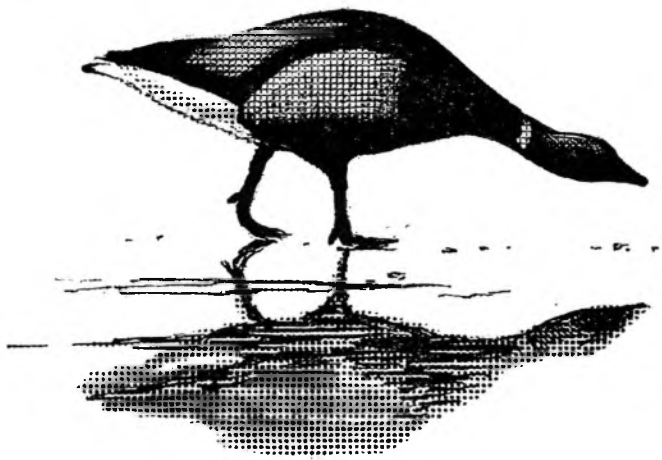
This summer the Kent Sand and Ballast Water was visited by Mr. Cooley, the President of the Colorado Sand and Gravel Producers, from Denver, Colorado. Mr. Wallis reports that he was far more interested in his native geese than in the equipment he had come to see and used up some 50 colour photographs on them! He returned to America enthusiastic about industrial ballast waters being used as wildfowl reserves.

This concludes our account of an experiment which has shown how the Wildfowl Trust, wildfowlers and industrialists can all combine together. We believe that industrial ballast waters can play a big part in the British wildfowl scene and the enthusiasm shown by all the workers on those in west Kent has been most encouraging. We look forward now to watching these Canada Geese as they establish their new traditions and hope to continue our experiments with other suitable species of wildfowl.



BRENT GEESE IN ESSEX, 1957—1958

P. J. K. Burton

IN the 9th Annual Report (pp.175-179), an account was given of work on the proportion of first-winter birds in flocks of Brent Geese in Essex. Similar observations have been made during the winter of 1957-58, and these are dealt with below.

Results

The method of estimation, using the numbers of first-winter birds in samples of 50, has been continued. A greater number of samples than in previous years have been obtained, and these came from several localities as follows:

Foulness	22 samples
Stansgate (S. Blackwater)	5 samples
Osea I. (N. Blackwater)	4 samples
Holbrook Bay, Suffolk (Stour estuary) ...	2 samples
Dengie	1 sample
Total	34

The counts cover the period 9 November 1957 to 15 March 1958. The mean number of first-winter birds per sample of 50 for 1957-58 was 26.32, with a standard deviation of 5.53, and standard error of the mean 0.95. There were no significant differences between the counts for different areas, or on different dates.

These figures indicate a proportion of first-winter birds in the population of about 53%. A few brood sizes only were counted, and do not give a significant figure for the winter.

Discussion

The results of the counts for the winters 1954-55 to 1957-58 are set out in Table I.

TABLE I

Season	Total count	Number of 1st winter birds	Mean Number	S.D.	S.E. of mean	Number of samples
1954–55	776	314 (40%)	—	—	—	—
1955–56	2020	522 (26%)	13.26	6.40	1.19	29
1956–57	1484	97 (7%)	3.52	3.90	0.78	25
1957–58	1810	955 (53%)	26.32	5.53	0.95	34

It will be seen that the proportion of first-winter birds in 1957-58 is the highest yet recorded. This figure differs significantly from those in the two preceding winters, but may represent a similar state of affairs to that in 1954-55, when the method of estimation by samples was not yet in use.

Two principal reasons for this high percentage may be advanced. In the first place, the summer of 1957 was undoubtedly a good breeding year for the Brent wintering in Essex. In support of this, the wildfowl counts for the county reach a maximum total of 5070 Brent on 19 January, 1955.

Secondly, the year preceding (1956) was a very bad one for Brent, as shown both by wildfowl counts, and counts of first-winter birds. This would have the effect in 1957-58 of reducing the proportion of sexually immature birds in adult plumage, with a corresponding increase in proportion of first year birds.

The high proportion (40%) in 1954-55, when the wildfowl count reached a maximum of 6089 on January 23rd must also indicate a good breeding year in the preceding summer (1954). Again, though, it may have been partly due to a poor season two years before (1953). This possibility is suggested by low wildfowl count totals in the winter of 1953-54, and by three small adult/first winter counts (not mentioned in the previous Report), which total 192, with 28 first-winter birds (14.6%).

The general picture so far then is tending to suggest that there has been a slight increase in numbers over the last 5 years. This is probably at least in part due to protection. However, present information does not seem to justify resumption of shooting for some years yet.