

The second party visited Iceland for four weeks at the end of July and beginning of August. The autumn Knot migration is spread over two months with smaller numbers than in May present on the west coast fjords at any one time. Flocks of 150 to 400 were seen and 204 caught and processed, including 15 controls (3 Wash; 5 Morecambe Bay; 1 Merseyside; 1 Heligoland; 5 Iceland, ringed by the first party). Other species caught by the second phase included 46 Oystercatchers (including one control from Morecambe Bay), 1 Ringed Plover, 4 Golden Plover, 15 Redshank, 1 Purple Sandpiper, 67 Dunlin and 2 Red-necked Phalaropes.

A full report of the expedition is in preparation and it is hoped to publish this within the next few months. As a result of the two expeditions to Iceland more than 1000 Knot are currently carrying Icelandic rings and all wader ringers in this country (and Western Europe) are urged to try to catch this species this autumn and winter. The value of any wader caught - not only controls - will, of course, be greatly increased if wing and bill length and weight are measured. A similar expedition to Morocco in autumn 1971 under the auspices of the University of East Anglia and the WWRG is being organised to continue this work on several wader species.

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How Many Dunlin must be Processed to Obtain Useful Results?

by A. J. Prater

This question is frequently asked when considering the balance between the need to gather information and the necessity of releasing the birds as soon as possible after catching them. In recent years large catches of Dunlin have been made with both mist nets and cannon-nets and it is now a question of some importance.

On the 2nd February 1970 an opportunity arose which enabled some answers to be obtained. On this date a catch of 556 adult Dunlin was made on East Plain Marsh, Morecambe Bay. As the day was fine and sufficient personnel (13) were present the whole catch was processed. At this time of the year only the northern race of the Dunlin, Calidris alpina alpina is present and hence we were dealing with a single population. The sex ratio of Dunlin is approximately unity (Prater in prep.) and hence the averages obtained should not be biased unduly by an uneven sex ratio.

The measurements were obtained by the methods outlined by the first meeting of the Wader Study Group, i.e. maximum wing, bill to feathers, and weight to the nearest gram. Two persons only measured, it was already known that both were consistent in measuring. The whole catch was processed within two hours and little change in weight could have occurred in that time, especially as the weights were taken to the nearest gram.

The mean and standard deviations of the whole sample was determined., Table 1, and then subsamples of 200 (2), 100 (5), 50 (11), 25 (22) and 10 (10) were taken and the means of each subsample compared with the true mean. The comparison was made by considering the percentage variation of each subsample from the true mean.

The results are set out in Table 11, together with the percentage of subsamples which deviated more than 1% and 2% from the mean.

As expected there is a decrease in variability with increasing size of subsample. The low variability of wing length and weight and the relatively high variability of bill length were all rather unexpected. The bill length is generally assumed to be a more consistent measurement but it is clear that although it has a small size difference when measured in millimetres, when compared by % difference the measurement has greater variability, a probable result of the small number of size classes of the measurement.

- 5 The variation in weight were quite small when sample sizes of 50 or more were considered but increased considerably in smaller samples.

SUMMARY

There is a decrease in variability of the sample with increasing sample size. However it is possible to give broad outlines of the number which should be processed.

Wing - samples as low as 10, but preferably 50, should give a close approximation to the mean.

Bill and Weight - if possible the sample size should be at least 50 but preferably 100.

Where large catches can be made and sufficient time is available a sample of 100 should be measured. However catches of 10 - 25 can also provide much information.

A Warning must be given and this is that the number recommended only refers to a winter population of a single subspecies. It is most probable that during the spring (March - May) and autumn (July - September or later) passage periods when other races may be present a much higher number is needed; then approximately twice the recommended numbers should be processed.

When taking a sample from a catch both new, retrap and controls should be treated alike otherwise a biased sample may result.

N.B. In order to increase the chances of a bird subsequently recovered having known measurements the larger the number of birds which can be processed the better.

WADER NETS

by C. J. Mead

Wader nets have been sold by the B.T.O. for about twelve years. They are of a heavier material and larger mesh (1½" knot to knot) than the other mist nets sold and are fitted with stronger shelf