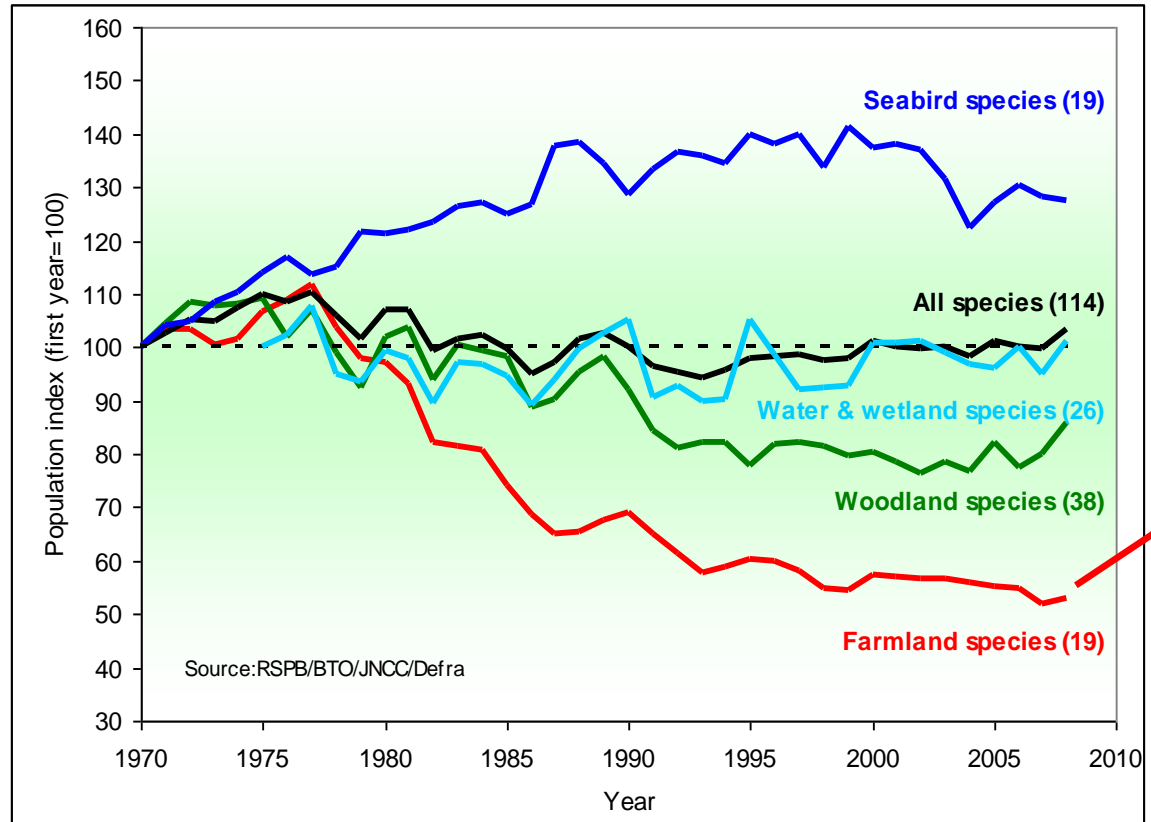
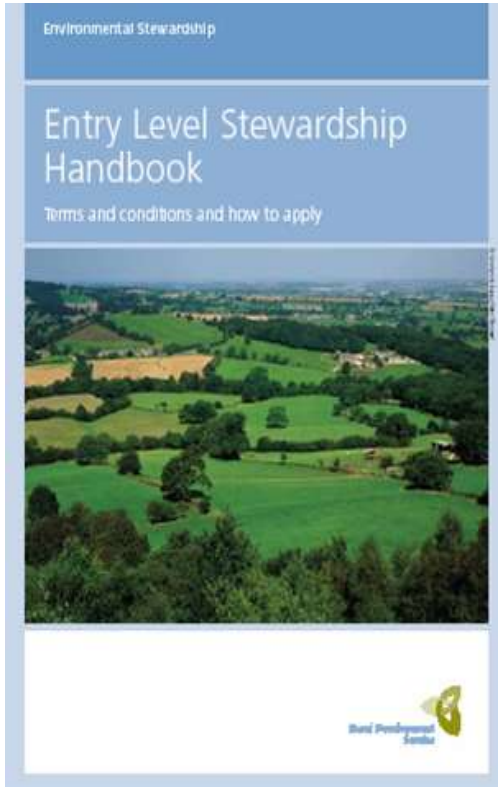
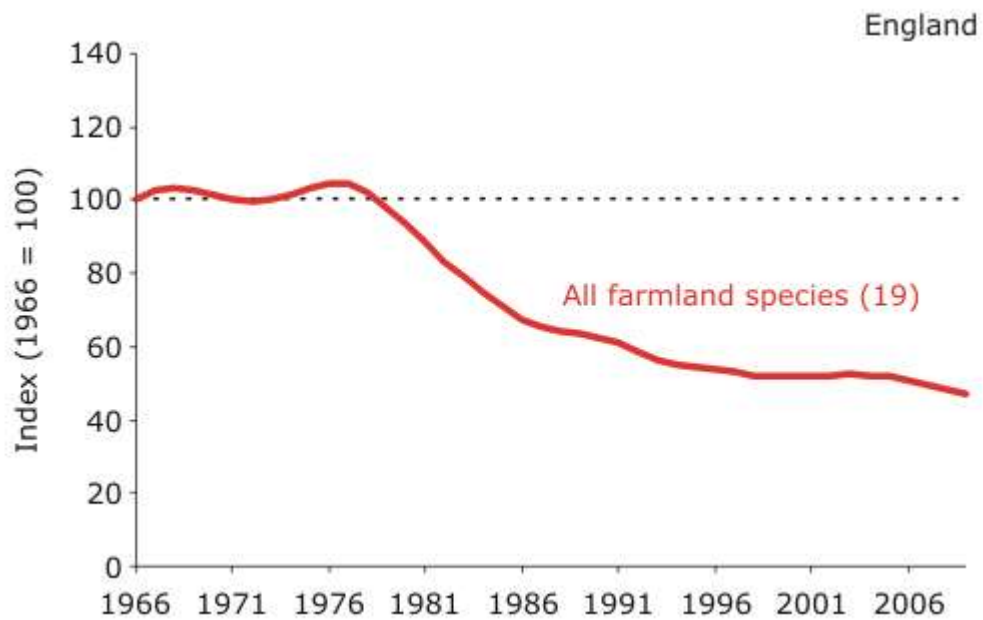
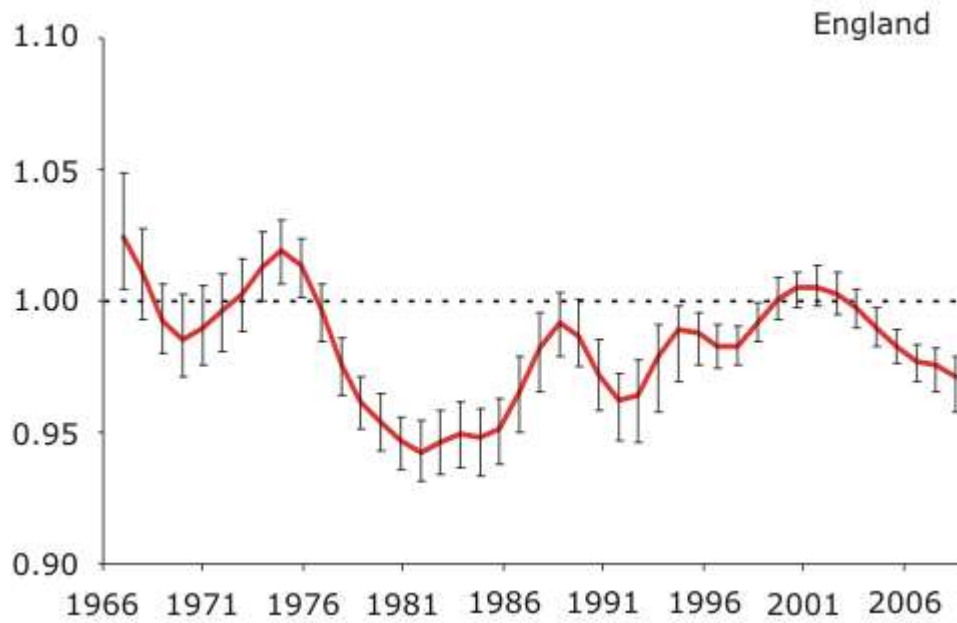


