VICTORIA NATURAL HISTORY SOCIETY

The VICTORIA NATURALIST

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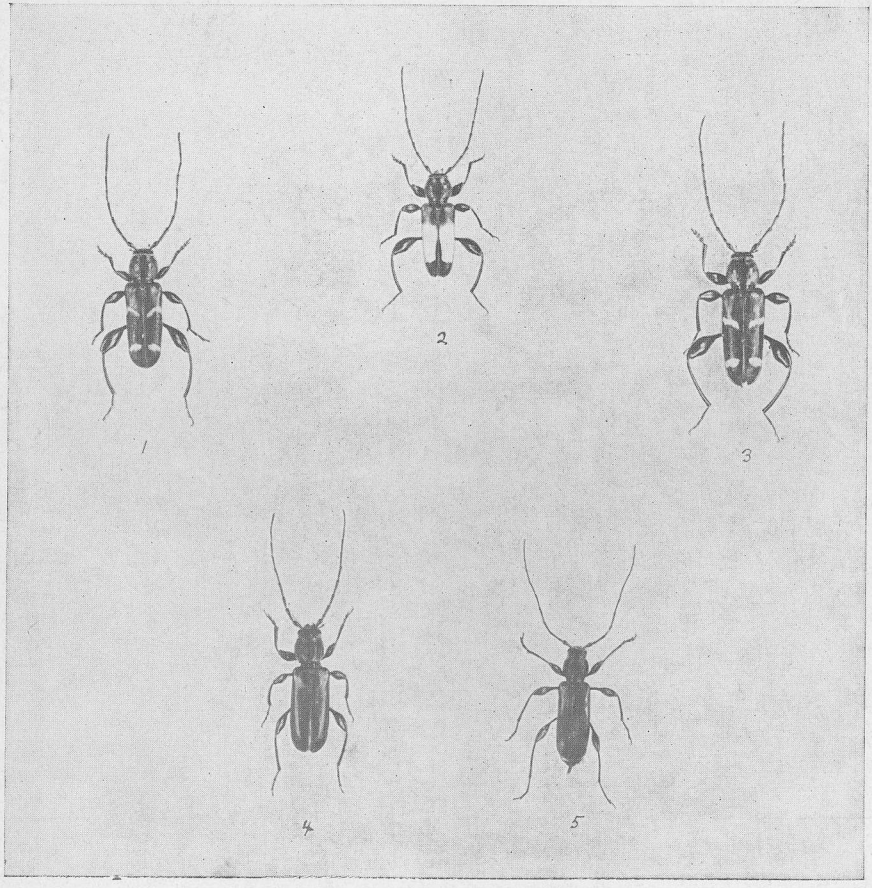
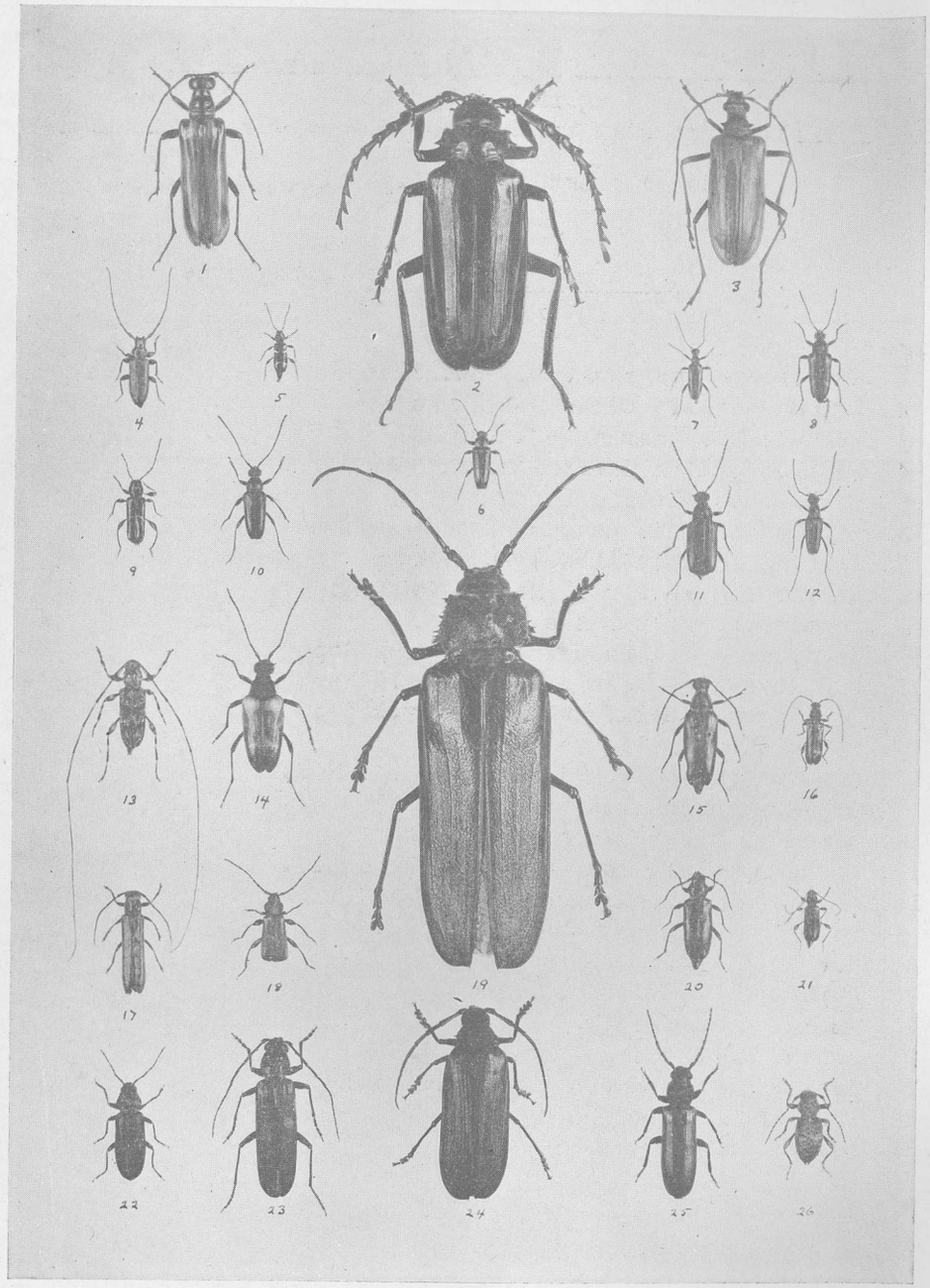


