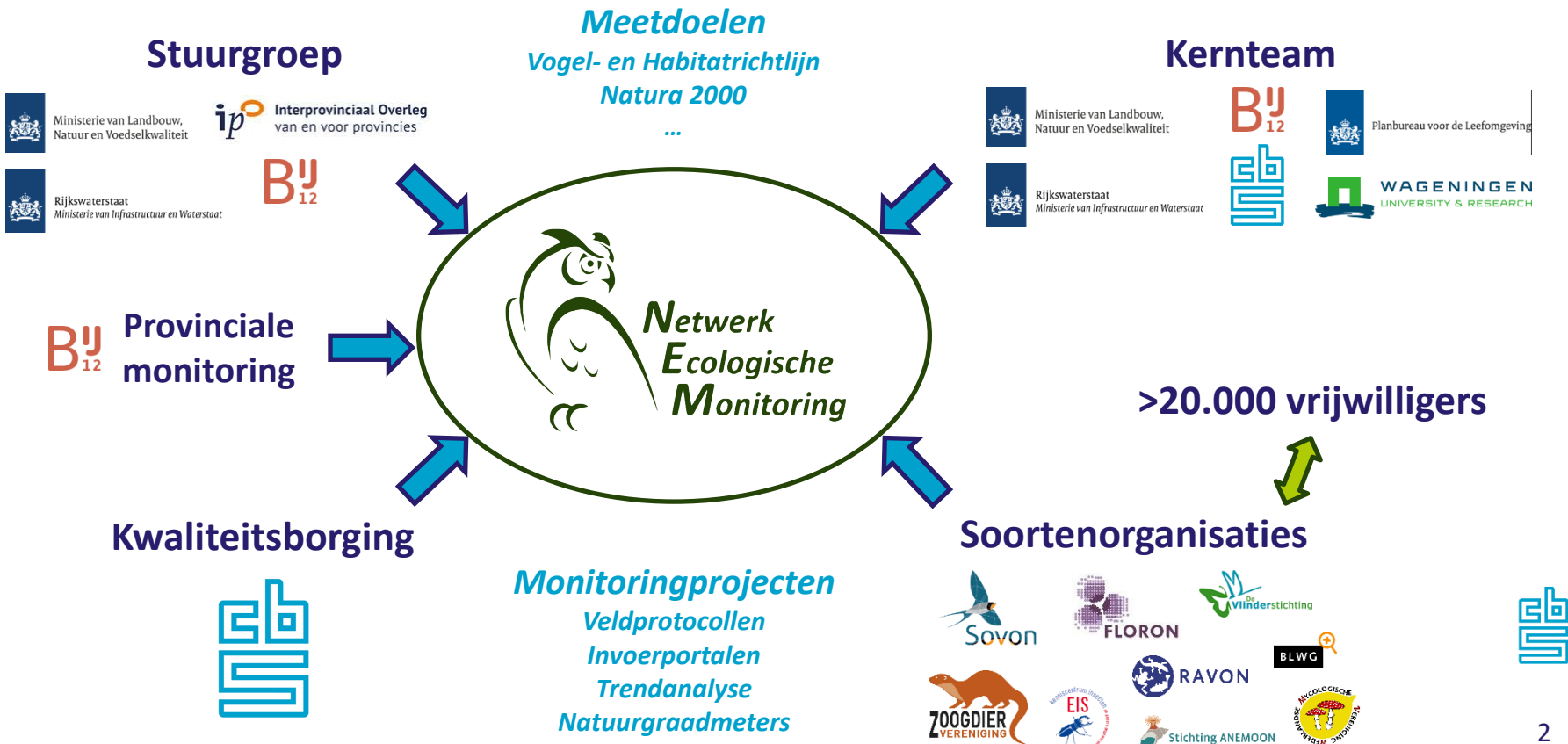


# Libellen en de Habitatrictlijn

Jelle van Zweden

Tellersdag Vlinderstichting, 8 november 2024

# Netwerk Ecologische Monitoring

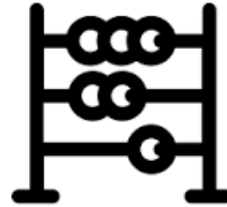


# Verwerking data tot informatie

## NEM

| SOORT  | SITE | JAAR | AANTAL |
|--------|------|------|--------|
| Kievit | 1    | 2012 | 30     |
| Kievit | 1    | 2013 | 25     |
| Kievit | 1    | 2014 | 28     |
| Kievit | 1    | 2015 | 43     |
| Kievit | 2    | 2012 | 5      |
| Kievit | 2    | 2013 | 9      |
| Kievit | 2    | 2014 | 6      |
| Kievit | 2    | 2015 | 11     |

