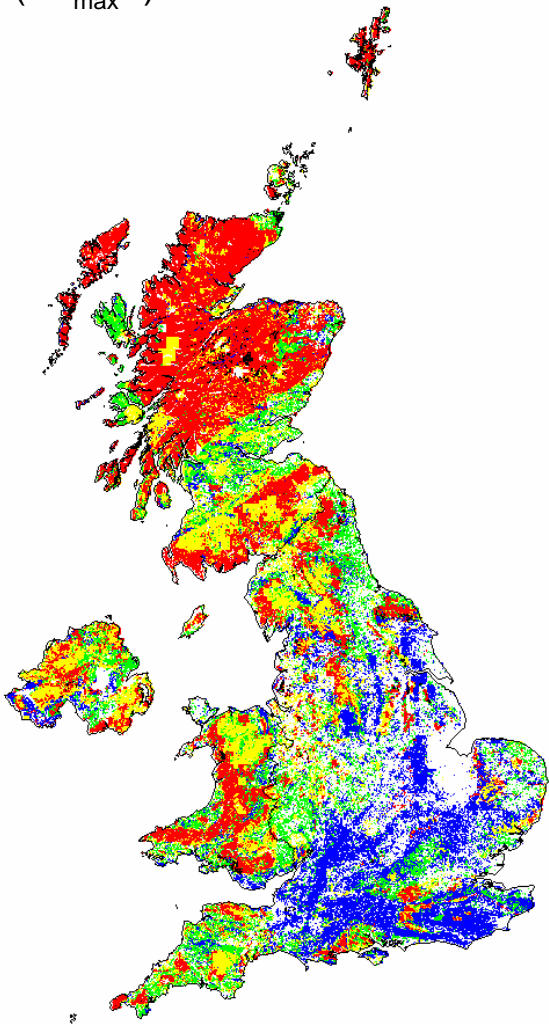
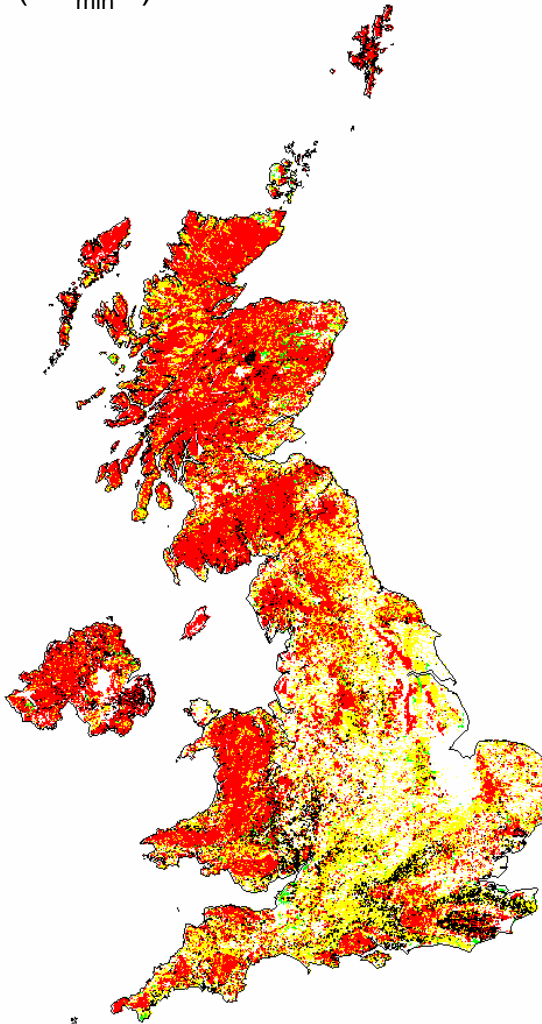


5th-percentile acidity critical loads:

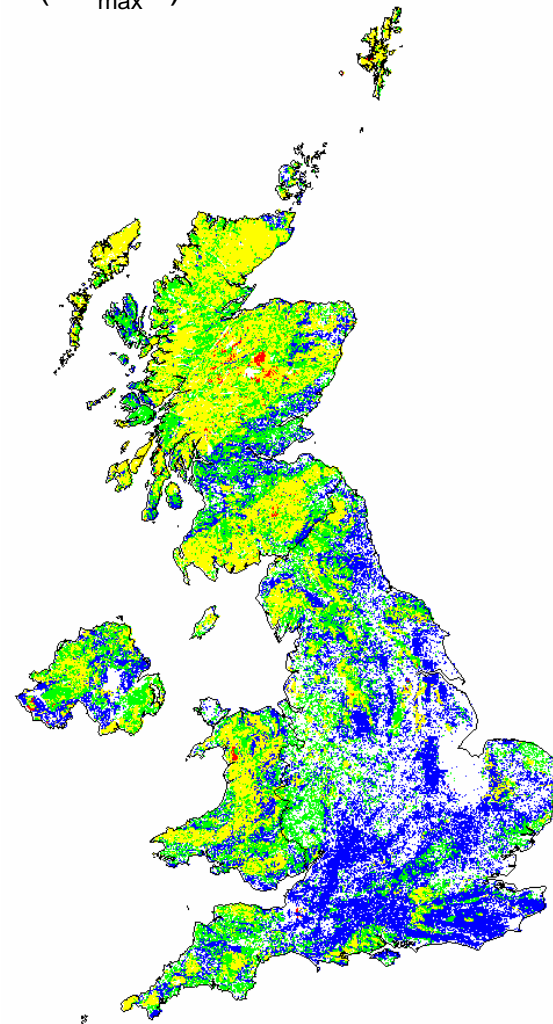
Maximum critical load of sulphur
($CL_{\max} S$)



Minimum critical load of nitrogen
($CL_{\min} N$)



Maximum critical load of nitrogen
($CL_{\max} N$)



keq ha⁻¹ year⁻¹

≤ 0.2

0.2 – 0.5

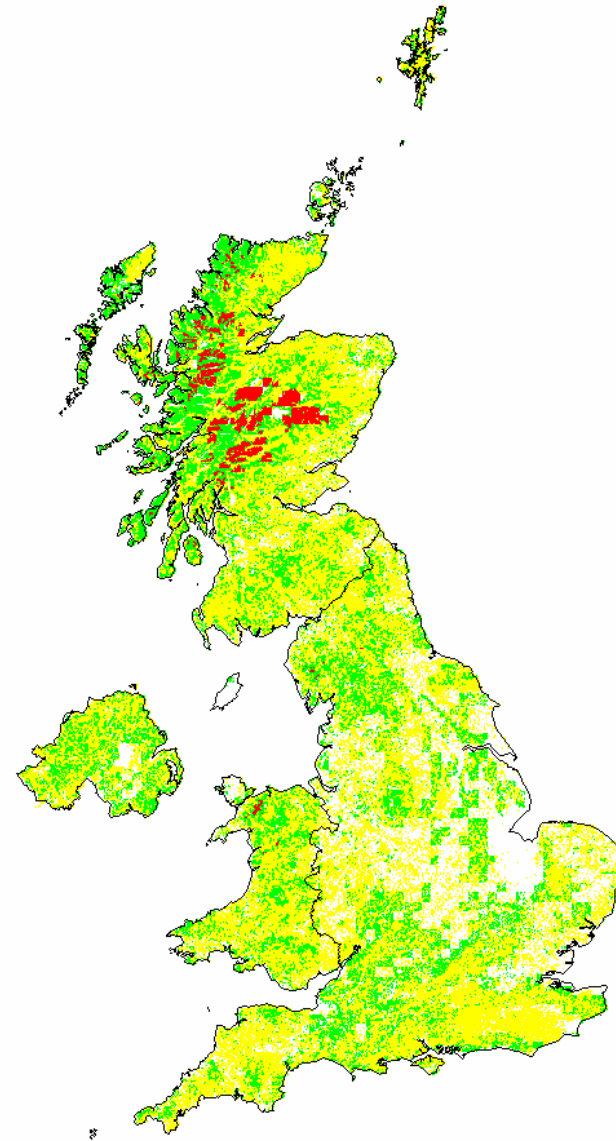
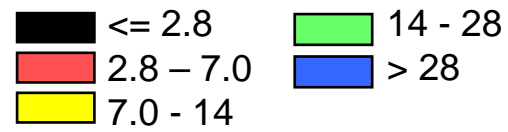
0.5 – 1.0