SOME PHYMATODES OF THE LONGHORN BEETLES.



THE VICTORIA NATURALIST

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Inside front cover. Page 82

Cerambycidae (Longhorns)

Natural Size

Fig.

1. Anoplodera valida (LeC) Sw. & Hopp
2. Prionus californicus Mots. Male
3. Parapachyta spurca LeC. Female
4. Opsimus quadrilineatus Mann.
5. Phymatodes nitidus LeC.
6. Atimia dorsalis LeC.
7. Pidonia scripta (LeC.) Sw.& Hopp
8. Anoplodera vexatrix (Mann.) Sw.& Hopp.
9. Phymatodes vulneratus LeC.
10. Anoplodera dolorosa (LeC.) Sw. & Hopp
11. Anoplodera dehiscens (LeC.) Sw.& Hopp
12. Anoplodera laetifica (LeC.) Sw.& Hopp
13. Graphisurus obliquus LeC.
14. Anoplodera matthewsi (LeC.) Sw. & Hopp
15. Leptura anthracina LeC.
16. Hybodera tuberculata LeC.
17. Oberea schaumi var. quadricallosa LeC.
18. Callidium vancouverense Van Dyke.
19. Ergates spiculatus LeC.
20. Anocomis lignea (Fab)
21. Phymatodes dimidiatus (Kby.)
22. Asemum atrum Esch.
23. Criocephalus productus LeC.
24. Tragosoma depsarium var. harrisi LeC.
25. Megasemum aspera (LeC.)
26. Plectrura spinicauda Mann.

REPORT OF NOVEMBER MEETING:

The regular monthly meeting was held in the Reading Room of the Provincial Library on Tuesday, Nov.13th. Mr. L. Colin Curtis acted as Chairman. It was decided at this meeting that the Society help defray the cost of the bird banding project which is being undertaken in Beacon Hill Park under the direction of Mr. J. O. Clay.

Mr. I. C. Macqueen presented an interesting address to the Society, a summary of which follows, on:-

THE WEATHER AND THE FORESTS

Weather has long been studied by forecasters, and quite early in the history of organized forestry, the effect of weather factors upon the science of forest protection became a matter of close study. This paper takes up the matter of weather factors as they affect the incidence and control of forest fires.

One of the earliest of meteorological factors to be studied was that of sun-spots, but while these were found to exercise a world-wide effect upon forest imflammability, they were of comparatively little use to those entrusted with the protection of any particular region.

At the present time, it is found that weather conditions have two general effects upon the matter of forest protection. The direct effect, by which lightning actually starts fires, and the indirect, by which the woods are put into a receptive condition for fires started by other means. Lightning is found to be responsible for about 35% of all fires, and it is interesting to note that just as many fires result from lightning storms accompanied by heavy rain as from the dry variety. Lightning storms are commonly generated in mountainous localities, as large masses of moist air are heated by solar radiation on the exposed southern slopes, and powerful convection currents are generated. As the warm air penetrates the cold air masses above, the upward force is amplified by the greater contrast in temperature and by the release of heat through condensation, and a very lofty cloud form develops, in which air currents reach high velocities, and water

molecules are actually torn apart and some of their electrons set free. The result is the building up of electrical charges sufficient to cause lightning flashes.

