

Krabbenscheer en groene glazenmaker



een duo waarbij beheer cruciaal is

Christophe Brochard

2 oktober 2025

symposium 50 jaar natuurherstel in Drenthe

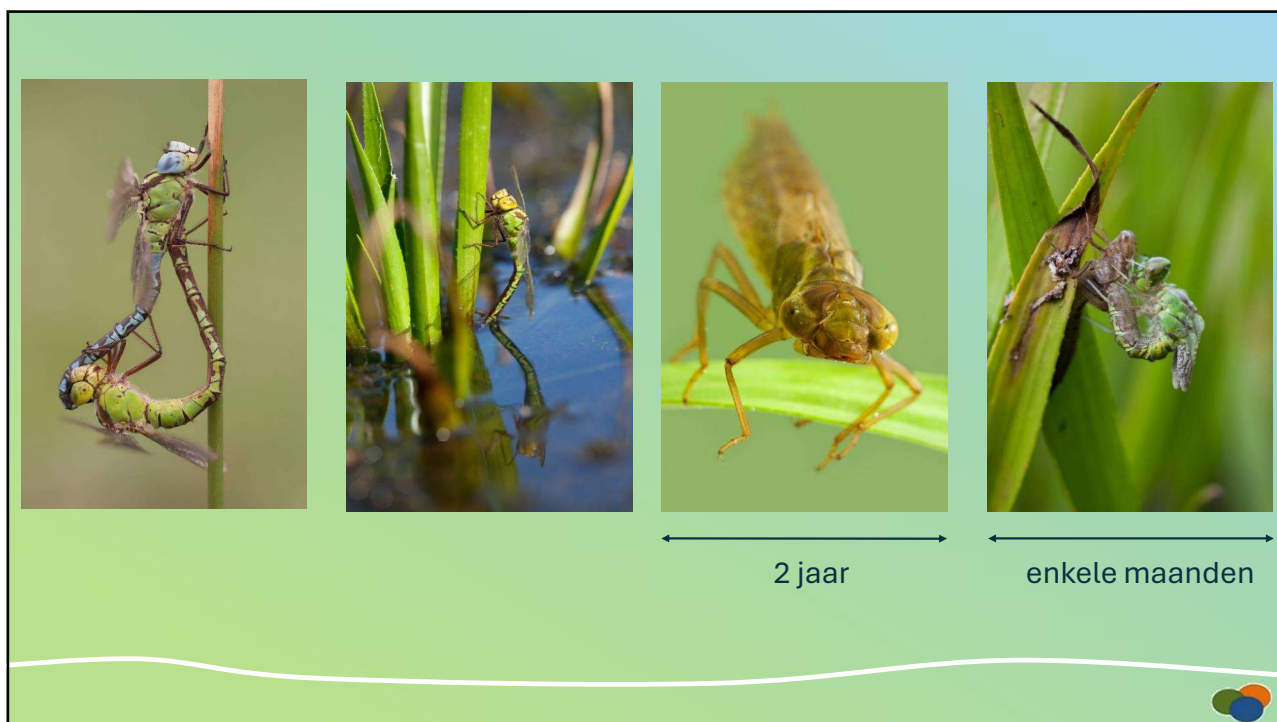


1

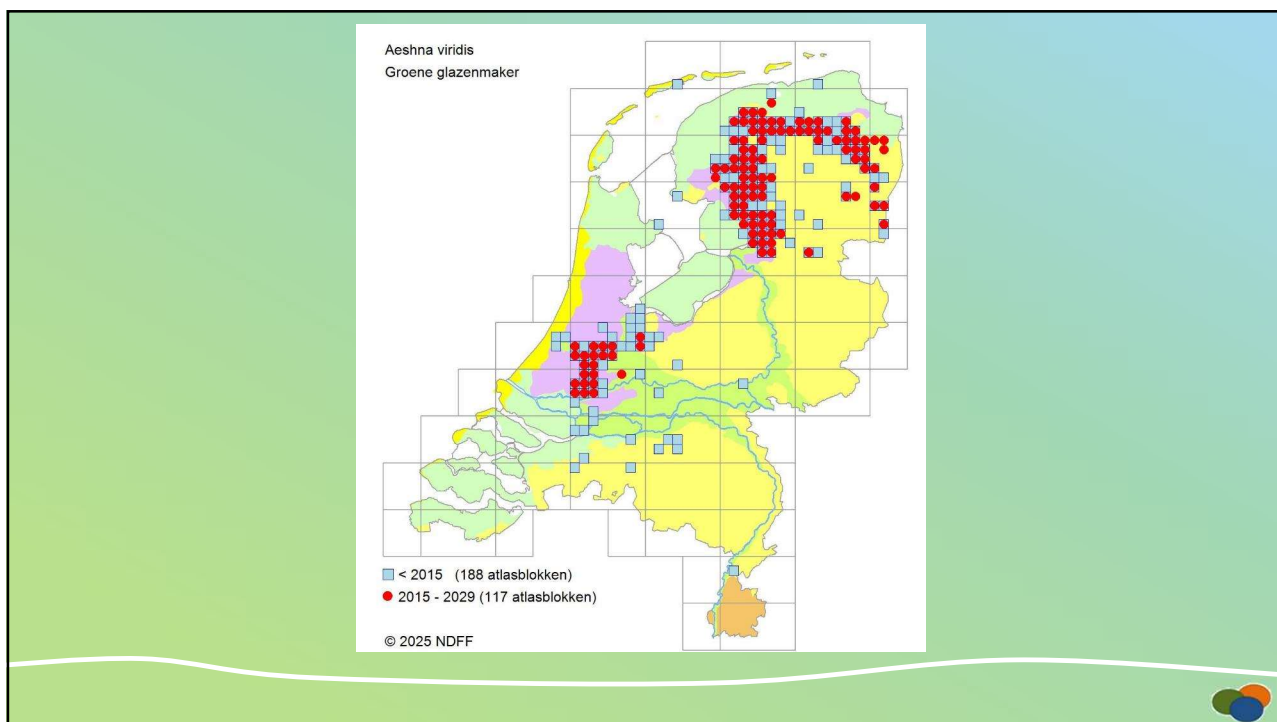