Agri-environment schemes and farmland bird recovery

Professor Ken Norris



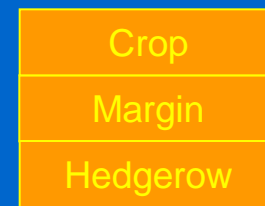
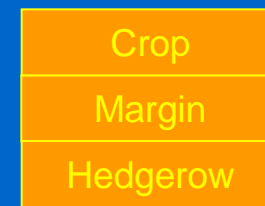
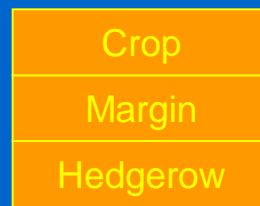
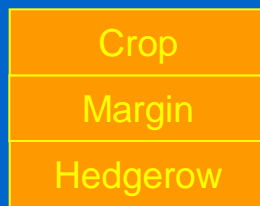




Why are farmland bird
populations failing to recover?



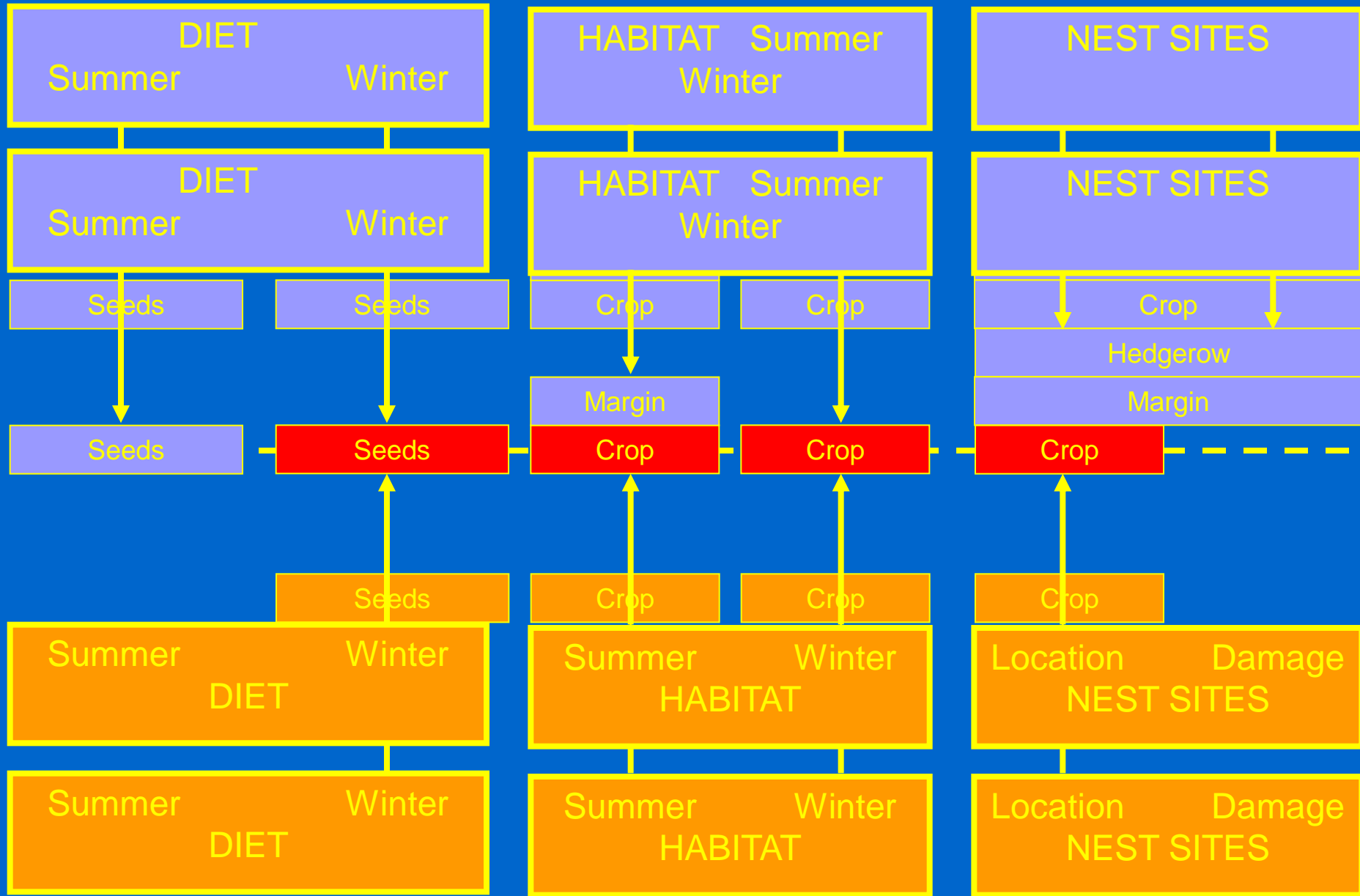
Ecological requirements



Potential stressors

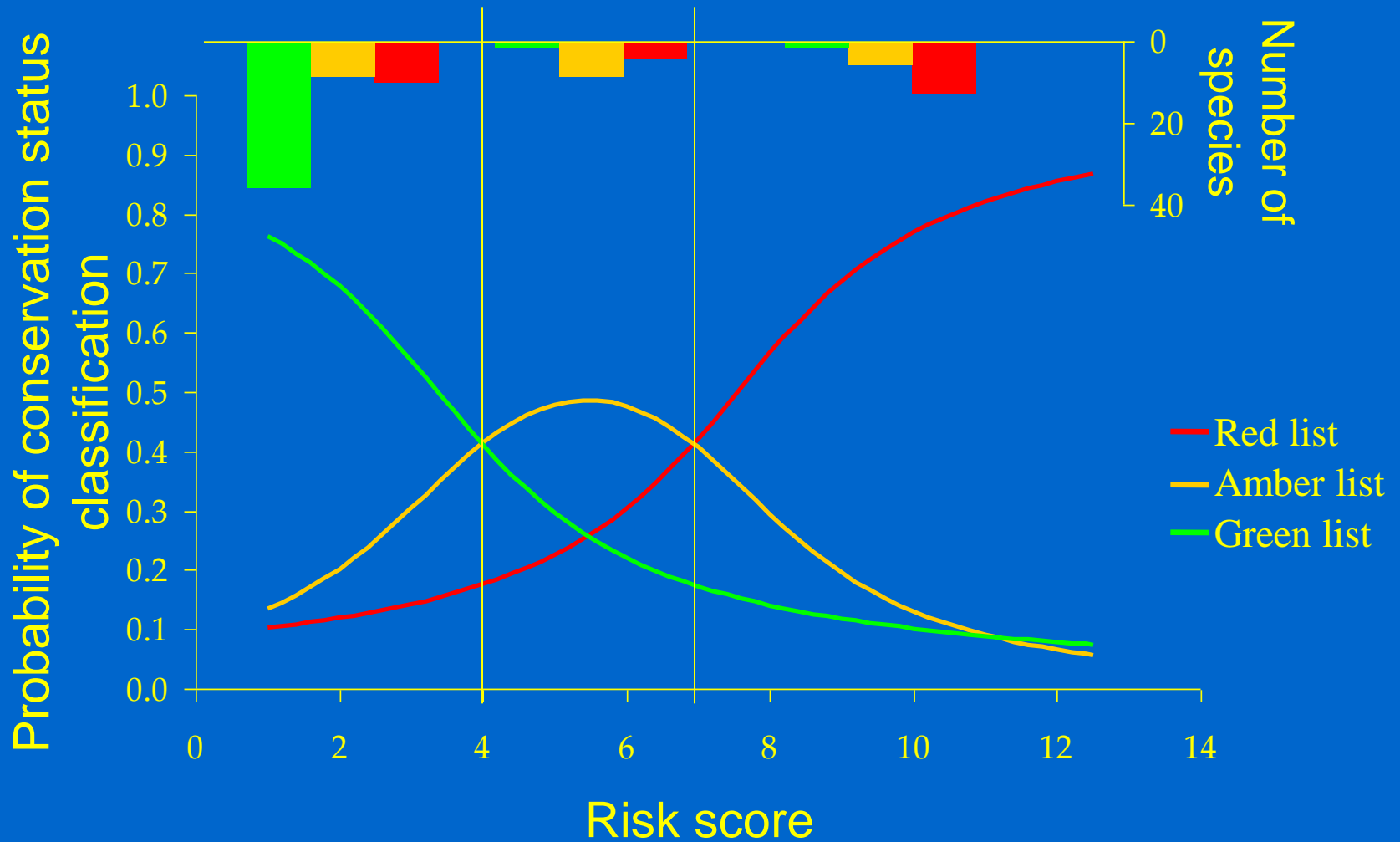


LINNET