1.0 – 2.0

> 2.0

5th-percentile critical load of nutrient nitrogen

kg N ha⁻¹ year⁻¹

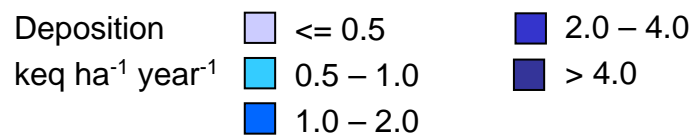
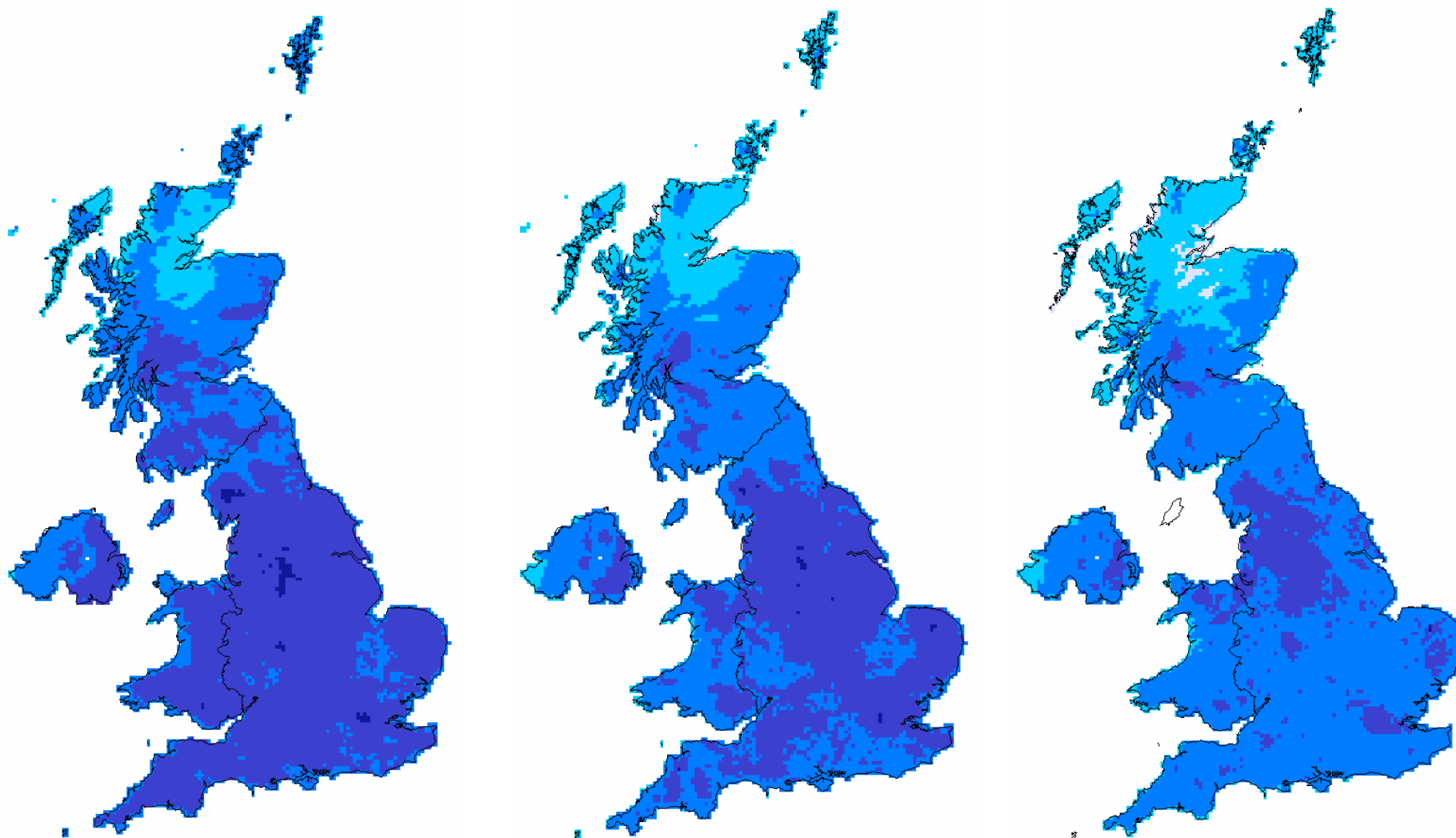


Total acid deposition (S + NO_x + NH_x) moorland:

1995-97

1999-01

2010

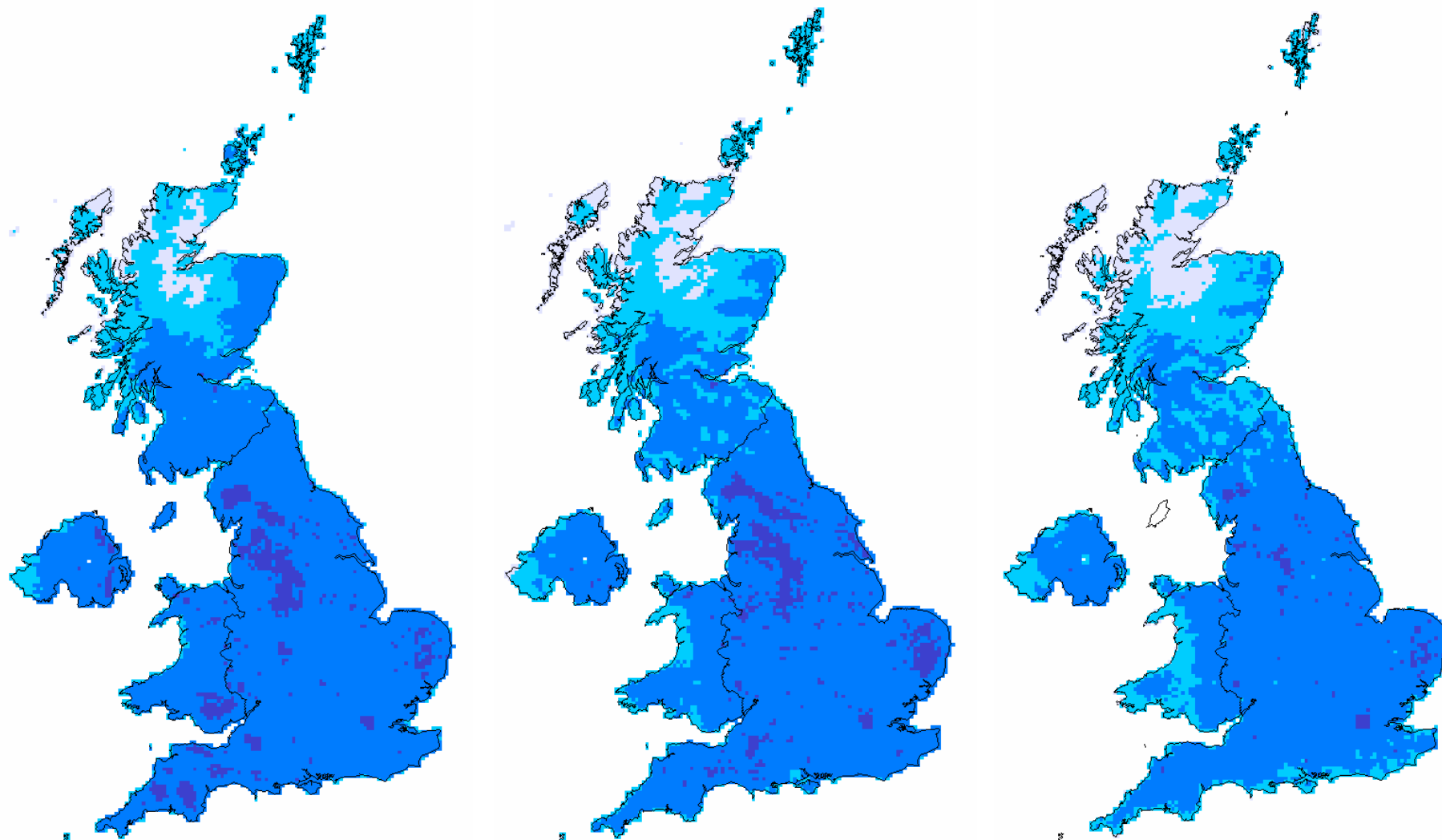


Total nitrogen deposition (NO_x + NH_x) moorland:

1995-97

1999-01

2010



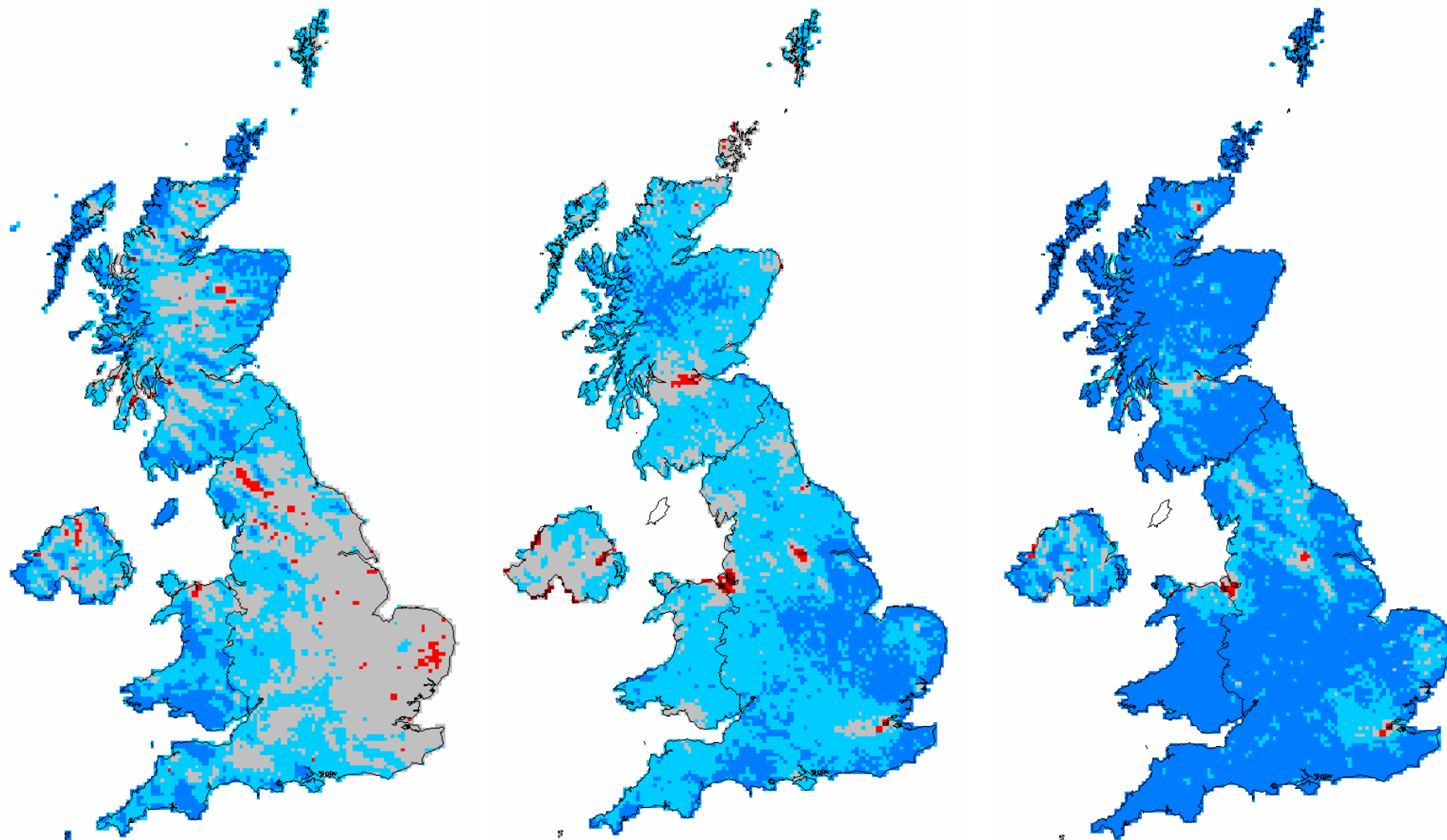
Deposition ≤ 7.0 28 - 56
kg N ha⁻¹ year⁻¹ 7 - 14 > 56
 14 - 28

