Omvang van de commerciële brasemvisserij in het IJsselmeergebied sinds het begin van de jaren 90 en de relatie met de waterkwaliteit

Eddy Lammens, RWS Waterdienst

12 december 2007

Rijkswaterstaat

Ontwikkeling visbestand in Veluwemeer

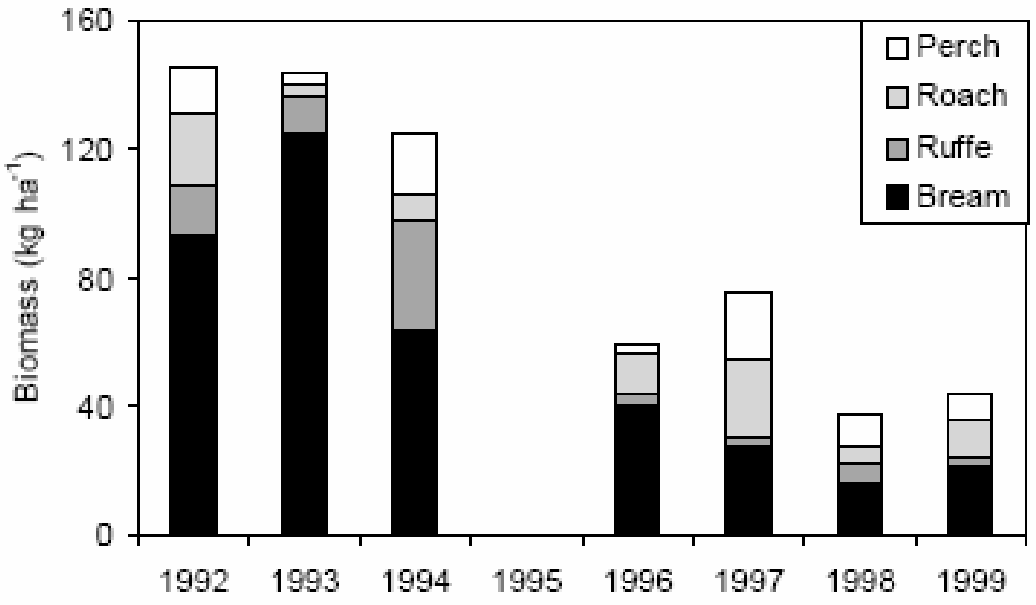
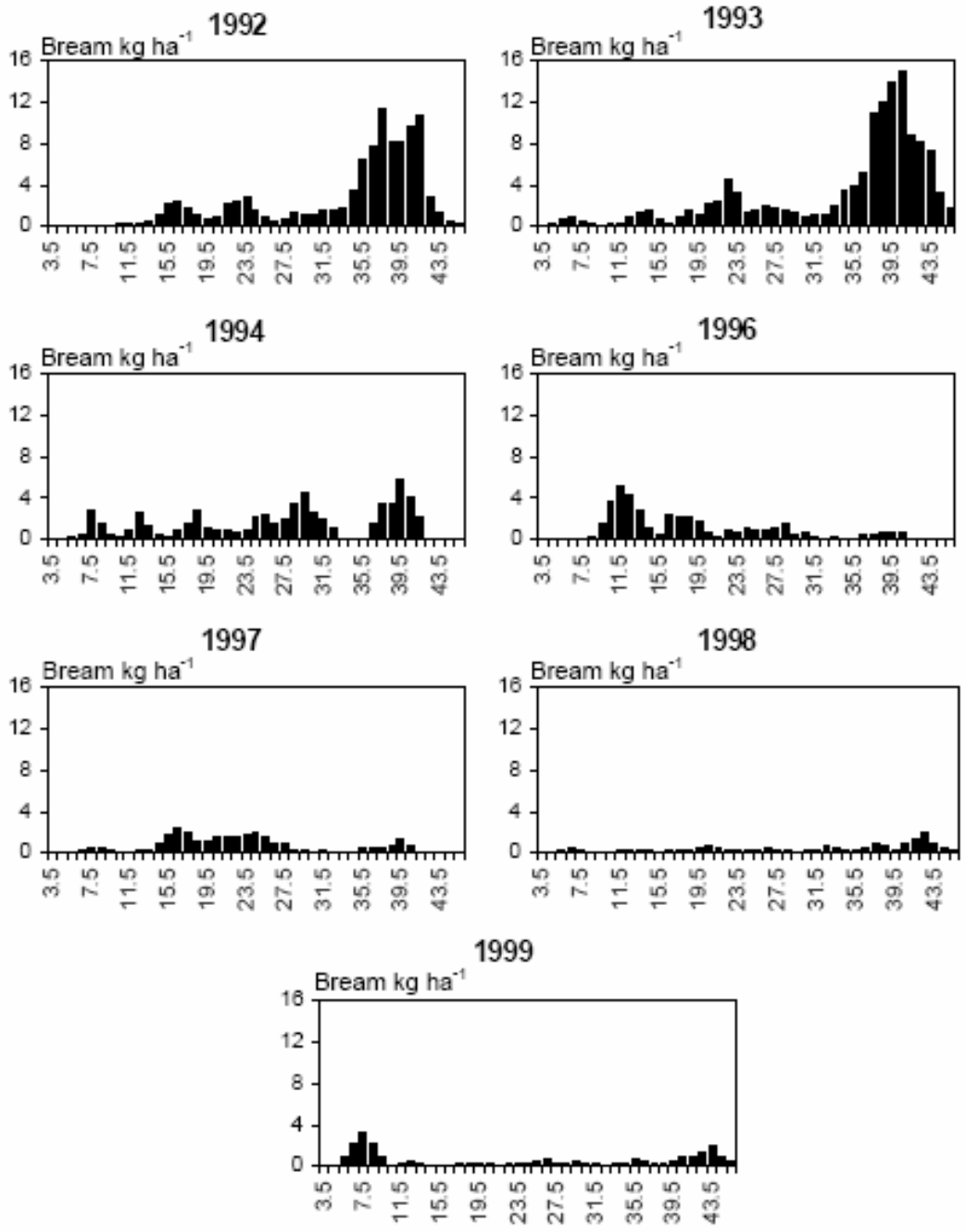