gestandaardiseerde  
monitoring



klassieke analyse

- populatietrend

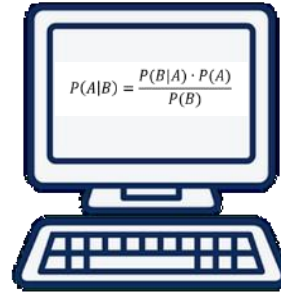
## NDFF



losse waarnemingen



filter



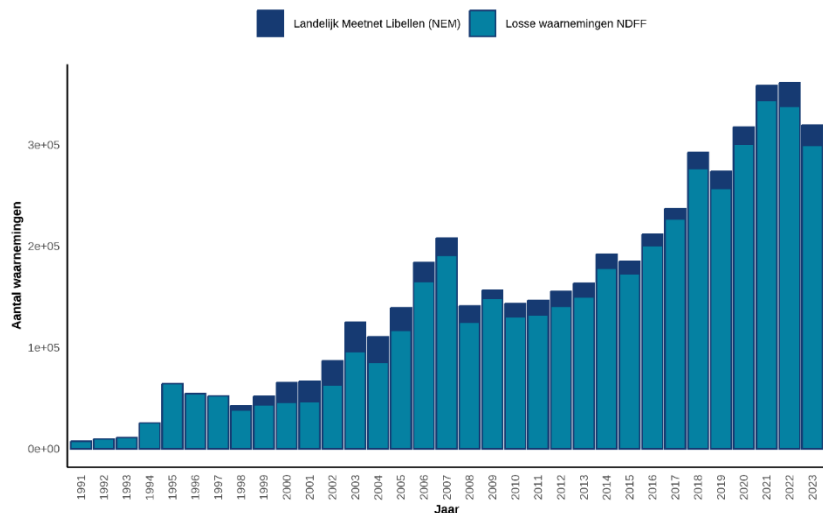
complexe analyse

- verspreidingsgebied
- trend in verspreiding



# Problematiek van losse waarnemingen

## Sterke toename



## Nulwaarnemingen

Als soort wel wordt waargenomen

➤ soort komt voor

Als soort niet wordt waargenomen

➤ soort komt niet voor

➤ soort is niet gevonden

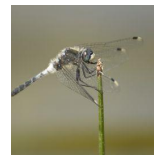
➤ niet op soort gelet



# Habitatrichtlijn

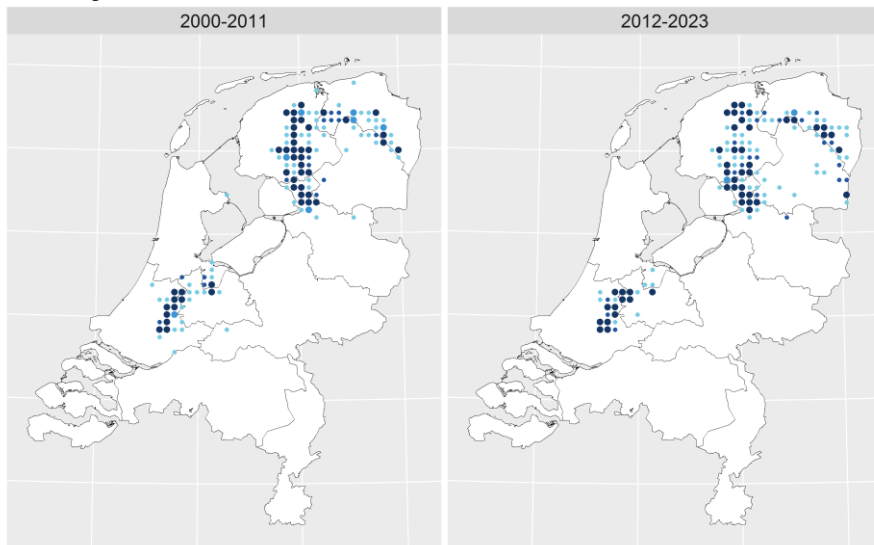
## – Totaal 9 soorten libellen

- Annex IV:
  - Noordse winterjuffer
  - Groene glazenmaker
  - Rivierrombout
  - Sierlijke witsnuitlibel
  - Oostelijke witsnuitlibel
- Annex II en IV:
  - Mercurwaterjuffer (*te zeldzaam*)
  - Gaffellibél
  - Bronslibel (*te zeldzaam*)
  - Gevlekte witsnuitlibel



# Groene glazenmaker

Groene glazenmaker

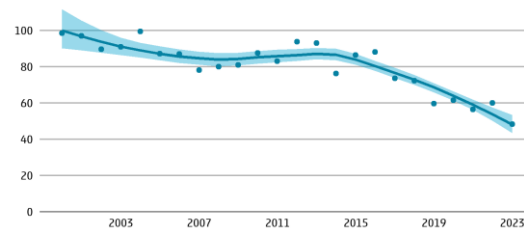


verspreidingsgebied

## trend in verspreiding

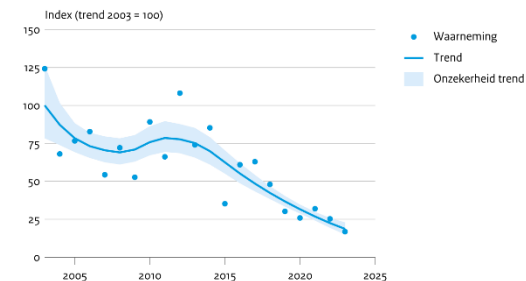
Groene glazenmaker, Nederland

Index (2000=100)



Bron: NEM (Vlinderstichting, CBS), 2024

Populatiestrend groene glazenmaker



## populatiestrend



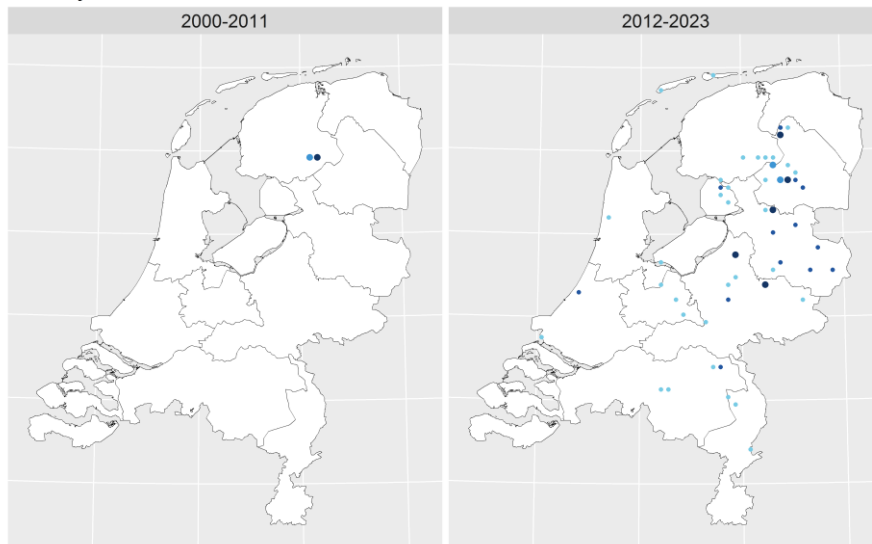
CBS/jun24  
www.clo.nl/nl41613



# Oostelijke witsnuitlibel

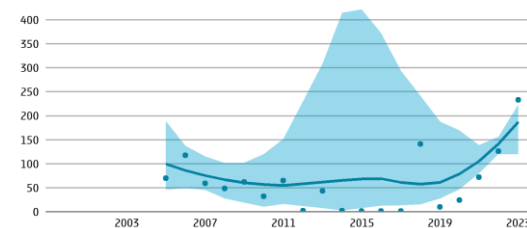


Oostelijke witsnuitlibel



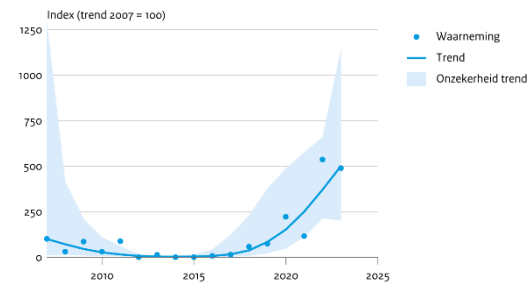
Oostelijke witsnuitlibel, Nederland

Index (~100)



Bron: NEM (Vlinderstichting, CBS), 2024

Populatietrend oostelijke witsnuitlibel



Bron: NEM (Vlinderstichting, CBS)

