fresh wound near the foot perching on soft ground or in water, soon after being released. It is therefore probably advisable to clean/disinfect the tarsus in all species before puncturing it and not to obtain blood from the leg in waders or other waterbirds.

There is one drawback to this method: at low temperatures, the vaso-constriction of the peripheral blood veins, particularly those in the legs, results in a very poor 'yield' of blood from the leg. In the Kalahari in Botswana, with morning temperatures in winter close to freezing, it was regularly quite problematic to obtain sufficient blood from the leg of small birds. but by mid-day – when the temperatures reach 15-25°C - there was no problem anymore. Throughout summer the method worked perfectly except on very hot days, when it became somewhat more difficult to stop the bleeding because of exceptional vaso-dilation.

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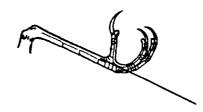


Figure 1. Direction of pricking with a needle to obtain blood from the leg in a small passeriform bird (drawing modified after Svensson 1984).

## SWALLOW TRAPPING WITH TAPE LURES

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European Swallows like to sleep together in groups. In Europe, starlings do the same and, in Africa, so do the weavers. Swallows prefer to roost in reedbeds along rivers and lakes or in swamps. If these are lacking, they will use maize fields or even bushes or trees, but they greatly prefer reedbeds. Such roosts make very good trapping sites.

In Europe, the roosts are used once the nestlings of the first broods have fledged, usually around mid June. The parents take their young to the roosts and the loud singing of the males courses over the site. From this time onwards, swallows can be trapped at the roost. When the nestlings of

the second brood have also fledged and the adults are breeding yet again, the number of birds at the roost increases. They use the roost until the start of migration to their African wintering quarters in mid September. Most of the swallows have left by the first week of October.

The swallows' behaviour at roosts in Africa is similar to that in Europe. The swallows start arriving about an hour before sundown. During this time they fly around and often drink or take a short bath. The nets should be set up at this stage and, with luck, a number of birds may be trapped. The nets should be set at right angles to the water if possible, as the swallows like to fly parallel to the water's edge when preparing to land. It is better to trap in the middle of the reedbed than at the periphery.

About 10-15 minutes after sunset they gather in large groups above the roost and often form dense clouds when preparing to

land. At this point it is better not to stand at the nets as the birds might land elsewhere if disturbed. When the nets are full enough, the ringing can start. If some birds come down early, the nets can be emptied before the majority of birds descend and thus the number of birds trapped can be increased.

Once the nets are set up the recorder can be switched on. The cassette recorder should be placed right under the net and the song played as loudly as possible. If the recorder cannot be placed directly under the net (because of water, for instance) a speaker can be tied to the middle net pole and connected to the recorder on the bank by a 15-20 m lead. An ordinary cassette player and an endless-loop cassette of one minute duration are sufficient. I copied the call from a cassette of bird calls produced by the Dutch Bird Protection Society and taped the call as loudly as possible, specifically setting the treble high to ensure good reproduction of the high tones. It is better to use a small speaker for high tones (a tweeter) than the recorder itself, because the amplification is better. An auto-reverse cassette player can be used with 60 minute cassettes. I use a car radio with a cassette player and a booster, operating off a small motorcycle battery built into a small wooden box. This provides more power and louder sound, and can be carried in a backpack.

When there are many swallows around the nets and it is darkening, the cassette can be played less loudly to avoid chasing away the birds. Swallows are very attracted to the recorded song and will go to sleep around the nets. If one is quiet whilst ringing, they will sleep only meters away. A very nice experience!

Big roosts always attract raptors. Falcons and sparrowhawks like to catch an easy meal before nightfall and there are always some careless swallows to seize. The presence of these raptors influences the behaviour of the swallows. At the alarm

call they quickly fly high, to stay above the danger. This can last until it is nearly dark, and the ringer thus catches almost no swallows. But in the end they will come down en masse, descending as swiftly as a falling stone.

It is also possible to trap in the early morning, before the swallows leave the roost. One has to rise very early, because at first daylight the birds awake, start twittering and leave the roost within half an hour. They are easily disturbed at night so it is best to leave the nets closed at the trapping site during the night and open them quietly at first light. Most of the swallows immediately fly vertically into the sky when leaving, but there are always low-flying birds that can be caught.

During the daytime, use of the tape lure is not so successful. The swallows can be trapped in rainy or windy weather conditions, when they are hunting low. However, their reactions to the tape are unpredictable and the nets are also more visible in full daylight. It is a question of trial and error

It is also possible to create a roost at an appropriate place in a reedbed. But then you will have to trap every evening in the beginning, until the birds have accepted the place as a roost.

It is my impression that, in Africa, the swallows are more attracted to the tape lure than they are in Holland. Could this be because they hardly sing in Africa?

I hope that this information will be of use to South African ringers, increase the numbers of swallows they can catch and ring and, who knows, hopefully enable them to catch some of ours!

**Ed**. Bennie has sent SAFRING a cassette of European Swallow calls. Any ringer wanting to make a copy should contact SAFRING. See also articles on pp. 40-42 and pp.43-44.