# 3 Cereal field margins

These are strips of land between cereal crops and the field boundary, and extending for a limited distance into the crop, which are deliberately managed to create conditions which benefit key farmland species. Field boundaries and strips around the edges of cultivated cereals provide an important refuge for species previously common in rural Britain but now rare as a result of the widespread and frequent use of herbicides and pesticides on cereals.

## Status

Cereals account for 63% of the total arable land in England[1]. If a field margin of only 6 m were managed for wildlife, with an average field size estimated at 12 ha, 200 000 ha of land could be managed in a sensitive way, to sustain wildlife presently marginalised in agricultural areas whilst not having a serious effect on the rest of the crop. Gamebirds and butterflies would benefit as well as predatory insects that benefit the farmer, such as hoverflies *Syrphidae* and ground beetles *Carabidae* that attack aphids *Aphidae* and reduce the chances of infestations. Excluding soil species, 2000 invertebrate species are commonly found in cereal fields. Some 300 species of plants can occur in this habitat, including some threatened and *priority* plants, such as the cornflower *Centaurea cyanus* and shepherd's-needle *Scandix pecten-veneris*. Some of them have suffered severe declines and are now very rarely seen.

*Skylark*

Areas of this habitat will change between years, depending on the grants available, the level of uptake and other effects on farmers' choice of land use. Data from the Countryside Stewardship Scheme, provided by the Farming and Rural Conservation Agency, show that farms in Yorkshire and the Humber held 18% of the length of English cereal margins managed under this scheme in 1998. The data are shown in Table 11 for the two relevant management options, which are generally used in conjunction with conservation headlands (crop edges managed to provide protection for wildlife from crop management operations). *Uncropped arable margins* are wide (6m) strips around field boundaries, providing grassy habitat for wildlife. *Two metre grass margins* are narrow grass strips along field boundaries and streams; *beetle banks* are similar grass strips sown across fields to provide a winter retreat for beetles, beneficial predators that help prevent crop infestations by pests. Other schemes and site agreements exist to create similar habitat and therefore the figures given here will not be absolute totals, but these are minor in comparison with the Countryside Stewardship Scheme and no data is provided for them here.

## Threats

Cereal coverage and field management may be greatly affected by any changes in EC agricultural policy, with a resulting effect on the extent of field margins available for management for conservation.

Factors that have affected the wildlife value of cereal crops are: pesticide and herbicide drift onto field margins; the use of broad spectrum chemicals instead of the available targeted products; a shift to winter cropping with a loss of winter stubble; a change from field rotations to consistent monoculture; and a reduction in the undersown area.