





## **Blues in the Marshes**

www.blauwinhetgroen.nl









Natura 2000 nature reserve Vlijmens Ven, Moerputten, Bossche Broek









#### Water: friend and enemy











Combined with Blues in the marshes: nature conservation and water storage







#### Natura 2000 nature reserve Vlijmens Ven, Moerputten, Bossche Broek









#### Soil removal: how deep should we go?

#### Expert study by B-ware



#### Design dependent on:







# NATURA 2460

#### Combining the works: removed top soil is used for dykes

600.000 m<sup>3</sup> top soil (40 cm) to be removed from ٠ 170 ha of former agricultural land Approximately 25% to be used for the dykes of ٠ the water retention area **Visualisation** 







#### Work in progress



**Februari 2014:** Signing contract which is based on best value procurement





Augustus 2014: Opening act with (board) members of all the involved partners

September 2014: Secure excavations due to risk of unexploded ordnance



#### **Relationships Maculinea teleius**



Life+ Blues in the Marshes









#### Habitat extension: large scale at larger distance









### 5 Transects in each of three soil removed areas: vegetation + ants + springtails + soil characteristics







150 vegetation relevés (3\*50)
450 ant baits (3\*150)
150 springtail samples (3\*50)
150 soil samples (3\*150)









#### Impact of hay translocation on soil removed areas





#### Ants and springtails in soil removal areas

- Initially, many *Lasius niger* and few *Myrmica* species
- Myrmica needs high vegetation cover and
- Myrmica needs more vegetation height
- After hay inoculation, vegetation develops faster
  - -> positive effect on *Myrmica*
- Springtails occur in soil removed areas
- 27.444 individuals of 64 species in 150 cores
- Average number of individuals or species equal between sites
- The heavier the springtails the better they explain occurrence of Myrmica

Further facilitation of Myrmica and springtail colonization by project "Fen meadow on the move": Translocation of 63 m<sup>2</sup> of fen meadow to soil removal areas









Life+ Blues in the Marshes





# **Questions?**



#### Thank you for the pictures!

Kars Veling Henk Vennix Roel van Bezouw Marcin Sielezniev Chris van Swaay Jelger Herder Theo Bakker





Life+ Blues in the Marshes