Groene glazenmaker



2

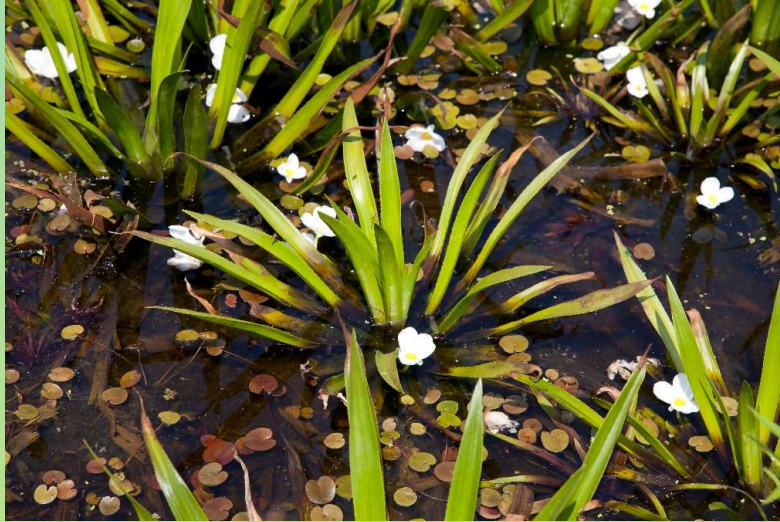


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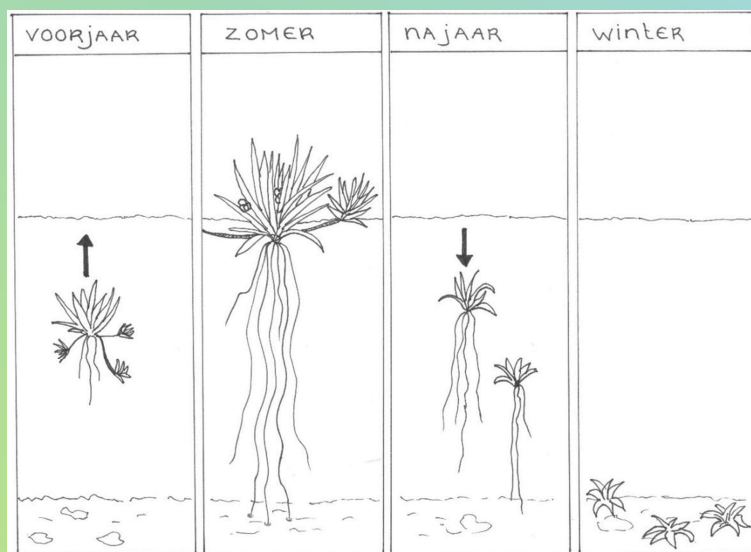
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Krabbenscheer



