

TABLE A3. Annual difference in clutch size in Wytham 1960-69.

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
Mean difference	+0.3	-0.7	nil	+0.8	+0.7	+0.6	-0.2	-0.2	-0.3	-0.4

three other areas were calculated by comparing them with  $\frac{1}{3}$  mean clutch Marley +  $\frac{2}{3}$  mean clutch Great Wood, and then averaging over years, as in table A2.

The effect of year, which includes effects of date and density, was based on the value for Marley Wood + 0.2 in 1960, and on  $\frac{1}{3}$  Marley +  $\frac{2}{3}$  Great Wood for 1961-69. The effects are given in table A3.

*Habitat.* Differences in habitat type, classified as "good" and "bad," within each area produced a small, but only just significant, difference (mean weighted difference  $0.17 \pm 0.08$  eggs), which was not considered worthwhile applying as a correction factor in the present analysis. The classification into "good"

and "bad" was made subjectively by the authors, and is not comparable to that of Krebs (1970), who used consistently occurring extreme values for clutch size as criteria for habitat quality and ignored middle values.

*Corrections applied.* To allow for the effects of "area" and "year" the effects calculated above in tables A2 and A3 were subtracted from each observed clutch size. To allow for the effect of the age of the female, 0.3 eggs was added to the clutch of a yearling and subtracted from that of an older bird.

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## AN UNUSUAL HOUSE SPARROW ROOST

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On numerous occasions through the winter of 1970-71, I observed a dozen or more House Sparrows (*Passer domesticus*) entering a subterranean transformer vault shortly before nightfall. The vault, next to a building on the campus of Tarkio College, Tarkio,

Missouri, was ca. 3 m deep, with an opening in the top ca.  $2 \times 15$  m which was covered by an iron grate flush with the surface of the ground. The birds entered through the grate and roosted under protection of the overhanging concrete roof about 1 m below the ground's surface.

Although the House Sparrow is very adaptable in its roosting and nesting sites, this situation seems unusual even for this species.

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## PREDATION OF XANTUS' MURRELET BY WESTERN GULL

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At about noon on 4 May 1972, while passing between the main north and south Coronado Island aboard a sports fishing boat, I observed a Xantus' Murrelet (*Endomychura hypoleuca*). The boat returned to this position about half an hour later, where what was presumed to be the same bird was observed. The boat slowly turned and stopped. The bird was swimming away from the boat calling continuously in a typical manner, reminiscent of a passerine. Suddenly one of several Western Gulls (*Larus occidentalis*) in the area swooped down and with open bill scooped the murrelet out of the water. The murrelet struggled

briefly waving a leg and wing, but was almost immediately swallowed whole by the gull. The murrelet appeared to be in full adult plumage and healthy condition.

A. C. Bent (Life histories of North American gulls and terns, Dover Publ., Inc., New York, 1963) and F. M. Bailey (Handbook of birds of the western U.S.A., Houghton, Mifflin and Co., Boston, 1902) suggest that the food of the Western Gull consists of eggs of murre (*Uria*), cormorants (*Phalacrocorax*), pelicans (*Pelecanus*), sea urchins, crabs, fish (often stolen from nests), and sometimes rabbits and young murre. Bent also remarks (quoting Bryant 1888) that they will scavenge the bodies of dead murre. Although adult Xantus' Murrelet may be as small as some young murre (8 inches), the observation of a Western Gull taking an adult which would be capable of flight or diving is of interest.

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