

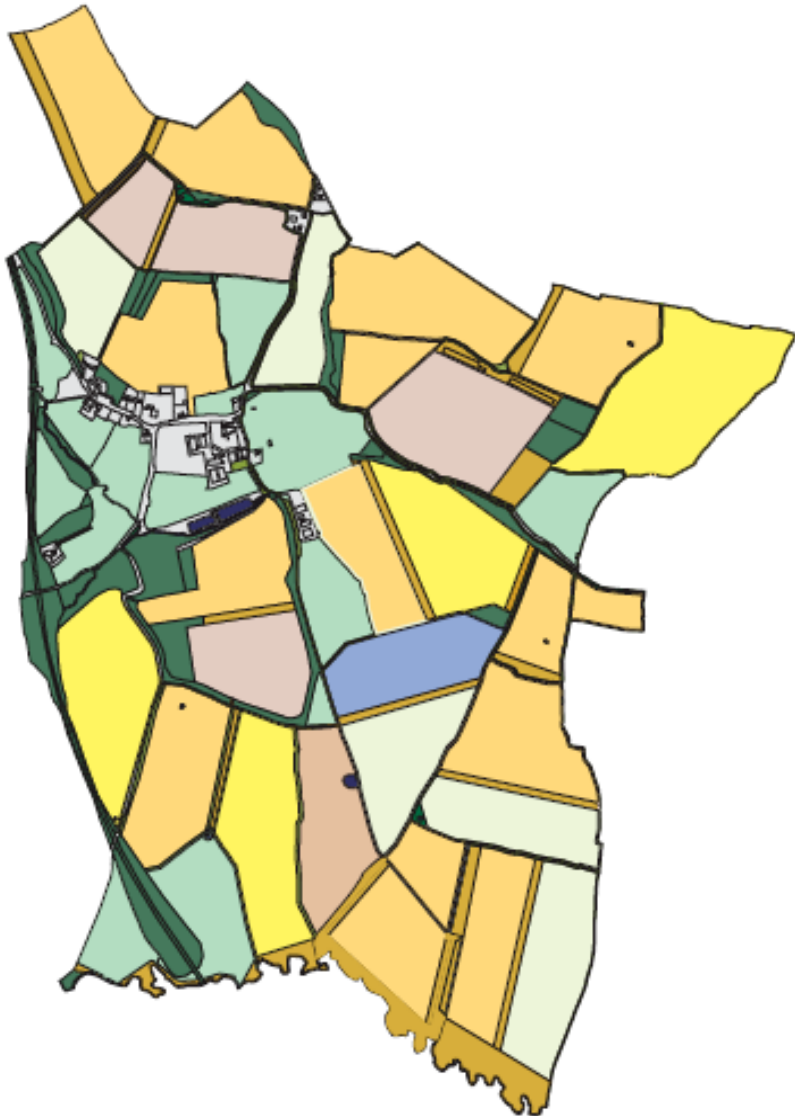
Impact of predator management on breeding success and abundance of songbirds at Loddington

