woodlands Event Centre.   |   |
| 8.00                 | Symposium registration, Woodland Hotel by reception area  |   |
|                      | Rosewood 1 & 2  | Rosewood 3  |
| 9:00                 | <p><i>Keynote lecture</i></p> <p>Back to basics: Challenges to Lepidoptera conservation in the tropics.</p> <p>Blanca Huertas</p>               |   |
|                      | <b>How widespread are declines in Lepidoptera?</b>  | <b>Lepidoptera conservation and Agriculture</b>   |
| 9.30                 | <p>Harnessing community science initiatives to assess trends in butterfly biodiversity</p> <p>Maxim Larrivee</p>                                | <p>Underestimated threats for butterflies</p> <p>Simona Bonelli</p>   |
| 9.45                 | <p>The State of the UK's Butterflies</p> <p>Richard Fox</p>   | <p>The Barberry Carpet moth: Past, Present, and Future.</p> <p>William Millard</p>                                |
| 10.00                | <p>Rural abandonment and climate change threaten south European Mountain butterflies Amparo Mora</p> <p>Cabello de Alba</p>                     | <p>Understanding the effects of atmospheric nitrogen deposition on butterflies in the UK</p> <p>Hannah Risser</p> |
| 10.15                | <p>Changes in butterfly species composition in grasslands in a study area in Southern Sweden between 1997 and 2019</p> <p>Christine Haaland</p> | <p>Butterfly responses to a broad range of foodplant nitrogen levels</p> <p>Will Langdon</p>                      |
| 10.30                | <p>A new Red List of European Butterflies</p> <p>Martin Warren</p>  | <p>Marvellous moths! Pollen deposition rate of bramble is greater at night than day</p> <p>Max Anderson</p>       |
| 10.45                | Coffee/tea Cedar lounge   |   |
|                      | <b>Final Plenary session</b> (Rosewood 1)   |   |
| 11.15                | <p>Direct and indirect climate stressors of montane butterflies</p> <p>Chris Halsch</p>   |   |
| 11.30                | <p>From Coast to Coast: Comprehensive U.S. At-Risk Butterfly Conservation and Recovery Efforts</p> <p>Jaret Daniels</p>                         |   |



|                  |  |
|------------------|--|
| 11.45            | Breaking down barriers to inclusion in butterfly recording<br><br>Megan Lowe   |
| 12.00            | From volunteer counts to European wide protection of butterflies: eBMS - European Butterfly Monitoring Scheme<br><br>Christina Sevilleja             |
| 12.15            | The re-introduction of the Chequered Skipper to England and a briefing on today's field visit to the site.<br><br>Nigel Bourn and Susannah O'Riordan |
| 12.30            | Closing address Nigel Bourn and Julie Williams   |
| 12.40            | Lunch– Olive Restaurant, Woodlands Event Centre.   |
| 13.30            | Coach departing for field trip   |
| 14.30 -<br>16.30 | Field trip to Fineshade Wood   |
| 16.30            | Coach return to Wyboston via train station (arriving approx. 17.30)  |
| 18.00            | Arriving at Wyboston   |