

DISCUSSION

The abandonment of a series of nests at the beginning of the breeding season, and of single nests during it, has not previously been recorded for the species, and can be brought about by periods of mild weather alternating with wet and cold. Whilst bad weather causes the abandonment of both completed and unfinished nests, it does not necessarily inhibit building activity, for pairs were often found working on a new nest while the conditions causing abandonment still operated. A brood of three nestlings is recorded as taking 16 days to fledge, compared with a maximum of 15 in earlier observations; whereas broods of four took 12 days 11 hours and 12 days 18 hours respectively, due probably to lack of room in the nest; but early fledging does not prejudice the chances of survival to independence, all of a clutch of four surviving to this stage. Successful survival of single nestlings, one of which fledged in only 11 days 17 hours was recorded previously (*Notornis* 12, 135).

An exact 24 hourly cycle of laying is indicated by these observations; but if the rhythm is upset by a fall in temperature during the laying of a clutch, the cycle continues to operate, but at the later hour each day. The second use of the same nest is exceptional due probably to the almost invariable breeding of ectoparasites in the nest. All nests examined have been infested to some degree; and in the instance of second use recorded above, it is doubtful if the interval of less than four days between the fledging of one clutch and the laying of the first egg of the next was sufficiently long for the parasites to die.

One pair under observation laid four clutches of four eggs, from which probably 15 young fledged. This compares with a pair on the same territory in 1959 (*Notornis* 12, 129) which produced 16 eggs in five clutches, from which 15 young fledged, and draws attention to the extraordinary fecundity of the species under favourable conditions.



SHORT NOTE

WELCOME SWALLOWS TRYING TO NEST IN A BOAT
IN KAIPARA HARBOUR

On 29/8/66 a pair of Welcome Swallows was sent to the Auckland Museum for identification. In an accompanying letter details were given of the circumstances under which the birds were obtained.

Mr. L. W. Dudding, who sent the birds in, is the owner of a launch which he keeps moored at Port Albert, on the Oruawhara River, an arm of the Kaipara Harbour. During one of his trips out to the launch he found bird droppings in the cabin, and on a rack the beginnings of a nest. The droppings and nest were cleaned away and the porthole through which the birds had entered was closed. However, on returning to the launch a few days later more droppings were found, and also the pair of dead Welcome Swallows. They had apparently been in the cabin unknown to Mr. Dudding and had died of starvation after his departure.

Welcome Swallows have now been reported widely 'on the Kaipara' and are known to have been nesting successfully at Tapora since 1964, about 15 miles southwest of Pt. Albert.

— LOIS J. WAGENER