Changes in acid deposition (moorland) over time:



1999-01 / 1995-97



2010 / 1999-01

2010 / 1995-97



Ratio

	< 0.75
	0.76 – 0.90
	0.91 – 1.10

	1.11 – 1.25
	> 1.25

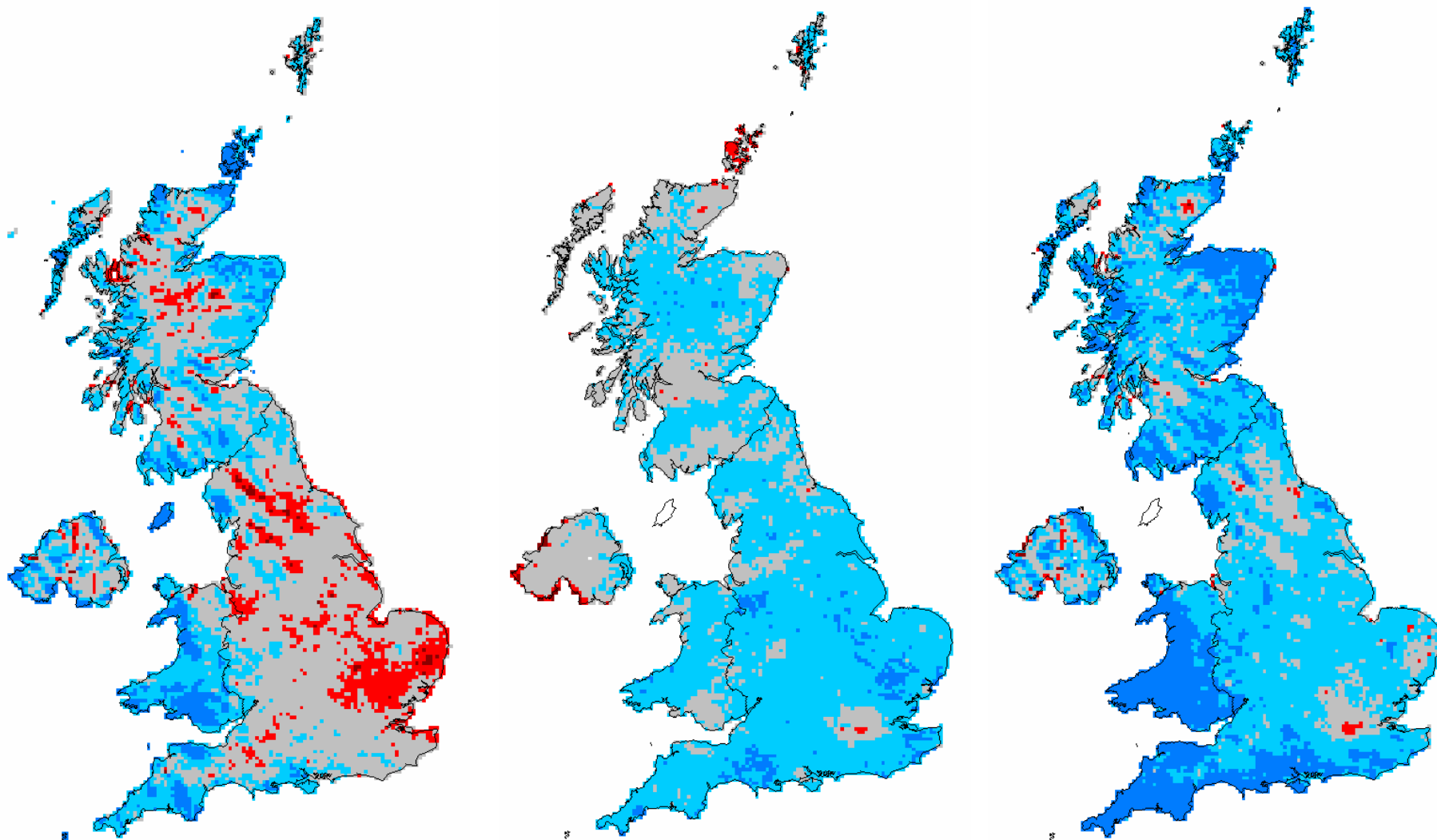
Ratios < 1 denote decreases in deposition
Ratios > 1 denote increases in deposition

Changes in nitrogen deposition (moorland) over time:

1999-01 / 1995-97

2010 / 1999-01

2010 / 1995-97



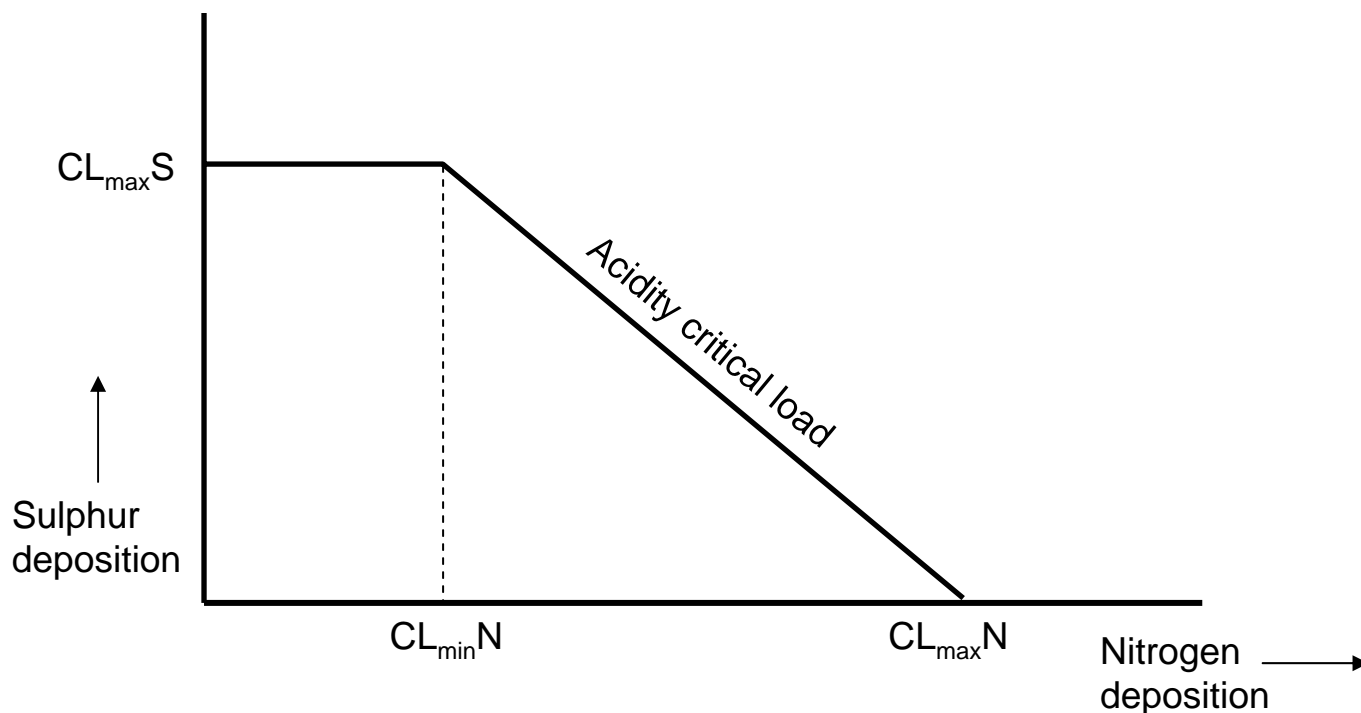
Ratio

- < 0.75
- 0.76 – 0.90
- 0.91 – 1.10

- 1.11 – 1.25
- > 1.25

Ratios < 1 denote decreases in deposition
Ratios > 1 denote increases in deposition

The Acidity Critical Loads Function (CLF)



