OSNZ NEST RECORD SCHEME INSTRUCTIONS

Aim of the Scheme

The Scheme aims to provide comprehensive information on the breeding biology of New Zealand birds. Since the Scheme began in 1950, over 17,000 cards have been received, covering some130 species. The breeding information in the Scheme is used for research and management. Many papers and books have been written using data from the Scheme and so contributors can feel confident that their records are put to good use.

Participation in the Scheme

Most participants are members of OSNZ, but records are welcome from all people with an interest in the breeding biology of birds. Members may also submit cards completed by friends as long as they can check the accuracy, and include their own name on each card. Nest Record Cards are obtainable free from the Nest Record Scheme Organiser. Completed cards received will be replaced by fresh ones for use in the next season.

Type of contribution wanted

A card should be completed for every nest in which the contents have been accurately counted on one or more occasions, or where evidence suggests that birds are currently breeding, e.g. birds seen building a nest, or an inaccessible nest at which young are being fed. Records are generally not wanted for old nests or those that failed before they were found unless there was something unusual about the record, e.g. an old Welcome Swallow nest in a moored boat.

If possible, searches for nests should be made from the earliest time that birds are thought likely to be nesting right through the season until all species have stopped breeding; otherwise bias towards early spring and school holidays is likely to occur. Contributions from rural, forest and island habitats are very useful because most records are from around people's homes, generally in suburban surroundings.

Although cards are needed for all nests regardless of the number of visits, the most valuable information is from nests visited more than once. Even two observations on a nest have more than twice the value of a single one, even if the nest is totally destroyed the day after it was first found. It is not necessary to visit nests daily, especially if no change in contents is expected.

A few well-planned visits can provide maximum information. For instance, for most birds, two afternoon visits during laying enables one to get the date of the first egg and the laying sequence (not necessarily every day); a visit during incubation gives the clutch size, after which a couple of visits around hatching time will give the approximate incubation period and hatching success. A few visits during the nestling stage will give details of growth, nesting success and fledging periods. If you can, try to follow the successive nesting attempts of each pair as far as possible throughout the whole breeding season.

Visiting nests

Each observer must exercise a sense of responsibility, always putting the welfare of the bird first if a visit might endanger the nest. Basically there are three potential risks:

a) accidentally damaging the nest
b) causing desertion or premature fledging of young
c) revealing the nest to predators

a) In practice, the exercise of due care decreases the chance of accidental damage. To cause least disturbance, to avoid effort and to save time, as well as to inspect inaccessible nests use a small mirror adjustably fixed to a pole. In addition a torch with a concentrated beam may be required to inspect nests in enclosed spaces e.g. Welcome Swallow, Starling. Delicacy of touch is essential when handling small eggs and young. Young chicks are generally helpless - always replace them well within the nest cup.

b) Whether or not a sitting bird should be flushed depends on a variety of factors. Certainly it is pointless to flush it if no useful new information can be gained, and some species are best left undisturbed when sitting, at any rate at certain stages. A good many species leave their nest unattended while feeding; this provides the ideal opportunity for an inspection. In general, it is best NOT to flush birds in failing evening light. If the bird is to be flushed, give it ample time to slip off quietly by tapping branches or whistling during your approach. A tight-sitting bird may take the opportunity to leave if you turn your back for a while. If a bird sits really tight, it might be in the process of laying or hatching and should be left undisturbed. Nestboxes should be tapped from below to give the bird a chance to leave before you look in. Sitting adults should not be picked up, particularly during the egg stage, but should one be accidentally handled - e.g. in mistake for a well-grown nestling - it has been found better to release it a good distance away; this is apparently enough to make it 'forget' the circumstances of its capture.

Many species tend to be rather sensitive to disturbance and should accordingly be treated with extra care, 1) at the start and finish of their breeding season, 2) in the early stages of each nesting attempt, 3) to a lesser extent, about the time of hatching, 4) in adverse weather such as cold, heavy rain, and 5) at times of food shortage, often associated with 4). Young inexperienced breeders are as a rule more sensitive than mature established pairs.

When partially feathered, the young develop an instinct to scatter on the close approach of a possible predator (a process often described as 'exploding'). This gives,a chance of survival for at least part of the brood, but once out of the nest the survivors are vulnerable to chill and to ground predators. In small birds this fear of intruders often develops when about 6mm of primary feather has emerged from the quill sheaths - a stage many passerines reach at about 9 days. The young of hole-nesters do not tend to 'explode' until somewhat older. If a brood becomes accustomed to handling, for instance through daily weighing, the fear reaction is inhibited, but normally don't handle nestlings after this stage. Inspections of large young should therefore be made cautiously from a short distance.

If an 'explosion' is inadvertently provoked, the young should be quickly gathered and kept together (in the dark if possible) and replaced gently but firmly in the nest cup, the smallest on top, and covered with a hand or handkerchief. The cover is withdrawn smoothly after giving time for the nestlings to settle. (Should they leave again despite this, more harm than good will be done by staying; the more the parents 'scold' the more determinedly will the fledglings scatter, and perhaps get lost.) Young ground-nesters (e.g. ducks) leave the nest before they can fly but are adapted to survive.

c) Observers often fear that increased predation may result from their leaving a track or scent trail to nests, but in Britain a two year investigation of this possibility showed that nests visited frequently in bushes, hedges and thick undergrowth had a similar success rate to others left undisturbed between laying and fledging.

Although natural predators do not seem to be assisted by tracks, children are, and so it is a basic rule as far as possible to avoid making tracks in the first place, as well as to cover up any traces after a visit.

Obviously a nest must not be inspected while a predator is in the vicinity and can watch you. A commoner danger is that once- a parent is flushed it may not return immediately, so the nest remains exposed to searching predators.

