

WINTER NESTING OF PIED STILTS IN SOUTH AUCKLAND

1. ARDMORE, 1954

Nesting which took place on my farm at Ardmore in 1954 was much earlier than usual. The first two nests hatched on 24/8/'54, broods of four and three being produced. At this date there were six other nests with eggs. A total of seventeen chicks was reared for the season.

The date of the laying of the first egg can be determined within a very few days. Allowing the average incubation period of 25 days (See A. F. Stokes, *Stilts Nesting at Ardmore*, "New Zealand Bird Notes," III, 108) gives July 30th as about the beginning of incubation. In the event of daily laying the first eggs would most likely have been laid on July 27th, incubation starting on the 30th, the day the last egg was laid. The date of the first egg could be earlier (a) if, as often happens, the bird took five days to complete the clutch, (b) if incubation started later than the day the last egg was laid, (c) if hatching took place a day or two later than the average.

— A. F. STOKES

Prior to 1954, when A. F. Stokes recorded eggs in late July, the earliest local nests with eggs of the Pied Stilt (*Himantopus h. leucocephalus*) have been found in August. At Miranda a first egg of a clutch of four found on 24/8/'47 could not have been laid later than 21/8/'47 and another clutch of four on 26/8/'51 could not have been started later than 23/8/'51. At Clevedon Mr. R. R. Clow reported a clutch of four on 19/8/'49, the first egg of which could not have been laid later than 16/8/'49. These nests were all lost so there was no hatching date to help to determine the actual date of laying. In the literature up to 1955 which we have searched we have found no earlier dates than these. 1956 has produced remarkably early winter records from several places, indicating that the season was quite abnormal. Possibly the very wet winter, with only short spells of cold weather, made food plentiful and induced early breeding.

2. MIRANDA, 1956

On 12/7/'56 a party of O.S.N.Z. members doing a routine check of the birds of the Miranda coast found at the fresh pools a nesting colony of Pied Stilts. The colony was new so the first egg was probably not laid much earlier than 9/7/'56. It was found on 28/7/'56 that every nest had been flooded and no further breeding attempt had then been made.

Three strongly flying young of the season seen at the pools on 9/9/'56 (R. B. Sibson) would have come from eggs laid at the beginning of July, allowing a minimum of four days for laying twenty-five for incubation and forty to forty-two for hatching to flying, the latter being estimated at the winter rate proved elsewhere for 1956. Since these three young birds were most likely bred inland and then brought to the coast by their parents, as is quite usual with the species, they would when seen have been flying for one or two weeks or even more. This would put the probable date of the first egg back to the middle of June.

— H. R. MCKENZIE

3. CLEVEDON SOUTH, 1956

NEST No. 1. July 12th:—On this date I visited Miranda with a party of fellow bird watchers, and we found the stilts there were already nesting. On returning home I decided to investigate the stilts in a wet paddock just below my house. To my surprise and delight, I found a nest with four eggs. Any display at all was only shown by the male bird; the female quickly returned to the nest to resume her incubating duties. I visited the nest each day up to July 31st, on which day four chicks hatched. At 2.15 p.m. I noticed the hen bird making two trips from the nest carrying egg-shell away. At 3 p.m. there were two very alert chicks, quite dry; the third still damp and fourth, visible through a large crack in the shell, was still in the process of hatching, very much alive and anxious to see more of the world outside

August 1st. 11 a.m. no chicks in nest. Much more display was now being shown. Aug. 3rd and 4th. On these dates we had a very bad storm; high winds, heavy rain and very cold. How the chicks survived this is unknown to me as the paddock was well covered with surface water, but they were all present when the storm was over. A few days after the storm the chicks disappeared. As we had a large number of Pukeko in the same paddock I feel they must have at least been partly to blame because they, along with Harriers, had been frequently worrying the stilts.

NEST No. 2. Found July 18th with 3 eggs. August 11th two were hatched and the third addled. These chicks were taken away to an area beyond my reach.