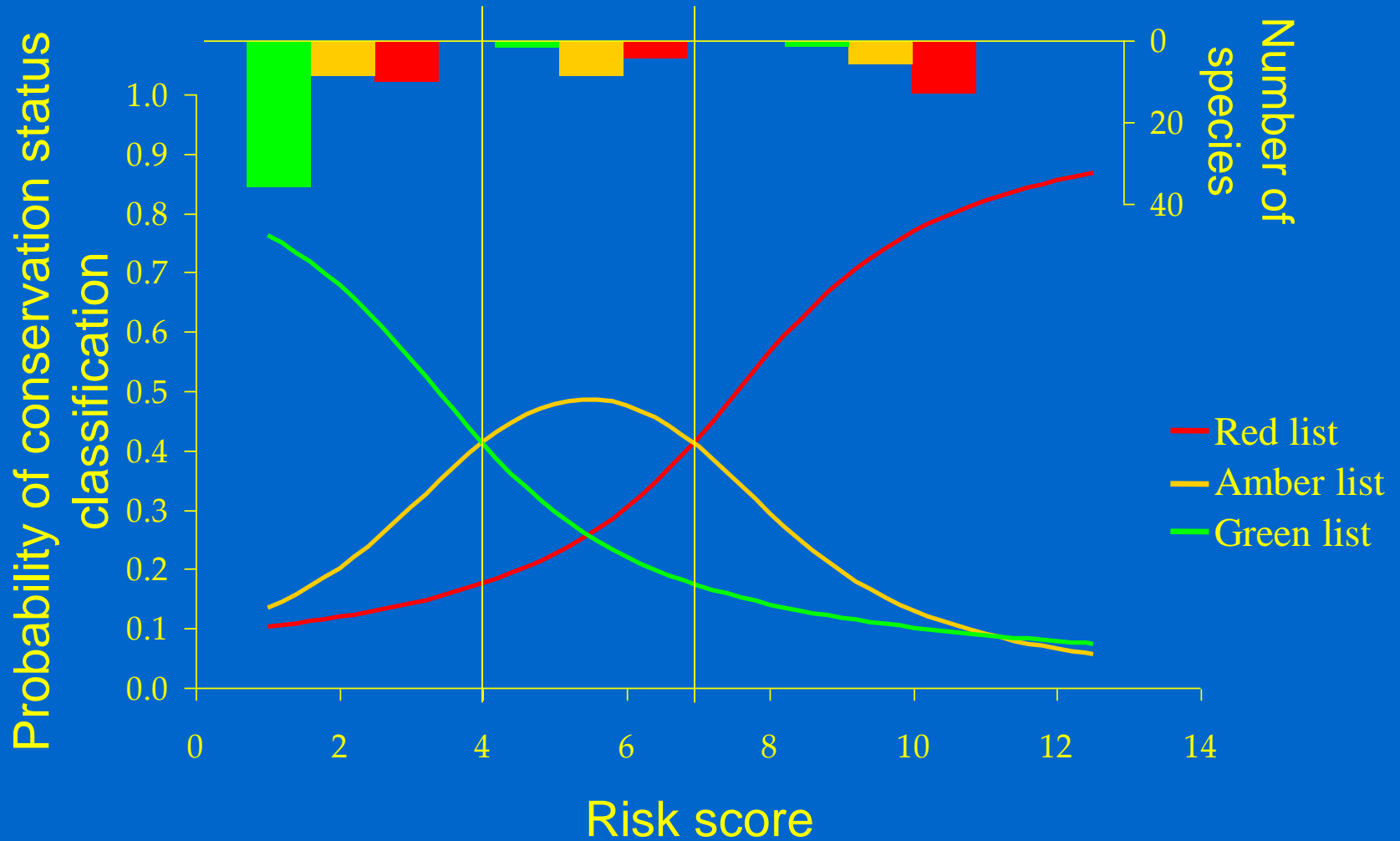


SPRING TO AUTUMN SOWING

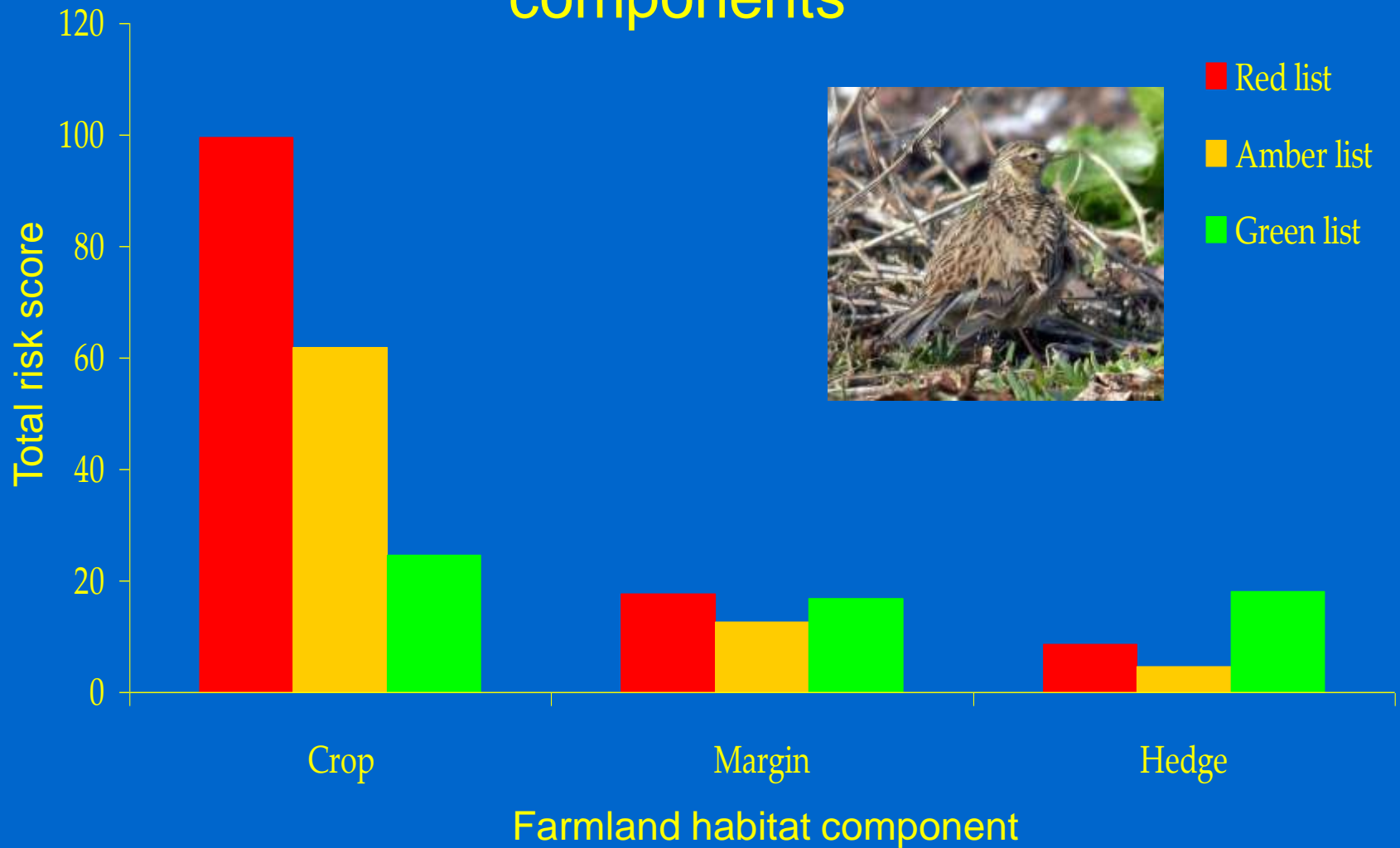
Predicted probability of being classified as either Red List, Amber List or Green List depending on model score

