

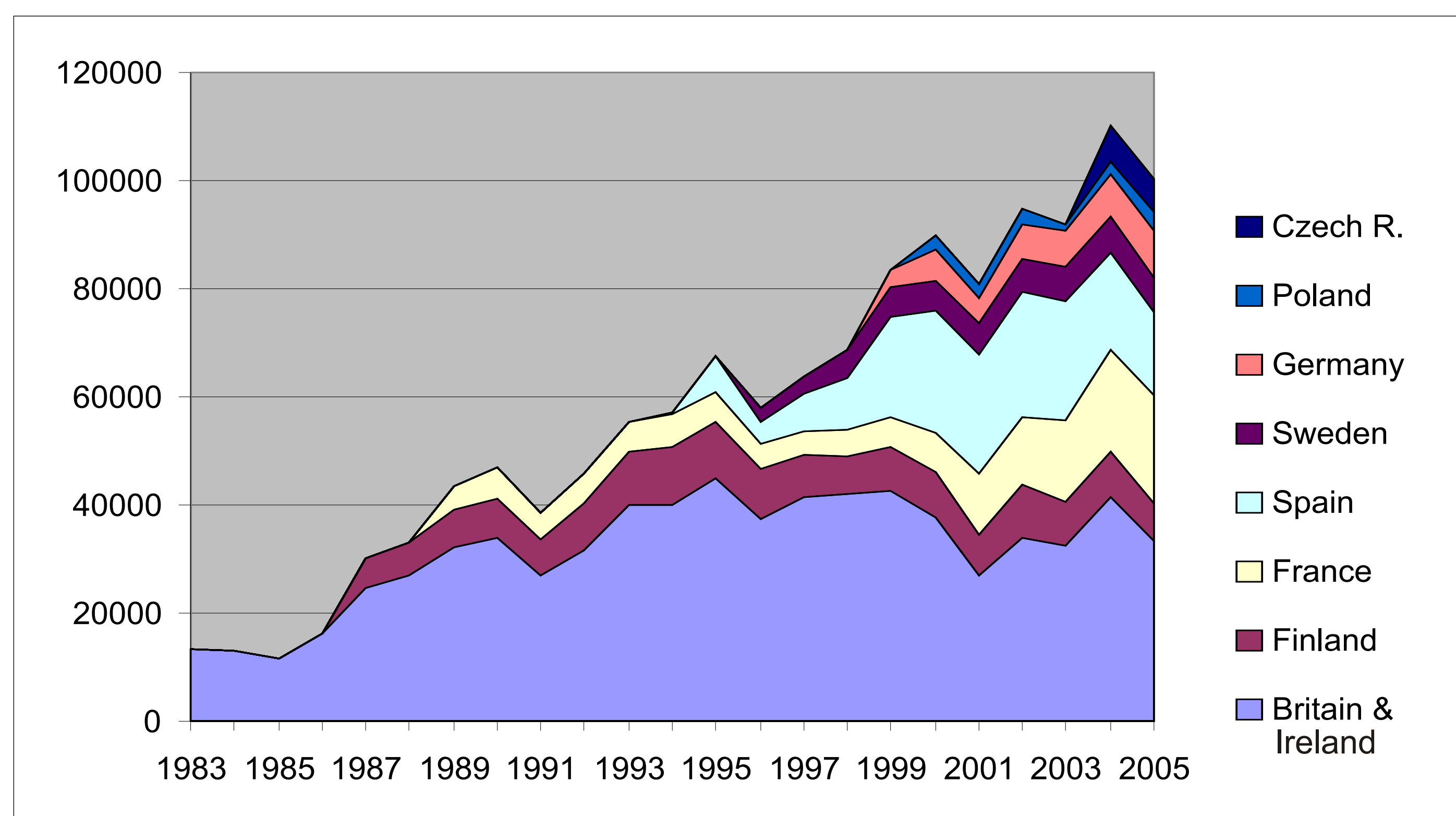
# Euring

Co-ordinating bird ringing throughout Europe



## European CES

Constant Effort Sites Ringing (CES) aims to monitor the trends in abundance, productivity and survival of songbirds throughout Europe. By studying productivity and survival we can investigate the demographic mechanisms responsible for population changes. CES schemes are now undertaken by volunteer ringers in a dozen countries throughout Europe, with coverage increasing each year. EURING is working to co-ordinate this important monitoring effort and has developed guidelines to promote standardisation between countries.



Numbers of birds ringed within CES projects throughout Europe by year.