5

Jaarcyclus



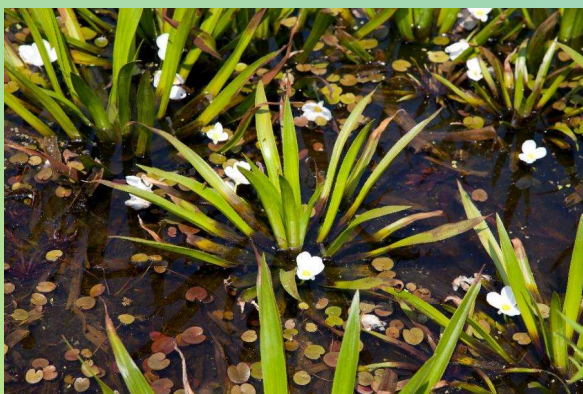
6

Zonder beheer verdwijnt krabbenscheer



7

Pre-optimale situatie



8

Optimale situatie



9

Post-optimale situatie



10

Winterbeeld Pre- & optimale situatie



11

Winterbeeld Post-optimale situatie



12

Nieuwe beheermogelijkheden



13



14



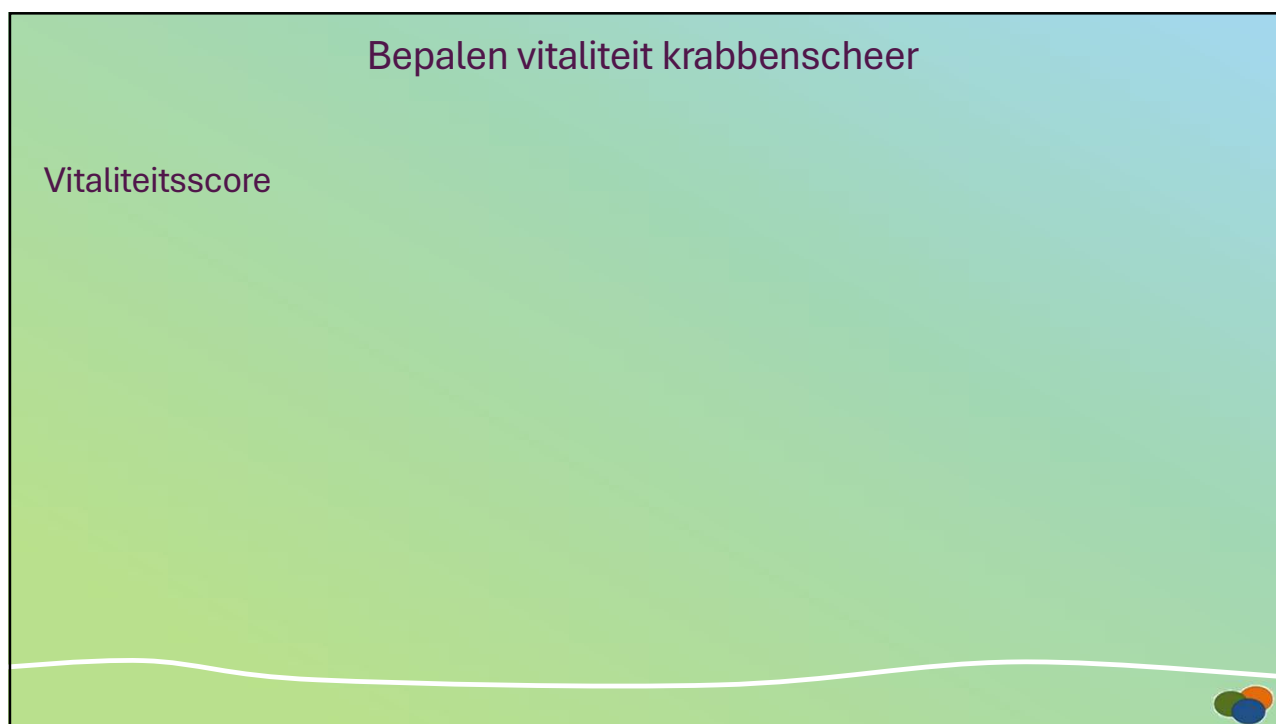
15



16



17



18

Bepalen vitaliteit krabbenscheer

Vitaliteitsscore 4



19

Bepalen vitaliteit krabbenscheer

Vitaliteitsscore 3



20

Bepalen vitaliteit krabbenscheer

Vitaliteitsscore 2



21

Bepalen vitaliteit krabbenscheer

Vitaliteitsscore 1



22

Nieuwe monitoringstrategieën

Kanskaart voor groene glazenmaker

Gebaseerd op condities van krabbenscheer



23

Nieuwe monitoringstrategieën

Kanskaart voor groene glazenmaker

Rood



24

Nieuwe monitoringstrategieën

Kanskaart voor groene glazenmaker

Oranje



25