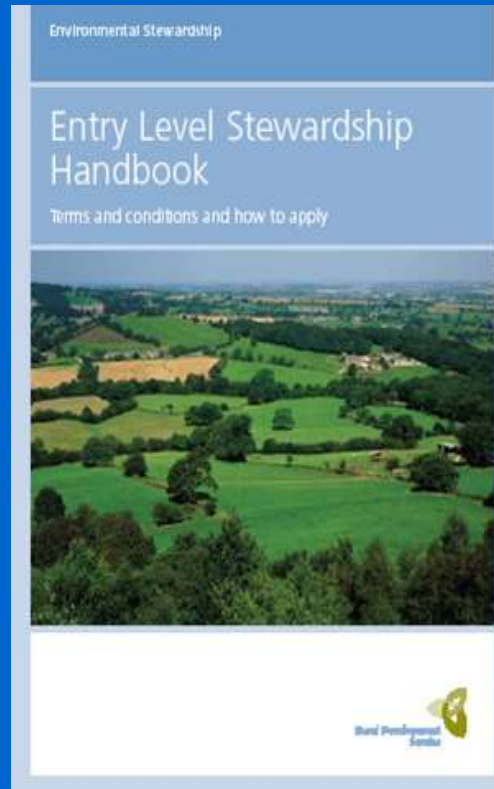


Predicted probability of being classified as either Red List, Amber List or Green List depending on model score



Total risk scores arising from changes in the cropped area, margin and hedgerow habitat components





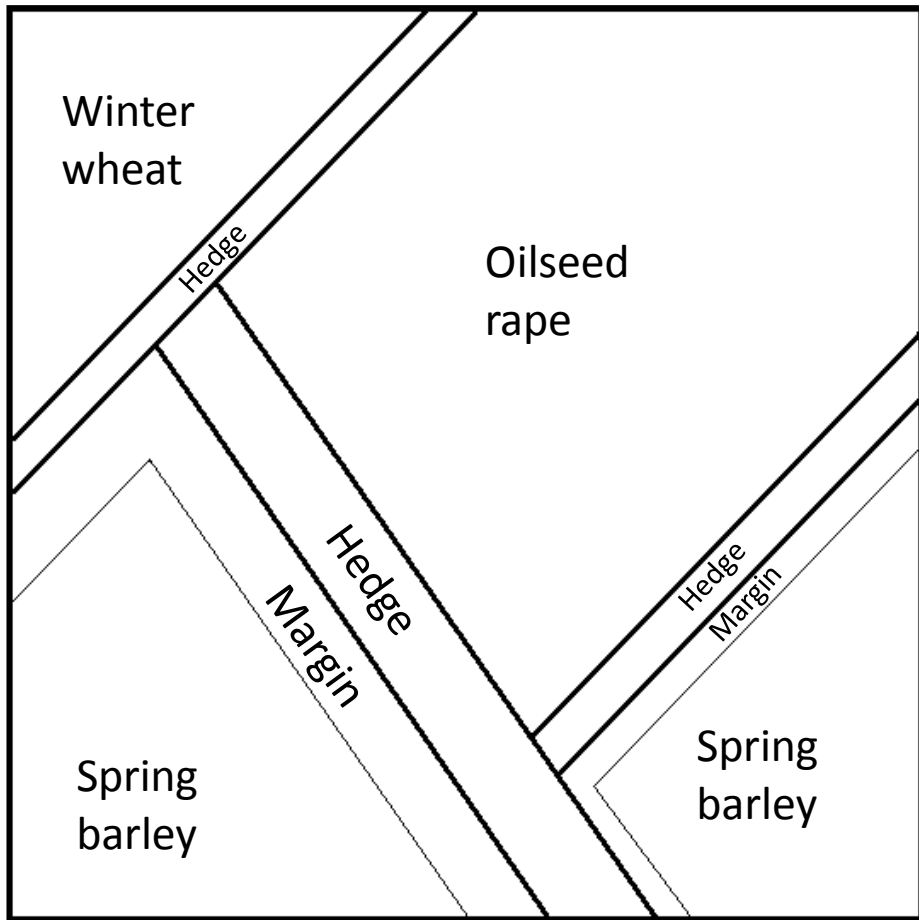
Farmland component	Proportion of total risk score	Proportion of total mitigation points
Cropped area	0.70	0.23
Margin	0.18	0.31
Hedgerow	0.12	0.46

Uptake of options is poorly aligned with the risks



Data sources:

- Breeding Bird Survey & Winter Farmland Bird Survey - c600 1km squares
- Bird counts: 1994-2007
- Habitat description: 1999/2000, 2000/2001, 2002/2003