Chris Stoate

**The Game Conservancy Trust
Allerton Project**



Loddington



	Ha
Arable crops	248
Pasture	42
Woodland	19
Other	24
Total area	333

**Influences on nest survival
and breeding abundance of
songbird species**

Habitat management at Loddington

Woods

Hedges

Commercial crops

Riparian buffer strips

Beetle banks

Wild bird seed mixtures

Conservation headlands

Grass field boundary strips



... all in the context of the project's farm business

Other management at Loddington

Winter feeding

- September - late April
- 140 feed hoppers

Predator control

- April - July
- Foxes, rats, crows, magpies etc



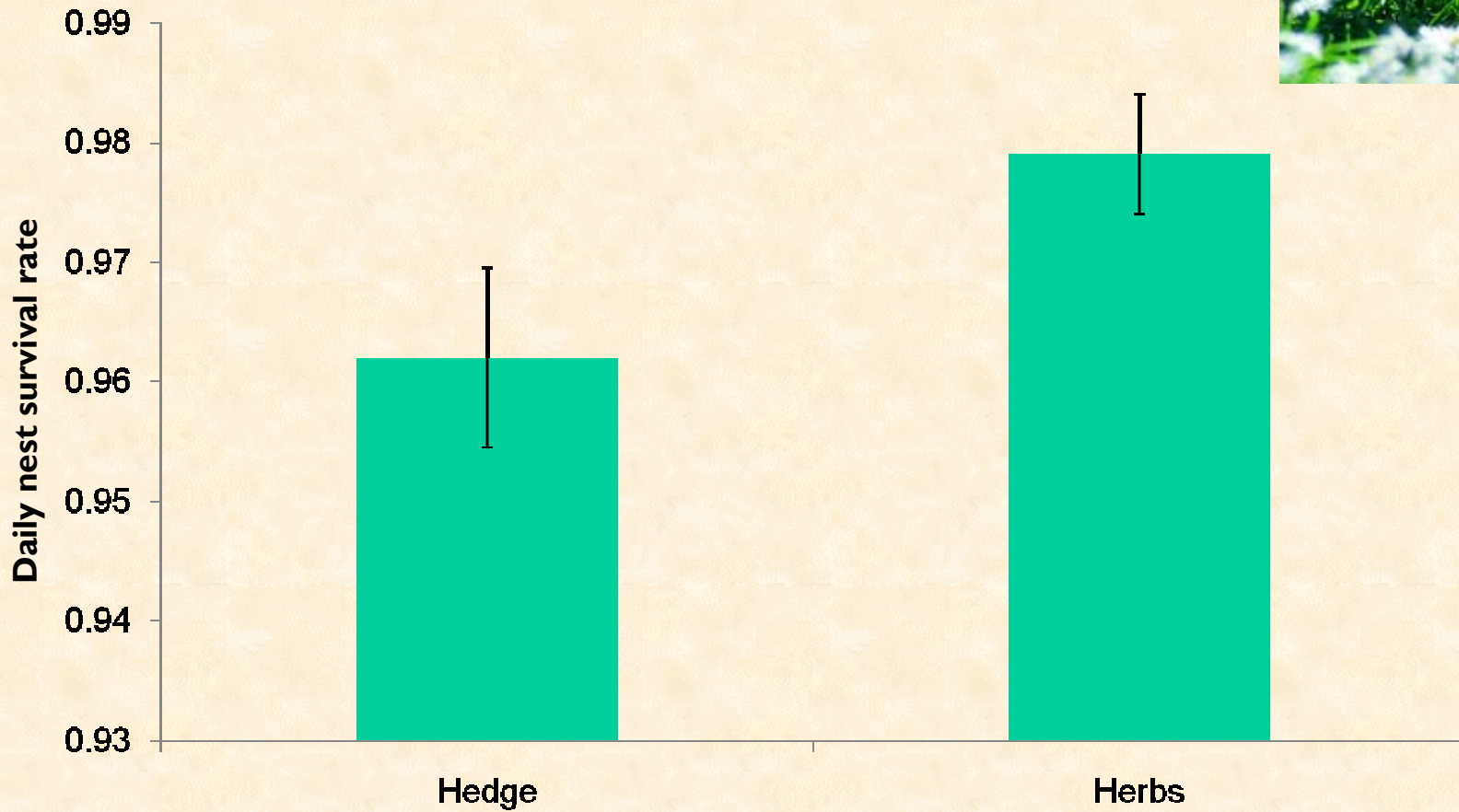
Management at Loddington

Year	9	9	9	9	9	9	9	9	0	0	0	0	0	0	
Habitat	2	[Redacted]													
Predator control		[Redacted]													
Winter feeding		[Redacted]													