Fig. 2. Biomass and species composition of dominant fish in Lake Veluwe.



Verandering groottesamenstelling brasempopulatie

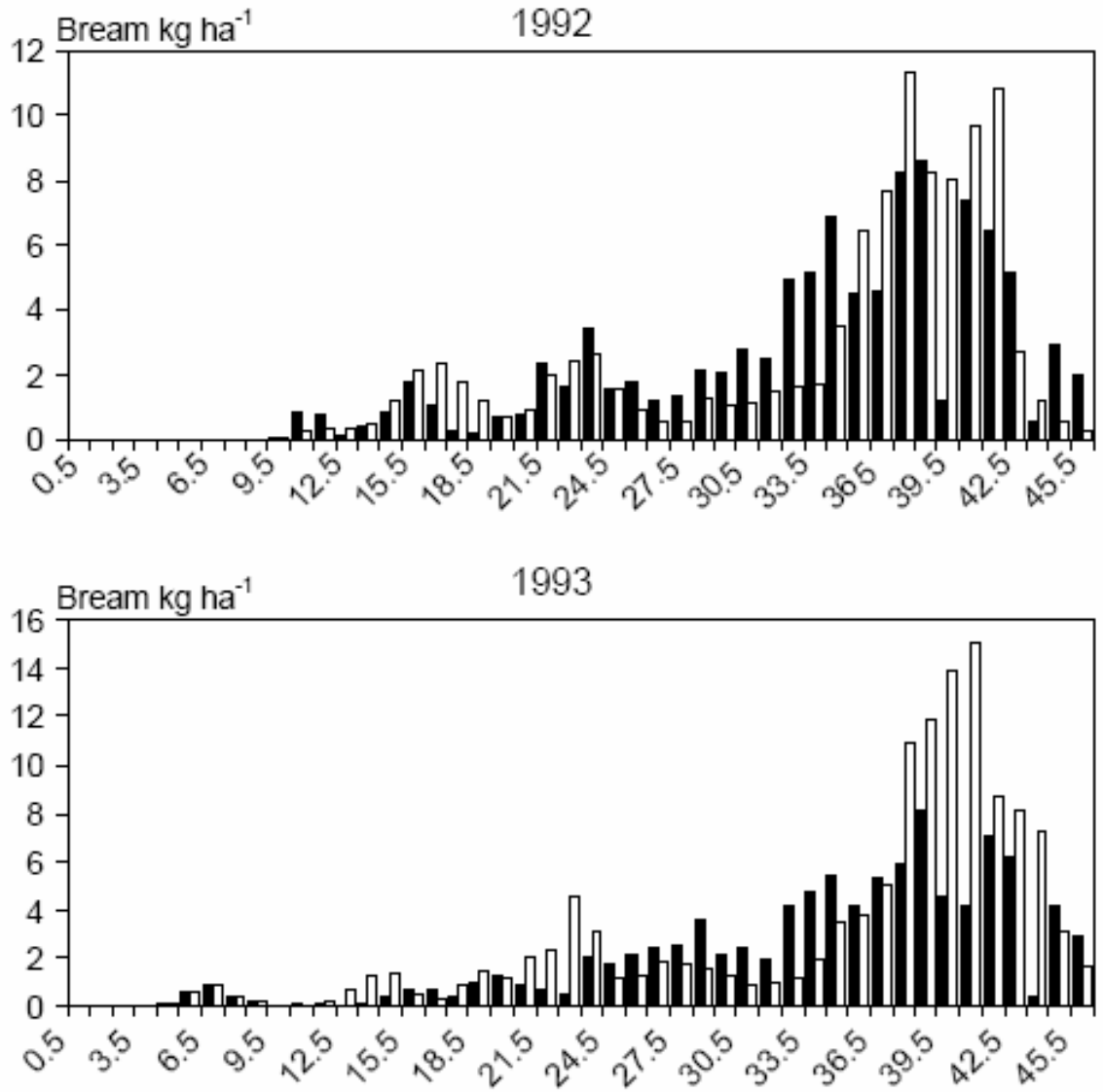


Fig. 4. Simulated and measured biomass (kg ha^{-1}) of 1 cm length-classes bream in 1992 and 1993. Open bars represent field data; black bars model results.

