

White-fronted Terns in South-eastern Australia in 1959

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The White-fronted Tern (*Sterna striata*) is generally considered an uncommon non-breeding migrant from New Zealand to south-eastern Australia. Prior to 1959 known occurrences in Victoria were comparatively few (1946, 1951, 1958). However, there can be little doubt that the species is a regular annual visitor, or migrant, to Victorian waters and that it is present at certain times of the year in greater numbers than is indicated by published records. Likewise many likely haunts of these coast-frequenting Terns are seldom visited by interested and experienced observers.

During 1959 White-fronted Terns were reported in numbers greatly in excess of any previous records. Approximately 50 per cent of the birds seen or collected in Victoria were in "adult" plumage, as were birds noted along the coastline of the Illawarra District, south of Sydney, N.S.W. (A. R. Sefton, *in litt.*). This is a much higher proportion than was known to be the case in past years, when most of the birds observed in the field, or collected as derelicts, were yearlings, i.e. birds with dark shoulder patches.

At Long Reef, near Sydney, the number of birds in adult plumage seemed to be about the normal figure which is somewhat less than 5 per cent of the population (G. Chapman, *in litt.*).

PLUMAGE PHASES

Beach-washed specimens examined by A. R. McEvey (National Museum) and the writer can be placed in the following categories—(a) yearlings or juveniles with brown mottling on the wings; (b) birds which, lacking the mottling of juveniles, were approaching adult (?) breeding plumage. All had the crown and forehead mottled in varying degrees as in eclipse plumage (1946, pl. 19, top and middle figures) and the streamer feathers of the tail present in varying lengths. Since it is considered most likely that the majority of the birds wintering in Australia are first year birds together with a lesser number of second year birds, it is assumed that the specimens in the present category represented first or second year birds (probably chiefly the latter) entering breeding plumage prior to returning to New Zealand. Generally, and in one case in particular (National Museum specimen w 4878), the freshness of the plumage is indicative of a recent growth of feathers.

A roseate flush on the throat and breast was found in both yearlings and (?) adults. In some cases, the flush persisted for a period of some weeks, in a prepared skin.

Information enabling the observer to distinguish between the summer plumages of first and second year birds is much

needed. One also wonders whether a second year bird in eclipse plumage (*i.e.* a bird in its second winter) differs much from a fully-adult bird (*e.g.* over two years) in eclipse plumage. That such adults may occasionally winter in Australia is suggested by the recovery of a banded bird in its sixth year at Dromana, Vic. (1959). No evidence to suggest that any adult bird winters in Australia in breeding plumage has been found.

MORTALITY

Severe storms occurred in Victoria during the first half of August, 1959. The most intense was on August 5, when wind gusts were reported to exceed 90 m.p.h. at Point Henry, 75 m.p.h. at Laverton, 74 m.p.h. at Mt. Gambier (S.A.) and 65 m.p.h. at Melbourne. The storms, all of a predominant westerly type, were responsible for a very high mortality of sea-birds. Of the 55 White-fronted Terns found beach-washed in Victoria, about 52 can be attributed, from the date of collection and condition of the specimens, to the August storms. The other three specimens collected are probably referable to the normal winter mortality.

BANDED BIRDS RECOVERED

Two banded White-fronted Terns were recovered in Victoria in 1959. One found at Dromana on August 21, was banded as a fledgling at Lake Ellesmere, South Island, New Zealand, on January 1, 1954. This is the 'oldest' White-fronted Tern recovered within the Ornithological Society of New Zealand's banding scheme. The other bird, recovered at Lorne on August 8, was banded as a fledgling at Kaikoura Peninsula, South Island, New Zealand, on December 21, 1958. In addition to the Victorian recoveries, four banded birds (all yearlings) were recovered in New South Wales (F. C. Kinsky, *in litt.*).

FIELD OBSERVATIONS

Victoria

During the last week of May and the first two weeks of June 1959, small numbers of White-fronted Terns appeared along the east coast of Port Phillip Bay. In an endeavour to discover the extent of the "invasion" an appeal for information was made to members of the Bird Observers Club. Records were also requested from several well-located ornithologists. The information obtained is summarized hereunder.

Lakes Entrance—1 dead, June 15; and 6 (4 dead), August 27.

Cape Patterson—2 dead, September 6.

Phillip Island—21 (5 dead), August 9; and 18 (1 dead), September 6.

Portsea—1 dead, August 8.

Dromana—1 dead (banded), August 21.

Bayside Suburbs east of Melbourne (from Port Melbourne to Mentone)—42 reports of up to 25 birds from May 29 to October 20. Several beach-washed birds were found.

Altona—3 reports of up to 7 birds from July 12 to August 16.

Werribee (Spit, Metropolitan Farm)—5, June 28.

Lorne—1 dead (banded), August 8.

Warrnambool—1 dead, August 16.

Port Fairy—Over 20 dead during August and September.

Portland—20 dead, August; and a flock of 10 seen on August 8.

Wyperfeld National Park (approximately 200 miles inland)—1 dead, September 20 (1960), probably forced inland during the August gales.

New South Wales

On the Illawarra (southern N.S.W.) coastline, White-fronted Terns were noted in much larger numbers than usual. On August 2, 1959, from an elevated position on Windang Island, a thousand birds were actually counted. They constituted only a portion of the total number within binocular range. Two separate groups, of 90 and 123 respectively, were counted resting on the mainland beach behind the island later in the day and of these almost 50 per cent were in (?) adult plumage (A. R. Sefton, *in litt.*). No great increase in population was noticed near Sydney or further north. Normally, however, the birds mainly frequent the southern New South Wales coastline and numbers rapidly diminish as one proceeds north of Sydney. As far as could be ascertained no White-fronted Terns were reported from South Australia or Tasmania. However, this could be due to a lack of observers.

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