

#### Acidity critical loads (simple mass balance) for woodland broad habitats

Figure 3.2

Coniferous woodland broad habitat: managed areas only



0.5 - 1.0

The acidity critical loads function (CLF)



## Maximum critical loads of sulphur (CL<sub>max</sub>S) for woodland broad habitats

Figure 4.2



### Maximum critical loads of nitrogen (CL<sub>max</sub>N) for woodland broad habitats

Figure 4.3



### Acidity critical loads for freshwaters (standing waters & streams)

# Figure 5.1



Time series output of surface water ANC concentration at Loch Grannoch, Galloway, from pre-acidification (1850) through the present and into the future under three assumed deposition reduction scenarios.



Figure 7.1

Exceedance of acidity critical loads for freshwaters (based on  $ANC_{crit} = 20ueq |^{-1}$ ) by acid deposition for 1998-2000 and the seven regions (black circles) modelled with MAGIC

Exceedance

0.0 - 0.20.2 - 0.5

> 0.5 – 1.0 > 1.0

(keq ha<sup>-1</sup> year<sup>-1</sup>)

• Not exceeded (<= 0.0)



# Figure 7.2

Figure 7.3



Example of a critical load function and target load function with respect to S and N deposition (meq m-2 yr<sup>-1</sup>) for a hypothetical ecosystem. Such functions are used by the Integrated Assessment Models for calculation of optimal deposition reduction scenarios. Emission reductions must be achieved at some future time to achieve the target chemistry (critical limit) at some (unknown) point in the future. The target load function requires specification of the timing of emission reductions to achieve the critical limit in a given year.

Example to show how increases in NO<sub>3</sub> concentrations can off-set the recovery in ANC resulting from reductions in sulphur deposition for different target years

Figure 7.4

