

Recent butterfly work in Belgium



Dirk Maes



inbo



Research Institute
for Nature and Forest

Flanders (north Belgium)

🦋 Distribution atlas

🦋 Butterflies in Flanders

- New knowledge for better action

🦋 New Red List

🦋 Species action plans

🦋 Ilex Hairstreak (*Satyrium ilicis*)

🦋 Grayling Butterfly (*Hipparchia semele*)

🦋 Wall Brown (*Lasiommata megera*)

🦋 Genetic research

🦋 Alcon Blue (*Maculinea alcon*)

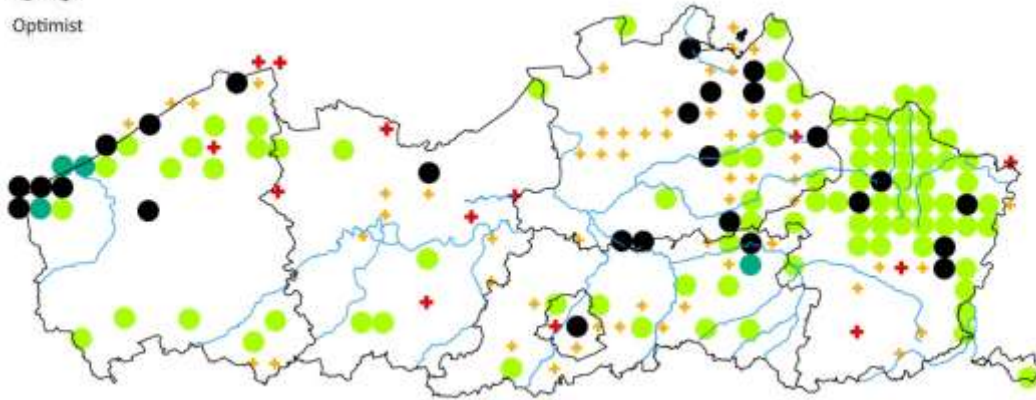




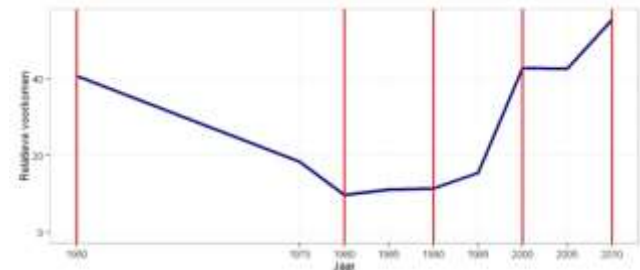
Optimist

Some species are doing well!

Queen of Spain fritillary (*Issoria lathonia*)



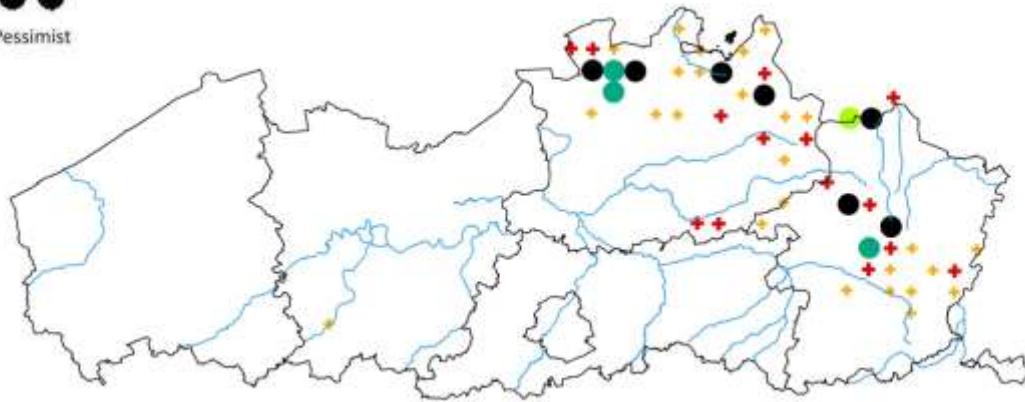
Brown Argus (*Aricia agestis*)