NEST No. 3. July 31st. Nest with 4 eggs. August 23rd 4.45 p.m. one egg was chipped. August 24th 10.30 a.m. all eggs were chipped. I visited the nest again at 3 p.m. and all chicks were hatched. This brood also moved away, so unfortunately I have no record of the time between hatching and flying. This pair of Stilts was the fiercest I have known. I only needed to step outside my back door and they would come swooping down on me. The day the chicks were hatched one of the pair came as close as three feet from me and determinedly stood its ground, letting me know in no uncertain terms that my interest was not appreciated.

NEST No. 4. August 1st. A neighbour Mr. D. H. Hunt, a mile south-west of me, found a nest of 4 eggs. These were later destroyed by cattle.

NEST No. 5. (D.H. Hunt). August 1st Nest containing 1 egg. Four eggs seen six days later. August 29th 3 eggs chipped. One had rolled out of nest. August 30th 3 eggs hatched. Sept. 1st chicks taken by parents to another farm.

INCUBATION RECORD. No. 5 nest gives the only record of winter incubation. Allowing four or five days for completion of the clutch and beginning of incubation, the period would be 26 or 27 days. The records of A. F. Stokes are 23 to 27 days, with an average of 25 days in the normal breeding season. This case therefore does not indicate a longer incubation period for winter nesting. It was not however one of the earliest of the winter nests.

FIRST LAYING DATES. Allowing the minimum of 4 days for completion of clutch and 25 days for incubation, according to the average mentioned above: No 1 Nest, July 3rd. No. 2 Nest, July 14th. No. 3 Nest, July 27th. No. 4 Nest. Prior to Aug. 1. Nest destroyed. No. 5 Nest. Aug. 1st (29 days from first egg to hatching).

— (Mrs.) L. M. RENOUF

4. ARDMORE, 1956

The members of my family watched the birds each day but only prominent dates have been used for this account. The broods are numbered according to age, but the nests according to date found. The term "Nursery" describes a wet hollow containing most of the nests.

BROOD No. 1 (Nest not known.)

- Aug. 6 One large chick seen twenty yards from "Nursery." Age estimated by H.R.McK. to be not less than three weeks.
- Aug. 8 Another of same size seen with the one of Aug. 6. These were about twice the size of those of Brood No. 2.
- Aug. 17 Flapping wings and hopping. Up to date had been regularly seen in same area near a ditch.
- Aug. 19 Only one left. Out of usual area and being chased by an adult pair. Unable to fly. Parents not present. Perhaps the other chick had flown and the parents had gone away with it.
- Aug. 21 Seen near cowshed, alone, not flying.
- Aug. 23 Alone again, looking dazed and lost. No adults did anything to help it when we went near. Flapped but could not fly when chased.
- Aug. 25 Still not flying.
- Aug. 26 Flew about 150 yards when disturbed.
- Aug. 28, 29 Flew well in large circles and was not seen again.

BROOD No. 2, Nest No. 4, "Nursery"

- Aug. 1 Adult apparently brooding chick in grass about 50 yards from Nursery. A large piece of eggshell was nearby but no nest.
- Aug. 2 Adult brooding as before. One chick found, $1\frac{1}{2}$ weeks old. By the area occupied from this date to flying these are thought to have come from a used empty nest found on July 31 in the Nursery (No. 4).
- Aug. 28 Two chicks often seen in above area up to date.
- Aug. 29 Upper wings dark. Stretching wings.
- Sept. 4 Nearly ready to fly.
- Sept. 8 Two seen. One flew when chased. The other could not.
- Sept. 10 Both flying.
- Sept. 14 Last seen. These chicks were of normal size when they flew.

BROOD No. 3, Nest No. 1, "Nursery"

- July 30 4 eggs.
- Aug. 2 Hatched. Two survived. (See Brood 5 for flying date.)

BROOD No. 4, Nest No. 6, "Nursery"

- Aug. 1 3 chicks, 1 egg.
- Aug. 2 Egg chipped.
- Aug. 3 Very bad storm. Bird on nest all day.

- Aug. 4 Storm continued. Nest not visited for fear of causing harm.
 Aug. 5 Nest empty. Mother and chicks returned to nest to roost for several nights from date. Other broods returned at night once or twice only. 3 chicks survived to fly. (See Brood 5 for flying date.)