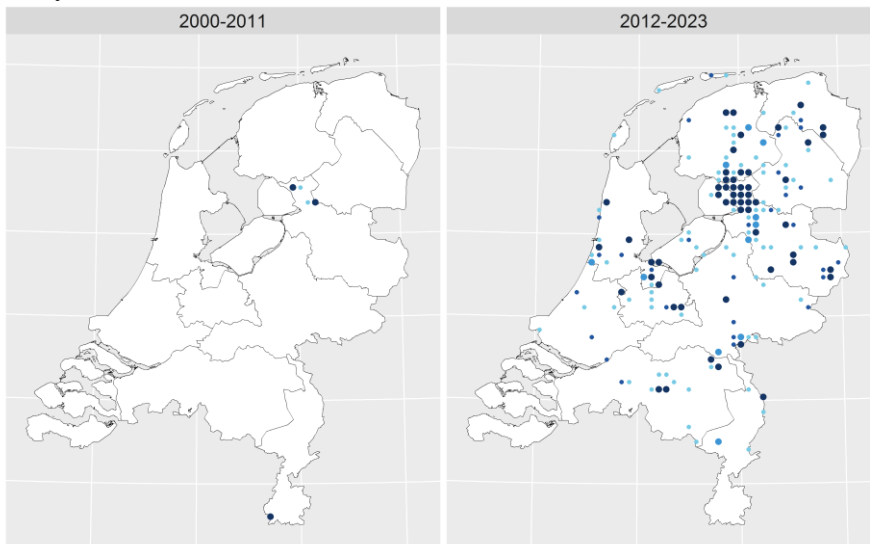
CBS/jun24  
[www.clo.nl/nl41613](http://www.clo.nl/nl41613)



# Sierlijke witsnuitlibel

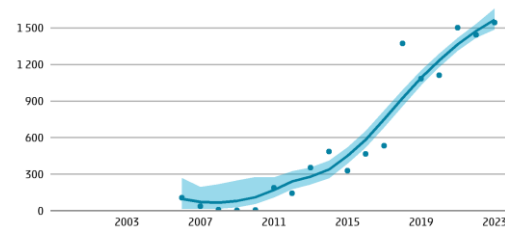


Sierlijke witsnuitlibel



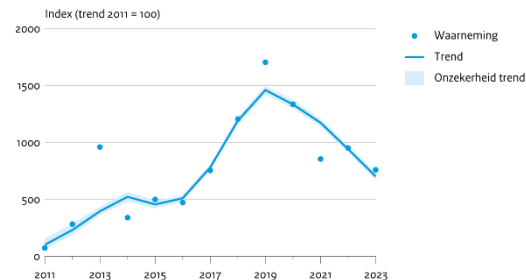
Sierlijke witsnuitlibel, Nederland

Index (=100)



Bron: NEM (Vlinderstichting, CBS), 2024

Populatiertrend sierlijke witsnuitlibel



Bron: NEM (Vlinderstichting, CBS)

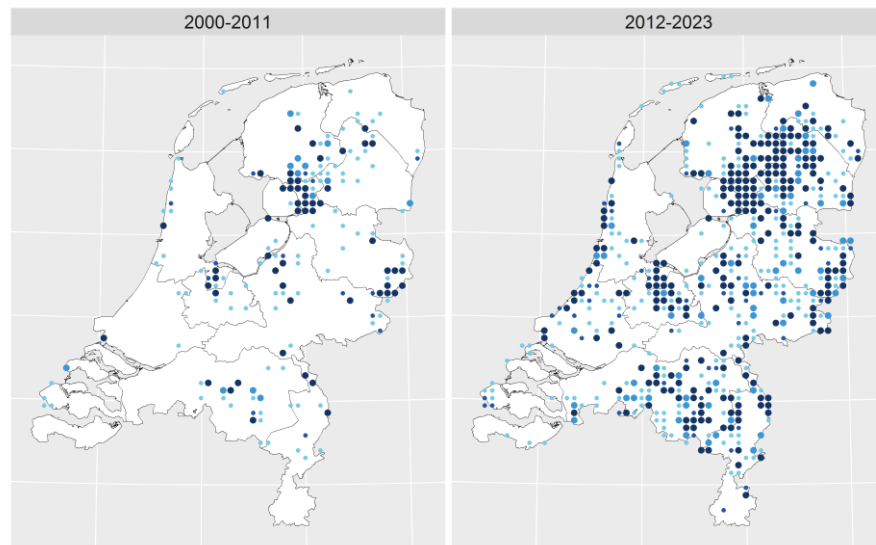
CBS/jun24  
[www.clo.nl/nl/q1613](https://www.clo.nl/nl/q1613)



# Gevlekte witsnuitlibel

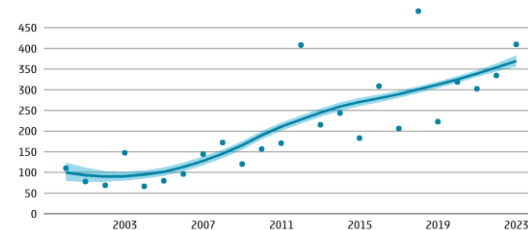


Gevlekte witsnuitlibel



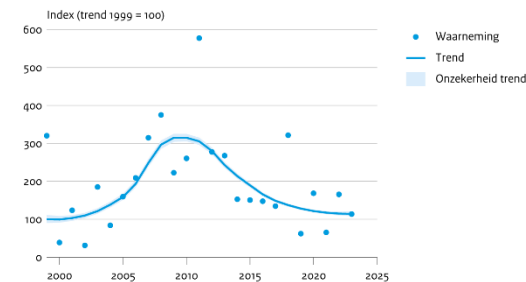
Gevlekte witsnuitlibel, Nederland

Index (2000=100)



Bron: NEM (Vlinderstichting, CBS), 2024

Populatiertrend gevlekte witsnuitlibel



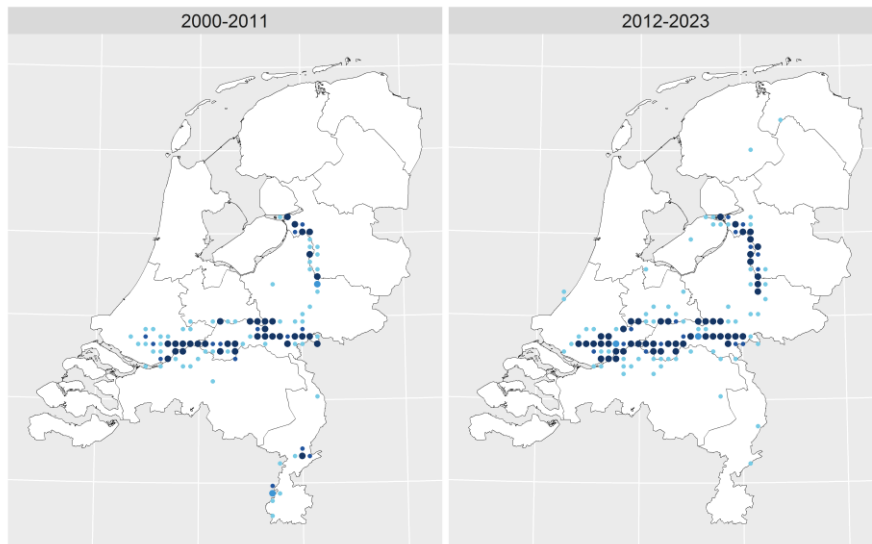
Bron: NEM (Vlinderstichting, CBS)