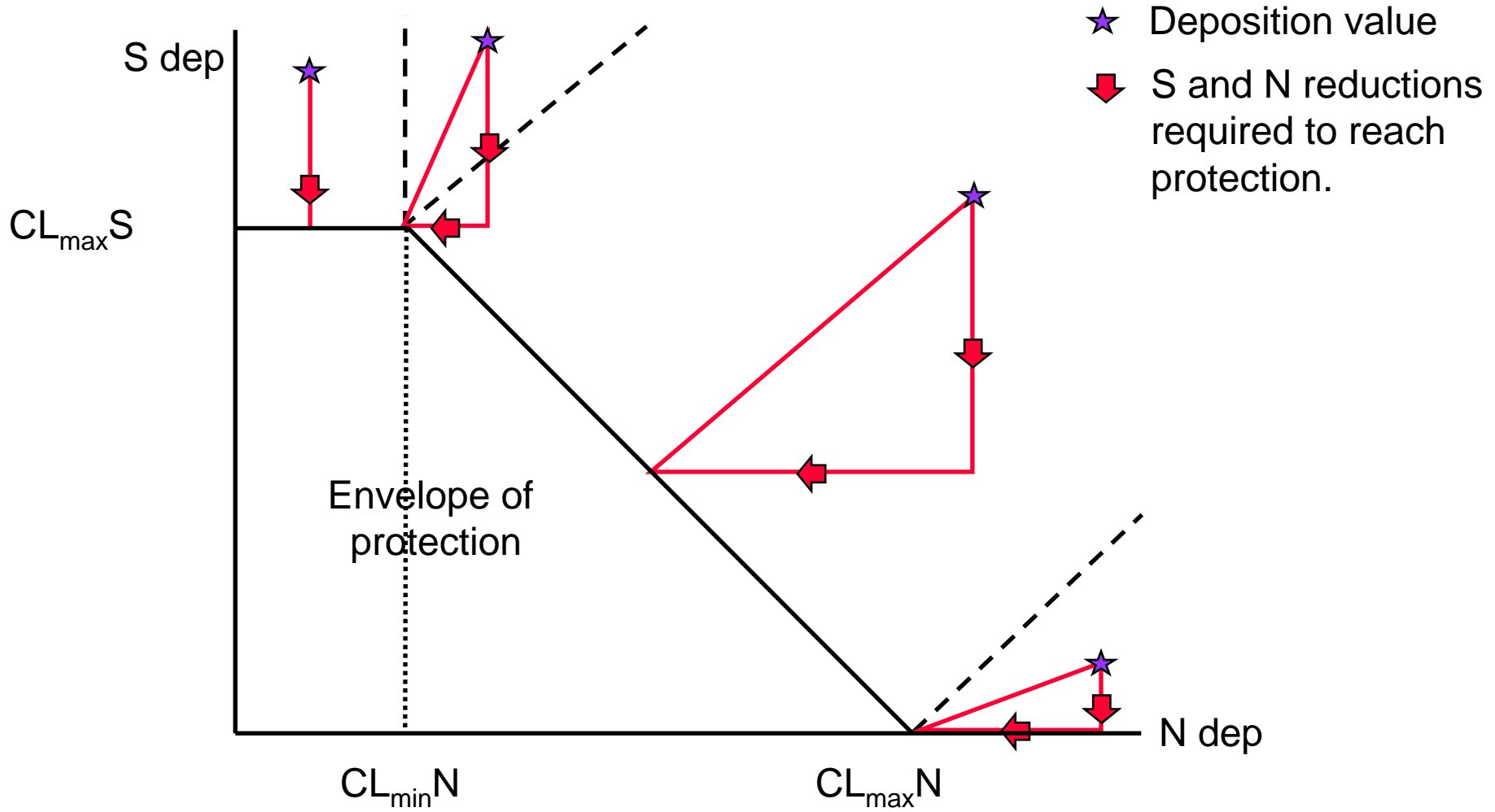
$CL_{\max}S$ = maximum critical load of sulphur
 = acidity critical load taking into account base cation deposition and removal

$CL_{\min}N$ = minimum critical load of nitrogen
 = sum of long-term nitrogen removal processes, eg, nitrogen uptake, immobilisation

$CL_{\max}N$ = maximum critical load of nitrogen
 = sum of $CL_{\max}S$ and $CL_{\min}N$

Refer to Section 4 of the 2004 Update to UK Critical Loads (Hall et al, 2004) for further information.

Calculating acidity exceedances using the CLF

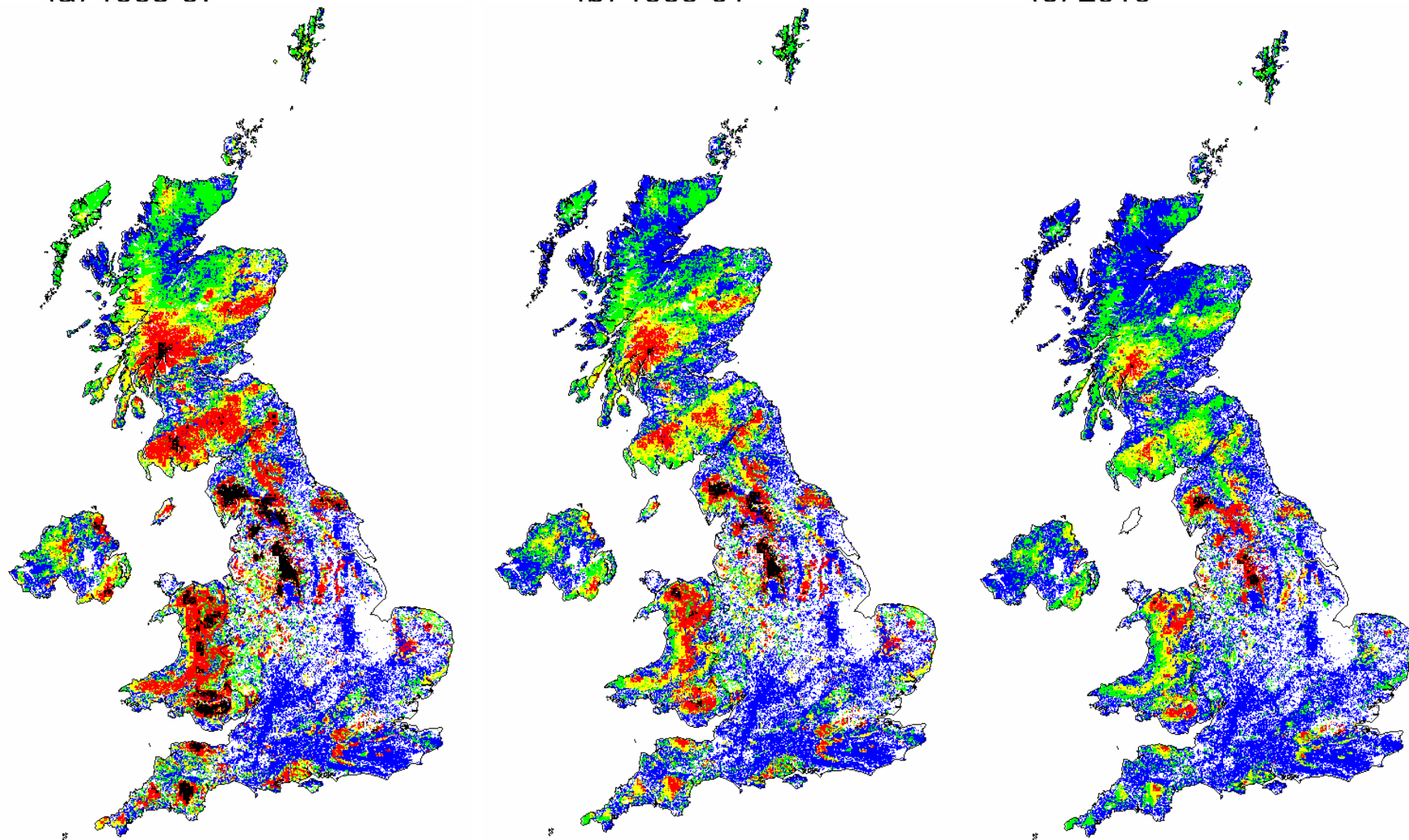


Exceedance of 5th-percentile acidity critical loads by total acid deposition for:

(a) 1995-97

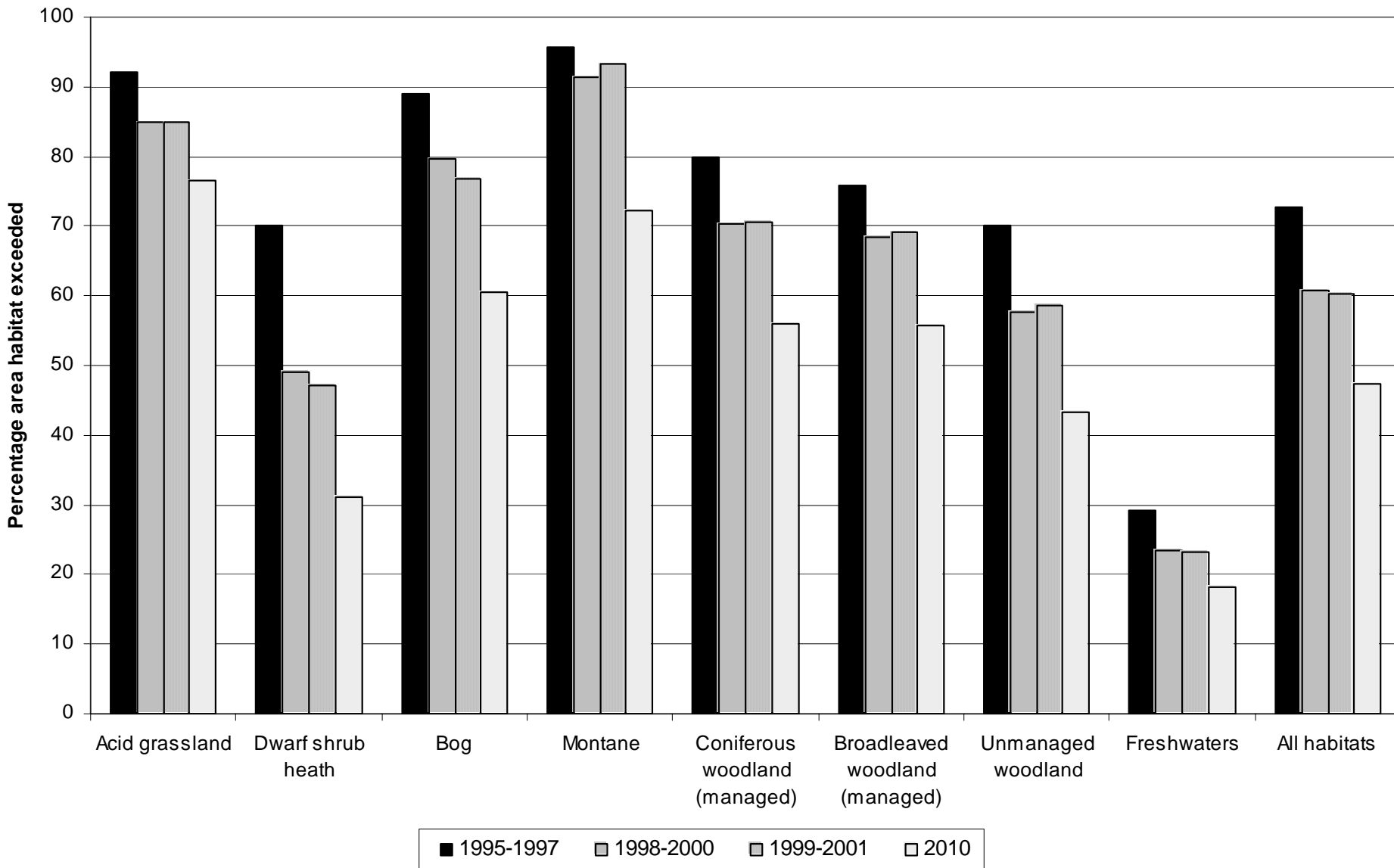
(b) 1999-01

(c) 2010



Exceedance ■ not exceeded ■ 1.0 - 2.0
keq ha⁻¹ year⁻¹ ■ 0.0 - 0.5 ■ > 2.0
 ■ 0.5 - 1.0

Percentage area of habitat exceeded for acidity in UK

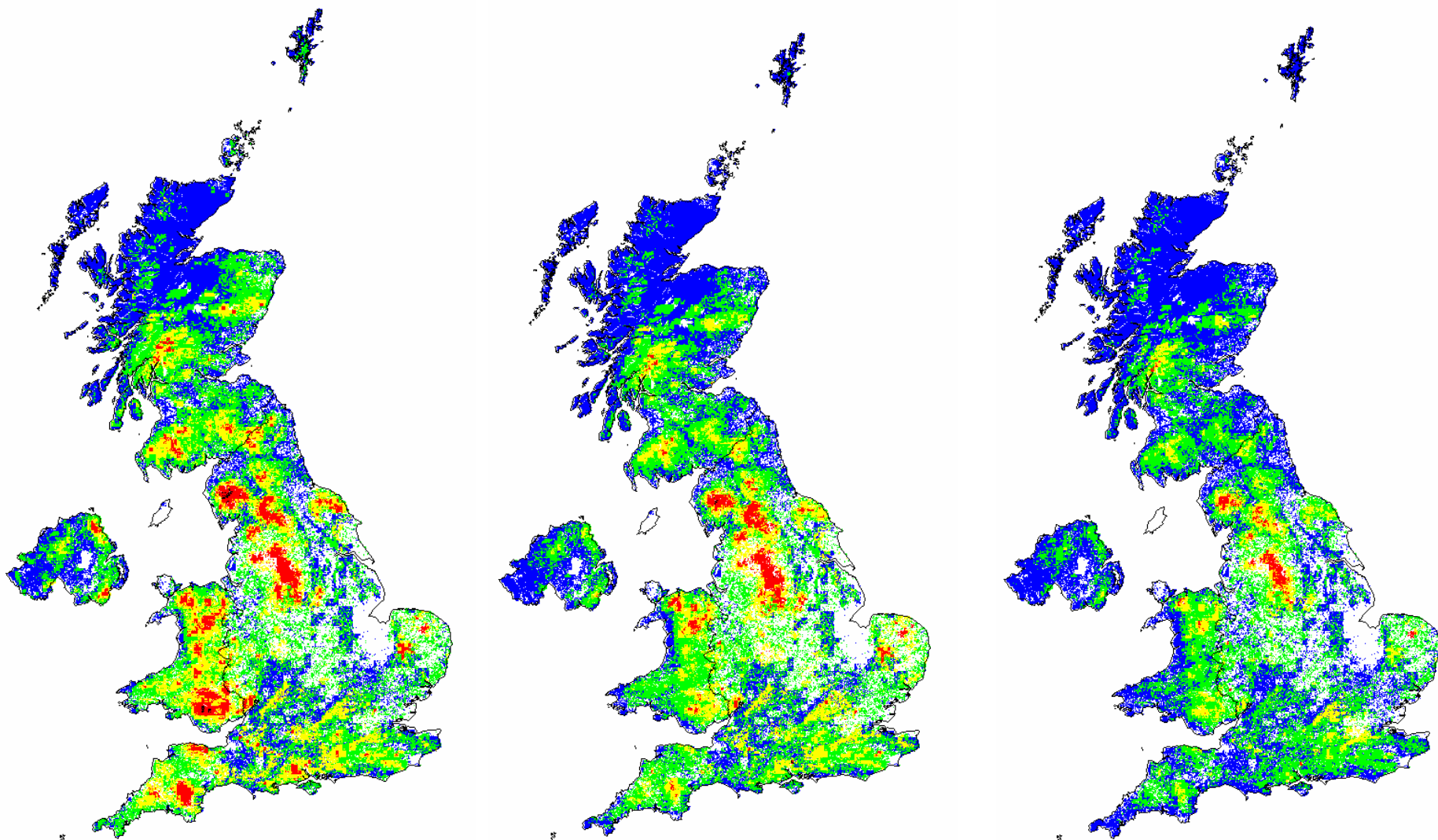


Exceedance of 5th-percentile nutrient nitrogen critical loads by total nitrogen deposition for:

