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Variable Oystercatchers nesting at Waikanae Estuary, 1971-1989

Variable Oystercatchers (Haematopus unicolor) used to breed regularly at Waikanae Estuary but had not done so for several years before the summer of 1971-72, when a nest was found and later two chicks were reared to independence. From then until 1989 the parents of these chicks have nested regularly. The male is pure black and the female smudgy or dirty pied; and they have become known to regular birdwatchers as "The Home Pair". As they are not banded, I cannot prove that they are the same two birds, but the 1988 pair looks very like photographs of the 1978 and 1983 birds and they stay at the estuary all year.

These birds will not tolerate another pair nesting at the estuary. They attempt to keep the whole area free from other oystercatchers throughout the breeding season, but by late summer they seem to tolerate visiting birds, both SIPO (*H. ostralegus finschi*) and Variable Oystercatchers. During the autumn and winter the number of oystercatchers builds up at the estuary, but the Home Pair can usually be recognised among them.

I have taken the following data from a field diary by Charles and Peg Fleming that records visits to the estuary from 1971. The visits were irregular, to record all birds, and no special study was made of the oystercatchers.

Table 1 summarises the breeding of this pair of Variable Oystercatchers at the Waikanae Estuary. A nest was 'successful' if one or more chicks survived to independence.

TABLE 1 — Summary of breeding

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1971-72 Successful 2 chicks, both pied
1972-73 Successful 2 chicks, both pied
1973-74 Failed
                   Nest with 5 eggs found 13 Jan, later deserted
1974-75 Successful 3 chicks, 1 black 2 pied; 1 pied died
1975-76 Successful Nov nest failed, Dec nest survived; 1 pied chick
1976-77 Successful 1 pied chick survived
1977-78 Failed
                   2 chicks, 1 black 1 pied; both died in NW storm
                   2 nests both destroyed by very high tides and storms
1978-79 Failed
                   Nest north end, flooded; stormy season
1979-80 Failed
1980-81 Successful 2 chicks, both black
1981-82 Successful 1 chick, pied
1982-83 Successful 2 chicks, 1 black, 1 dark pied
1983-84 Successful 2 chicks, both pied, survived 5 weeks; then 1 found dead
                   Nest at north end, flooded twice
1984-85 Failed
1985-86 Failed
                   Nest at north end
1986-87 Successful 2 chicks, fully pied; nest at south end
1987-88 Successful 2 chicks, fully pied; nest at south end
1988-89 Failed
                   Birds sat on 3 eggs from 12 Nov to 1 Feb; eggs addled
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In the 18 seasons, 11 nests were successful and 7 were failures. Of the 22 chicks hatched, 17 were pied and 5 were black. Of the 22, 18 grew to independence; of the 4 that died, 3 were pied and 1 was black.

Notes from the diary

1971-72: On 12 Dec, the pair had two running chicks. By Dec, the chicks were well grown, both very pied but not properly feathered. From 24 Jan, two flying juveniles were seen at the estuary, with their parents until 8 April.

1972-73: On 26 Nov, the pair had two chicks, which ran and swam in the lagoon. On 28 Nov, the chicks were described as "pied as possible" i.e. fully pied. On 17 March, the adults were seen with one chick only; the other may have left or died.

1973-74: No observations from September to January. On 13 Jan, a nest with 3 eggs found, but on 21 Jan, the pair had separated and were well away from the nest site; cause unknown.

1974-75: On 27 Dec, the pair had three well-grown chicks, one dark and two probably pied. By 26 Jan, only two chicks were with the parents, one black and one pied. The family was last seen on 28 March.

1975-76: On 20 Nov, the pair had a nest with three eggs, but on 28 Nov, the adults were not at all demonstrative when we handled the eggs, which were probably overdue. On 7 Dec, a new nest had three eggs, and on 1 Jan, Max Falconer found the Home Pair with one chick. On 24 Jan, the chick was "pied downy" and it was "running not flying". The family remained together until at least 20 March.

1976-77: On 30 Oct, the pair were copulating with the black bird on top of the pied. By 6 Nov, they were on territory and on 20 Nov their nest was found with three eggs. On 17 Jan, they had a very pied chick, which was flying by 22 Jan.

1977-78: On 11 Nov, the pair had a nest. On 26 Nov, they were sitting but excited and playing with the eggs and so we expected hatching. The next morning two chicks and one egg were in the nest but by late afternoon the chicks had left the nest. The parents were very aggressive. On 10 Dec, they had one pied chick and one black. By 27 Dec, the chicks had disappeared, probably because of heavy northerly storms. By 6 Jan, the pair had a new nest and one egg, but by 15 Jan, the nest had gone.

1978-79: The pair lost their first nest in a very high tide on 16 Nov. On 16 Dec they had a nest with three eggs, but by 24 Dec they had gone and the nest site was again covered by the tide. It was a very stormy summer.

1979-80: The pair had a nest with one egg at the northern end of the estuary on 16 Dec and two eggs on 21 Dec. On 24 Dec, spring tides surrounded the nest, but it survived and on 30 Dec the Oystercaters were still sitting in a cold southerly wind. Later the nest was destroyed. Another stormy summer.

1980-81: On 14 Dec, the pair had a nest with three eggs at the southern end of the estuary. On 26 Dec, the nest had one chick, one egg chipping and one still intact. At 8 a.m. the next morning Max Falconer found the third egg hatched but only two chicks. The family was seen during January and February and the fledglings were almost flying on 8 Feb (42 days after hatching). Alan Tennyson noted that the chicks were black. The juveniles were no longer with the parents on 4 April.