### CES Methods

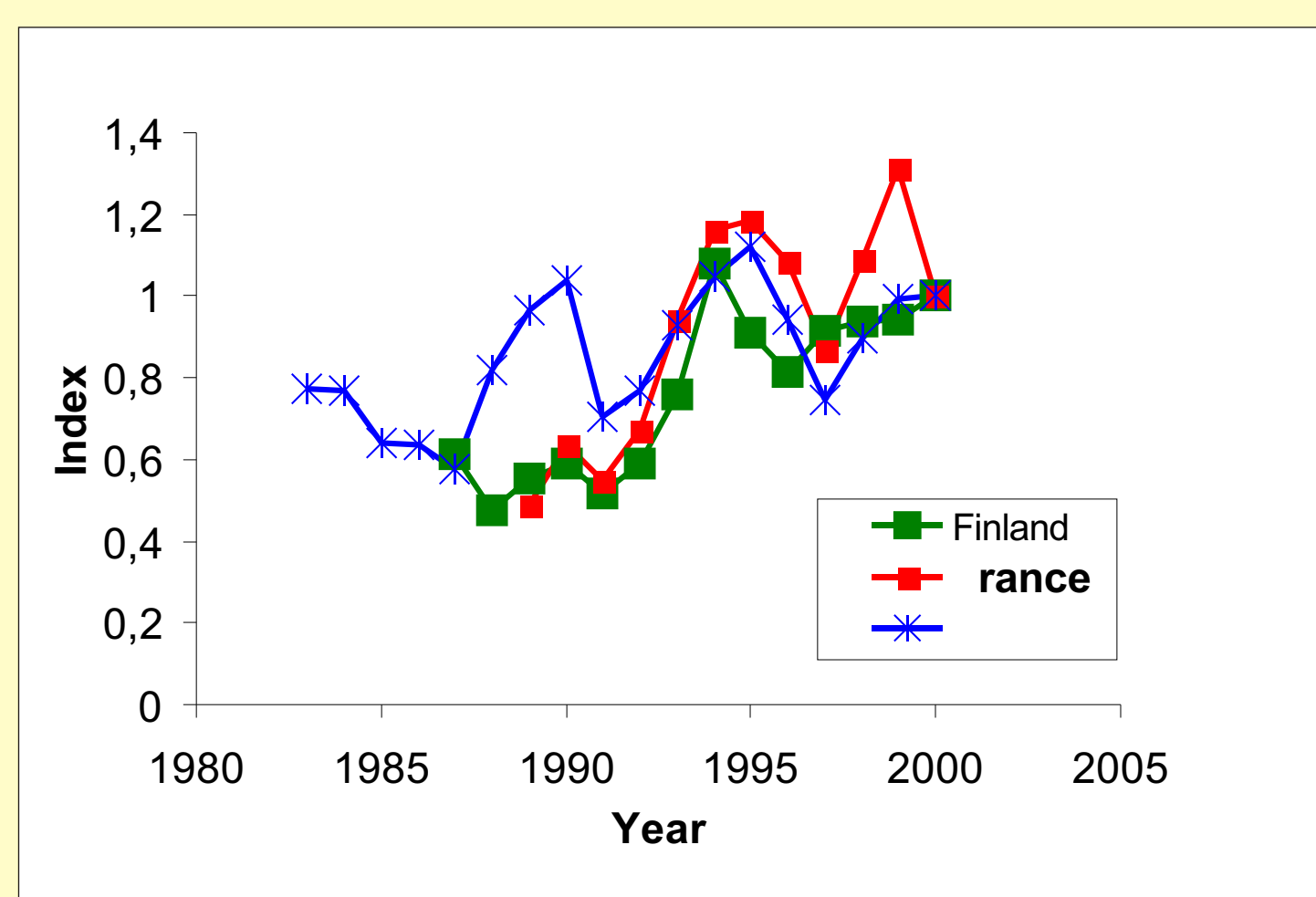
Each year CES ringers are asked to make a standard number of visits to their site spread evenly between early May and late August (12 visits in Britain and Ireland). Standard mist nets are erected in the same position on each of the main visits. The total length of standard netting is decided by the ringer and is typically 100-200 m. Ringers are asked to operate their set of standard nets for at least six hours on each visit and to standardise their chosen duration. A typical regime would be to begin netting at dawn and continue until 11:00 hrs on each of the visits. The scheme has some flexibility and permits additional nets to be used during main visits, and also extra visits.