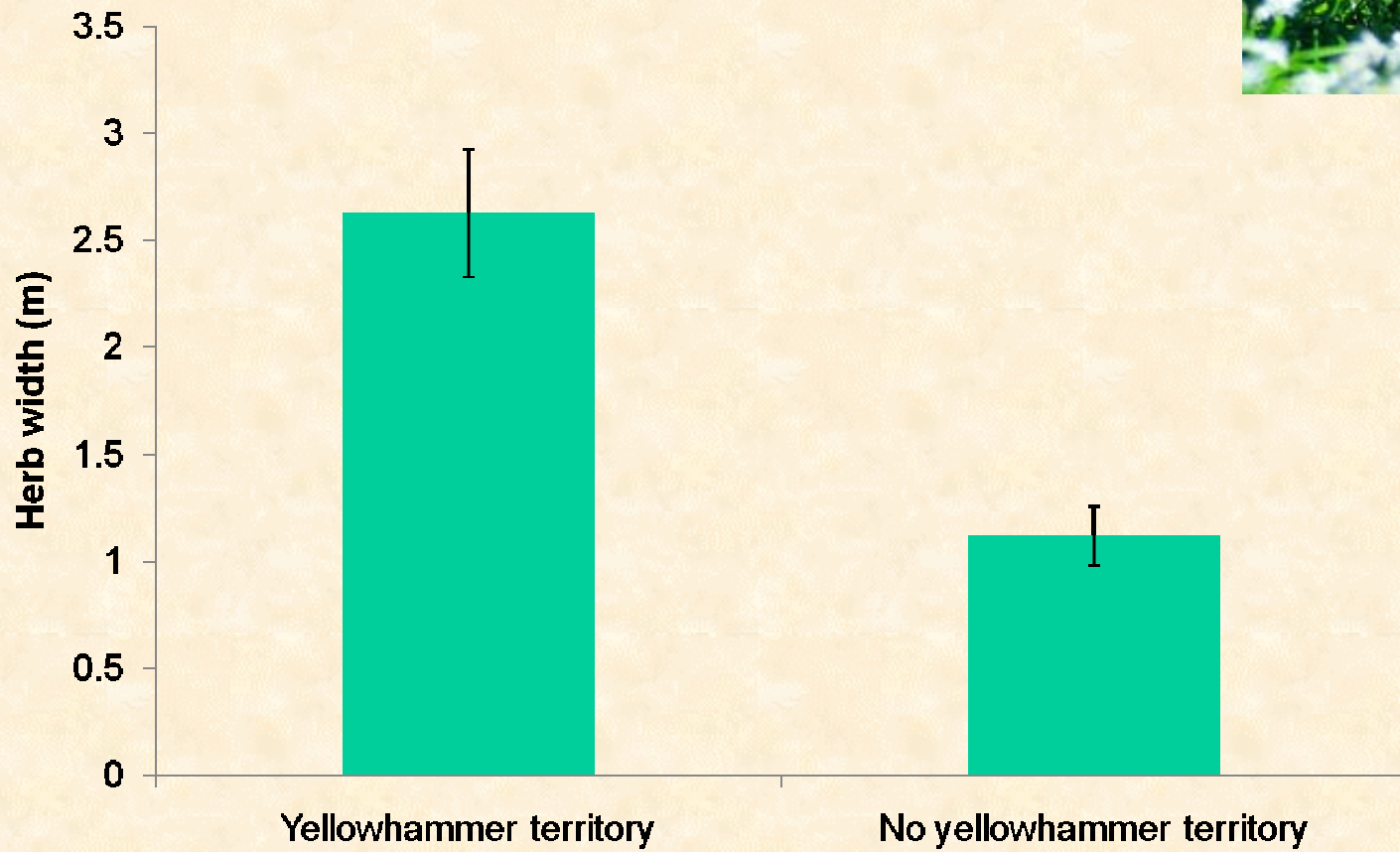
Habitat effects



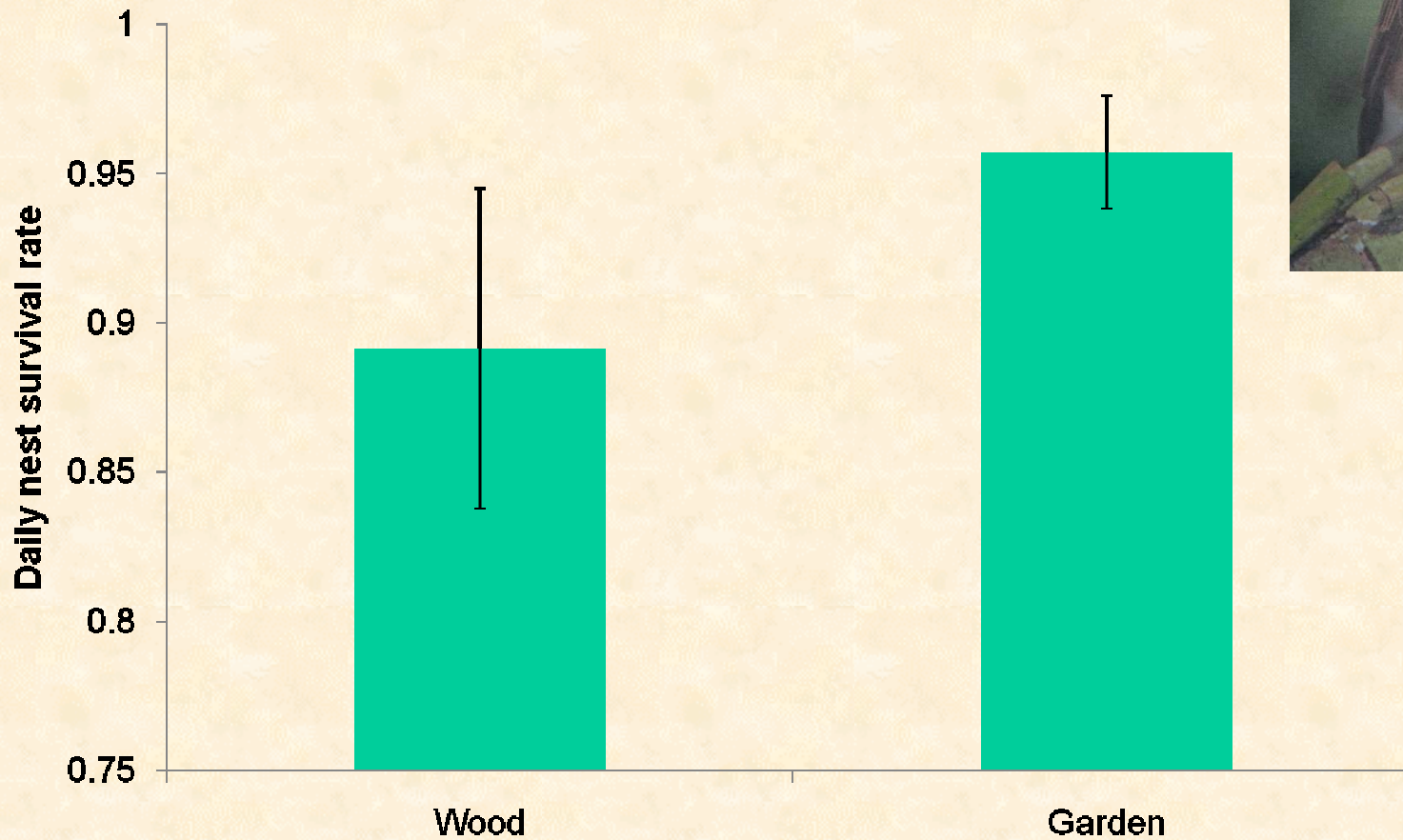
Yellowhammer daily nest survival



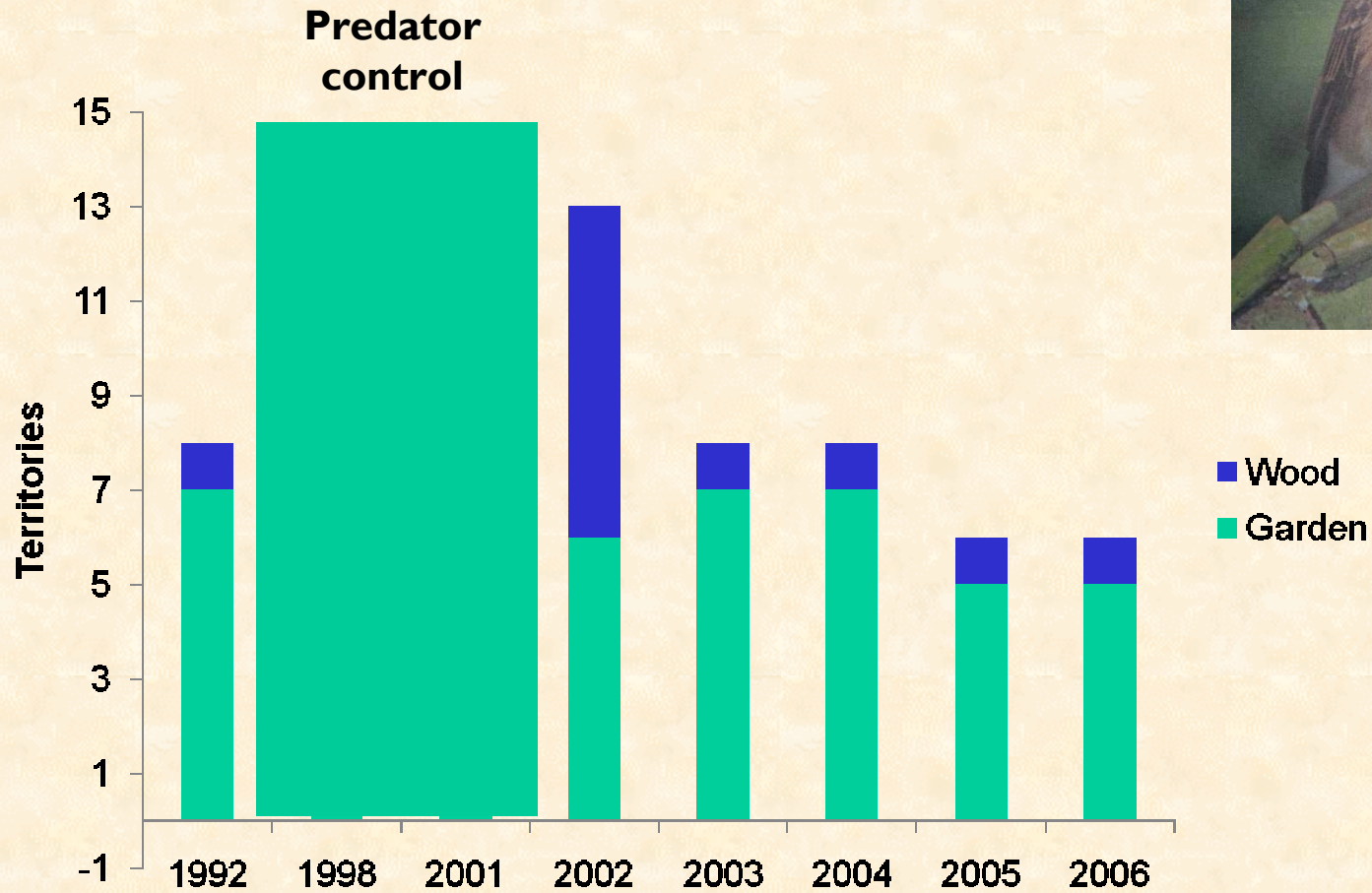
Herb width