(a) 1995-97

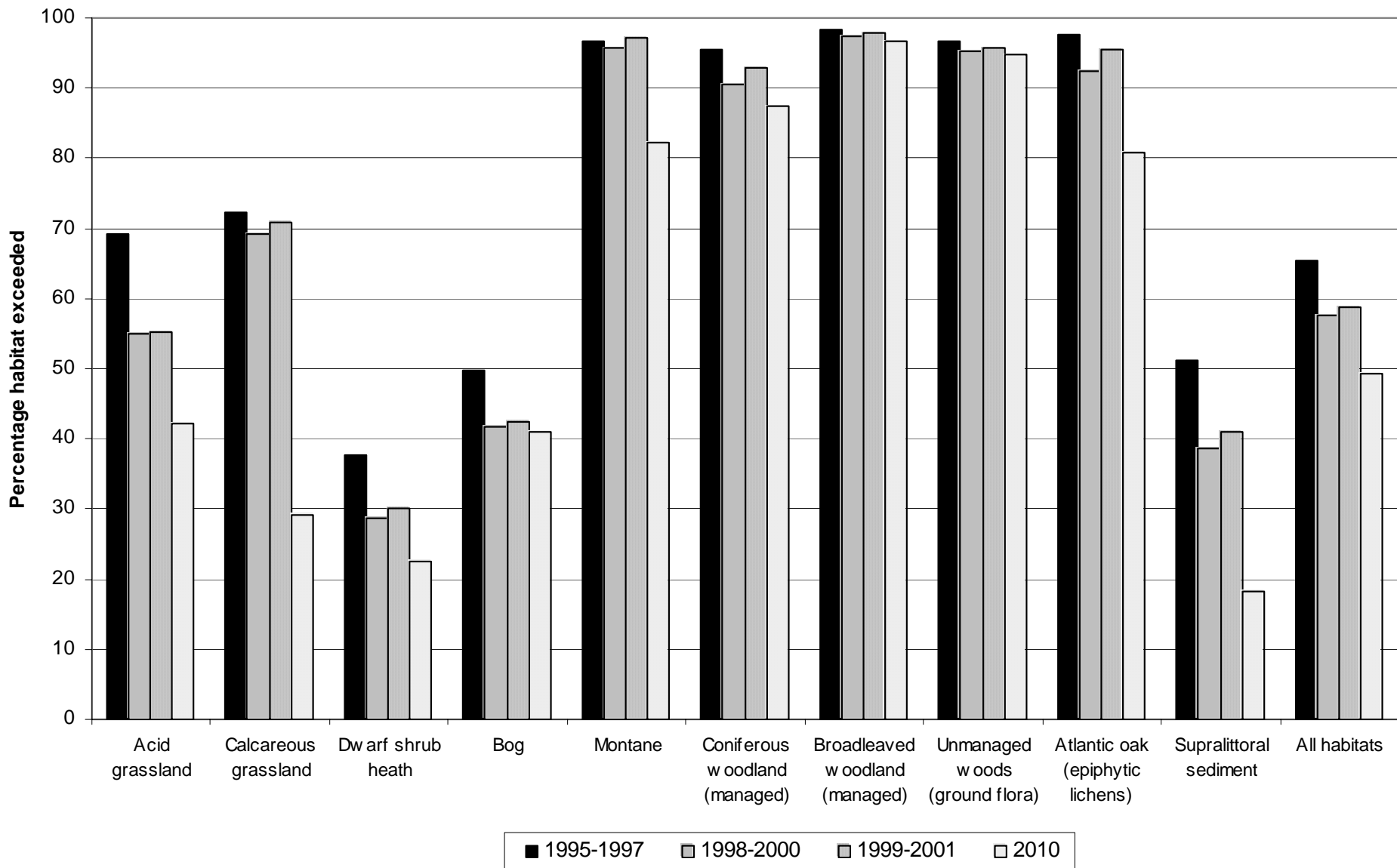
(b) 1999-01

(c) 2010

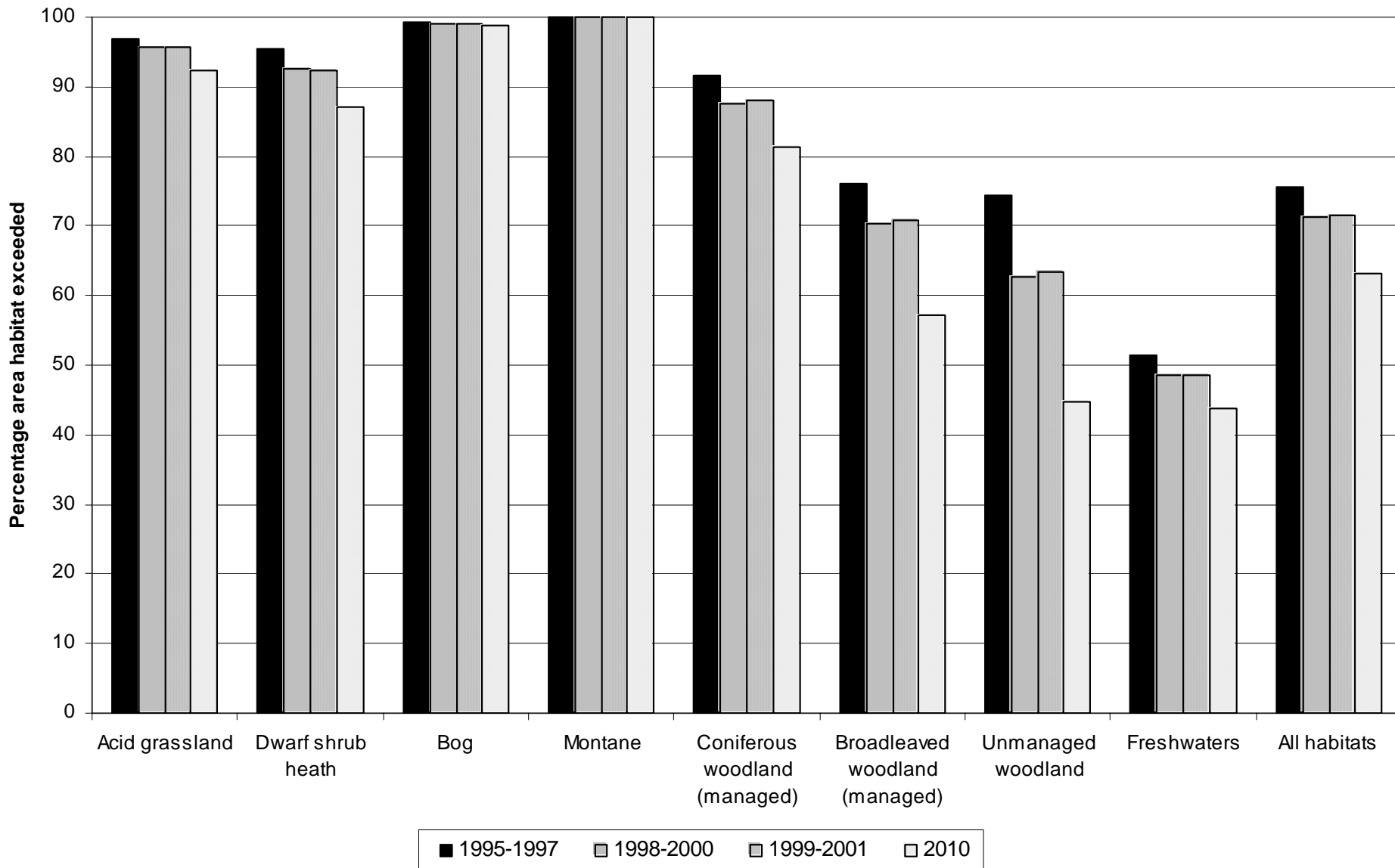


Exceedance  not exceeded  14 - 28
kg N ha⁻¹ year⁻¹  0 - 7  > 28
  7 - 14

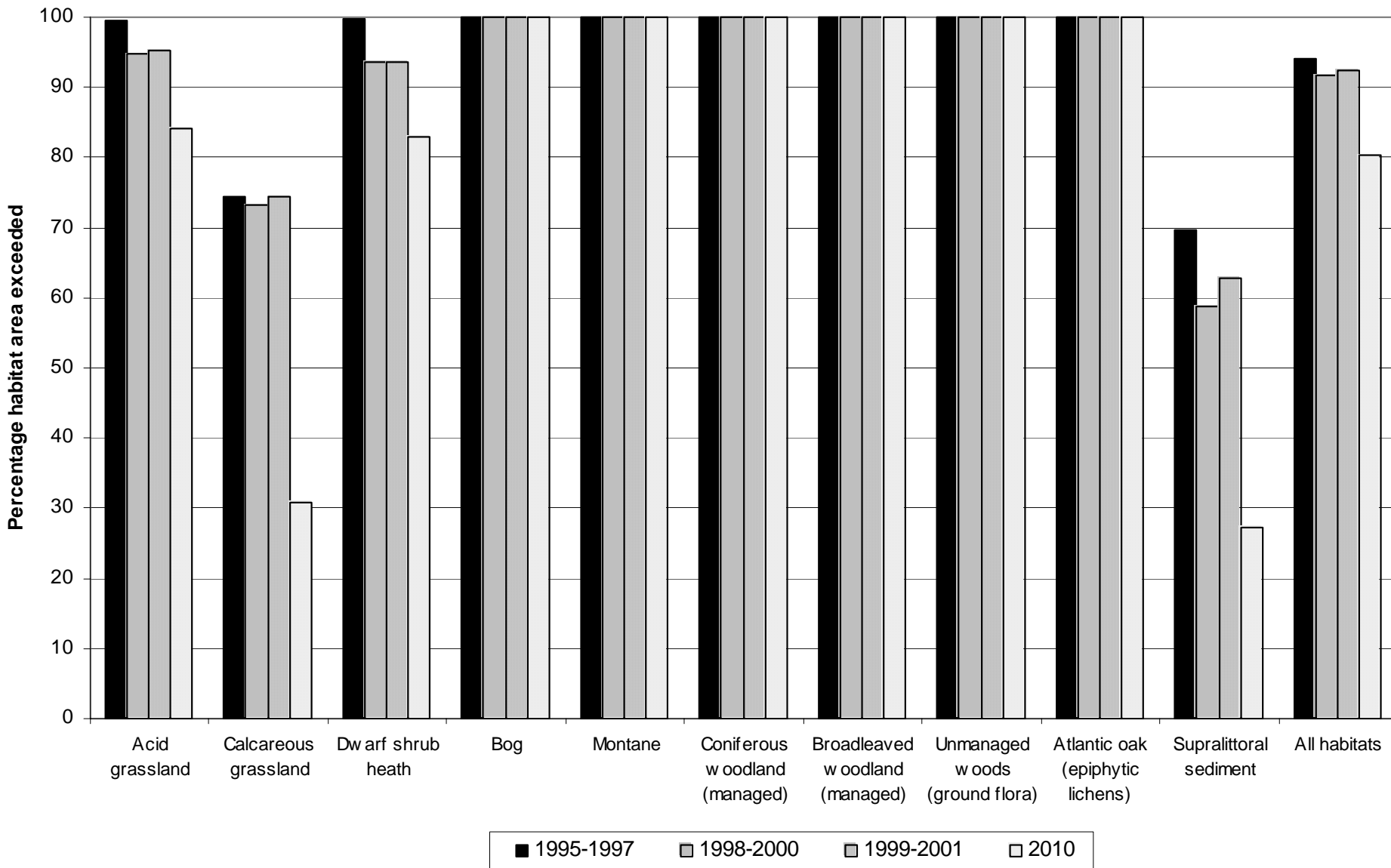
Percentage area habitats exceeded for nutrient N in UK