CBS/jun24  
www.clo.nl/nl41613



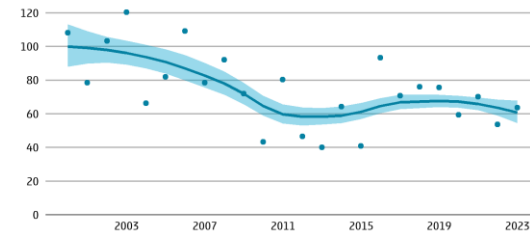
# Rivierrombout

## Rivierrombout



## Rivierrombout, Nederland

Index (2000=100)

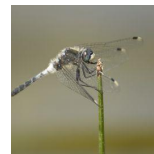


Bron: NEM (Vlinderstichting, CBS), 2024

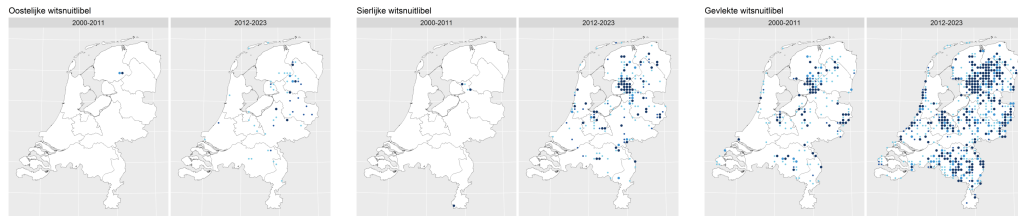


# Habitatrichtlijn

- Totaal 8 habitattypen met karakteristieke soorten libellen
  - H3130: Zwakgebufferde vennen
  - H3150: Meren met krabbenscheer en fonteinkruiden
  - H3160: Zure vennen
  - H3260: Beken en rivieren met waterplanten
  - H7110: Actieve hoogvenen
  - H7120: Herstellende hoogvenen
  - H7140: Overgangs- en trilvenen
  - H91E0: Vochtige alluviale bossen

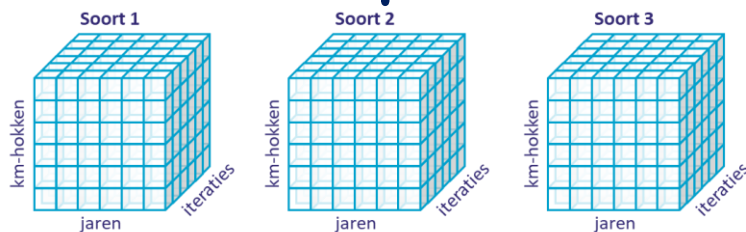


# Karakteristieke soorten x habitatype



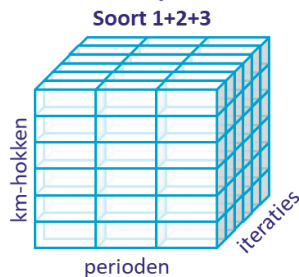
NDFD-data per soort

km-hokken met habitatype



verspreidingsanalyse

karakteristieke soorten stapelen



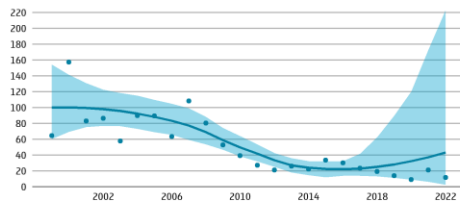
% aanwezige karakteristieke  
soorten in km-hok  
=  
kwaliteit habitatype



# H3130: Zwakgebufferde vennen

Speerwaterjuffer, Zwakgebufferde vennen

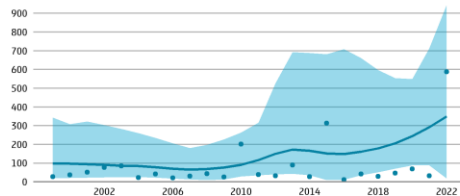
Index (1999=100)



trend 1999-2022: **matige afname**  
trend 2011-2022: **onzeker**

Kempense heidelibel, Zwakgebufferde vennen

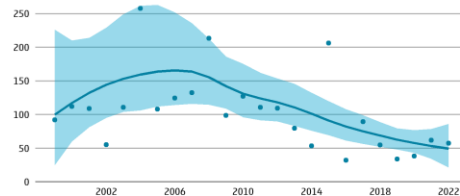
Index (1999=100)



trend 1999-2022: **onzeker**  
trend 2011-2022: **matige toename**

Gevlekte glanslibel, Zwakgebufferde vennen

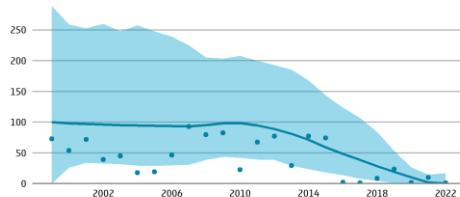
Index (1999=100)



trend 1999-2022: **matige afname**  
trend 2011-2022: **matige afname**

Sierlijke witsnuitlibel, Zwakgebufferde vennen

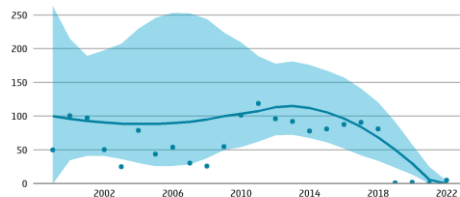
Index (1999=100)



trend 1999-2022: **matige afname**  
trend 2011-2022: **matige afname**

Oostelijke witsnuitlibel, Zwakgebufferde vennen

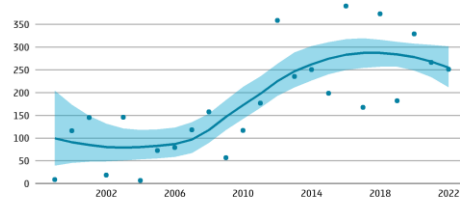
Index (1999=100)



trend 1999-2022: **onzeker**  
trend 2011-2022: **sterke afname**

Gevlekte witsnuitlibel, Zwakgebufferde vennen

Index (1999=100)



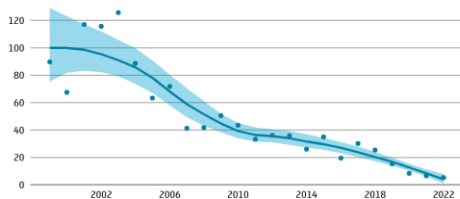
trend 1999-2022: **sterke toename**  
trend 2011-2022: **stabiel**