Spotted flycatcher daily nest survival



Spotted flycatcher breeding abundance

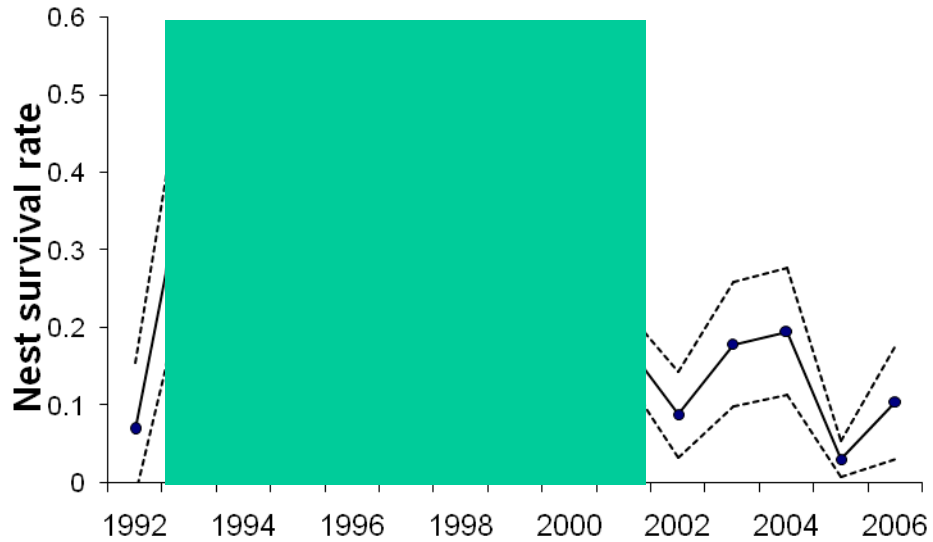


Percentage nest survival

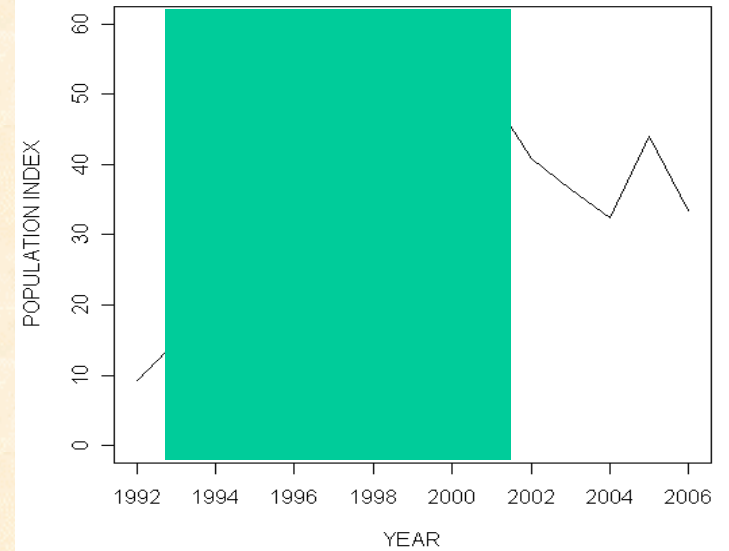
	Keeper	se	No keeper	se
Blackbird	25.7	3.0	8.9	2.3
Song thrush	23.6	4.5	11.6	4.0
Chaffinch	28.1	5.6	14.2	4.2
Yellowhammer	32.3	7.4	16.9	5.5

Blackbird

Nest survival



Breeding abundance (annual transects)