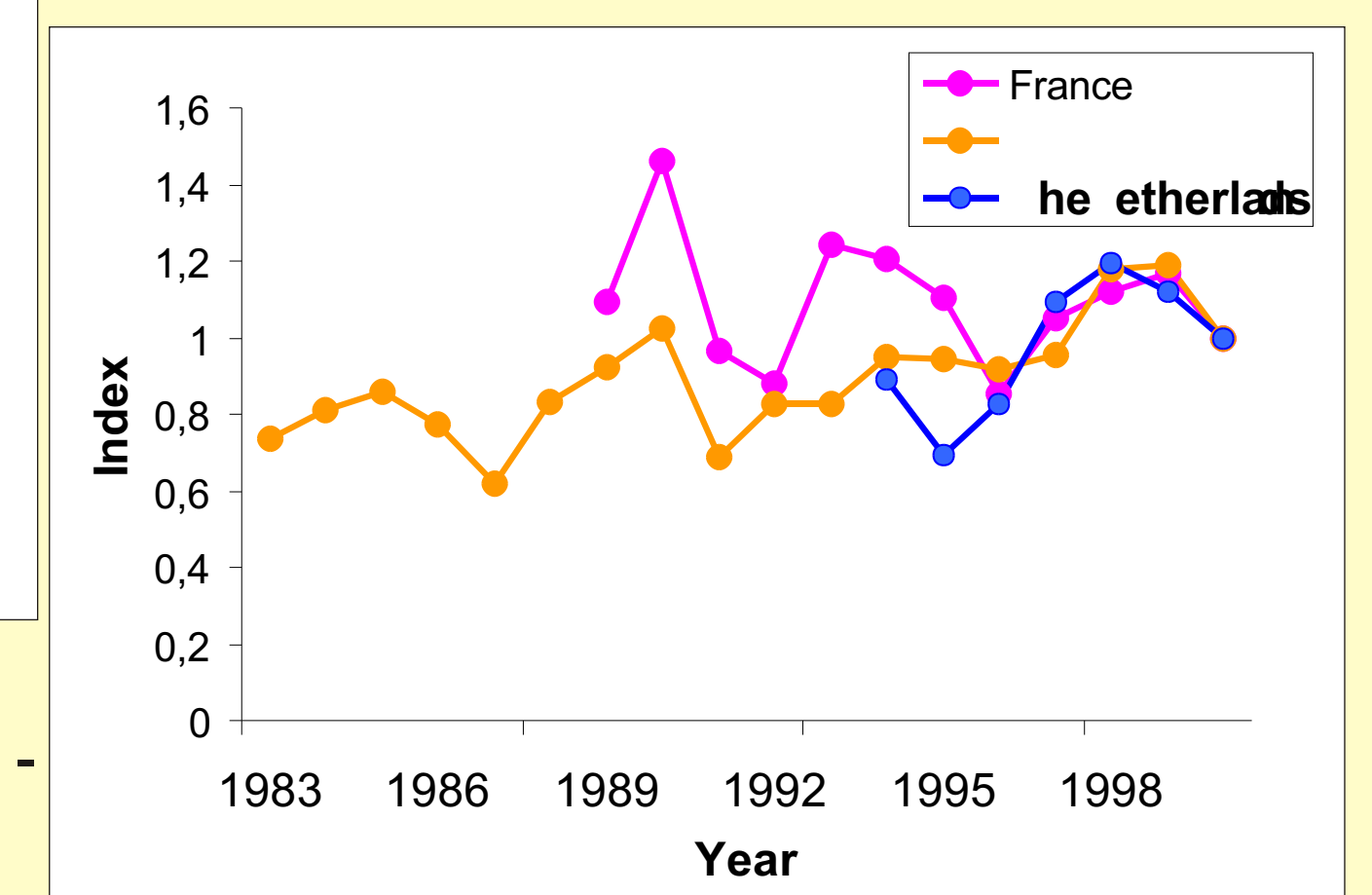
Most constant effort sites are located in either wet or dry scrub, reedbeds or deciduous woodland. Sites in coniferous woodland are not accepted because rapid tree growth is likely to cause short-term changes in catching efficiency and the local bird community. Potential constant effort sites are proposed by volunteer ringers, and are generally accepted into the scheme as long as they are located in suitable habitats and are not considered to be undergoing major successional changes. In most schemes there is some level of habitat recording. In Britain and Ireland a quantitative system of habitat recording was introduced in 1995 and all CES ringers are asked to record habitat in the first year they operate their site, and then at regular intervals thereafter.