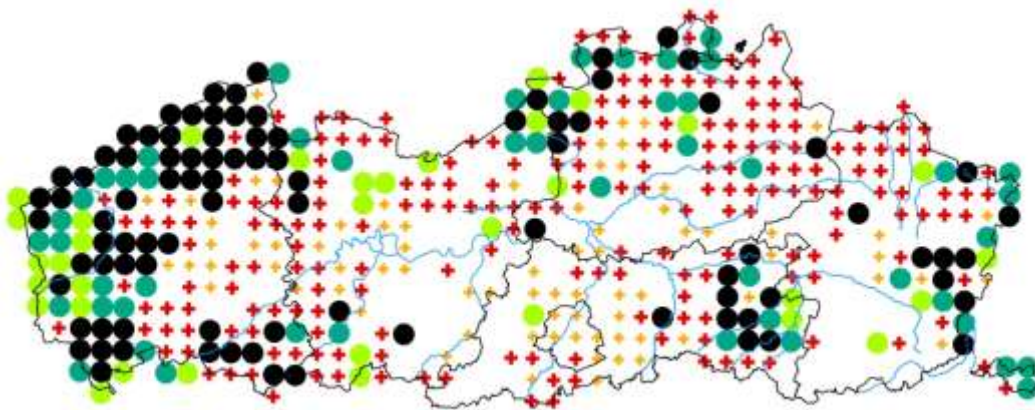


Pessimist

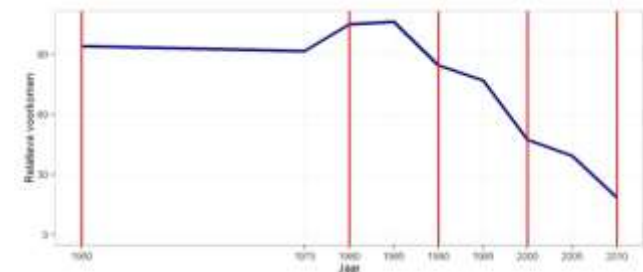
Others continue to decline ...



Alcon Blue (*Maculinea alcon*)



Wall Brown (*Lasiommata megera*)