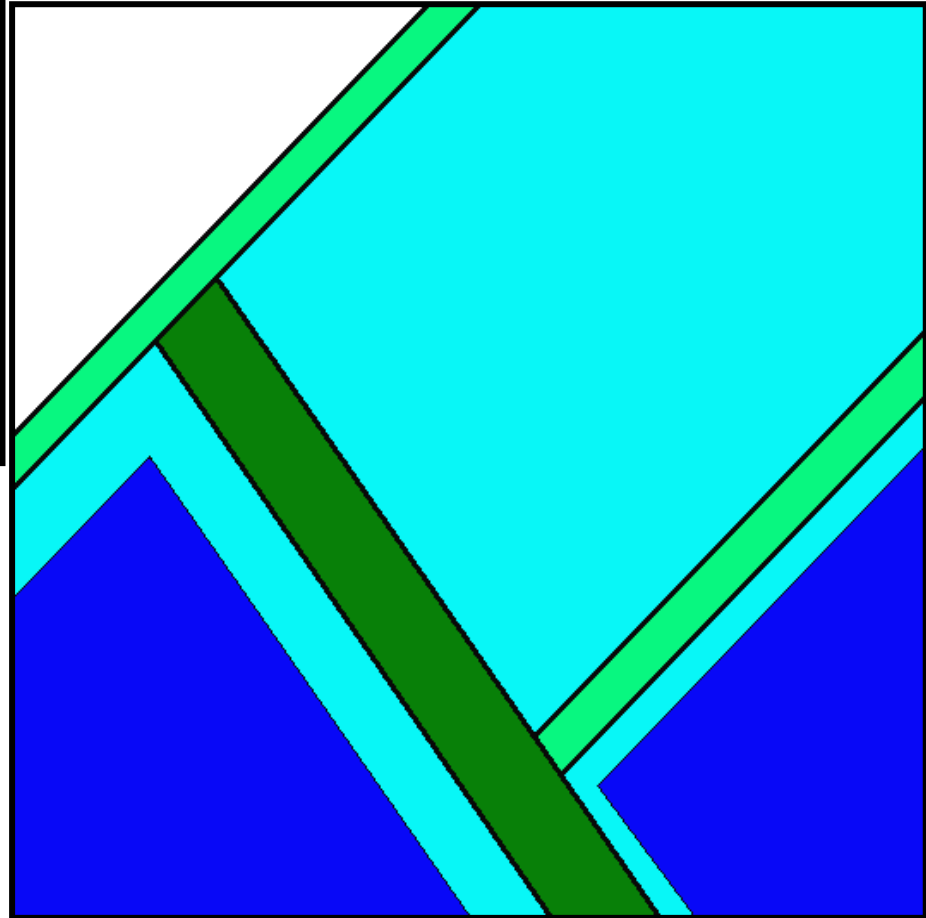


BBS square (1 x 1 km)

Species requirements:

Nesting: Hedge

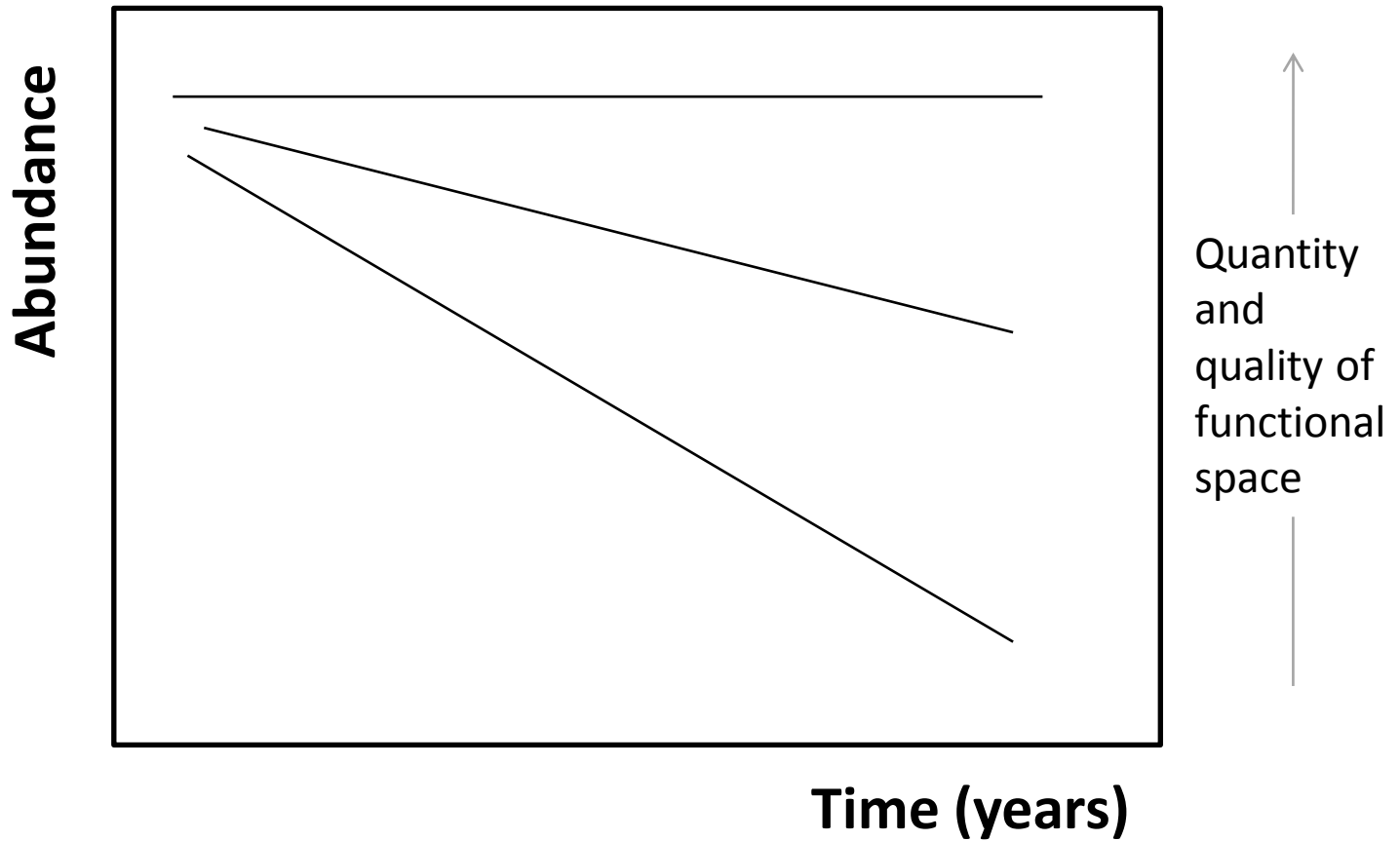
Foraging: Margin & Cropped area

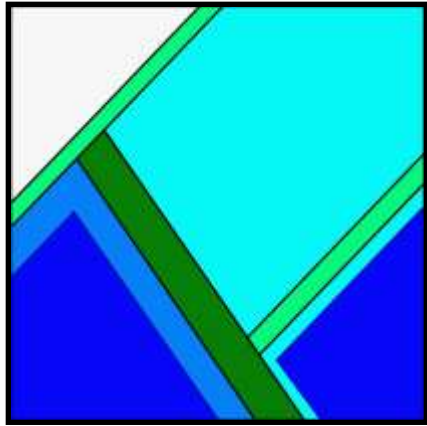


Functional space quality:

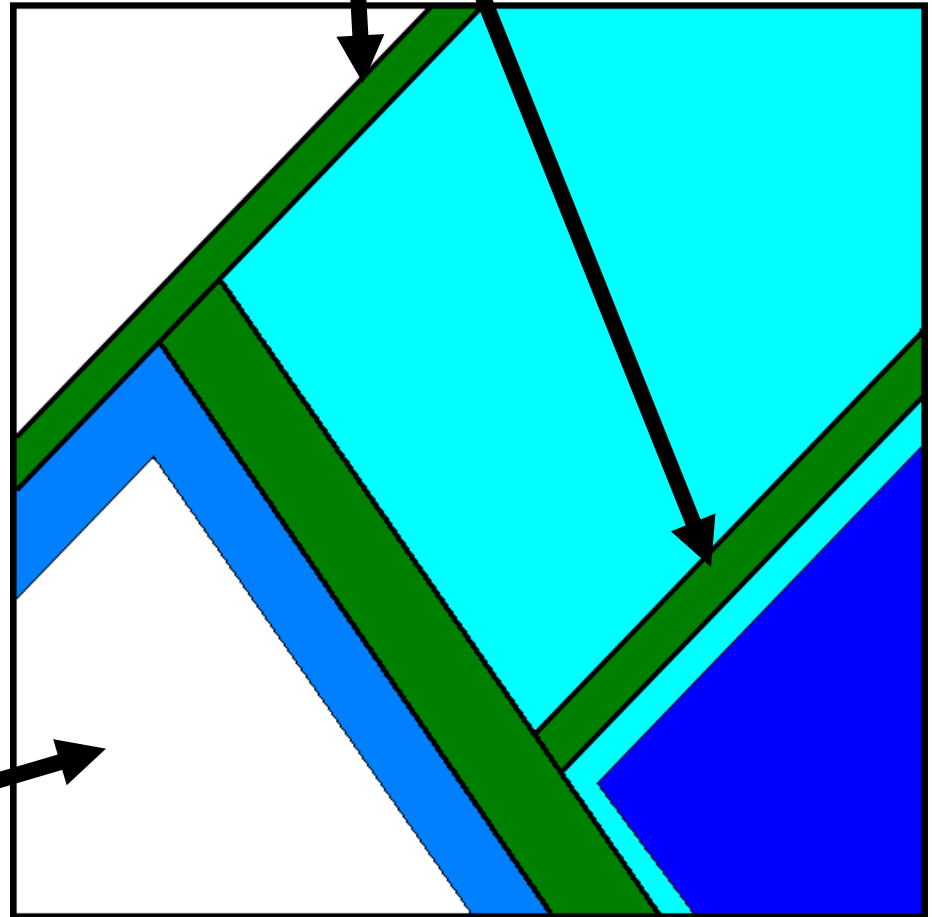
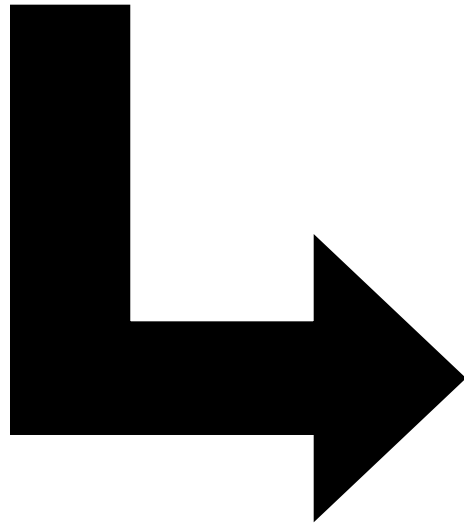
Nest sites:  > 

Food availability:  > 





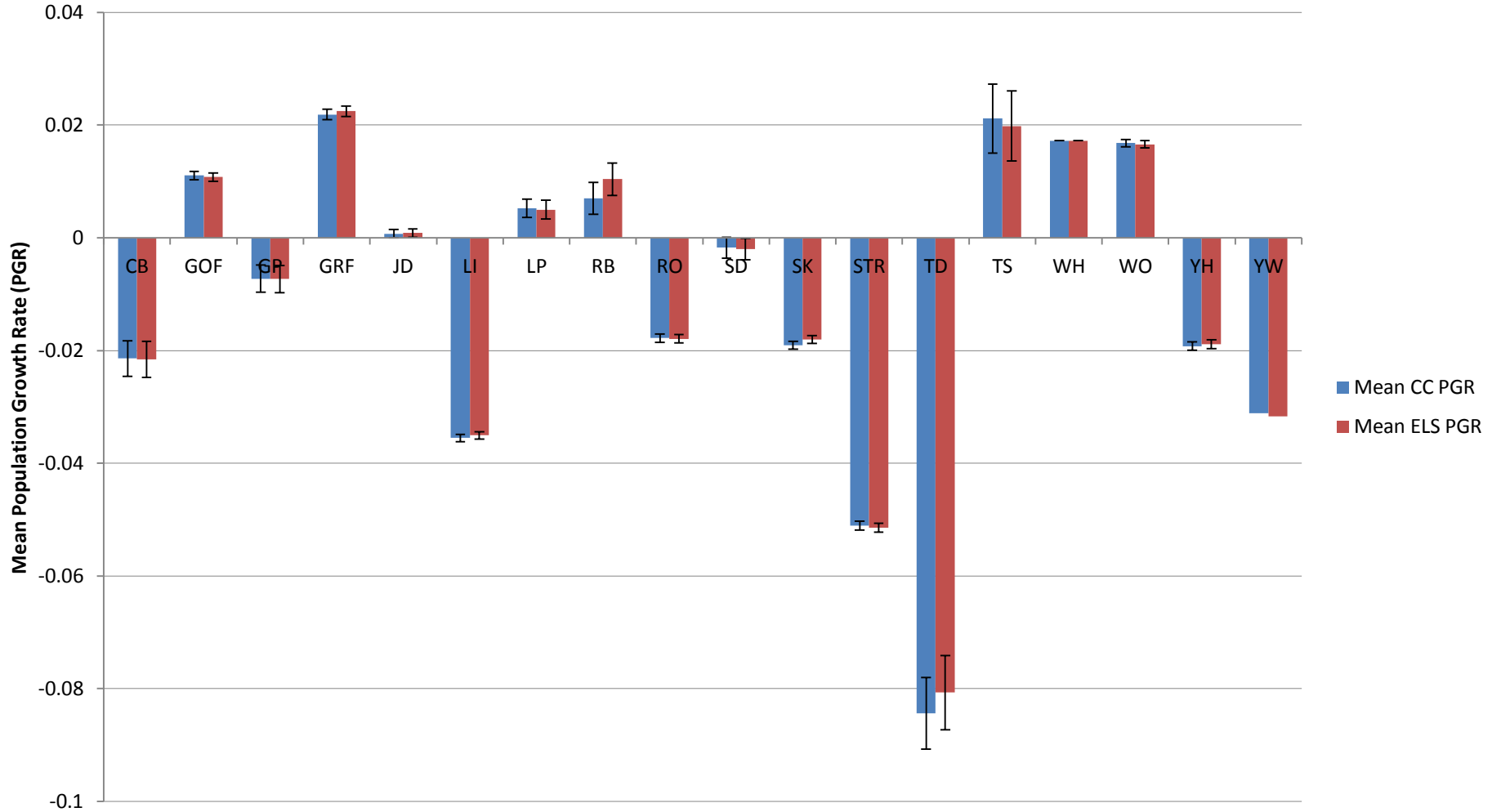
Low quality foraging habitat improved to high quality