Grootteсamenstelling gesimuleerd

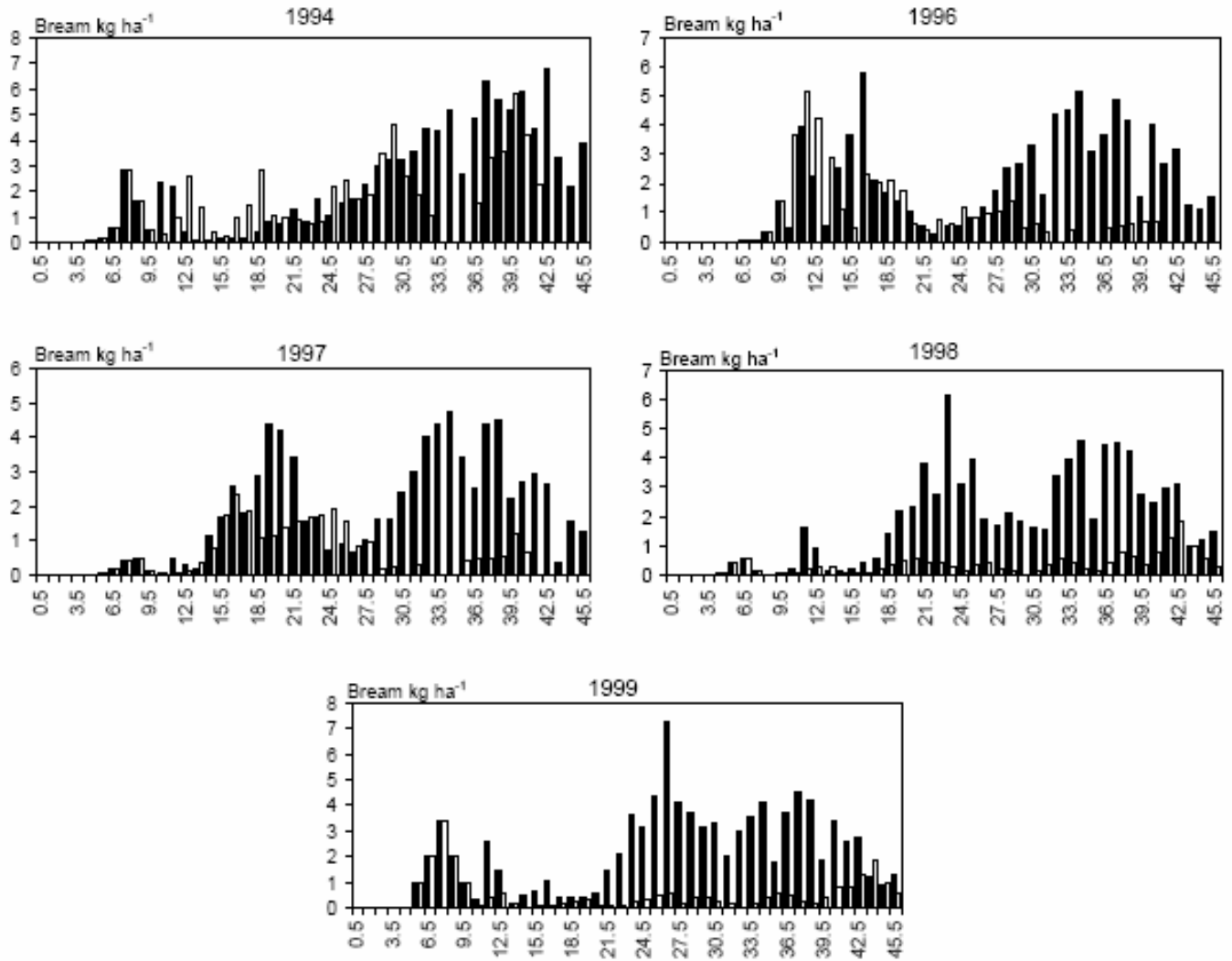


Fig. 5. Simulated and measured biomass of 1 cm length-classes bream in 1994–1999 in the absence of fishery. Open bars represent field data; black bars model results.

