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## LEG 'CRAMP' AND ENDOPARASITES

by David S. Melville

The causes of leg 'cramp' in waders are not fully understood (WSG Bull. 24:24, 27:19-21, 28:15-16). Stanyard (WSG Bull. 27:19-21) reported that the three casualties out of 110 Curlews Numenius arquata caught were in a less advanced state of moult than the other birds and noted that 'this might indicate poorer condition'. However, Purchase and Minton (WSG Bull. 34:24-26) found that female Bar-tailed Godwits Limosa lapponica with much subcutaneous fat (i.e. in 'good' condition) seemed more likely to suffer from 'cramp' than males or juveniles.

During the winter of 1980/81, a total of 256 Redshanks Tringa totanus were caught at night in mist nets in central Thailand. Of these, nine suffered from 'cramp', despite being placed in tall keeping boxes (WSG Bull. 20:21-24) after capture, and were killed. A further four apparently healthy birds were also collected (two caught by the author and two from local bird nets. Of the latter, one was found freshly dead, and the other alive but with a dislocated leg). All specimens were prepared as museum skins. Brief examination of the carcasses revealed that five of the nine 'cramp' victims had some endoparasites (nematodes, cestodes, trematodes), and in several cases the burdens were heavy. None of the four healthy birds showed signs of endoparasite infestation. (All parasites are awaiting identification.) It is therefore possible that waders with endoparasite burdens and so possibly in poor condition, may be more liable to 'cramp' than waders in better condition. To further examine the possibility of a link between endoparasite burden and leg 'cramp', it would be useful if those people with access to 'cramp' victims examine them for endoparasites as well as determining general body condition.

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## INLAND WADER COUNTS - SECOND PROGRESS REPORT

by OAG Münster

The Inland Wader Count project has now been in existence for three years in some parts of Europe. On the one hand, this period is much too short to yield really valuable conclusions based on the data received so far, so it is not yet possible to give any final results. On the other hand, it is nevertheless admirable that, for such a long time, so many people have spared neither pains nor costs to count waders on wet, muddy and sometimes badly smelling sites week after week. We would like to thank all contributors to the project for their help given so far.

The main aim of the project in the next years must be to maintain the level of work which has been reached - i.e. it is very important to continue counting waders at those sites which are already involved in the programme. Only in this way can certain questions, like changes of numbers of inland resting waders be answered. The success of the project depends, as before, on the work of the volunteers and we hope that they will continue supporting the Inland Wader Counts in the next years.

The map (Fig.1) shows the distribution of counting sites. Sites, where counts were not regular, but a reasonable number of counting data are available or promised, are also included.

Presenting results of the project would be somewhat difficult at this moment, since computer storing of the data has not yet been finished and compiling the material by hand would be tiresome. For these reasons we tried simply to see what we could do with the data for one species which is widespread and numerous at nearly all sites - the Common Sandpiper Actitis hypoleucos. The following results are, of course, very preliminary, since most data came from one year only and, at the time of evaluation, not all data from all sites were available.

We briefly referred to resting numbers of Common Sandpipers in WSG Bulletin 29: 8-9. As mentioned there, this species does not show any tendency to build up large concentrations of birds at certain sites. Figure 2 shows that during the spring and autumn migration periods, resting numbers (totals of birds counted on the fixed counting dates - single missing numbers being interpolated) did not depend on the sizes of the resting sites (given as the estimated sizes, in hectares, of available mudflats and shallow water regions. Therefore, resting numbers of Common Sandpipers on the different sites are probably regulated by other factors than the extent of possible feeding grounds.