# H3160: Zure vennen

**Maanwaterjuffer, Zure vennen**

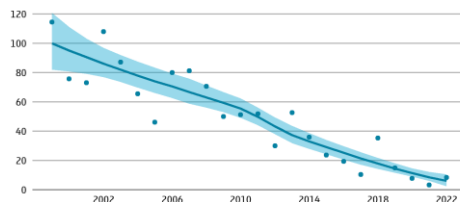
Index (1999=100)



trend 1999-2022: **sterke afname**  
trend 2011-2022: **matige afname**

**Venglazenmaker, Zure vennen**

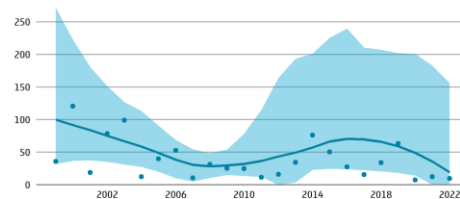
Index (1999=100)



trend 1999-2022: **sterke afname**  
trend 2011-2022: **sterke afname**

**Noordse glazenmaker, Zure vennen**

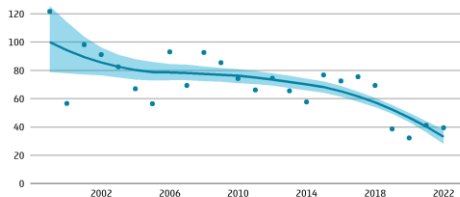
Index (1999=100)



trend 1999-2022: **matige afname**  
trend 2011-2022: **onzeker**

**Venwitsnuitlibel, Zure vennen**

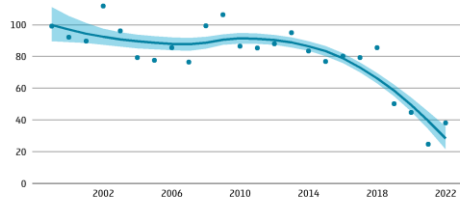
Index (1999=100)



trend 1999-2022: **matige afname**  
trend 2011-2022: **matige afname**

**Noordse witsnuitlibel, Zure vennen**

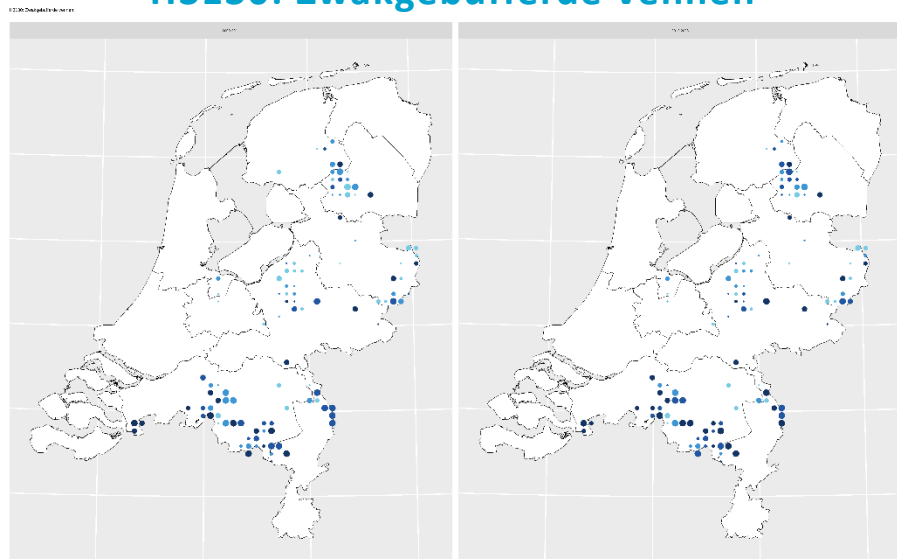
Index (1999=100)



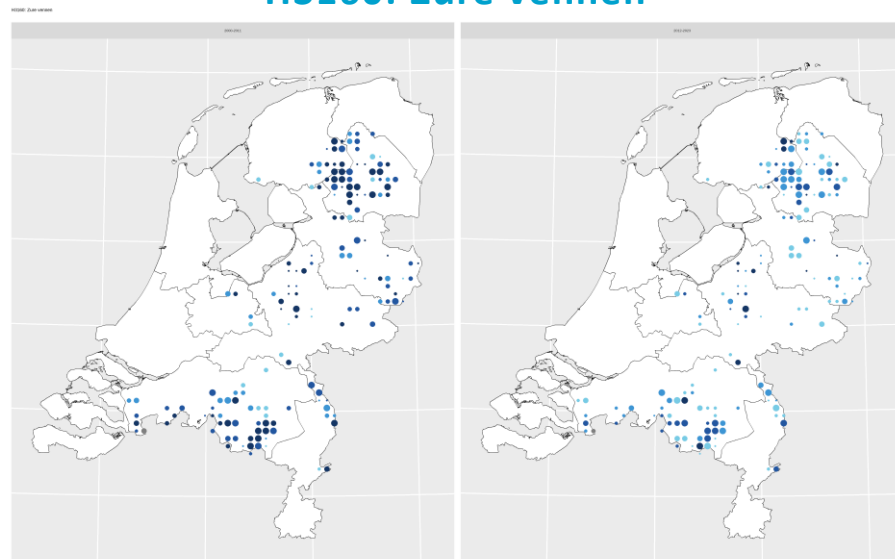
trend 1999-2022: **matige afname**  
trend 2011-2022: **matige afname**