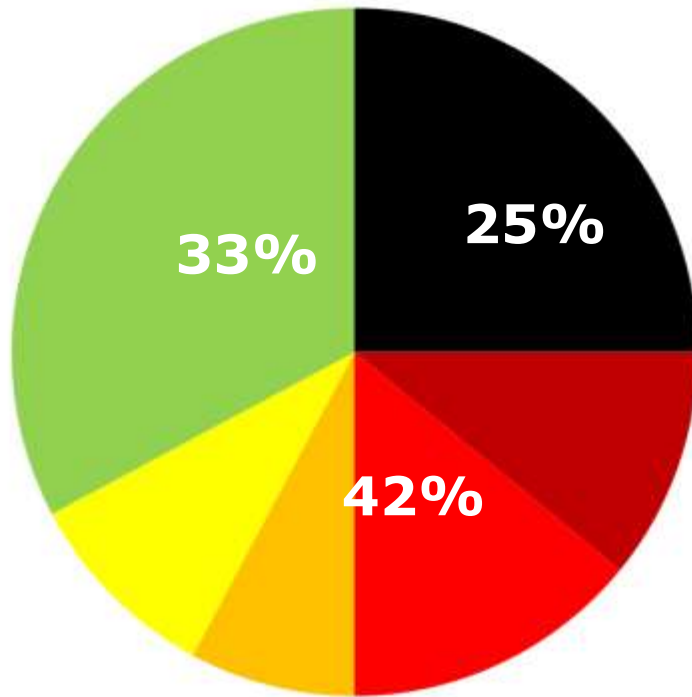


Realist

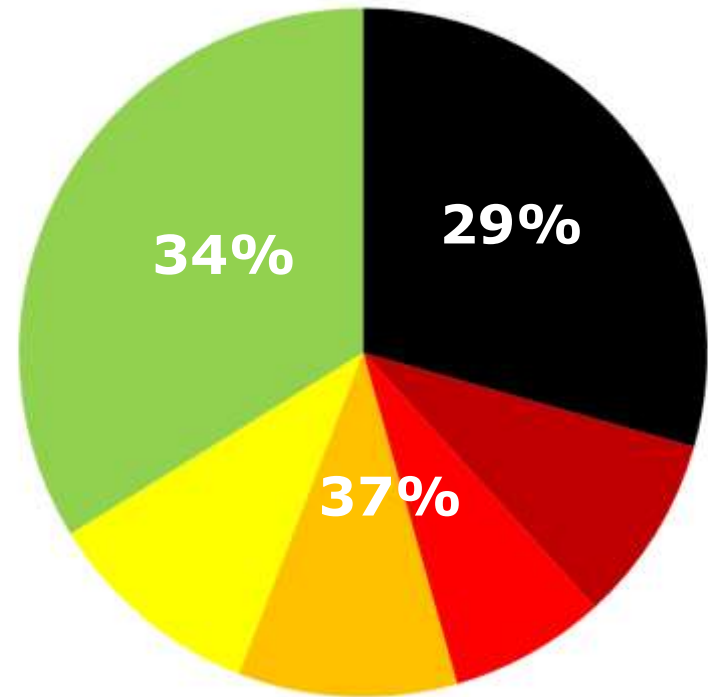
New Red List

1999

2012



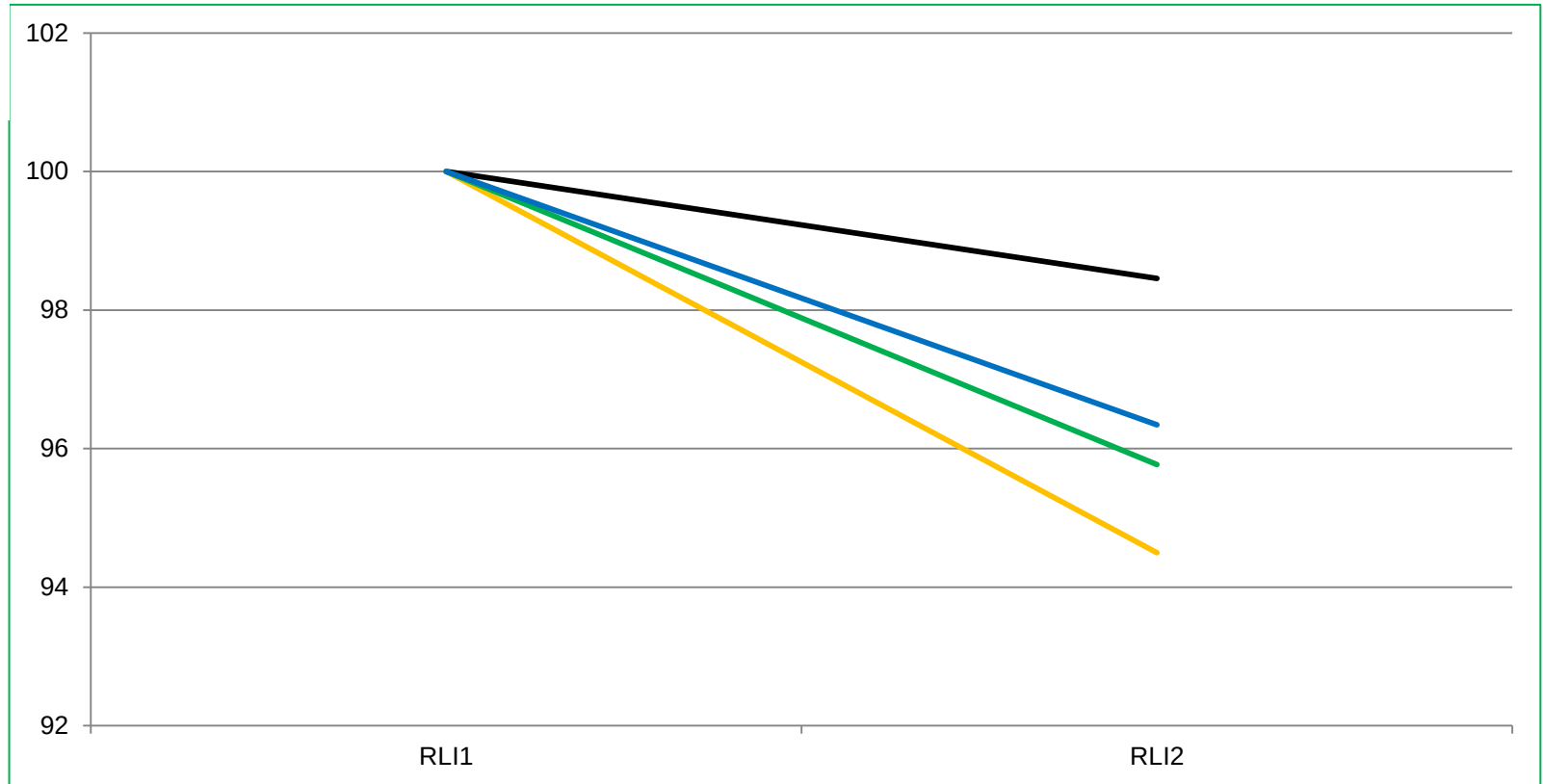
Extinct or threatened: 67%



Extinct or threatened: 66%



Red List Index



Species action plans

☛ Ilex hairstreak (*Satyrium ilicis*)



- ☛ Maes, Jacobs, Segers, Vanreusel, Van Daele, Laurijssens & Van Dyck (2014). A resource-based conservation approach for an endangered ecotone species: the Ilex Hairstreak (*Satyrium ilicis*) in Flanders (north Belgium). *Journal of Insect Conservation* 18: 939-950.

☛ Wall brown (*Lasiommata megera*)



