THE BROWN SAND MARTIN - A POTENTIAL NATIONAL RINGING PROJECT

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Over the past 30 or so years, spasmodic ringing studies have been made on the Brown Sand Martin *Riparia paludicola* in the Transvaal, Natal, southwestern Cape and Zimbabwe, while at present ringing is being carried out in the Orange Free State and Zululand. Prior to the present studies none of the earlier ones ever parallelled each other but sprang up intermittently due to individual interest in one area at one time. We do feel, however, that now is the time for a co-ordinated ringing project on this species throughout the country in an attempt to gain a greater insight into certain aspects of the bird's biology. There are a variety of reasons for choosing this species, not the least being that it is one of the easier species to catch in appreciable numbers.

Bird ringing has now been carried out in southern Africa for about 36 years but unfortunately because of the very small body of ringers scattered over this vast area and operating in a wide range of habitats, individuals have restricted themselves to those species which take their particular interest and which are readily accessible. Thus, the only reasonably co-ordinated studies have been on wildfowl, waders and European Swallows *Hirundo rustica*. Of the other passerines, excluding the Redbilled Quelea *Quelea quelea*, ringing of those species with considerable movements is usually either very limited or subject to the whim of lone ringers. Thus the chances of subsequent recaptures elsewhere are very remote while most other passerine ringing on any scale is restricted to relatively sedentary species. The following then are a few reasons why we have chosen this species for a potential national ringing project:

(a) they may be caught in substantial numbers at breeding sites, roosts and while feeding over suitable localities such as sewage-works which are also favourite sites for birders/ringers!

(b) this martin is much more subject to local and more extensive movements than is generally realised. To what extent these movements are regular or partly nomadic is unknown at this stage;

(c) this bird is widespread, although localised, throughout our subregion and hence should be available to most ringers;

(d) it is very likely that a large proportion, if not all, of the population remains within the subregion throughout the year;

(e) there appear to be multiple subpopulations within our area, many totally out of breeding, moulting, etc., synchrony with each other which may help to establish guidelines as to their provenance.

At this stage we do not know what your population may do but let us list a few points that are known from different areas. In the southwestern Cape birds are present at most localities throughout the year but some movement does take place because the two longest-distance recoveries for the species to date are reported from this area, one of 92 km and the other of 181 km. In the Orange Free State some birds may be in full breeding swing while others in a nearby reedbed roost may be in full post-breeding moult at the same time, very likely indicating different origins. There is also a considerable drop in numbers in winter in some parts of the Free State. In Zimbabwe two totally different populations visit the Mashonaland highveld; the smaller-sized summer visitors are very likely from the hot lowveld sand rivers, such as the Zambezi, which normally become flooded at this time of year while the larger winter visitors, which contain a far higher proportion of brown-bellied morphs (20% as against 2% in the summer visitors) are almost certainly visitors from South Africa where the brown-bellied morph probably evolved only to be invaded later by the pale-bellied morph from further north.

The literature is very light on information concerning this species but let us have a look at a few notes that have appeared in Ostrich since 1955. Lamm (1955) considers the Brown Sand Martin to be a local winter visitor to southern Mozambique from late March to September when it breeds. Farkas (1962) considers this bird to be fairly rare at Barberspan but most regularly seen in winter; Milstein (1975) found it to be most common there in spring, while Skead and Dean (1977) reported this bird to be sporadic in spring and autumn with few in the summer and winter. Winterbottom (1967) found it abundant along the Orange River in April, and numerous on the lower Fish River at the same time and Grindley (1959) also found them at the mouth of the Orange River in July; however, these observations are too restricted in time to be of much use at this stage. Uys and Macleod (1967) found the species common throughout the year in Bredasdorp area. Britton (1970) considered them to be a breeding visitor to the upper Zambesi in Zambia from May to September. It would appear then that although this sand martin may be present throughout the year in any one area, it is unlikely to be totally resident anywhere and there is probably a continuous interchange of some birds. Movements may be quite substantial; for instance which South African populations visit the Zimbabwean highveld as non-breeders in winter?

So to get down to the nitty-gritty, we need willing ringers from all over our subregion to ring birds throughout the year, or seasonally if that is the case in your area. Studies at breeding colonies are particularly important as we will then learn from where the birds actually come. Information required during handling is minimal but please do try to process every bird (it is usually the unprocessed bird that is retrapped - Sod's Law!). The basic information that should be gathered is as follows:

(a) wing and tail length, the wing must be a maximum chord measurement;

(b) mass and time at which weighed;

(c) primary moult, remember that they only have nine primaries to all intents and purposes;

(d) ageing if possible, always very difficult once juveniles loose pale edging to upperparts feathers;

(e) belly colour, from pale-brown to dark-brown as well as white; please separate at least two shades of brown;

(f) please complete Nest Record Cards for all colonies so that we can get a better picture of the breeding range.

Ringers interested in becoming involved in this proposed national project should contact either of us or Terry Oatley at SAFRING, so that we can get an idea of the number of ringers that will be involved and make plans for standardized forms for collecting data.

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Editor's comment :

(This is an excellent proposal which, if taken up by enough ringers, will result in a lot of new and worthwhile scientific data and at the same time produce some exciting ringing. There is much more incentive to capturing and ringing such birds when one is aware that there is a co-operative effort by some 50 or (hopefully) more ringers all over the subcontinent, doing the same thing. I know of one pair of white-bellied Brown Sand Martins that nest solitarily in an unusual site (a drainage pipe in a concrete retaining wall) and spend much of their time feeding in the intertidal zone. I have never considered ringing them, but they are now due to receive aluminium-magnesium alloy jewellery as soon as the organisers send me the record forms mentioned above.)

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