

# Red kite

## *Milvus milvus*



### Status

Red listed: HD, BR  
SPEC 4 (S)  
Schedule 1 of WCA 1981  
Annex I of EC Wild Birds Directive

### National monitoring

Known sites currently monitored annually by the RSPB/SNH in Scotland, EN/RSPB and the Red Kite Study Group in England and the Red Kite Study Group in Wales; this level of monitoring will be reviewed as the red kite population expands.  
Rare Breeding Birds Panel.

### Population and distribution

Breeding red kites were almost extinct in Britain at the start of the twentieth century, with only a small population existing in Wales. In recent years this population has gradually increased, and birds have been successfully reintroduced to Scotland and England. The current breeding population is estimated at 160 pairs (*Population Estimates*).

### Ecology

Red kites in Wales breed in mature woodland, chiefly of oak, often on the steep sides of valleys. In Scotland, a wide variety of trees is used, including mature conifers. The nest is usually high in the main fork of a broadleaved tree, made from sticks and turf, and lined with wool, although sometimes rags and other rubbish are used (*Red Data Birds*). Kites are known to adapt the disused nests of corvids and buzzards. Feeding areas usually encompass pastoral agricultural land and can be up to 10 km from the nest-site. Eggs are laid from late March to May. There are usually 2–3 eggs in a clutch; there is a single brood, and young fledge by mid-July (*Red Data Birds*).

## Breeding season survey – population

The survey procedures for red kite monitoring are intense, and are currently followed for all known sites (Bainbridge et al 1995).

#### Information required

- number of occupied territories
- number of breeding pairs
- a map showing all registrations
- completed nest recording and sighting forms.

#### Number and timing of visits

Three visits, February to late March, for evidence of occupation. Every 3–4 days to occupied territories from late March to the end of April, for signs of nest-building and incubation.

**Time of day**

Any time of the day.

**Weather constraints**

Avoid visiting in persistent rain, strong winds or poor visibility.

**Sites/areas to visit**

Woodland, usually mature broadleaved but other woodland possible.

**Equipment**

- 1:25,000 map of the area
- A4 photocopied field maps
- nest recording forms (Figure 1)
- sighting forms (Figure 2)
- Schedule 1 licence.

**Safety reminders**

Always tell someone where you are going and when you expect to return. Carry a compass and know how to use it. In more remote upland areas, always carry extra clothing, food, a survival bag and first-aid kit.

**Disturbance**

Keep disturbance to a minimum. Egg-collectors are a threat to this species.

**Methods**

During the winter, check winter roosts to see which birds are associating as pairs, noting the details of any wing-tags seen.

Map the boundary of the survey area on to a field map. Make three visits between the beginning of February and late March and map all potential nest-sites, ie areas with suitable nesting habitat – particularly areas where kites have been reported, areas where single birds or pairs have been seen previously, and territories which have been occupied in the past. Defended territories can be small, and neighbouring nests can be as little as 300 m apart, although 3–5 km is more usual.

In late March and April, visit potential territories every 3-4 days and watch for 1–2 hours for evidence of breeding behaviour, ie nest-building or egg-laying. Nest-building behaviour is usually seen before 10 April and includes birds carrying nest material, both male and female entering the wood at the same point, or birds being aggressive towards crows and buzzards. Egg-laying usually takes place from 10 to 25 April when the male may be seen on his own in a potential territory, or the female might be seen coming off a nest. Estimating when the eggs were laid is important for estimating breeding success because it can be used to work out the predicted hatching date. Always watch from outside the wood. However, if the wood is open, it may be possible to observe the nest without disturbing the birds.

Map all the potential red kite nest-sites and annotate the map as follows:

- × Potential nest-sites located in the survey area
- ⊗ Territories occupied by red kite (red kites seen, no evidence of breeding behaviour)
- Red kite breeding sites (breeding behaviour seen)
- Sites lost (destroyed/developed) during the survey

Outline and hatch shade any areas which were not searched because they were unsuitable. As well as mapping the required information, fill out a nest recording form (Figure 1) for each occupied territory, ie each site at which red kites are seen. Each time a red kite is seen away from the breeding site fill out a red kite sighting form (Figure 2) and report details of any wing tags seen.

The number of occupied red kite territories is defined as the total number of suitable breeding sites at which red kites were seen. The number of breeding pairs of red kites is defined as the number of occupied territories at which there was evidence that nest building took place and/or eggs were laid.

**RED KITE SIGHTING FORM**

DATE OF MESSAGE \_\_\_\_\_ RECEIVED BY \_\_\_\_\_

OBSERVER DETAILS

NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_

TELEPHONE \_\_\_\_\_

DETAILS OF SIGHTING

PLACE \_\_\_\_\_

GRID REFERENCE \_\_\_\_\_  
DATE/TIME \_\_\_\_\_  
NUMBER OF BIRDS \_\_\_\_\_

| ACTIVITY                    | BIRD 1 |   | BIRD 2 |   | BIRD 3 |   |
|-----------------------------|--------|---|--------|---|--------|---|
|                             | L      | R | L      | R | L      | R |
| HABITAT                     |        |   |        |   |        |   |
| TAGS                        |        |   |        |   |        |   |
| Tags looked for?            |        |   |        |   |        |   |
| Possible to see tags?       |        |   |        |   |        |   |
| Tags seen?                  |        |   |        |   |        |   |
| Main colour                 |        |   |        |   |        |   |
| Bar at end of tag (colour?) |        |   |        |   |        |   |
| Diagonal bar (colour?)      |        |   |        |   |        |   |
| Spot (colour?)              |        |   |        |   |        |   |
| Horizontal bar (colour?)    |        |   |        |   |        |   |
| Letters/number only (what?) |        |   |        |   |        |   |
| IDENTITY (Office use)       |        |   |        |   |        |   |