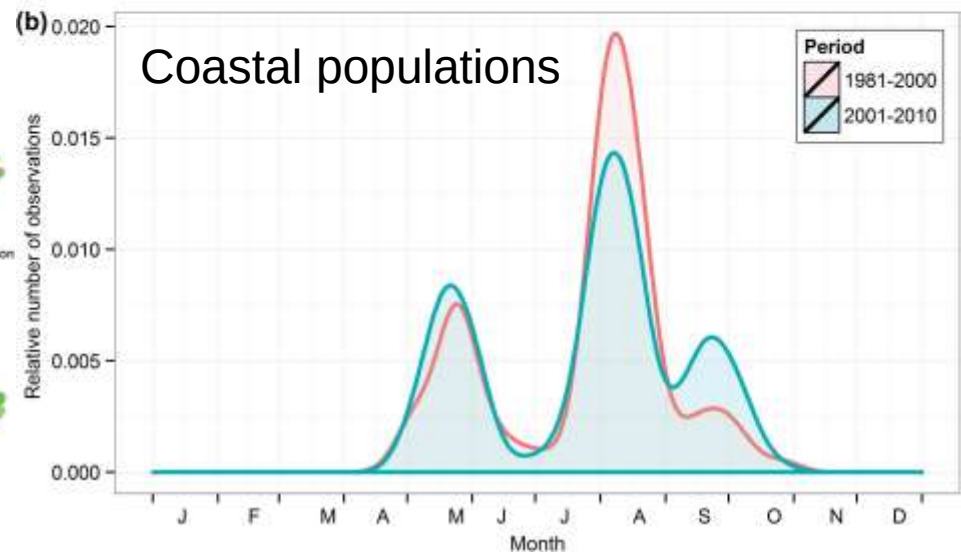
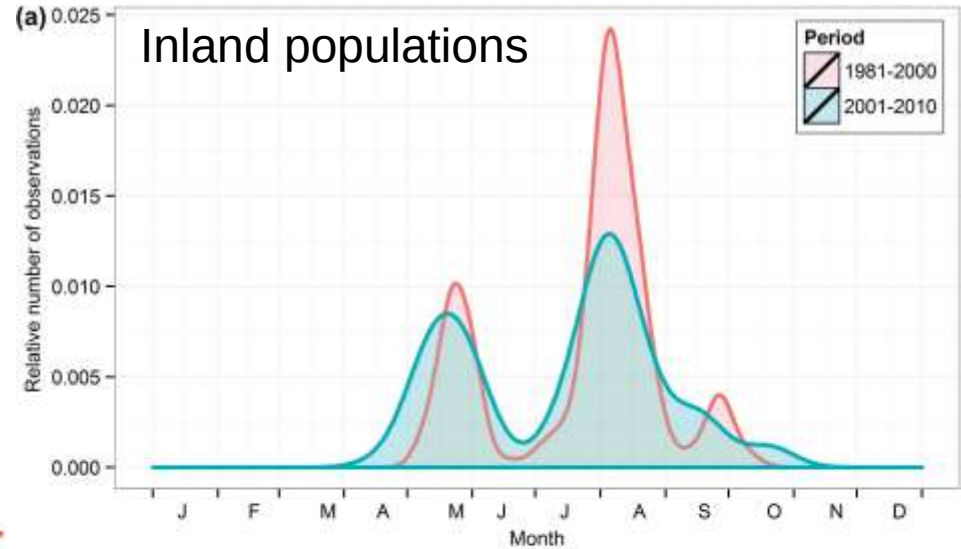
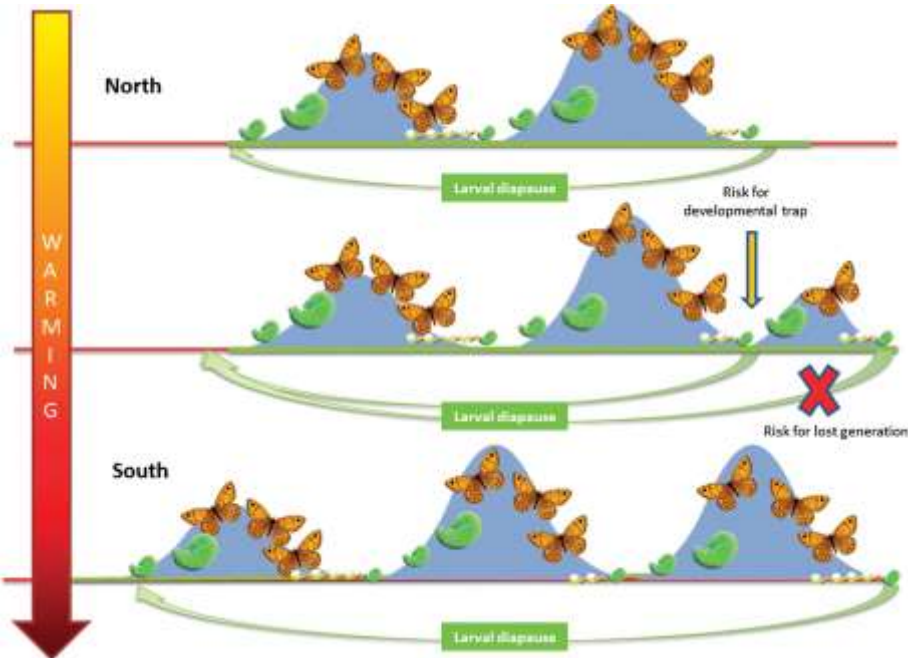
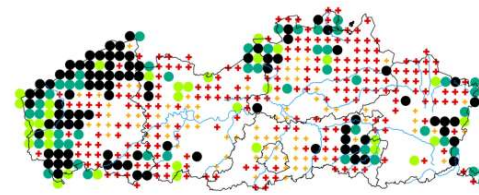
- ☛ Van Dyck, Bonte, Puls, Gotthard & Maes (2015). The lost generation hypothesis: could climate change drive ectotherms into a developmental trap? *Oikos* (in press).

