

ON THE CONNECTION OF SWIFTS WITH WEATHER.

By H. Stuart Dove, F.Z.S.

(Read September 11th, 1911.)

For years I have been watching the movements of the "Spine-tailed Swift" (*Chaetura Caudacuta*), that species which comes down to us from China and Japan, and, after spending a few summer months here, departs again to those more northern climes. While living among the mountains of Northern Tasmania, it occurred to me that the appearance of this Swift was often coincident with that of a cyclonic disturbance, and this observation has been confirmed of recent years. During the summer of 1910-11 I kept notes of the various appearances of this species, together with weather conditions of same period, and, as anything which may tend to throw light upon the habits of this migrant should be placed on record, I give extracts from my journal, first remarking that in some seasons the Spine-tails appear to visit us in very small numbers, and are scarcely seen, while in other seasons, such as the summer just passed, they appear so frequently and in such numbers that they thrust themselves upon our attention.

LAKES ENTRANCE, EAST GIPPSLAND, VICTORIA.

December 8th, 1910.—A great company of Spine-tailed Swifts appeared this morning for the first time this season, circling and wheeling at heights varying from the tree-tops to practically out of sight; they were first noticed shortly before 9 a.m., and appeared to come from E.N.E., as in the case of the great company of Wood Swallows. *

Again, near the end of the same month (December), two companies of the Spine-tails were seen, before and after stormy weather.

* (*Artamus tenebrosus*, Lath.)

These Wood Swallows appeared on the morning of 5th Sept., 1910 and continued their migration towards W.S.W. (See "EMU" October, 1910).*

On 6th January, 1911, a party of these birds was observed in the midst of a thunderstorm, flying towards N.E., the wind at the time being N.W.

On 1st February, 1911, while proceeding by launch up the Tambo River, E. Gippsland, we noticed many Spine-tailed Swifts flying backwards and forwards over the river, some at a low elevation; the day was sunny, and extremely warm, with a light breeze from the east. Two days afterwards the sky became overcast, and we had a gale from the eastward.

February 8th, 1911.—Large numbers of the same species were seen high in the air, early in the morning, in fine weather; next day, 9th February, broke fine, but rain came on, and continued steadily until noon, while on 10th February heavy squalls of wind and rain passed over south eastern Victoria.

WEST DEVONPORT, TASMANIA.

March 11th, 1911.—Numbers of the Spine-tailed Swift appeared on 8th, 9th, and 10th March, during disturbed thundery weather, with rain, and, during part of the time, a high, tearing south-east wind. Great floods again in Victoria and parts of Tasmania.

March 20th.—The Swifts again appeared yesterday, when it was raining almost the whole day. They passed leisurely over from west to east, near the sea, and at a good elevation.

March 23rd.—Swifts again seen coursing leisurely about; soon afterwards rough weather set in.

April 16th.—Perfect morning, cloudless sky, light sea breeze (N.N.E.); Spine-tailed Swifts passed over the shore scrub at a low elevation, making west as a general direction. I said to the friend with whom I was walking, "There are the Swifts; our fine weather will not be of long continuance." That very night great piles of cumulus appeared in the eastern sky, and drifted gradually overhead, bringing a heavy downpour.

April 25th, 1911.—On this day the Spine-tailed Swifts were seen "migrating," passing to the N.W. over the beach, at a height of 60 or 80 feet; weather cold, showery, squally, wind veering N.W. to S.W.

April 27th.—This afternoon the Swifts passed to the north-west in a long, straggling party over the beach and the sea, at a height of perhaps 60 feet; wind south-west, strong, cold. This was their last appearance, and the latest date I have ever seen them; I believe it constitutes a record for Tasmania, if not for the Commonwealth.

Now, the Spine-tailed Swift is very fond of ants in the winged state, and these insects constitute a large portion of its food while with us: I have noticed that the male and female ants of various species attain the winged state, and "swarm," or issue, in vast numbers from the nest, generally during the moist, muggy weather which precedes an atmospheric disturbance; the termites, or so-called "White ants," will often swarm during a light, warm rain. It has, therefore, occurred to me that the frequent appearance of the Spine-tail Swift either during, or shortly before or after, disturbed atmospheric conditions, may be due to its winged food occurring more plentifully at these times. There may be other conditions of which at present we know nothing, affecting the sudden appearances and disappearances of this most interesting species, but the theory here advanced seems a reasonable one, and I shall be glad if it is the means of inducing other observers of our migratory fauna to give particular attention to the habits of this swift.
