



thological Society of New Zealand) but also in other scientific publications. One of its claims to distinction is that from its shores come the first records in New Zealand of some long distance travellers, namely Asiatic black-tailed godwit, grey and ringed plover, Mongolian dotterel, Terek and broad-billed sandpiper. Among its thousands of what are termed its normal or common species, are usually one or two of exceptional rarity, recent examples of which are Asiatic dowitcher and marsh sandpiper. Naturalists who visit the Firth have good reason to travel in hope.

In 1974 the Miranda Naturalists' Trust was founded by a group of enthusiasts who, backed by many years of experience, were convinced that the west coast of the Firth was an ideal place for a permanent observatory, as a base from which others, young and old, could learn something of the won-

ders of our natural coastal heritage. Also of the mysteries of that remarkable phenomenon, bird migration.

The annual reports of the Trust contain much detailed information, not only about birds but also about the local botany and invertebrates, especially cicadas.

Geography and climate have given the Firth special advantages since frosts are seldom severe. Its shores are therefore all the more attractive to the great flocks of wintering waders. Here, too, the sub-tropical mangrove nears its southern limit. Over the last thirty years the remarkable growth of mangroves may point to an amelioration of the climate. For the birds of the exposed flats, these mangroves now offer shelter against the biting southerlies which from time to time blow down the Hauraki Plains.

As the Firth widens northwards to the Hauraki Gulf the many islands of the Approaches support colonies of gannets, terns and shags, including the spotted shag, a southern species here near the northern limit of its range. Over these outer waters, as the seasons come and go, shearwaters and petrels forage with the gannets, shags and little blue penguins and may penetrate far up the Firth when fishing is good.

The lowlands of the Firth still hold plants which have become rare elsewhere. On the west the high forested slopes of the Hunua range and on the east the Coromandel Peninsula, still offer rugged tracts, where despite possums and other alien browsers, a mixture of northern and southern plants

### Counts of Selected Species from Winter and Summer Censuses – Firth of Thames 1978

Endemic Waders	Winter	Summer
South Island pied oystercatcher	12,091	1,131
Banded dotterel	78	1
Wrybill	2,011	190
Pied stilt	5,918	1,101
<b>Migrants</b>		
Golden plover	–	150
Far eastern curlew	–	12
Whimbrel	5	21
Bar-tailed godwit	256	5,292
Turnstone	52	141
Lesser knot	900	7,472
Sharp-tailed sandpiper	–	23
Curlew sandpiper	2	20
Red-necked stint	3	3

should delight the heart of any perceptive botanist.

Over the millenia, geography and climate have treated the Firth of Thames so generously that it offers unlimited scope for research to naturalists of all disciplines. In all its moods it is artist's country too. Those who have eyes to see and search and persevere seldom come away disappointed.

All things in Nature's vast store must be treated on their merits. For example, sharp-tailed sandpiper, pectoral sandpiper and curlew sandpiper clearly have much in

At most about 150 curlew sandpipers migrate to New Zealand, although large numbers are found in Australia. There is a striking difference in winter and summer plumage, with the bird changing to a marked red colour in summer.



common as well as size and general shape. Yet, as years of study have shown, they differ in many ways and their life-patterns are quite distinct. And in New Zealand their diet, a very difficult subject for research, has hardly been investigated.

In New Zealand's long archipelago there are few better places to learn about our immensely rich and varied coastal heritage than in the Firth of Thames. 🦆

The Miranda Naturalists' Trust needs to raise \$500,000 towards the cost of the Education Centre project. If members would like to help, write to The Secretary, Miranda Naturalists' Trust, PO Box 39-180, Auckland West.

Another Arctic migrant is the turnstone which can be seen from September on feeding busily on shellfish in lagoons and coastal harbours such as Miranda.