

Reviewer comments on “Species Status Assessment for the Hermes copper butterfly (*Lycaena [Hermelycaena] hermes*). Version 1.0

The report on the status assessment of the Hermes copper butterfly is very well written and, to my knowledge, all available information has been compiled to assess the status of this rare endemic butterfly. I have added some minor remarks in the word document on which I will comment here as well.

1. Page 2: I had a look at the IUCN Red List webpage and I found that the Hermes copper butterfly is Vulnerable according to IUCN criteria; I would certainly mention this in the introduction to underpin the importance of the conservation of this species (<http://www.iucnredlist.org/details/12435/0>.)
2. Page 9: Having worked quite a lot on *Maculinea alcon*, I was wondering whether the Hermes copper butterfly has any relation with ants (certainly not obligatory as in *M. alcon*, but maybe facultatively as in some other Lycaenids)? The “need” for ants might explain a more restricted distribution range than what is possible on the basis of the host plant distribution ...?
3. Page 10: I would like to recommend to the authors to carefully check the references to the different figures in the document. For example, I could not find Figure 3 although the authors refer to this figure on several occasions in the text. In the Appendix, two figures have a caption mentioning Figure 2.
4. Page 14: On Figure 2 in the document, I wonder why Male behavior is in green, while Female behavior, oviposition and dispersal aren't. To me, they are also ‘species variables’. If the authors do not see them as such, some explanation would be appropriate here.
5. Page 15: Would it be feasible to make a species distribution model (Guisan et al. 2013) to detect potentially suitable sites both in the US and in Mexico? Or do you think that you don't have enough occurrences to run such models? Or maybe, suitable layers (vegetation type, soil ...) are missing?
6. Page 21: Connectivity could be seen as a population need as well.
7. Page 35: On a couple of occasions, a p-value is given as a result of a statistical test. The test that was done, however, should also be mentioned when giving p-values.
8. Apart from these comments, I find this report scientifically underpinned and complete.

Guisan, A, Tingley, R, Baumgartner, JB, Naujokaitis-Lewis, I, Sutcliffe, PR, Tulloch, AIT, Regan, TJ, Brotons, L, McDonald-Madden, E, Mantyka-Pringle, C, Martin, TG, Rhodes, JR, Maggini, R, Setterfield, SA, Elith, J, Schwartz, MW, Wintle, BA, Broennimann, O, Austin, M, Ferrier, S, Kearney, MR, Possingham, HP, Buckley, YM (2013). Predicting species distributions for conservation decisions. *Ecology Letters*, 16: 1424-1435. doi: Doi 10.1111/Ele.12189

Dirk Maes
Senior researcher
Research Institute for Nature and Forest (INBO), Belgium