# Kwaliteit habitattype op de kaart

## H3130: Zwakgebufferde vennen



## H3160: Zure vennen



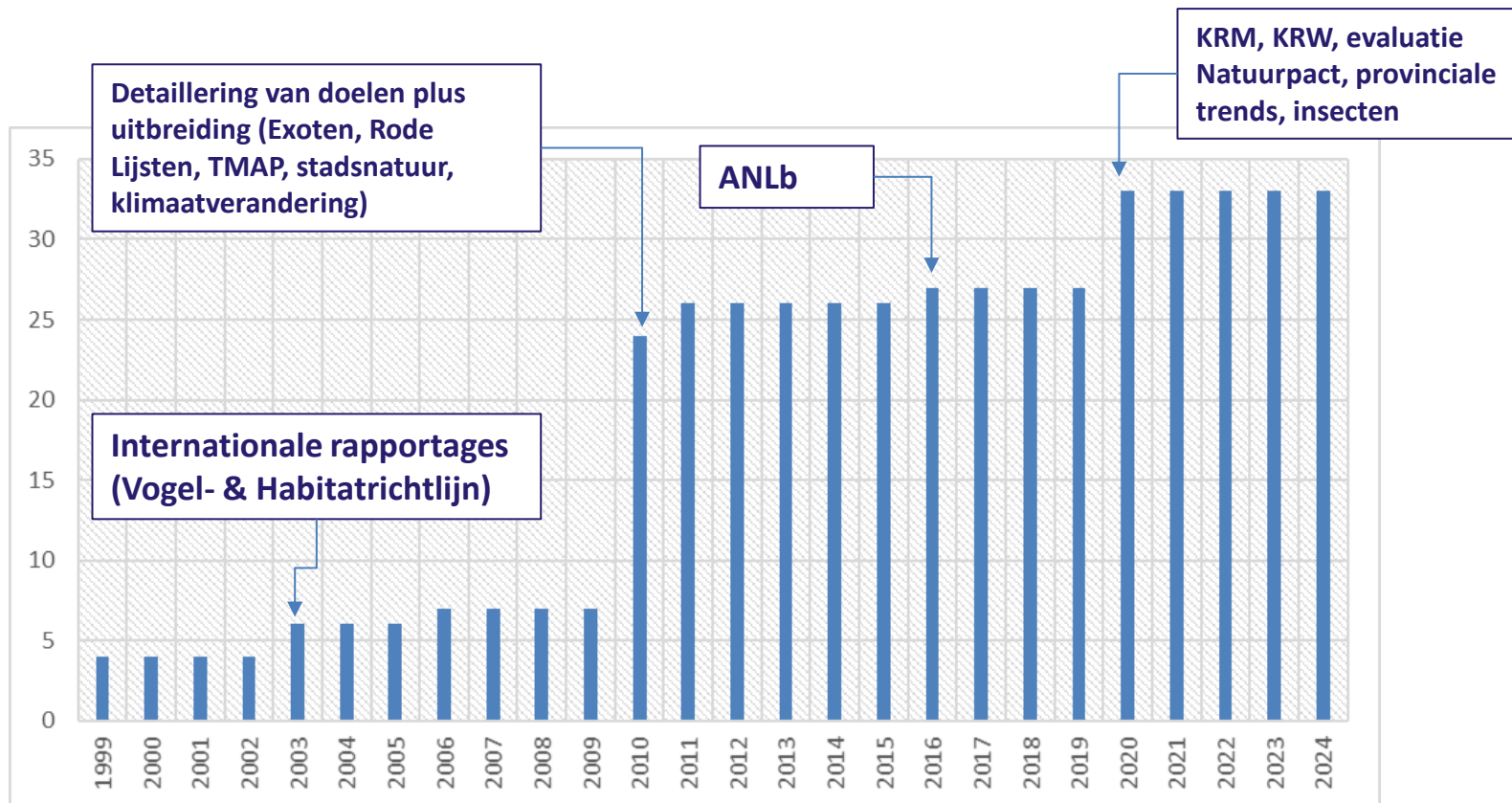
# Habitattypen met libellen

| Habitatype naam                           | Aantal<br>soortgroepen | Aantal<br>soorten | Aantal km-<br>hokken | 1999 -<br>2004 | 2005 -<br>2010 | 2011 -<br>2016 | 2017 -<br>2022 | 1999 - 2022 |          |                | 2011 - 2022 |          |               |
|-------------------------------------------|------------------------|-------------------|----------------------|----------------|----------------|----------------|----------------|-------------|----------|----------------|-------------|----------|---------------|
|                                           |                        |                   |                      |                |                |                |                | Trend       | Trend SE | Trendklasse    | Trend       | Trend SE | Trendklasse   |
| Zwakgebufferde vennen                     | 3                      | 31                | 308                  | 59,9%          | 63,1%          | 65,0%          | 65,7%          | 1,013       | 0,004    | Matige toename | 1,003       | 0,010    | Stabiel       |
| Zure vennen                               | 3                      | 12                | 445                  | 67,1%          | 62,1%          | 59,3%          | 49,4%          | 0,963       | 0,004    | Matige afname  | 0,935       | 0,007    | Matige afname |
| Meren met krabbenscheer en fonteinkruiden | 2                      | 13                | 429                  | 57,7%          | 59,5%          | 63,0%          | 63,1%          | 1,008       | 0,005    | Stabiel        | 0,997       | 0,015    | Stabiel       |
| Beken en rivieren met waterplanten        | 2                      | 18                | 242                  | 50,6%          | 50,1%          | 50,7%          | 51,9%          | 1,002       | 0,005    | Stabiel        | 1,004       | 0,015    | Stabiel       |
| Actieve hoogvenen                         | 6                      | 23                | 190                  | 68,9%          | 66,7%          | 63,1%          | 60,1%          | 0,977       | 0,003    | Matige afname  | 0,973       | 0,006    | Matige afname |
| Herstellende hoogvenen                    | 5                      | 20                | 244                  | 70,9%          | 70,9%          | 68,2%          | 66,2%          | 0,989       | 0,003    | Matige afname  | 0,986       | 0,006    | Matige afname |
| Overgangs- en trilvenen                   | 3                      | 31                | 515                  | 61,3%          | 61,3%          | 61,3%          | 62,4%          | 1,006       | 0,003    | Matige toename | 1,011       | 0,008    | Stabiel       |
| Vochtige alluviale bossen                 | 3                      | 55                | 950                  | 49,4%          | 49,2%          | 50,0%          | 50,9%          | 1,002       | 0,002    | Stabiel        | 1,002       | 0,005    | Stabiel       |

# EINDE



# Van 4 naar 33 meetdoelen...

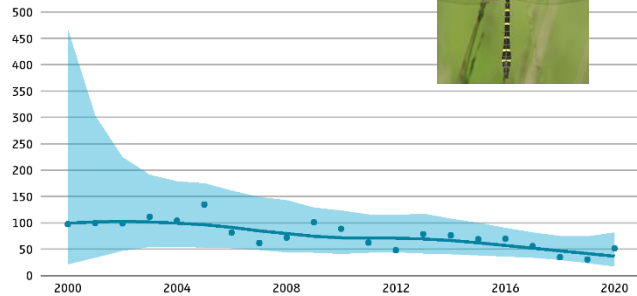


# Trends per soort en soortgroep

## Populatietrend

### Gewone bronlibel-

Index (2000=100)

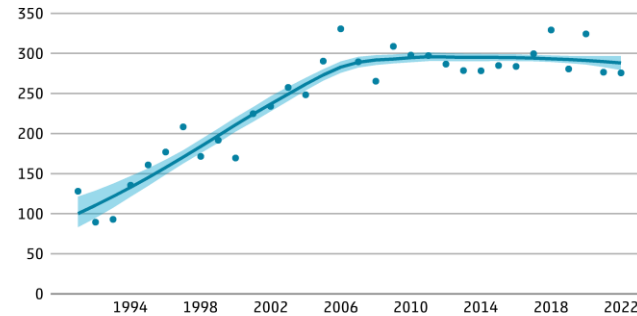


Bron: NEM (Vlinderstichting, CBS)