Nieuwe monitoringstrategieën

Kanskaart voor groene glazenmaker

Groen



26

Nieuwe monitoringstrategieën

Kanskaart voor groene glazenmaker

Blauw



27

Nieuwe monitoringstrategieën

Kanskaart voor groene glazenmaker 137 Locaties bezocht in Drenthe in 2024

Zwart: status ongeschikt

op 59 van de onderzoekslocaties geen krabbenscheer (meer) aangetroffen (43%).

Rood: status slecht

Op 9 locaties is de status van de krabbenscheer slecht (12% van de locaties met krabbenscheer).

Oranje: status matig

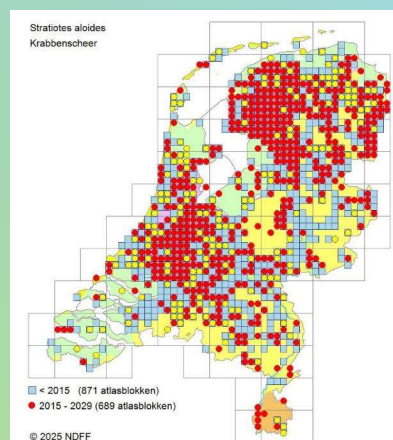
Met 43 locaties de meest algemene categorie (55% van de locaties met krabbenscheer).

Groen: status goed

Slechts 4 locaties (5% van de locaties met krabbenscheer).

Blauw: status goed met kans op uitbreiding

De beste categorie bevat 22 locaties (28% van de locaties met krabbenscheer).



28

Toekomst en uitdagingen

Landbouw

Klimaat



29

Meer kennis !!!



