

## THE TERMITE SITUATION IN BRITISH COLUMBIA IN 1936

By. G. J. Spencer

University of British Columbia, Vancouver, B.C.

For the past ten years I have collected Termites or White Ants in this Province, from Tofino and Long Beach on the West coast, from Mount Tolmie outside of Victoria and at Nanaimo, on Vancouver Island; on the mainland and in the Gulf, from Van Anda on Texada Island and from all around Vancouver. In the Interior I have taken them from Kamloops and from half way between Lytton and Lillooet. Mr. Hugh Leech sent me a collection from Salmon Arm.

In British Columbia there are two species and probably a race of one of them constituting a third species. These are:

**Zootermopsis angusticollis** Hagen, the Coast or Wet Belt form. I have taken this on Texada Island and all around Vancouver and New Westminster. Workers are about one-half inch long, and winged ones, about one inch long with their wings.

**Zootermopsis nevadensis** Banks, on the west coast of Vancouver Island and at Nanaimo. It is the same size as the previous species.

**Reticulotermes hesperus** Banks, the dry belt or underground termite. This is less than half the size of the two preceding forms; workers and soldiers are white and alate forms, black. Taken at Kamloops, Lytton and Salmon Arm. I think it is this species which has been reported as far north as Quesnel.

Up to a year ago, I had not encountered actual commercial damage from these insects and considered this freedom due to the large amount of waste lumber lying in all directions in surrounding woods and on bare lots in the city. However, in the autumn of 1935, I received a call from a large abattoir in South Vancouver where much damage had been done to the underpinnings of the landing approach and platform and to the animal stables. All affected wood had to be replaced by concrete and creosoted timbers, and the cost was considerable, amounting, in the case of the creosoted timbers alone, to over seven hundred dollars. Hunting for the source of this infestation, we found that the abattoir adjoined the yards of an abandoned lumber mill, whose extensive site in the low-lying area near the river had been paved with heavy timbers which were lying everywhere in various stages of decay and, at time of our inspection, were being overgrown by grasses and alders. These timbers were heavily populated by **Z. angusticollis**, enough to re-infest all large buildings in every adjacent direction.

The second complaint came from a private dwelling in South Vancouver and was investigated by Mr. Kenneth Jacob, one of our graduate

students who is working on the biology of Termites in this Province. He found the sills and sleepers of the house to be heavily infested and practically destroyed by this same insect.

In January, 1936, I found this species infesting remains of stumps under the floor of the University gymnasium, left lying there by the contractors instead of being hauled out and burnt. This trash was at once hauled out and destroyed by University authorities.

Then in February, I received an urgent appeal from the Manager of the Powell River Paper Company, whose townsite manager had reported that the underpinnings of many buildings in the townsite were being destroyed by Termites. Here again, the same species was concerned.

Since then, Mr. Jacob has assembled several more records around Vancouver.

Two points have come up in connection with the attacks of *Z. angusticollis* around Vancouver which are not normal and which must be taken into account in building plans in future. The *one* is the fact that I have found them excavating *DRY* timber resting against cement. While the moisture content of the wood in question was not determined at the time, in no sense could it have been called damp; rather it would have been described as bone dry. The *other* point is that they can become established in timber above ground, without tunnelling up from the ground. In 1932 I found a deeply-checked telephone pole infested some 4 to 5 feet above ground level. In 1936 the condition of the pole necessitated its replacement and company workmen gave it to the owner of the house for firewood. This man sawed it into blocks for burning and, at my request, kept careful watch of the location of the termites in it. He reported that the timber below the point of infestation was perfectly sound as I had suspected, and that the infestation did not begin until some 4 feet above the sod in which the pole had stood. The attack must have been started by termites flying into the pole which had checked well above the ground and this fact, unusual in its occurrence, warrants additional precautions in future.

These records go to show that at least *Z. angusticollis*, the damp climate termite, is spreading its attacks in the Vancouver district from waste lumber to timbers placed on or near the ground in private dwellings and in certain factories, that it is capable of serious damage to timber, and that it may be expected to extend its attacks to local buildings in future.

A campaign with the necessary publicity seems indicated, to warn citizens of the danger to be expected from termites in British Columbia.