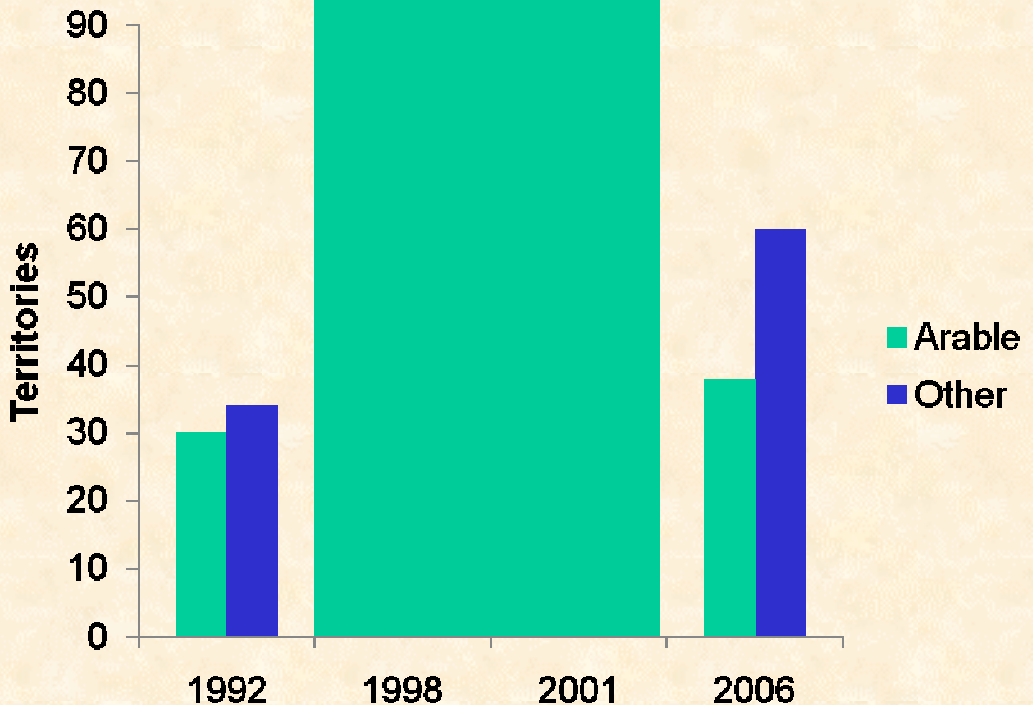
Blackbird

Incubation stage – negative influence of cereals

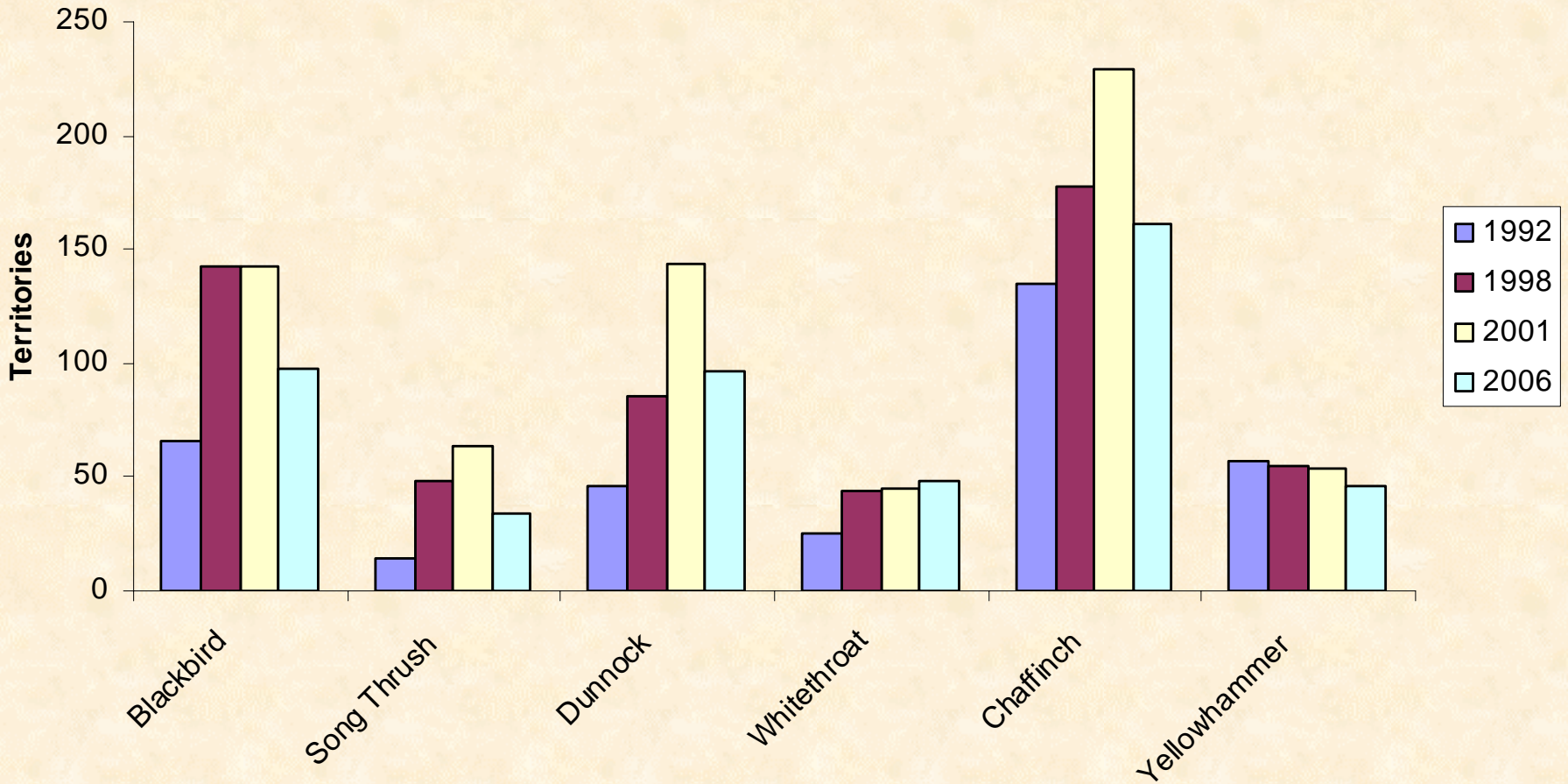
Nestling stage – negative influence of woodland