## Graadmeter / multi-species indicator

### Libellen in stromend water

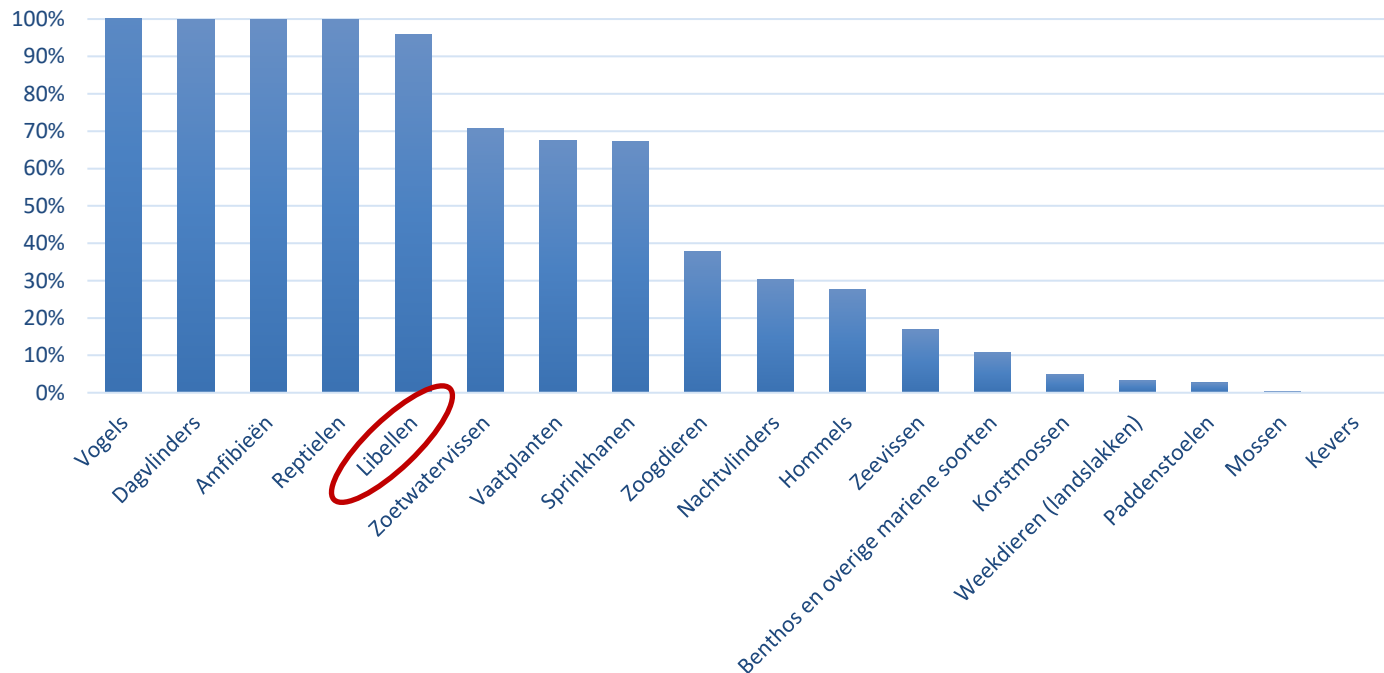
Index (1991=100)



Bron: NEM (Vlinderstichting, CBS)

# Libellen relatief goed onderzocht

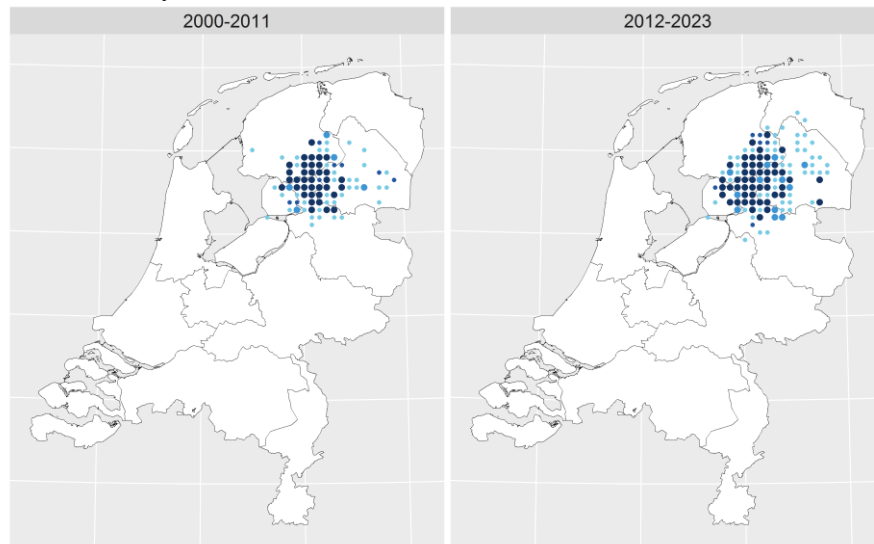
Aantal soorten met trends per soortgroep (in %)



# Noordse winterjuffer

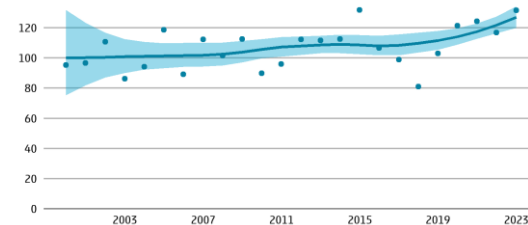


Noordse winterjuffer



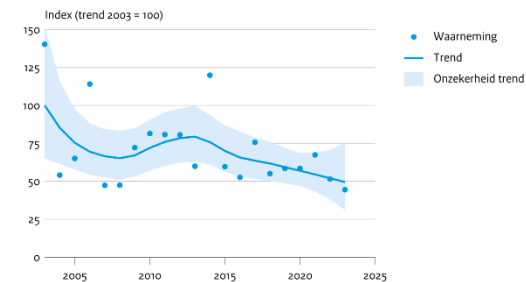
Noordse winterjuffer, Nederland

Index (2000=100)



Bron: NEM (Vlinderstichting, CBS), 2024

Populatiestrend noordse winterjuffer



Bron: NEM (Vlinderstichting, CBS)