Groottesamenstelling zonder visserij

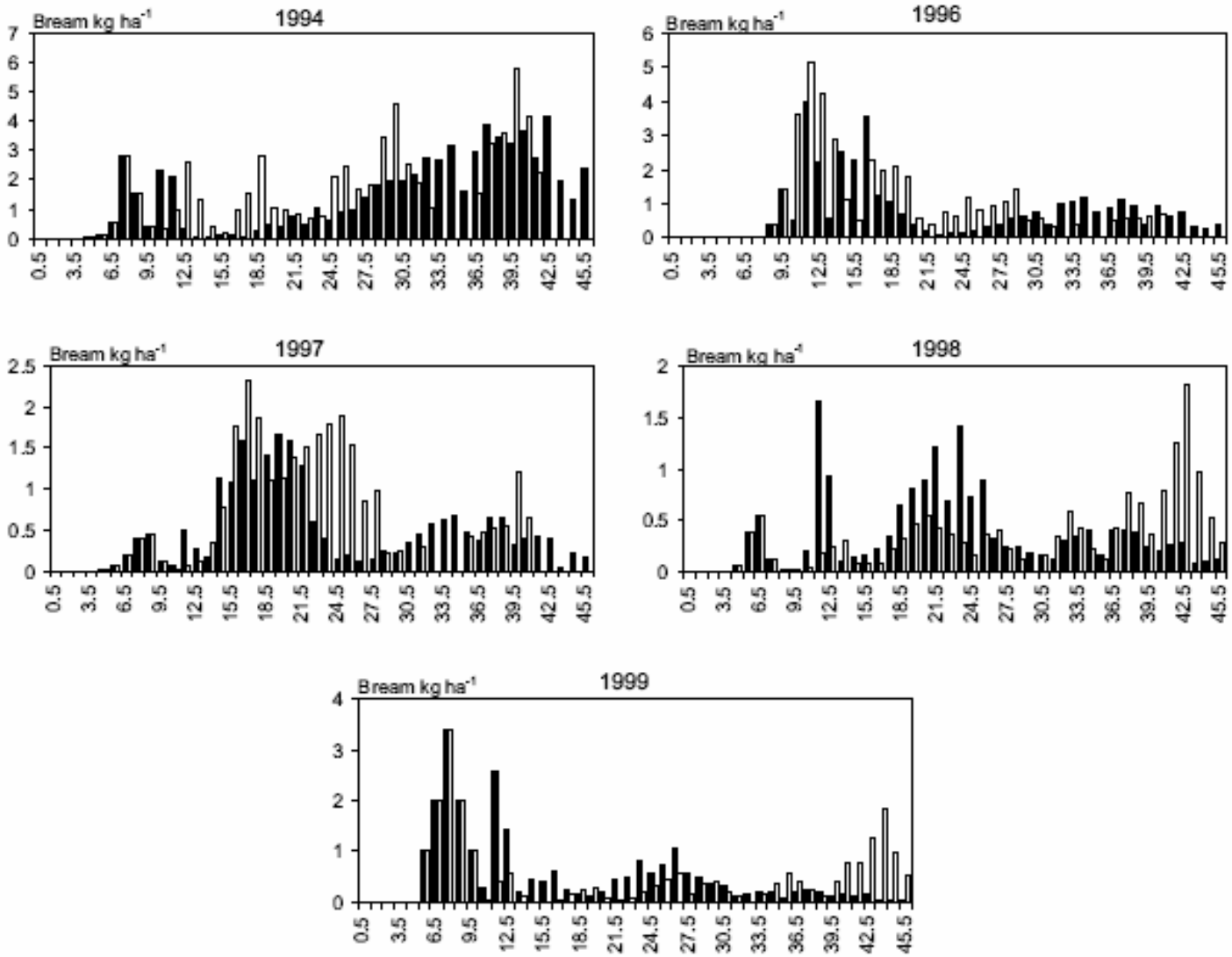


Fig. 6. Simulated and measured biomass of 1 cm length-classes bream in 1994–1999 in the presence of fishery. Open bars represent field data; black bars model results.

