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Observations on French Frigate Shoals, February 1956

by

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A visit was made to French Frigate Shoals from February 11 to February 21, 1956, in order to study the life habits, distribution and abundance of the Hawaiian Seal (Monachus schauinslandi). Incidental to the primary purpose of the trip, observations and collections of other animals and plants were made.

I am indebted to the U. S. Coast Guard for transportation to French Frigate Shoals as well as for assistance and cooperation while there.

All collections were made on Tern Island due to inability to visit the other islands in this group. Specimens of plants and terrestrial arthropods which were collected have been deposited in the Bernice P. Bishop Museum, Honolulu, Hawaii.

Tern Island consists largely of the barren landing strip but there is a small area of approximately three acres in extent which still retains some of the original flora. This consists of various grasses (some of which are undoubtedly introduced), the beach morning-glory (Ipomoea pes-caprae) and Scaevola. Around the buildings of the Loran Station three coconut trees and several clumps of Casuarinas have been planted. The trunks of the three coconut trees are about one foot high and seem to be established. The Casuarinas, planted in front of the mess hall are about 15 feet high. They too appear to be growing well.

Under blocks of coral above the beach line as well as under discarded boards were found sow-bugs, crickets, cockroaches, earwigs and spiders. Since soil from Honolulu had been brought to Tern Island, these arthropods might have been introduced in this way. A few house flies were present in the buildings.

The only nesting bird on Tern Island was the Laysan Albatross. Each nest had a single chick about a month old. A few Black-footed Albatross were also present but were not nesting although they were going through the characteristic dancing antics. About 15 Turnstones frequented the vicinity of the mess hall where scraps were thrown to them. Only 1 Sanderling was seen. On several occasions Man-of-War birds were observed flying over the island. Six Fairy Terns flew over the island one day. The most numerous birds were the Sooty Terns which appeared every evening just before or after sunset over the shallow lagoon where they were apparently feeding. Their loud calls could be

heard as soon as they appeared and continued until they disappeared about 3:00 o'clock each morning. I have been informed by one of the men who was stationed there that later in the year these birds nest in enormous numbers on the island, hence the name Tern Island.

The mammals on the island consisted of a fluctuating population of Coast Guard personnel, two house cats (said to be of the same sex) which fed to a certain extent on the birds; two dogs, pets of the men, and the Hawaiian Seal. Four of these mammals were seen on Tern Island. On the return flight to Honolulu a count of seals was made. A total of 32 seals were seen on February 21, 1956, from the following islands of the group:

Shark (didn't fly over)		
Tern	0	(4 day before)
small island in front of Trig	4	
Trig	4	
Skate	10	2 turtles
Whale	7	1 turtle
Round	2	
Mullet	3	
East	1	
on reef in lagoon	1	

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The plane did not fly over Gin, Little Gin or Disappearing Islands.

The previous count of Hawaiian Seals occurring on French Frigate Shoals was 16. This mammal is apparently on the increase here. On some of the islands the seals were seen in pairs, the males could be distinguished by their larger size, heavier forequarters and dark brown color from the smaller, more slender light brown color females. Pairing was apparently occurring here at this time of the year.

Several large sea turtles were also seen from the air.