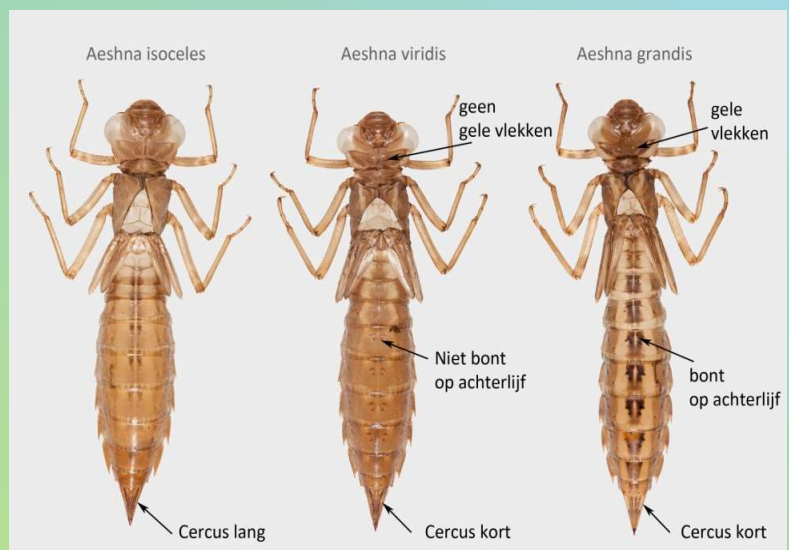
30

Meer kennis !!!



31

Meer kennis !!!



32

Meer kennis !!!



33

Meer kennis !!!

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ORIGINAL PAPER

Development of two common dragonfly species with diverging occupancy trends

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Abstract
The two sibling and syntopic odonate species *Sympetrum striolatum* and *Sympetrum vulgatum* are common and widespread in Central Europe. While *S. striolatum* has strong positive population trends, declines of *S. vulgatum* are observed. The aim of this study was to identify possible drivers of these diverging trends. We presumed that differences in egg development may lead to differences in survival until hatching. First, eggs laid in non-permanent or shrinking waterbodies may suffer of increasing drought periods. Second, differences in development may cause increased size-mediated intraguild predation, a common cause of reduced survival in odonate larvae. Egg development time and hatching rates were recorded of eleven egg clutches of *S. vulgatum* and ten clutches of *S. striolatum* under simulated drought vs. water and direct vs. delayed development treatments. Hatching rates were reduced under drought conditions, and particularly so in *S. vulgatum*. We did not observe obligate winter diapause in any of the egg clutches. But, *S. vulgatum* varied widely in development between clutches, while the eggs of *S. striolatum* developed much faster and hatched highly synchronously. This would provide *S. striolatum* with a temporal advantage that may lead to a size-advantage over most *S. vulgatum*. We also found that *S. vulgatum* grew faster. Faster larval growth would only compensate for those *S. vulgatum* with fast egg development. The current population trends may be partly attributed to lowered survival of *S. vulgatum* under drought and by phenological and, thus, size benefits of *S. striolatum*.

Implications for insect conservation Our results show that population dynamics of two closely related dragonfly species can be explained by climatically induced changes in their interactions. Understanding the causes and processes of behavioural changes resulting in differing population trends is fundamental for the protection of species.

Keywords Climate change · Egg development · Intraguild predation · Larval growth · Mortality · Phenological shifts

Introduction
Insect conservation often concentrates on charismatic or threatened species, while the population trends of common and widespread species remain unnoticed (Gaston 2011). Nevertheless, recent studies provide evidence of decline of common species, for instance of Lepidoptera (Habel and Schmitt 2018; Korte et al. 2018; Salcido et al. 2020) and Coleoptera (Losey et al. 2007; Homberg et al. 2019). Since numerical declines of common and widespread species may impact the composition and functioning of ecosystems more severely than the declines of rare species (Cardoso et al. 2020) they need to be specifically addressed. The drivers of insect decline are manifold, among them habitat loss, pollution, invasive species, and climate change (Carlson et al. 2020). Aquatic insects are supposed to be disproportionately affected by climate change, due to the synergistic negative effects of other factors on freshwater ecosystems (e.g. eutrophication, acidification, salinization) (retrall (Woodward et al. 2010; Reid et al. 2019)). Anthropogenic climate change has been shown to have a large impact on species abundance, distribution, development, and phenology (Parmesan et al. 1999; Parmesan 2006; Robinet and Roques 2010; Chen et al. 2011; Devictor et al. 2012; Hahch et al. 2021). Particularly warming may affect species and communities in different ways. For instance, receding water levels with progressing drought

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34



Dank voor
jullie
aandacht

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