Geregistreerde en gesimuleerde oogst

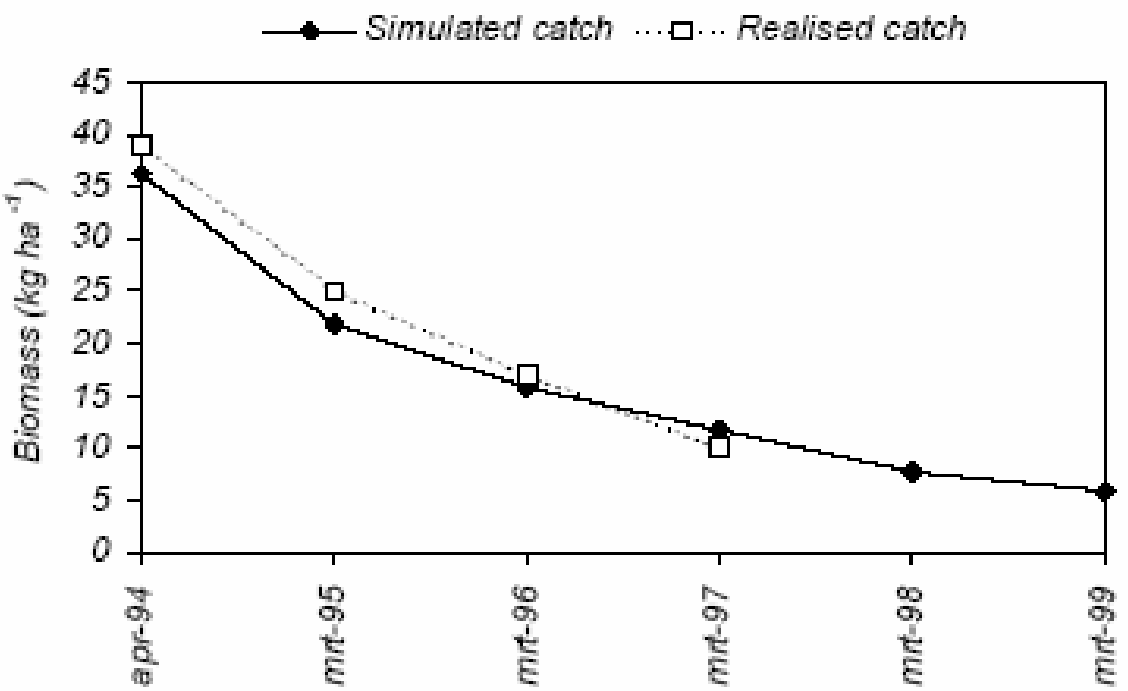


Fig. 7. Simulated and realised catches of bream.

Doorzicht en Charabedekking in samenhang met brasempopulatie

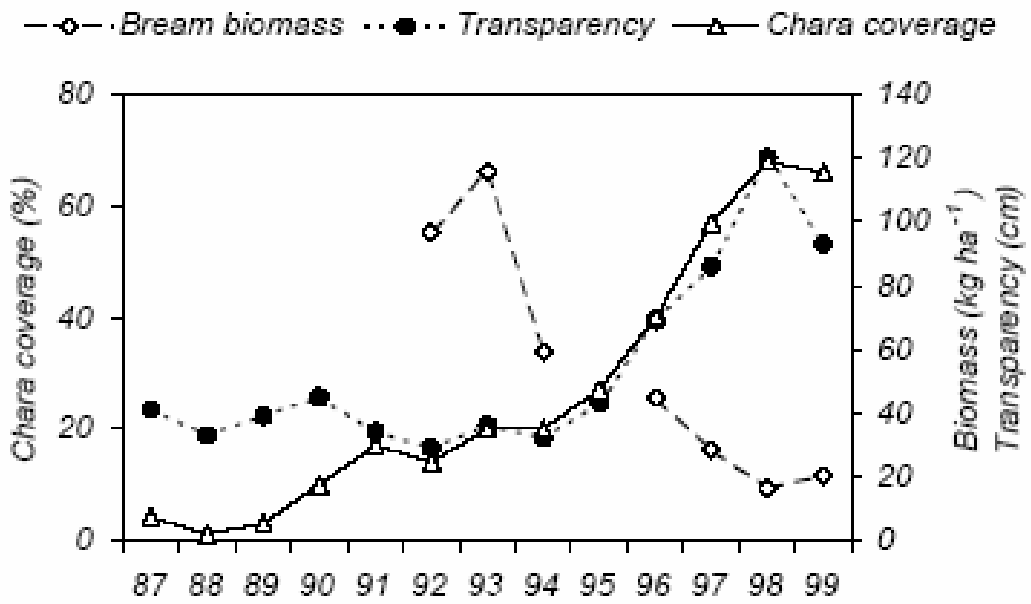


Fig. 8. Percentage coverage of *Chara* sp. and transparency (cm) in relation to the biomass of the bream population (kg ha^{-1}) in Lake Veluwe (Lammens et al., 2002).