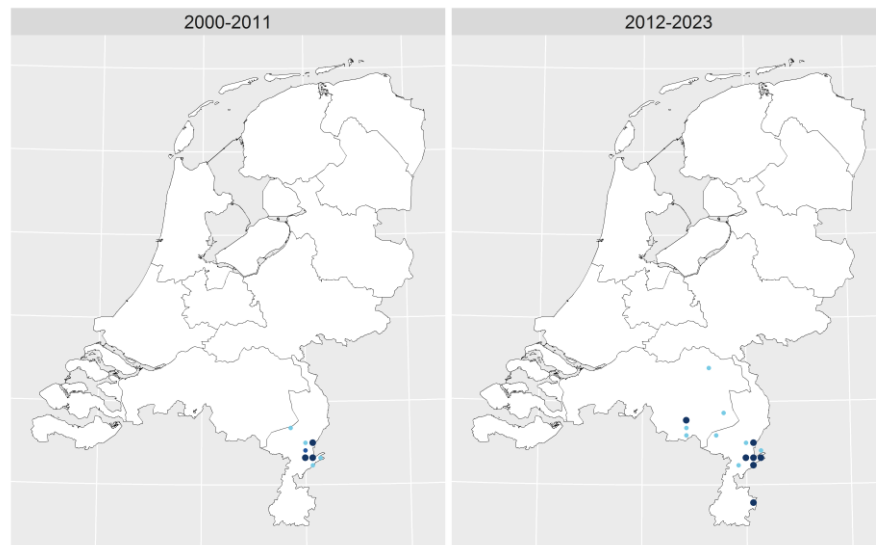
CBS/jun24  
www.clo.nl/nl41613



# Gaffellibel

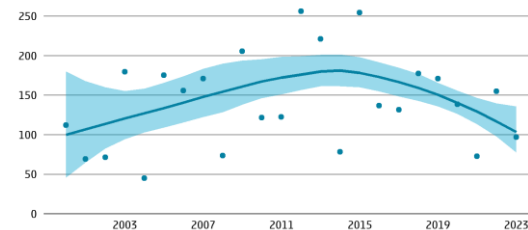


## Gaffellibel



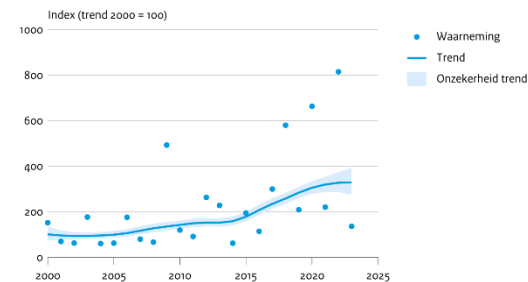
## Gaffellibel, Nederland

Index (2000=100)



Bron: NEM (Vlinderstichting, CBS), 2024

## Populatiestrend gaffellibel



Bron: NEM (Vlinderstichting, CBS)

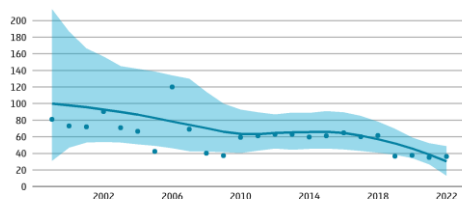
CBS/jun24  
www.clo.nl/nl.q1613



# H7110: Actieve hoogvenen

**Speerwaterjuffer, Actieve hoogvenen**

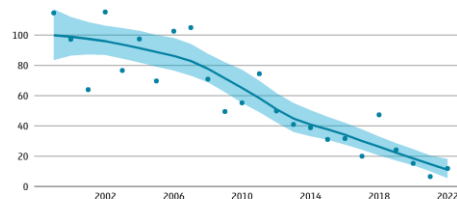
Index (1999=100)



trend 1999-2022: onzeker  
trend 2011-2022: matige afname

**Venglazenmaker, Actieve hoogvenen**

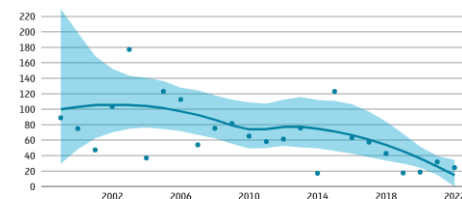
Index (1999=100)



trend 1999-2022: sterke afname  
trend 2011-2022: matige afname

**Noordse glazenmaker, Actieve hoogvenen**

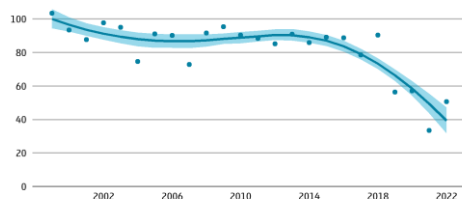
Index (1999=100)



trend 1999-2022: matige afname  
trend 2011-2022: matige afname

**Noordse witsnuitlibel, Actieve hoogvenen**

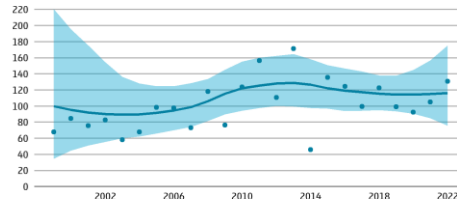
Index (1999=100)



trend 1999-2022: matige afname  
trend 2011-2022: matige afname

**Hoogveenglanslibel, Actieve hoogvenen**

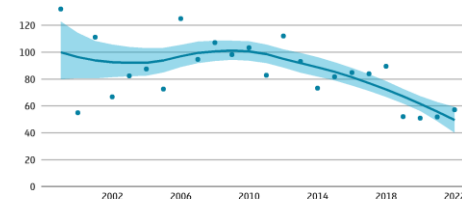
Index (1999=100)



trend 1999-2022: stabiel  
trend 2011-2022: stabiel

**Venwitsnuitlibel, Actieve hoogvenen**

Index (1999=100)



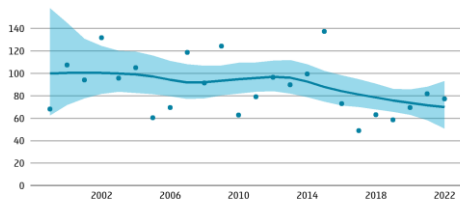
trend 1999-2022: matige afname  
trend 2011-2022: matige afname



# H7140: Overgangs- en trilvenen

Noordse winterjuffer, Overgangs- en trilvenen

Index (1999=100)

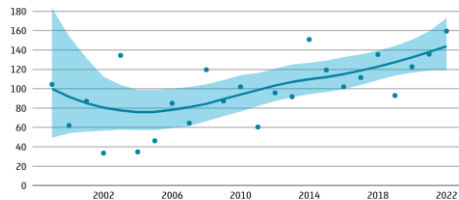


Bron: NEM (Vlinderstichting, CBS), 2024

trend 1999-2022: **stabiel**  
trend 2011-2022: **stabiel**

Gevlekte glanslibel, Overgangs- en trilvenen

Index (1999=100)

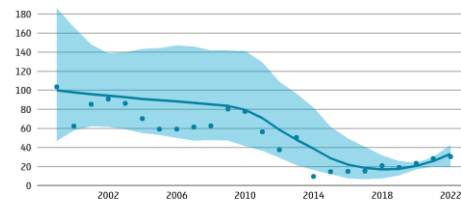


Bron: NEM (Vlinderstichting, CBS), 2024

trend 1999-2022: **matige toename**  
trend 2011-2022: **matige toename**

Kempense heidelibel, Overgangs- en trilvenen

Index (1999=100)



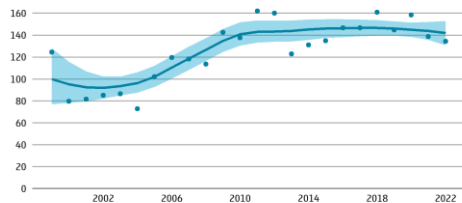
Bron: NEM (Vlinderstichting, CBS), 2024

trend 1999-2022: **matige afname**  
trend 2011-2022: **onzeker**

# H91E0: Vochtige alluviale bossen

Bosbeekjuffer, Vochtige alluviale bossen

Index (1999=100)



trend 1999-2022: matige toename

trend 2011-2022: stabiel