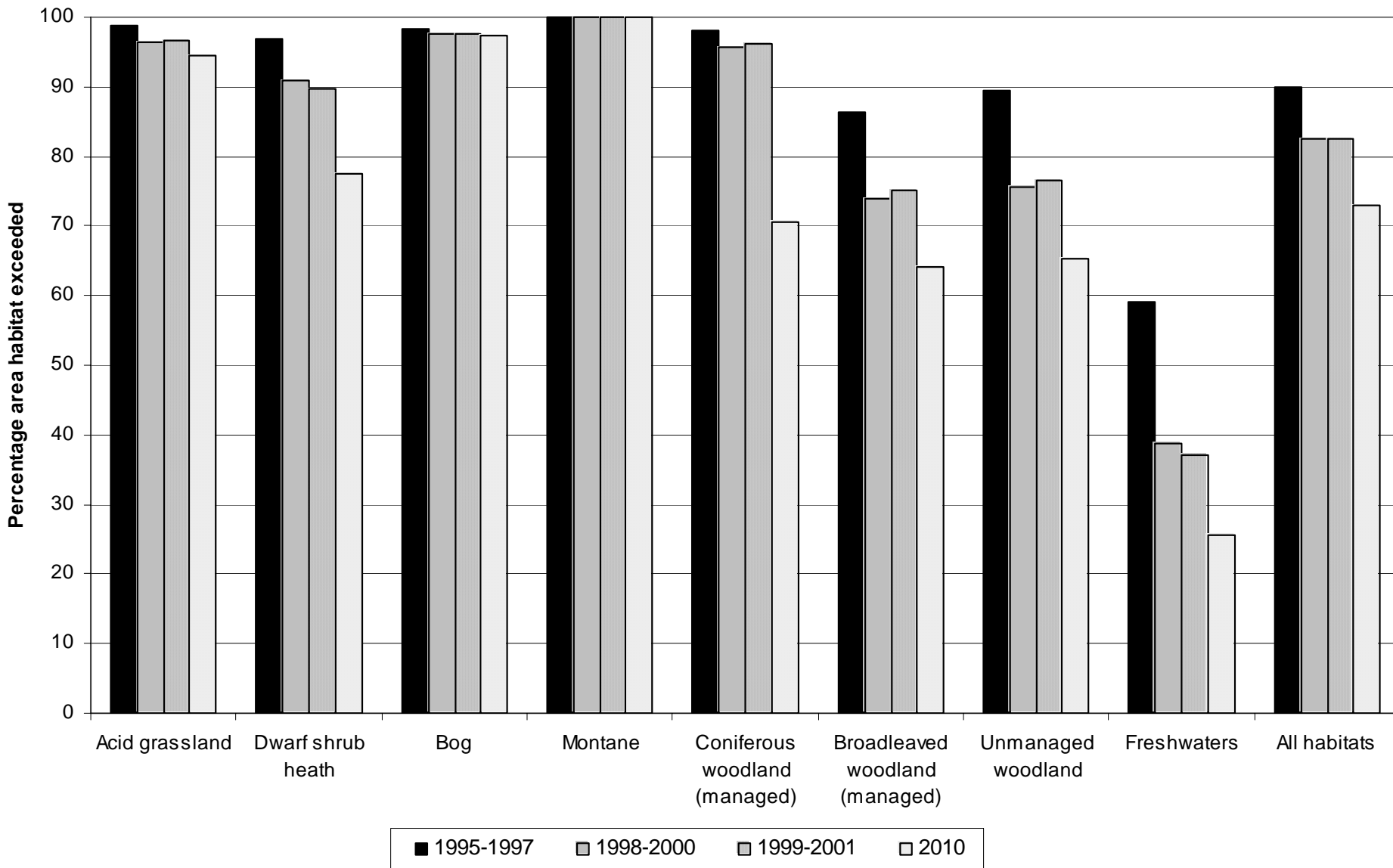
Percentage area of habitat exceeded for acidity in England



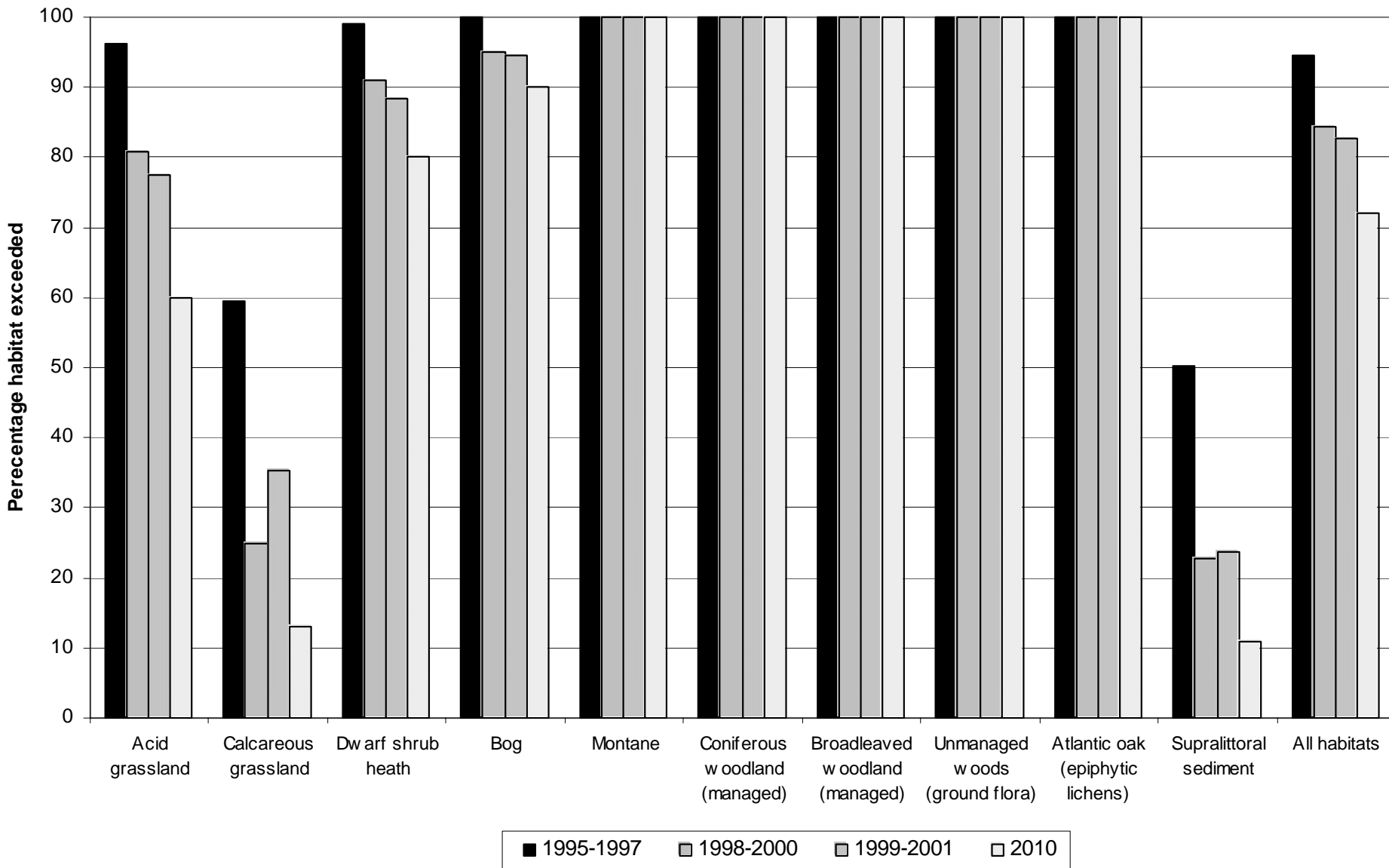
Percentage habitat area exceeded for nutrient N in England



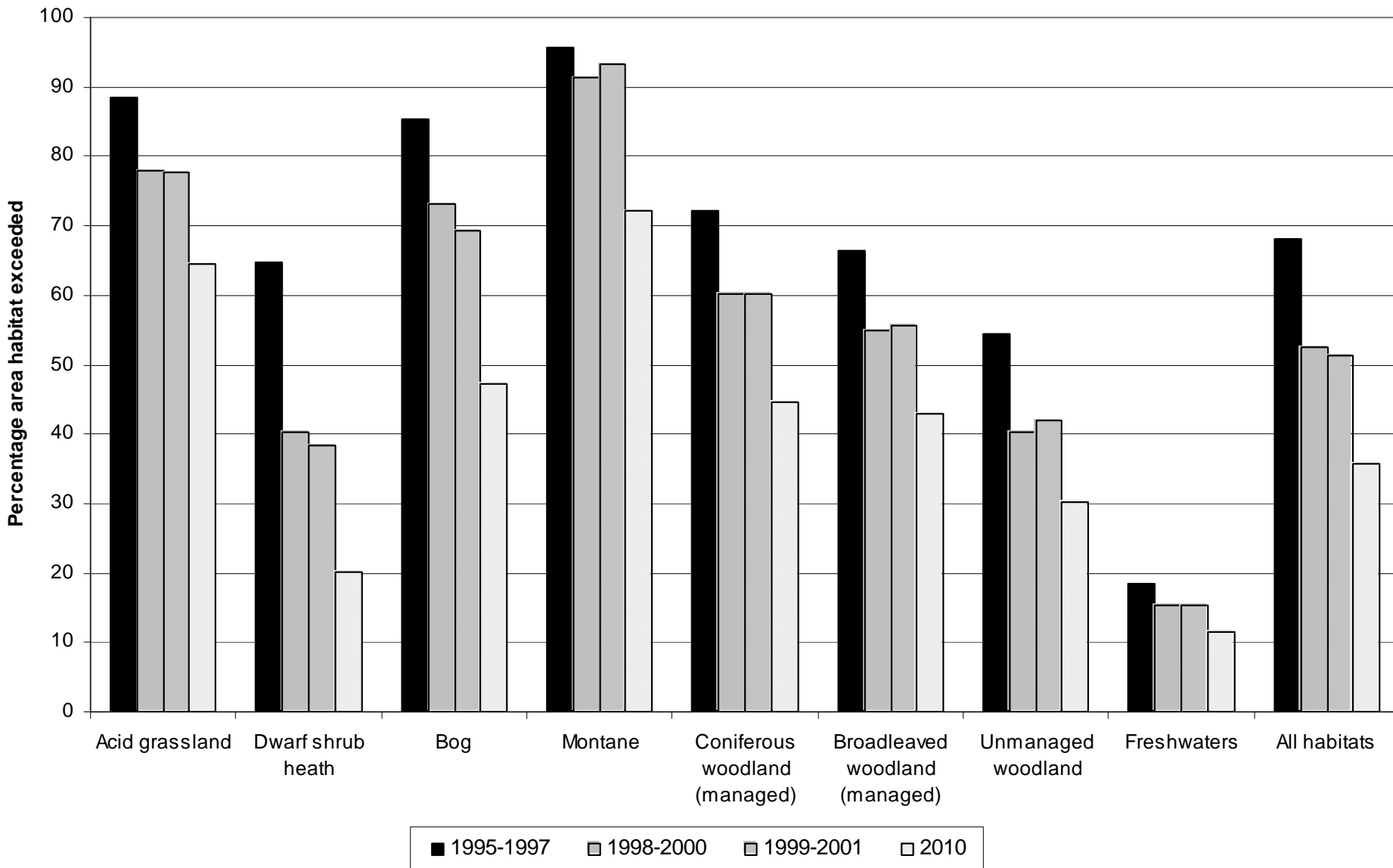
Percentage area of habitat exceeded for acidity in Wales



