I.O.C. ROUND TABLE ON THE QUELEA

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Of the 25 people who signed up ahead of time for the Round Table Discussion (RTD), 22 made it to Durban including nationals of Cameroon, Sudan, Tanzania, Zambia and Zimbabwe, and, of course, a large contingent from all corners of South Africa. We decided that since the actual RTD was only scheduled for the Friday of the Congress, we had better meet to introduce ourselves on the first day. It quickly became clear at that first meeting that we had a lot to discuss at least amongst the hard core of the group. So we met every day during gaps in the programme, having sessions on Quelea as food, on control techniques and how they were used in different countries, and on research priorities. Our two official topics for the RTD were:

1. Integrated Pest Management (IPM) *versus* Lethal Control: how should management strategies be improved?
2. Are migration patterns changing towards greater sedentariness?

In the end, we had nearly nine hours of discussions.

On the first topic, it was explained that an IPM approach to Quelea control involves working with farmers to examine all aspects of farming practice in relation to Quelea *Quelea quelea* damage, with an overall aim of finding the best combination of mitigating solutions, and decreasing the use of avicides and other costly/environmentally damaging inputs. It has to be said that at least part of the "Quelea problem" is to be found in farmers' perceptions that the birds are causing serious problems. Sometimes these perceptions are fully justified and a serious threat is posed to livelihoods (of subsistence farmers) or to profits (of commercial farmers). But on other occasions farmers are simply reacting to the conspicuousness of the birds, often greatly overestimating their losses and/or are following practices which actively encourage the damage. Another aspect of the jigsaw is that in many countries, the costs of control are borne by the State, so there is a tendency to ask for Quelea control to be done partly because it is free.

IPM approaches are becoming increasingly accepted in Asia through networks of Farmer Field Schools and Demonstration Farmers and it is felt that these methods should be equally applicable in Africa. The ways in which farmers can become involved include modifying crop husbandry, adjusting planting time, weed reduction, crop substitution, bird scaring, exclusion netting and bird trapping for food. It should be remembered that IPM does not exclude lethal control of the pest, only that it is one of the many options to be considered. In South Africa, in the most recent season, under pressure from environmental groups, half of the control operations used firebombs instead of conventional aerial applications of organophosphate avicides.

The RTD reviewed all these points and decided that while the proposals for a new IPM approach should be supported, there were often practical difficulties in applying them. For example, there were fears that if commercial farmers were asked to contribute to the costs of control, they would not report Quelea attacks but take their own action independently, perhaps using even more environmentally damaging techniques or poisons more toxic than official control methods.

On the second topic, which is probably of more direct interest to ringers, the current knowledge of Quelea migrations especially in southern Africa was reviewed. The theory goes that a movement occurs on a NW/SE axis from Botswana to KwaZulu-Natal and Mozambique, and back. The movement along the axis is affected by the distribution of the rains, with the birds aiming to be wherever fresh grass seed can be expected. There also seems to be evidence of concentration of populations in Botswana either in breeding colonies or later in the season in roosts and then a fanning out or dispersal of the population as it moves towards the east. This fanning out causes the birds to penetrate increasingly far south into the Cape. From the Quelea management point of view, a better knowledge of this movement might allow for strategic con-

trol such that a few concentration points could be knocked out, thereby preventing subsequent incursions into croplands. Alternatively, if evidence is collected to suggest increasing sedentariness, it might be useful to control populations in especially vulnerable cropping areas or to seek alternative solutions in these areas.

In southern Africa, evidence comes from two principal sources, the *Bird Atlas of Southern Africa* and from ringing. The Atlas work superficially suggests that a resident population exists, but if the data are sorted by habitat and altitude, two areas show marked seasonal increases in presence, namely the highveld in Free State and Gauteng in winter and the lowveld in Botswana and Namibia in summer. From the Quelea point of view, the problem with the Atlas work is that it shows only presence and absence in a given degree square, rather than changes in numbers. The ringing data, covering 15 000 ringed and 450 recoveries, is remarkable for the occasional glimpses it gives of long distance movement (over 1 000 km has been recorded several times) and of flock cohesion, like the two birds ringed in Gauteng and recovered together in Malawi. One of the problems with interpreting the results is that the distribution of ringers has tended to be on a N/S axis rather than a NW/SE one and if the lapsed time between ringing and recovery is more than a few weeks, the result may be only after a two-way migration or a fanning out and concentration back has been completed.

As far as an increased sedentariness was concerned, the jury is still out because it requires very careful observation of the Quelea population to be sure that it has not been away for a few weeks and then come back again. The theory goes that if a given population is going to migrate, then it should do fairly soon after the first rains arrive in an area, causing the wild grass seed staple food of the Quelea to germinate so that it is no longer available. It is also a time when termites fly and these can be a useful food source if the Quelea wants to build up body fat for a migration. Perhaps ringers should look out for fluctuations in body weight as an indicator of movement, but these are complicated by the birds flying to roost with their crops full of a variable amount of food which can weigh around 1.5 gm for a full load. Alternatively consistent retraps in a small local population at this time would be a good indicator of residence if it continued right through a rainy season. It is also at these times that atlasers should be checking hardest to make sure that most or all of the birds are not moving out. The RTD recommended that efforts be made to target specific ringing areas such as the large roosts that build up in eastern Botswana after the breeding season is over and which may be a major source of the birds causing damage in South Africa. Perhaps a SAFRING expedition to these areas might be considered, if the necessary authorisations and support can be provided, followed by efforts to recover the birds further down the supposed route.

A couple of other matters were agreed to by the RTD. One was to establish an email network for Quelea workers (which includes ringers) and the other was to develop an updated bibliography of the species.

The email is already up and running. It is:
MAJORDOMO@LISTS.UCT.AC.ZA
command action: SUBSCRIBE QUELEA-L

We are looking forward to your comments and contributions! ***Eds.***