**RED KITE NEST RECORDING FORM**

| SITE/PAIR          |  | Region/district | Year            |
|--------------------|--|-----------------|-----------------|
| Observer           |  | Grid reference  | Altitude (m)    |
| Site name          |  | Tree species    | Tree height (m) |
| Other site details |  | Aspect          |                 |
| Female (tag, etc)  |  | Male (tag, etc) |                 |

SITE VISITS

| Date | Time | Adults present | Eggs | Young | Age | Comments |
|------|------|----------------|------|-------|-----|----------|
|      |      |                |      |       |     |          |
|      |      |                |      |       |     |          |
|      |      |                |      |       |     |          |
|      |      |                |      |       |     |          |
|      |      |                |      |       |     |          |

continue overleaf if necessary

RINGING DATA

| Nest | Date    |            |          |      |        |     |        |        |     |
|------|---------|------------|----------|------|--------|-----|--------|--------|-----|
|      | Ring no | Tag colour | Tag mark | Wing | Tarsus | Leg | Wing/L | Wing/R | Sex |
|      |         |            |          |      |        |     |        |        |     |
|      |         |            |          |      |        |     |        |        |     |
|      |         |            |          |      |        |     |        |        |     |
|      |         |            |          |      |        |     |        |        |     |

**Figure 1**  
A red kite nest recording form.

**Figure 2**  
A red kite sighting form.

## Breeding season survey – breeding success and productivity

### Information required

#### On each visit:

- breeding status of the birds, eg confirm sitting birds, young or old chicks or failure
- clutch size
- number of eggs hatched
- brood size, early June
- brood size, late June/early July
- brood size at fledging.

### Number and timing of visits

Numerous. One between 22 and 28 April to record the clutch size, one to record number of chicks hatched, one in early June to record the brood size early in the chick-rearing period, and one in late June/early July to record the brood size and to ring the chicks. Then, every 3–4 days throughout July and possibly into August, to check progress.

### Time of day

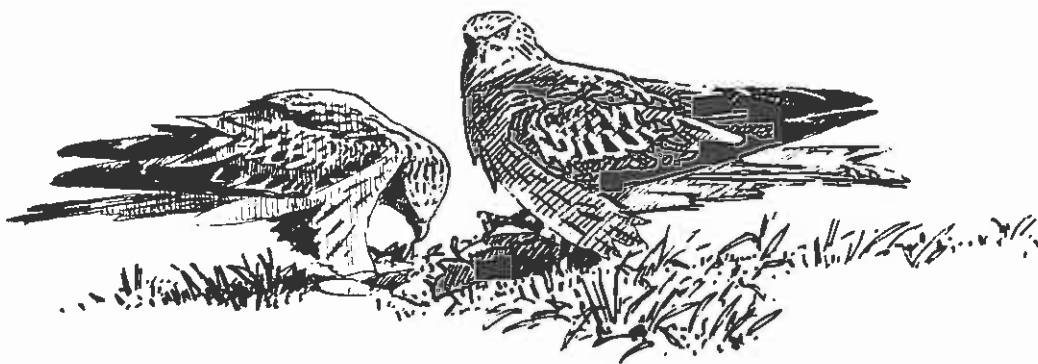
Any time of day.

### Weather constraints

As for population survey (above).

### Sites/areas to visit

All occupied territories and breeding sites recorded earlier in the season (see above).



### Equipment

- 1:25,000 field maps of the survey area
- nest recording forms (Figure 1)
- sighting forms (Figure 2)
- a mirror attached at 45° on a long (up to 20 m) extendable pole (you should be sure that this works before approaching the nest)
- ringing, tagging and measuring equipment
- Schedule 1 licence.

### **Safety reminders**

Always tell someone where you are going and when you expect to return. Only climb trees with the assistance of a ladder and ensure that you are accompanied. You will need help to ring, tag and measure the chicks quickly and safely.

### **Disturbance**

Keep disturbance to an absolute minimum. Egg-collectors are a serious threat. Always make initial observations from a distance.

### **Methods**

To record the clutch size, the number of eggs that have hatched and the brood size early in the chick-rearing period, use a mirror on an extendable pole to look at the nest contents and count the eggs and/or young. Fill in the details on the nest recording form (Figure 1) and each sighting of adults away from the breeding site on a sighting form (Figure 2). Each visit should take no more than 5–10 minutes.

To record the brood size later in the chick-rearing period and ring the young, visit the nest-site in late June/early July (dependent on the progress of the young and the predicted best time for ringing). Climb to the nest, secure the chicks and lower them down to the ground for ringing, tagging, blood sampling (if undertaken) and measurements. While at the nest, record any food items present. Record appearance/progress of chicks and details of rings, tags and measurements on the nest recording form (Figure 1). This visit should take no more than 30–40 minutes.

To record the brood size at fledging, visit the vicinity of the nest every 3–4 days in July and watch for 2–3 hours. The approximate fledging date can be worked out if the hatching dates are known. Visits should start about 40 days from the hatching date; red kites can leave the nest between 45 and 60–70 days after hatching. Again, fill in the nest recording form for each site after each visit and continue to fill out sighting forms for any other records.

In order to calculate nesting success, visit at least once every 10 days to ensure that the nest is still occupied. If, during a visit, the nest appears to be unoccupied, search for causes of failure, dead adult, blown-out nest, predated eggshells, partially eaten chicks, etc. Regular visits are important for the accurate calculation of daily survival rates of clutches and broods.

### **Reference**

Bainbridge, I P, Summers, R W and O'Toole, L (1995) *Red Kite Monitoring in Scotland: Annual Red Kite Monitoring Procedures*. RSPB unpubl., Edinburgh.