☛ Grayling butterfly (*Hipparchia semele*)



Wall brown

The lost generation hypothesis



Genetic research

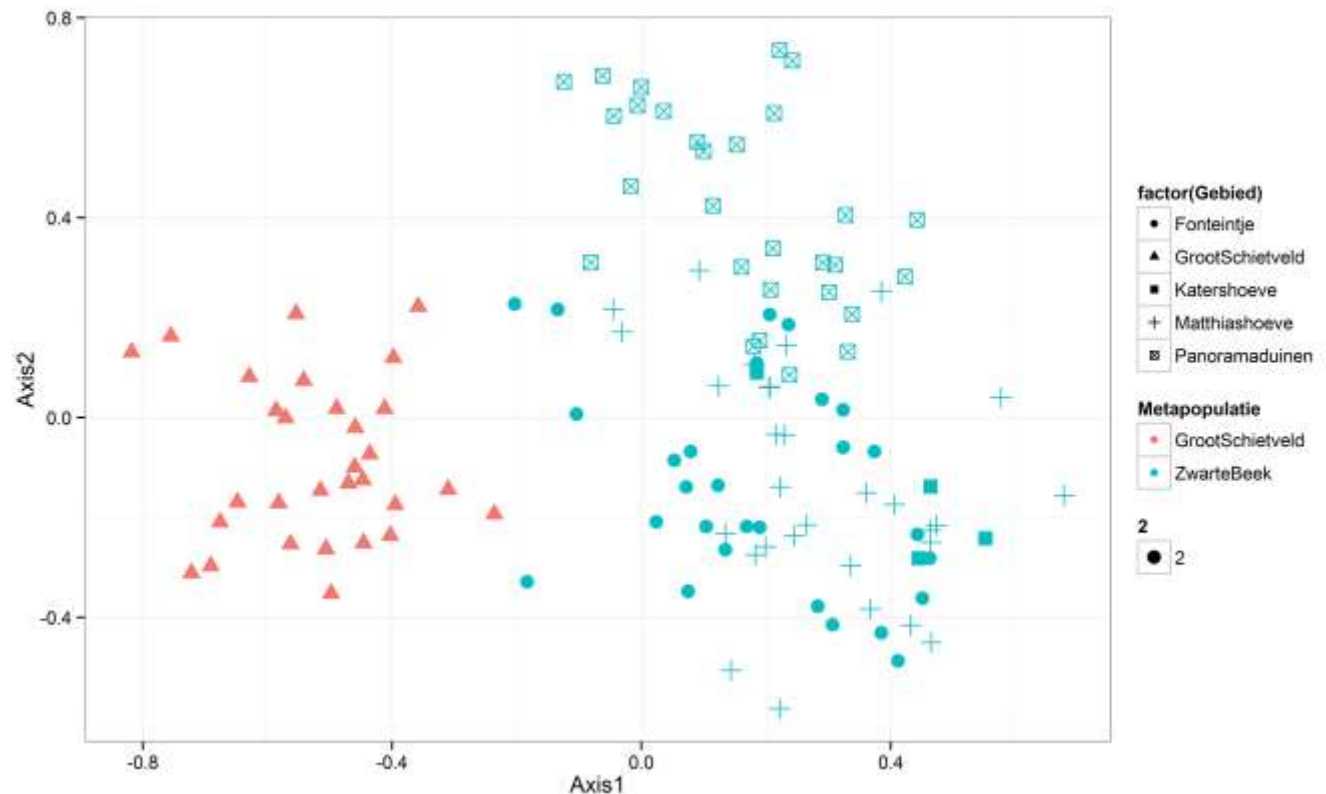


Alcon Blue (*Maculinea alcon*)



Wing clips

Microsats



Wallonia (south Belgium)

Life project

Bog butterflies and other typical species

- *Lycaena helle*
- *Boloria aquilonaris*
- *Coenonympha tullia*

 http://old.biodiversite.wallonie.be/offh/LIFEPLTTAILLES/Telechargements/Layman_PLTTAILLES_EN.pdf