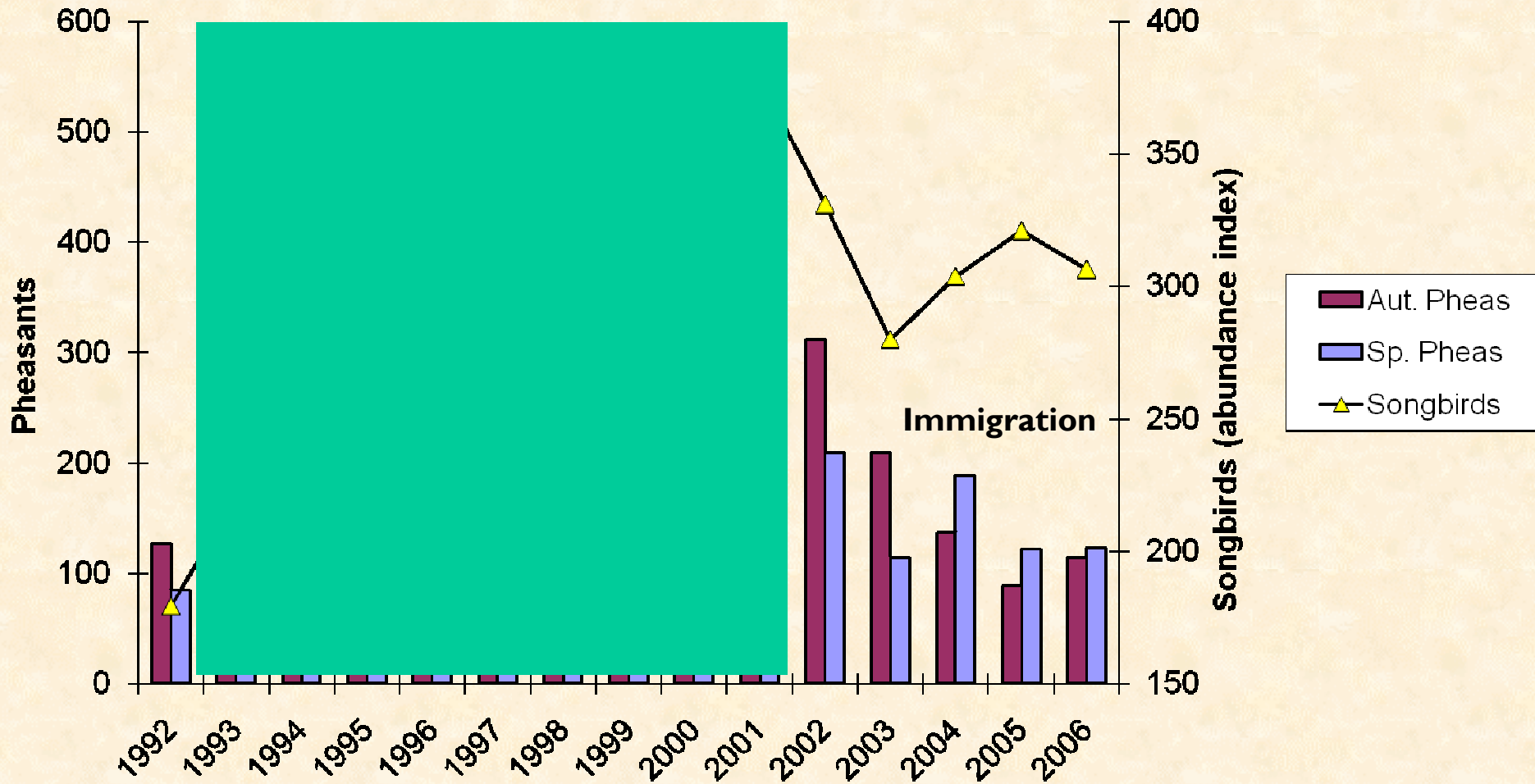
**Breeding abundance
(territory mapping)**