Het mechanisme

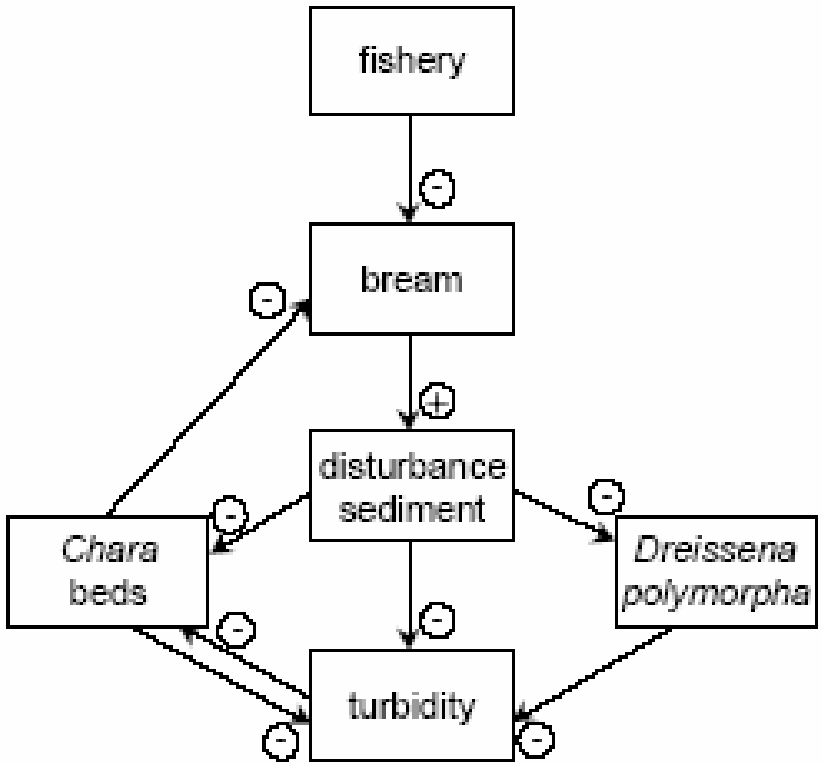
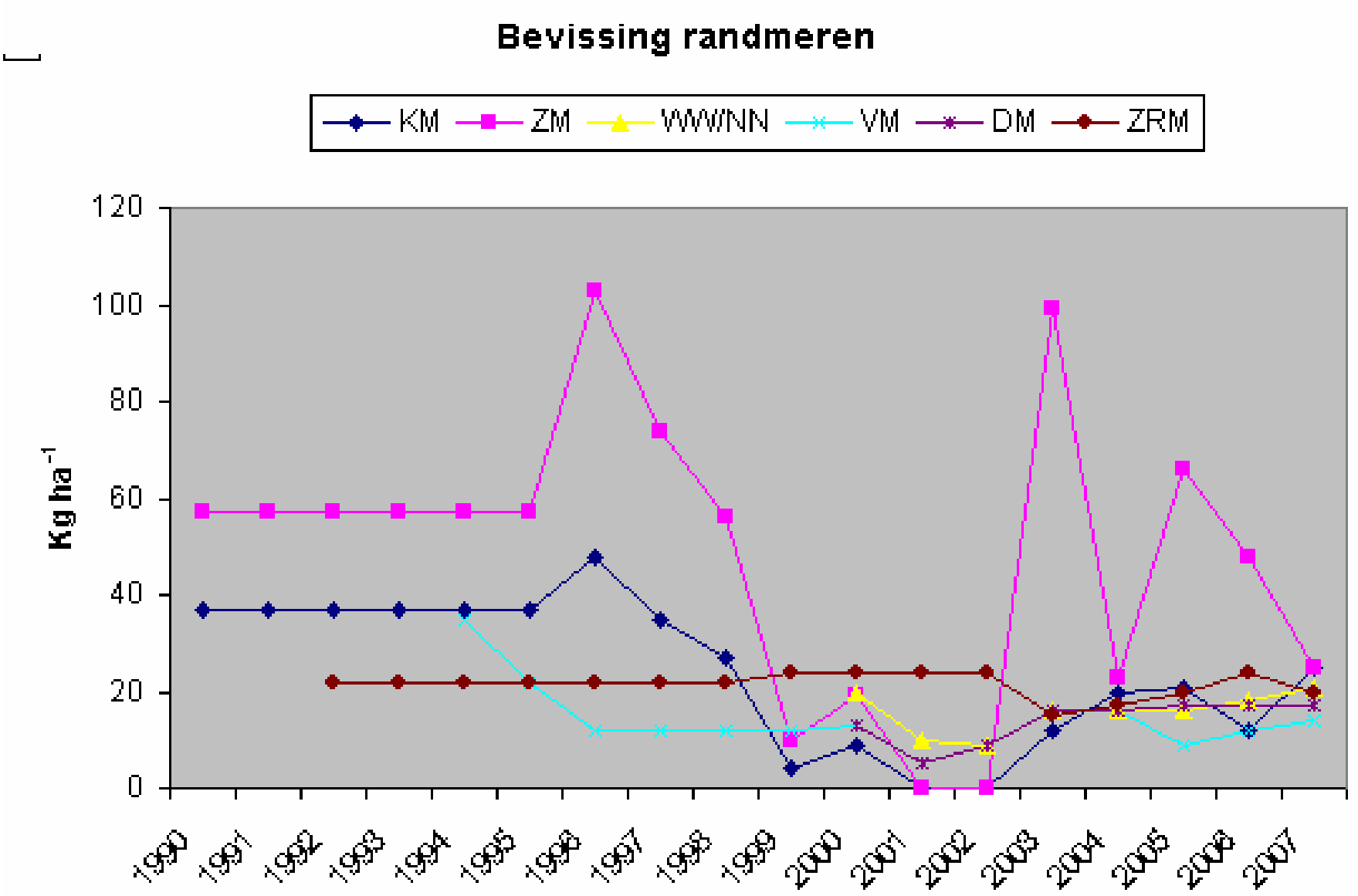