1981-82: On 15 Nov, the female of the pair was incubating three eggs. On 5 Dec, there were three chicks about two days old, but by 20 Dec only one pied chick had survived and the male bird was limping (dogs?). By 17 Jan, the fledgling was probably capable of flying but we did not test it (45 days). The family was seen together till mid-April.

1982-83: On 20 Nov, a very high tide washed over the site of the Home Pair's nest, but by 28 Dec, they had a new nest with three eggs and both parents were defending vigorously. On 1 Jan, the nest had two live and one dead chicks. On 23 Jan, one black and one partly pied chick were with the parents. They were flying on 20 Feb. The family was last seen together in early April.

1983-84: On 3 Dec, the pair's nest had two chicks, the female incubating the third egg. The next day the chicks had left the nest and the egg was abandoned. On 28 Dec, the two chicks were being fed on pipis brought from the beach by the parents, and on the 29th they were seen to swim across the river to join the parents. Both chicks were very pied, like SIPO. On 12 Jan, Alan Tennyson found one chick dead beside the river. The other chick survived. On 18 March it was seen to have an orange bill and dark grey legs. By 8 April it had left its parents.

1984-85: No nest was found in November. On 8 Dec, the pair were behaving territorially but the female had an injured left foot and was limping badly. A nest was found on 12 Jan, after a severe storm. One egg was in the nest and a second just outside, which we replaced. The eggs were incubated until 17 Jan, but they had gone on 18 Jan, although the parents were still defending vigorously. On 19 Jan, the nest was empty and deserted. We suspected magpies had predated the nest.

1985-86: On 17 Nov, the male was incubating three eggs. On 21 Nov, only two eggs were in the nest and the birds were defending vigorously. They incubated until 26 Dec, even though the eggs should have hatched at least 10 days earlier. By 30 Dec the eggs had gone and the nest was deserted. We suspected predation by magpies.

1986-87: Although we did not find the nest, on 2 Jan the pair had two large downy chicks. By 6 Feb, they were two fully pied juveniles with black-tipped red bills. The family was seen together on 22 Feb, but by 17 April only one juvenile remained with the parents.

1987-88: We found the pair's nest with two eggs on 2 Jan and three eggs on 4 Jan. They hatched during the late afternoon and night of 28 Jan because at 9 a.m. on 29 Jan, two fluffy chicks were 3 metres from the nest. Jean Luke and Bice Tennyson watched the family closely for the first weeks. Both chicks were fully pied. By 9 March, they were learning to fly. On 27 March the juveniles were feeding on an island in the river. They could catch bivalves but were unable to open them without help from a parent. On 5 May, one juvenile aged about 14 weeks left the parents. The second stayed with the parents begging for food for several more weeks, until the parents drove it off in early June.

1988-89: On 12 Nov, we found the Home Pair's nest with three eggs. In spite of severe gales throughout most of November, the birds continued to sit. The eggs were due to hatch between 5 and 9 Dec, and on 11 Dec hatching seemed about to take place, the parents being reluctant to leave the nest. The hatching did not take place and the birds continued to sit. On 24 Dec, we removed the smallest egg and on investigation Peter McKenzie thought that the embryo had died at about the end of the second week. We did not interfere further with the nest, and the pair continued to sit until 1 Feb, 9½ weeks past the hatching date. On that day we took the eggs.

PEG FLEMING, 42 Wadestown Rd, Wellington



Several respondents to DSIR Ecology Division's national survey of wasps in New Zealand (Clapperton et al., in press) noted wasps feeding on dead adult or nestling birds. The birds were found dead either in the nest or on the ground, and so it was not known whether the wasps had killed the birds or were scavenging. However, Mr Ron Winstanley told me of seeing "two or three dozen" wasps attack and kill newly hatched Hedgesparrows (Prunella modularis) at Tennyson Inlet, Marlborough Sounds. At that time (November or December in the early or mid 1970s) almost certainly only German wasps (Vespula germanica) were there (Perrott 1975, Donovan 1984, Clapperton et al., in press).

Mr Winstanley watched the attack through a window a few metres from, and about level with, the nest, which was in a Cotoneaster shrub. Alarm calling by the adults drew his attention. At first one adult was sitting, while the other repeatedly flew near the nest, which was surrounded by flying wasps. Eventually the sitting adult also took wing, and they both swooped back and forth, alarm calling, but not again settling near or on the nest. At least one of the three or four chicks was seen moving, but all were dead and being eaten by the wasps by the time Mr Winstanley approached the nest closely. The nestlings were wet from the egg. Mr Winstanley suggested that the smell of the egg albumen might have attracted the wasps to the nest and triggered the attack.

Social wasps have twice been seen to kill newly hatched chicks overseas (Wild 1927, Grant 1959) and once even to fell an adult hummingbird on the wing (Grant 1959). It is possible that wasps kill nestlings much more often than the few records suggest because they attack the prey rapidly and extensively scavenge the flesh. After a short time the only sign remaining in the nest would be the chick's skeleton. Cameras triggered by treadles, broken light beams or tracking devices are sometimes used to show whether rats, possums, cats, or mustelids prey on eggs or nestlings (Moors 1978); such means would not detect wasp attacks.