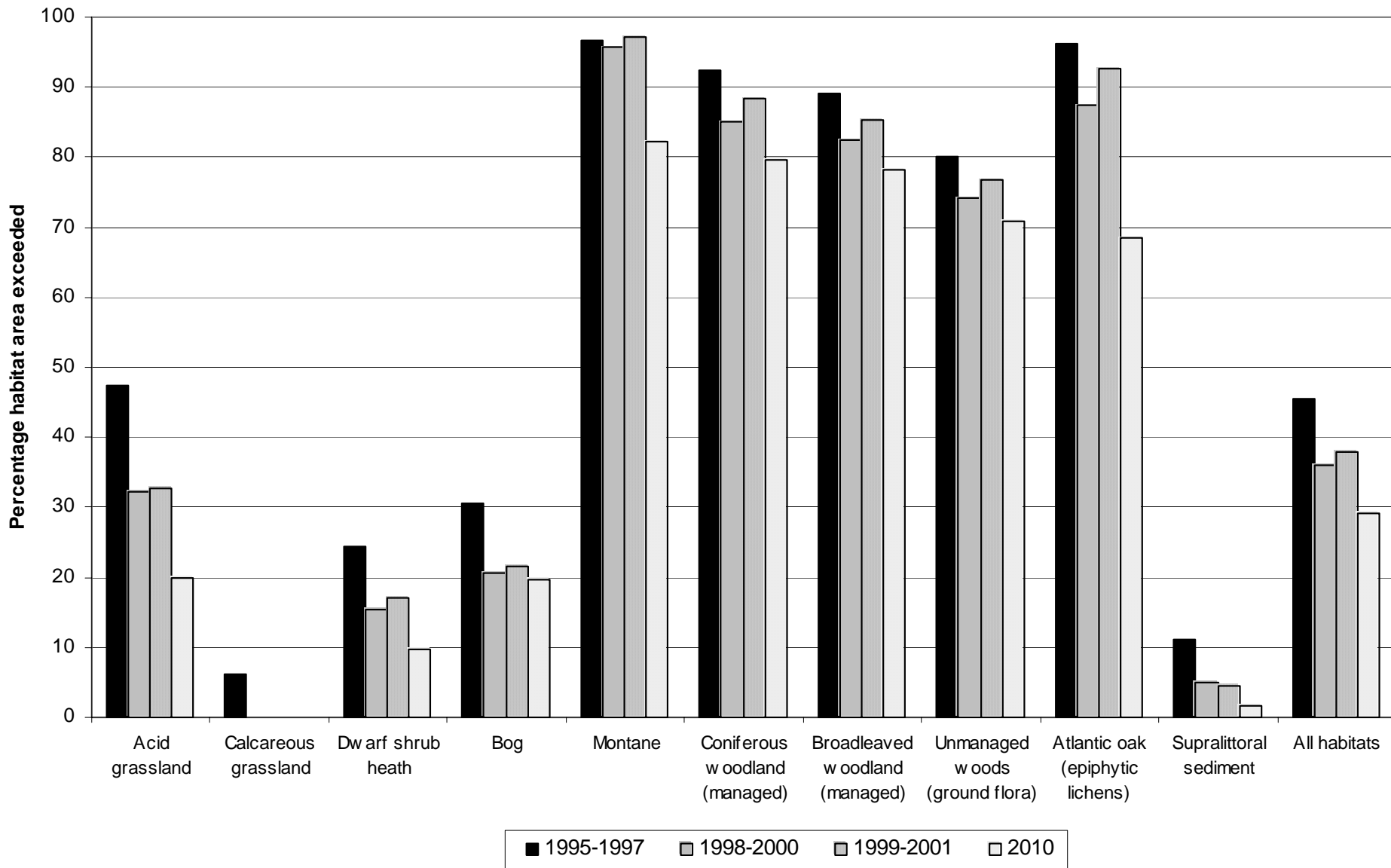
Percentage habitat area exceeded for nutrient N in Wales



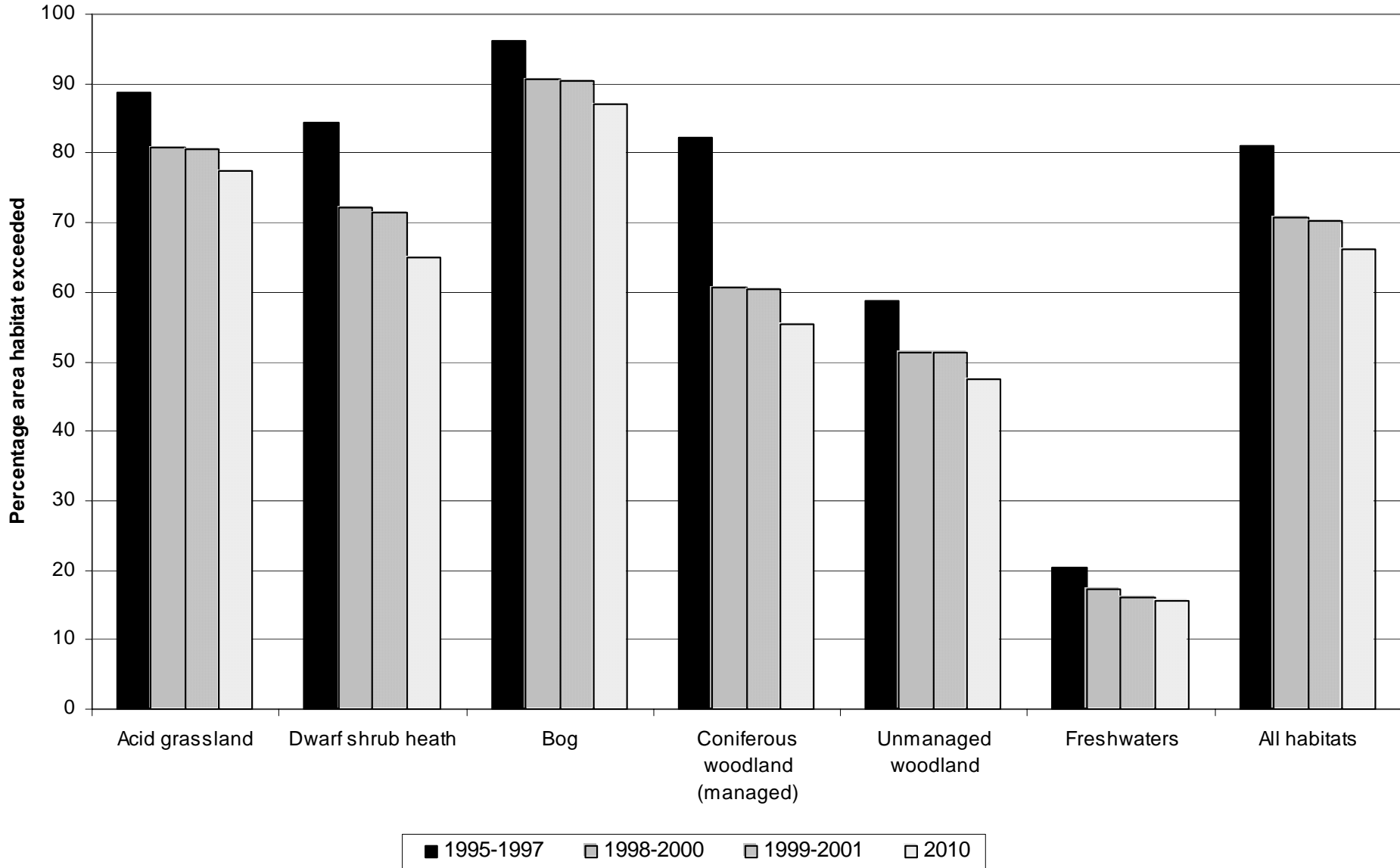
Percentage area of habitat exceeded for acidity in Scotland



Percentage habitat area exceeded for nutrient N in Scotland



Percentage area of habitat exceeded for acidity in NI



Percentage area habitats exceeded for nutrient N in NI