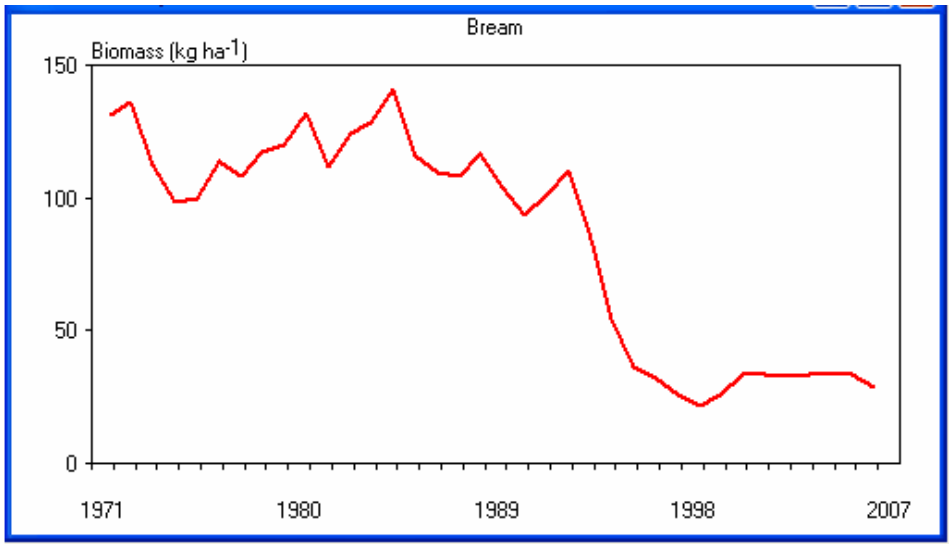
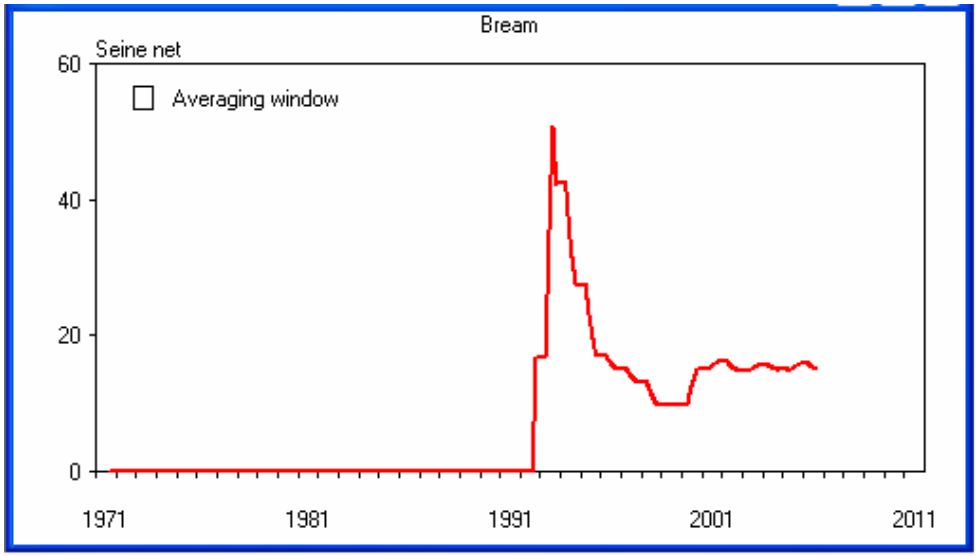
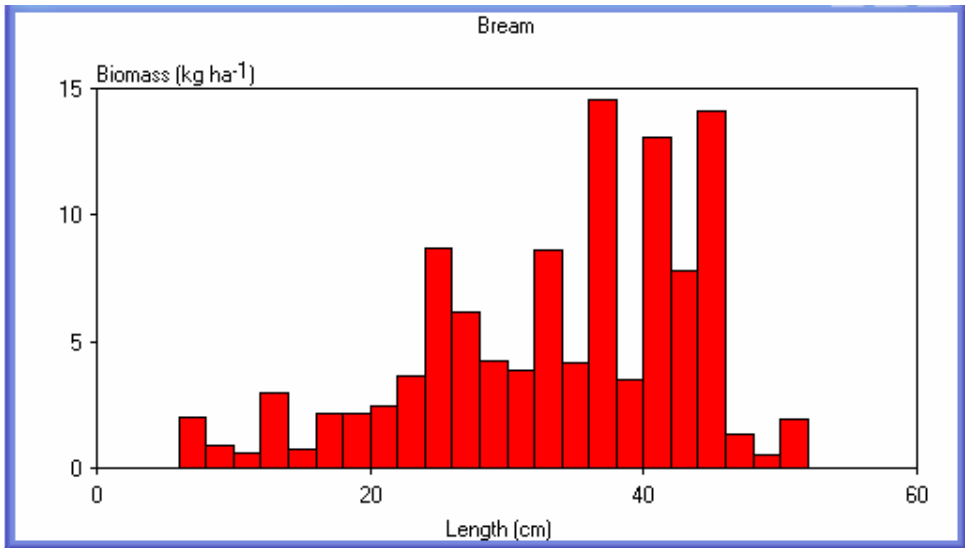