BROOD No. 5. Nest No. 7, 30 yards N.W. of "Nursery"

- Aug. 1 1 chick and 1 egg in nest. Two other chicks must have been hidden in grass.
 Aug. 4 4 chicks seen. These kept apart from other broods. One lost in first eight days. Three finally flew.
 Sept. 11 6 chicks of Broods 3, 4 and 5 flew.
 Sept. 12 1 flew.
 Sept. 14 1 flew. (Total 8 survivors of the three broods.) The last one was thought to have been able to fly before the 14th. The chicks of Brood 5 were noted to stay small for a long time, then grow quickly from 26th to 29th in period of fine weather. The chicks of these broods were all much under-sized when they flew.

BROOD No. 6. Nest No. 2, "Nursery"

- July 31 2 eggs. Incubating.
 Aug. 3, 4 Storm. Bird still sat.
 Aug. 11 Not traced further.

BROOD No. 7. Nest No. 8, 55 yards West of "Nursery"

- Aug. 8 3 eggs.
 Aug. 26 Left nest with 2 chicks. Not seen further.

BROOD No. 8. Nest No. 9, "Nursery"

- Aug. 8 Bird sitting.
 Aug. 11 4 eggs seen.
 Aug. 28 Left nest.
 Sept. 2 2 chicks seen. Not traced further.

NEST No. 3, "Nursery"

- July 31 Thought robbed by hawk. Remains of 3 or 4 eggs.

NEST No. 5, "Bull-paddock"

- July 31 Pair seen at nest. Two Harriers settled near nest. Stilts chased one away and the other ate the two eggs.

NEST No. 10, "Bull-paddock"

- Sept. 1 The pair of Nest No. 5 (presumed to be the same) incubated 4 eggs from date to Sept. 27. The 3 chicks were almost certainly taken by pukeko.
 For the purposes of this article this nest cannot be classed as "winter."

SUMMARY

No incubation period was obtained.

Hatching to flying period:

Brood No. 3 — 2 chicks 40 days.

Brood No. 4 — 2 chicks 41 days. 1 chick not definite.

Brood No. 5 — 3 chicks 41 or 42 days.

This winter period is on the average 9 days longer than that given for the normal season by A. F. Stokes.

Another notable matter is that the 8 chicks of Broods 3, 4 and 5 were little more than three quarters of normal size when they flew, whereas the earlier ones were of full size.

First eggs laid:

Brood No. 1 — June 17 approx.

No. 6 — July 13.

No. 2 — June 23 approx.

No. 7 — July 29.

No. 3 — July 2.

No. 8 — July 31.

No. 4 — July 3

Nests No. 3 — July, date unknown

No. 5 — July 3.

No. 5 — July, date unknown

— (Miss) B. L. GOERTZ

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GENERAL SUMMARY

There is proof of seventeen nests having contained eggs at various times between the middle of June and the last day of July. The nests were divided between two districts and were in five separate groups.

The only record of laying to hatching did not indicate a more lengthy period than the normal one for the spring.

The survival of newly hatched chicks through a long severe winter storm was most surprising.

The hatching to flying period was on the average nine days longer than normal. The small size at the first flying of the last eight birds, from three different broods, has not been previously experienced by the observers.

— H.R.McK.

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BIRDS OF CHATHAM ISLAND AND PITT ISLAND

By C. J. LINDSAY, W. J. PHILLIPPS and W. A. WATTERS

These notes were the result of a short stay at Chatham Islands by two of us (C.J.L. and W.J.P.) and a much longer stay (29th January to 26th May, 1957, by W.A.W.). Our general impression is that the bird population in the past twenty years has become depleted as farming has improved and cultivated areas increased to the detriment of bush clad areas

North of a line joining Waitangi and Owenga the areas of bush remaining are almost without exception in poor condition and without undergrowth. In one or two localities small areas have been fenced off from stock; the best example of this is on the property of Mr. A. Weisner, Kaingaroa, where an area of about 100 acres, partly bushed, partly in open grassy country, has been protected in this fashion.