Songbird territory mapping



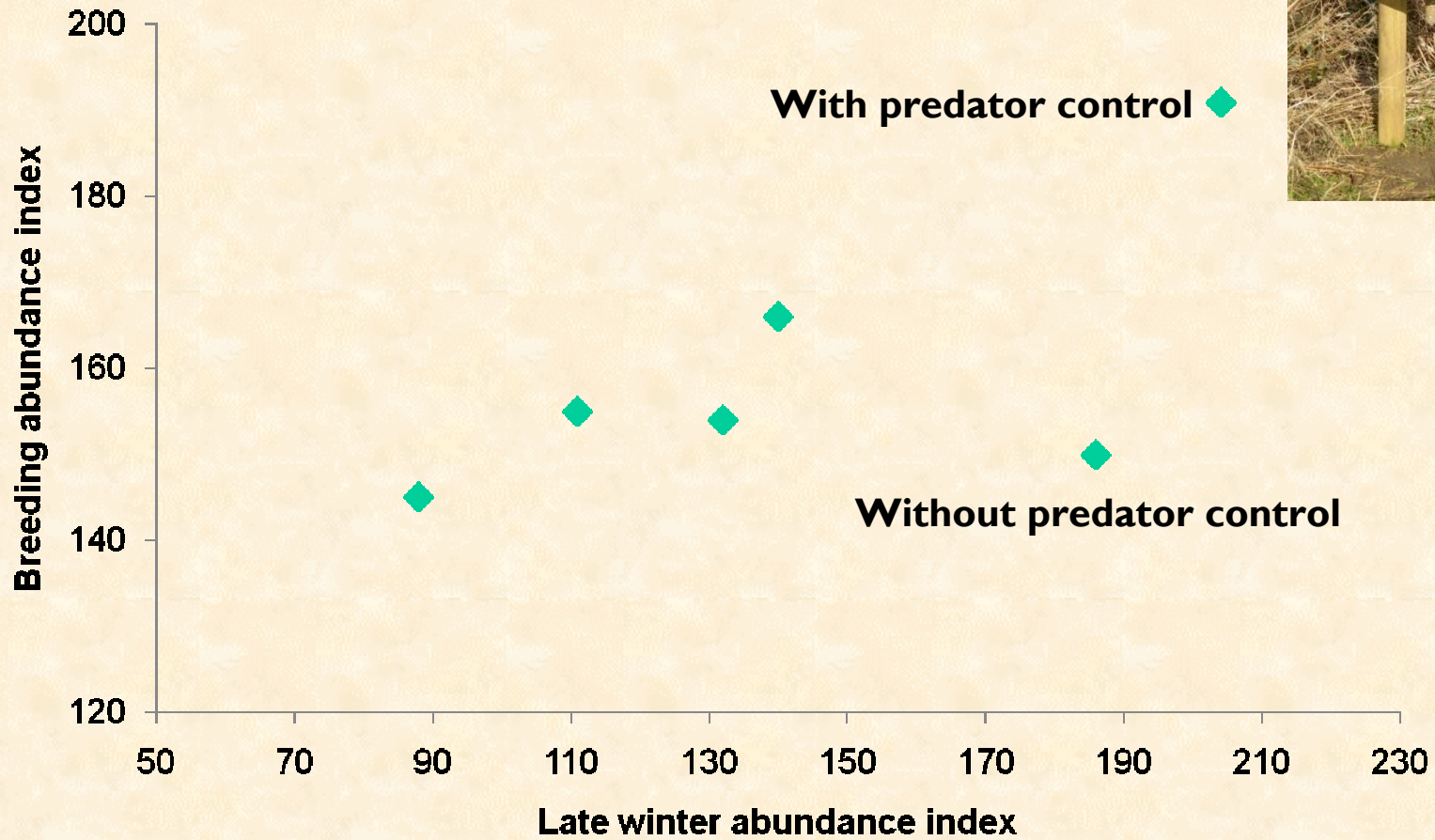
Pheasants and songbirds



Late winter bird abundance



Hopper-using passerines





Feed hopper use by ...

Brown rats

Grey squirrels

Rooks

Jackdaws

Summary

- **Effects of habitat on nest survival and breeding abundance**
- **Increased nest survival when predators controlled**
- **Breeding abundance increased over same period**
- **Apparent density dependent effect on nest survival**
- **Winter food may influence breeding abundance**
- **Winter food may influence predator abundance**

Predator control may contribute to early population increase, with habitat and winter food increasingly important influences.