In case parent birds are watching it is a good practice to approach nests casually, as if by chance, rather than directly or deliberately. Birds are then likely to regard you as harmless (much as they would a passing sheep) not as a predator intent on robbing the nest. A sitting bird should never be given a sudden fright as this might cause it to desert. Therefore, as you approach try to see if a parent is sitting; a bird crouching low on a nest above eye-level can very easily be missed. Occasionally, in dense cover, if a bird returns and only then sees a person examining its nest it may be so startled as to desert; therefore keep yourself in view whilst making the inspection. Never take an entire clutch or brood away from the nest, because a bird is much more likely to desert if it returns to an empty nest.

Filling in Nest Record Cards

1. RECORD FACTS ONLY : MAKE NO ESTIMATES OR GUESSES

2. Use a separate card for each nesting attempt - staple two cards together if you run out of space and mark each with the same observer's reference number. If a nest is used more than once use a separate (cross-referenced) card for each attempt.

3. Dates on which no major change (e.g. eggs hatching, nest deserted) was noted can be shown under Remarks.

4. Use a non-smudgy ink when filling in cards.

Instructions:

(1) Observer - The name of the observer(s). If the nest is recorded by a friend of a member please add member's name. Please put address on at least one card each year.

(2) Obs Code - Observer's code number - please leave blank for allocation of a personal reference number.

(3) Species - Record the common or latin name of the species – add subspecies if relevant. See (23) Outcome of nest for dealing with parasitised nests.

(4) Sp. Code - Species code - please leave blank for allocation of a species and subspecies reference number.

(5) Locality - Locality should pinpoint the area in which the breeding record was observed. Give distance and approximate direction to the nearest town or geographical feature.

(6) Altitude - Altitude above sea level should be recorded in metres.

(7) Latitude&Longitude - To accurately locate the position of the breeding record please give latitude and longitude coordinates to the nearest minute. Note that the Chathams are in the Western Hemisphere.

(8) Habitat - Place a cross in the square that most appropriately describes the general area where the bird is living; e.g. if a Blackbird was nesting in a clump of apple trees in the garden of a country house this would be best placed as farmland; rather than horticultural or residential.

(9) Site - Place a cross in the appropriate square and briefly describe the site, e.g. macrocarpa shelterbelt; cabin of moored boat.

(10) Height of nest - Record height to the nearest metre.

(11) Height of nest plant/cliff-structure - record height of the plant, cliff or structure, e.g. building that the nest is located in.

(12) Height of tallest vegetation over nest - record if nest is in or under vegetation.

(13) General Notes - Record information such as band numbers, egg dimensions, weights and colour, any unusual features of the nest, e.g. type of construction or nest materials, note presence of parasites such as fleas or mites. Note cuckoo parasitism/or host species. Note presence of helpers at the nest, i.e. three or more birds attending the nest.

(14) Observer's Reference No. - for your own notes

(15) Ref. No. of other nests of same pair - Put down your own observer's reference numbers of previous nests of the same pair in the same season.

(16) Date - Record this at each visit

(17) Time - Use the 24 hour clock, e.g. 5.30 p.m. = 1730 hrs.

(18) Eggs - Record the number of eggs known to be in the nest. Make no guesses, but if you know that eggs were present but not possible to count, mark this column with a tick.

(19) Young - Record the number of young in the nest. Note any out of the nest in the Remarks column.

(20) Bird on - If a bird was sitting or flushed from the nest enter one of these codes. Y = unknown sex, M = male, F = female - if a bird was not on place N unless you determined if the eggs were w = warm, c = cold.

(21) Age of young - It is important to record this as it helps analysts to deduce the date of laying and in calculating success. Record the age in days if known, or use categories shown on card to help to age nestlings. If the age is precisely known, please note eye condition and wing feather growth in Remarks column as this information will help to age those chicks in other nests whose age was not accurately known.

(22) Remarks - Note anything special at each visit e.g. stage of nest onstruction;
weights of chicks; reasons for eggs or young failing if the whole nest didn't fail e.g. 1 egg broken.

(23) Outcome of nest - Put a cross in the box that describes the fate of the nest. A successful nest is defined as having at least one chick leave successfully. It may have had four eggs initially, three may have hatched and only one chick leave. If the gap between your last two visits to the nest was so far apart that you can't determine if the nest was successful or not mark the box 'Evidence inconclusive'. If the nest was still occupied at your final visit, put a cross in the 'Observations not continued' box unless the chicks were 'Ready to leave' i.e. if they were judged to be capable of fluttering away.

If a nest fails, it is usually obvious which of the boxes should be marked but sometimes more than one category will have to be marked, e.g. a Blackbird nest containing three newly hatched chicks - one visit, but only one dead 'injured' chick the next day, would have both 'young gone' and 'young injured' marked. The category of young 'injured' will mostly be used when remains of young eaten by predators are found.

The 'Other' category could include such events as the adults dying, or nests parasitised by cuckoos. If a pair of Grey Warblers raised a Shining Cuckoo chick their own 'nest' would have failed even though they might successfully raise the cuckoo chick. In this case a separate card should be filled out for Grey Warbler and Shining Cuckoo with each suitably cross-referenced.

Bird colonies

It is usually most valuable to select a few nests in a colony and visit the same ones on a subsequent visit, but if visits are made to bird colonies and individual nests can not be followed up, the 'Colonial Nest Record Card' should be used. These cards are designed to record a SINGLE VISIT to the nests of a SINGLE SPECIES. In mixed species colonies, separate (but cross-referenced) cards should be used for each species. Normally these cards are used for casual visits to seabird colonies and the colonies of shags, herons and some waders.

[Hugh Robertson, minor revisions DSM August 2008]