### CES monitors...

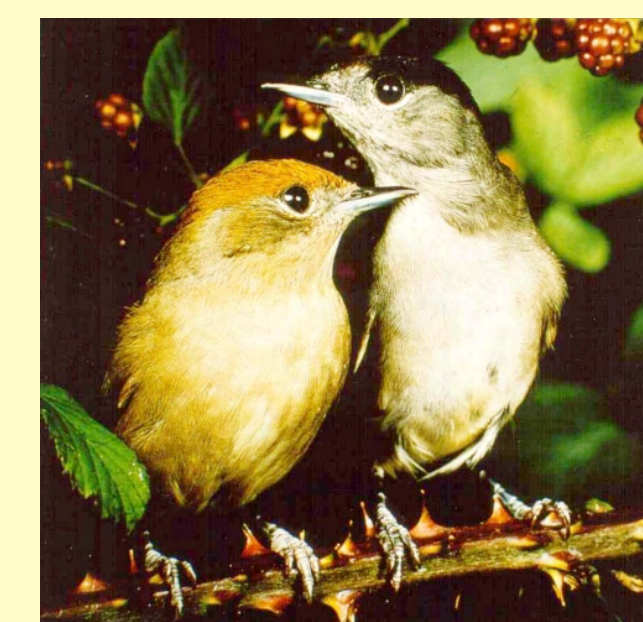
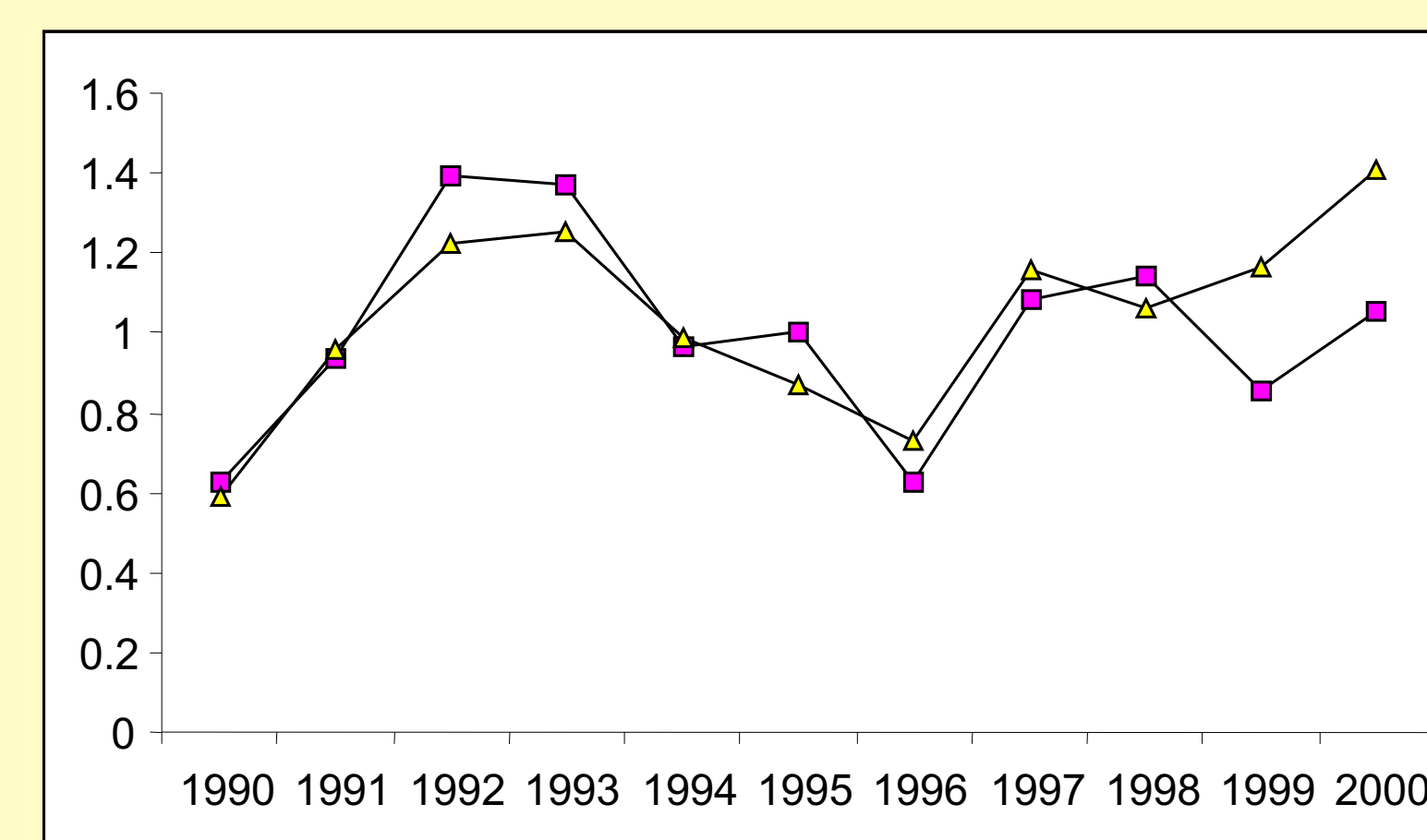
(1) **adult numbers** (total number of adults caught during the breeding season)



Abundance of adult European Robins (*Erithacus rubecula* - top) and adult Blackcaps (*Sylvia atricapilla* - right) at the CE sites in three European countries



(2) **productivity** (ratio of juveniles to adults in the catch)



Productivity index for Blackcap. France - yellow UK - pink

(3) **survival** (from between-year captures)

Estimated annual survival rates of adult Sedge Warblers (*Acrocephalus schoenobaenus*) at two constant effort sites in Britain and Ireland

From Peach, W.J., Buckland, S.T. & Baillie, S.R. (1990), *The Ring 13*.