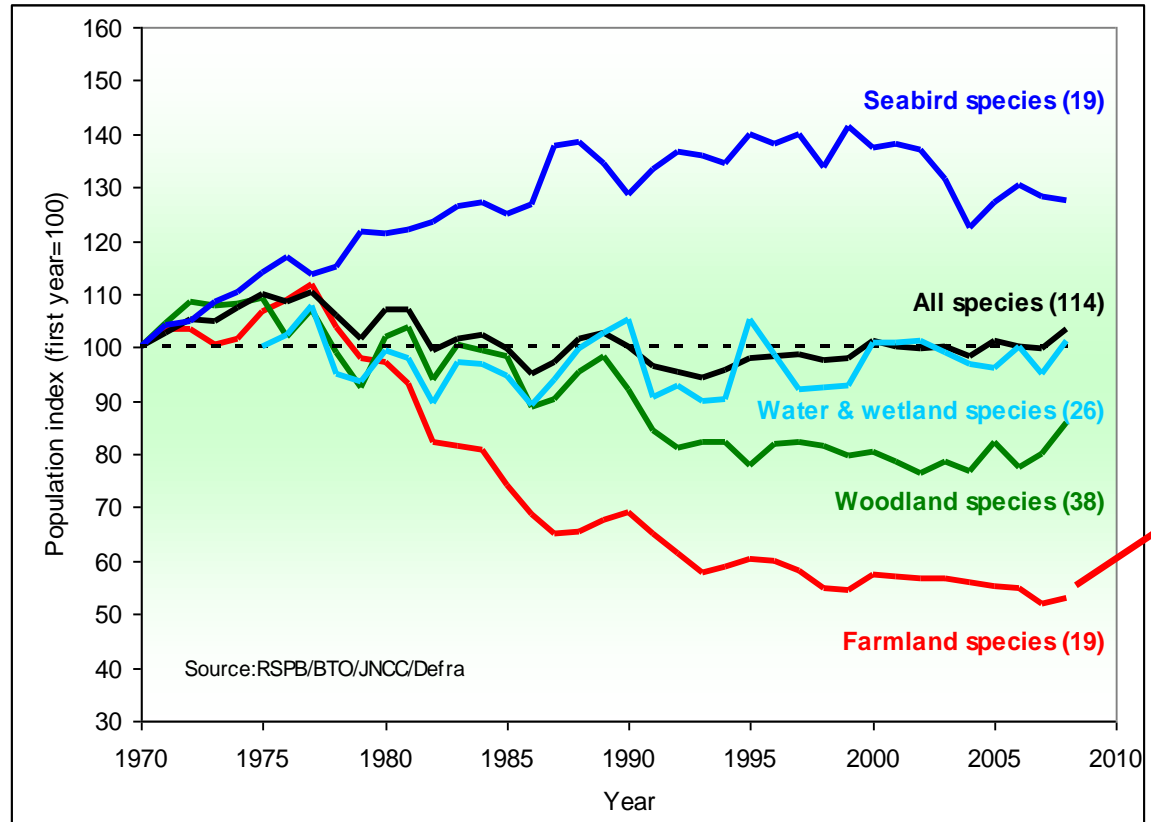
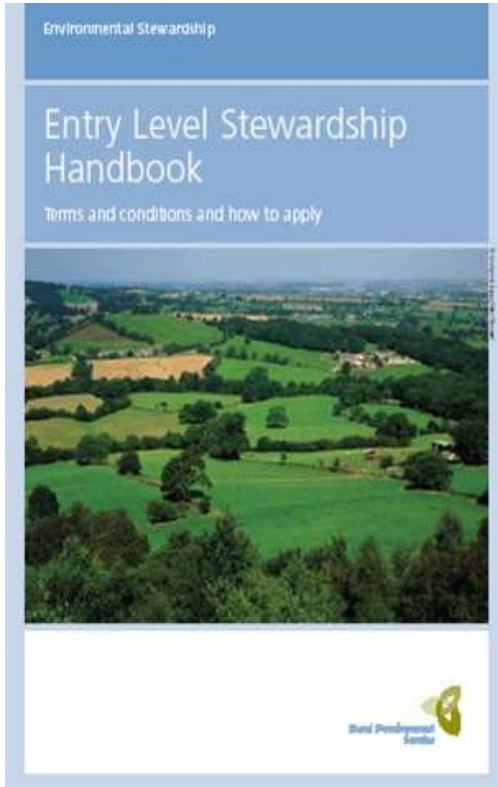
High quality foraging habitat becomes unsuitable

RESULTS

Farmland Bird Index species: population growth rates



- Not enough of the right options are being taken up
- Options need to be targeted
- Some options seem to have the opposite effect to that intended



Deploy agri-environment
management as risk mitigation
measures



Thanks!