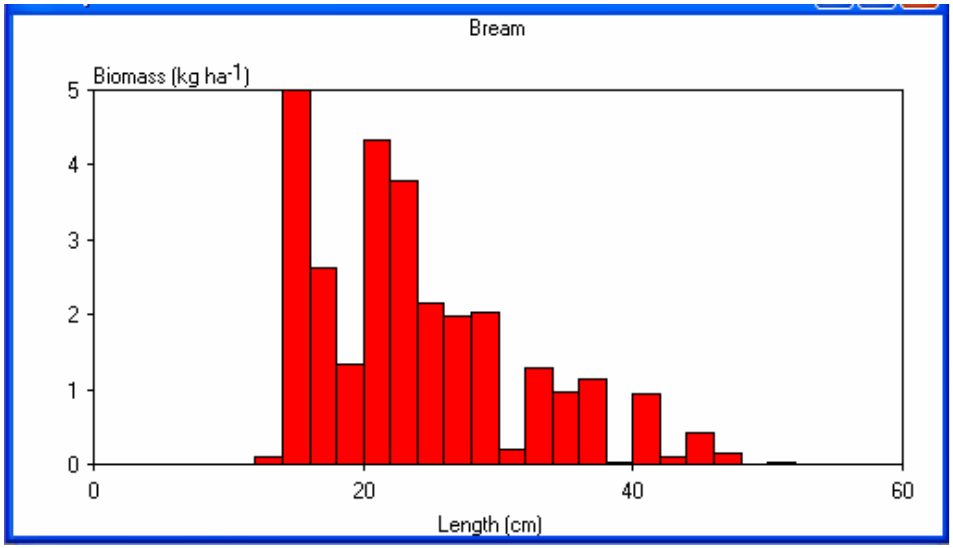
Fig. 9. Feedbacks in the recovery of Lake Veluwe. Though the causation is complex, we suppose that the increased fishery on adult breams triggered a change in the ecosystem. Positive feedbacks stabilise the *Chara* dominated state.


Bevissing randmeren
KM
ZM
WWWNN
VM
DM
ZRM
120
100
80
60
40
20
0
Kg ha-1
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007


Bream
Biomass (kg ha-1)
150
100
50
0
1971
1980
1989
1998
2007


Bream
Seine net
Averaging window
60
40
20
0
1971
1981
1991
2001
2011


Bream
Biomass (kg ha-1)
15
10
5
0
0
20
40
60
Length (cm)


Bream
Biomass (kg ha-1)
5
4
3
2
1
0
0
20
40
60
Length (cm)