Electrical storms may be general or local. The former occur only three to five times per year in B.C., and may cover an area 100 miles long and 40 miles wide, and are generated when extreme heat is manifested early in the day. Local storms begin to form in the afternoon, and are dissipated before they have time to cover much ground. Contrary to common belief, the frequency of lightning strikes is not affected by local conditions, such as mineralization.

The weather indirectly affects the forest by varying its inflammability, which is directly related to the amount of moisture retained by the fuel material on the forest floor. The factors concerned here are precipitation, ground moisture, the humidity of the atmosphere, the loss of moisture due to insolation, radiation and reflection and wind. It is found that the wind has two contradictory effects, as it not only hastens evaporation of moisture, but also has a cooling effect upon the fuel. The importance of this latter may be seen when it is noted that the top level of the forest floor in direct sunlight may reach a temperature of 150°F. In a timbered area, where most of the "duff" is in the shade, fire is less likely to be generated, hence rapid regeneration of logged areas is highly desirable.

Wind assists in the spread of fire in two ways- firstly by feeding the fire with oxygen, and secondly by carrying the heat forward and drying out the woods ahead of the fire. It is found that the spread of a fire varies directly as the square of the wind velocity.

Forecasting was at one time based upon the comparison of current pressure diagrams with similar ones from the past, but the modern method is based upon the air mass theory developed in Norway during the 1914-18 war.

L. Colin Curtis.

NOTES ON OUR WESTERN WINTER WREN

(Nannus hiemalis pacificus)

No matter which of the above cognomens is used, we still have taxed one of our smallest and cheeriest year round residents with a long drawn out name. Quite oblivious to the load put upon him, he carols his way through swamp, moist ravine and big timber country, equalling if not outdoing our much better known Chickadee.

If sociology is known in Avian Circles, the Chickadee must be regarded as something of a panhandler, coming around many of our homes for a looked for handout. By the same standard the Winter Wren is independent, and is prepared to stand solidly on his own feet, and do his own foraging.

To those of us who are privileged to scout the deep woods or forested mountains, he is an unfailing source of interest. No weather, be it rain, snow or fog, seems to discourage him, and a continuing source of wonder is the volume of song; intense and sustained, which pours from such a feathered fragment. He is a puckish morsel withal, peering from brush pile, fern thicket or clump of usnea, and flirting noiselessly away if human approach seems too near.

Obviously if an all year resident, these birds must breed here, which of course they do. Discovery of a nest, however, is no small task. The terrain in which they are ordinarily found is usually remote from habitation, while their nesting habits further accentuate the problem.

Found in moist ravines, swamps and deep forests; where brush, monstrous fallen tree trunks and usnea moss almost completely make up the landscape, we might conjecture whether these Wrens moved in because of such suitable conditions, or whether instead they decided to make the best of things as they were found. With scores of piles of brush or slashings, any conceivable number of fallen trees, and untold patches and festoons of long fibrous moss, nesting conditions become ideal for this bird.

Following a well accepted sales dictum, that if we make enough calls, we will surely dig up some share of

business let us follow that plan. And in every pile of brush, every rotting log with bark split by a crack, and the moss patches whether growing on vertical tree trunks or festooned over low branches, become potential nest sites and objects of our keenest search.

Ultimately several nests may be found, their size and construction governed by their location. Where a 500 year old fir fell across a ravine a score of years since, we find a long crack in the bark on the under side, and for some feet the bark is loosened away from tree trunk. Into this, to them, delightful crannie our Wrens have packed dead twigs, and a mass of dry moss, all so integrated as to be quite firm. A tiny opening leads into a cosy chamber well lined with rabbit fur, deer hair and perhaps a few feathers.

The same sort of structure might be found well concealed and protected from the elements in a brush pile. Perhaps the favorite spot of all are the patches and tufts of usnea which seem to have an attraction for this species. And so we find a nest in a batch of moss which, falling from aloft, has lodged on a low branch, commenced to grow and has now become a bird home. The nest opening here is at the side of and immediately below the branch from which suspended, nest pocket formed in the down hanging moss.

It would seem that "joie de vivre" actuates this race as we find in the other species of our Wrens, as many unused nests will be discovered on thorough search.

Unlike Tule and the House Wren, whose eggs are very heavily pigmented, our little Winter Wren deposits 5 to 7 creamy white eggs faintly flecked with reddish brown specks.

And so Nannus hiemalis pacificus,
"I doff my hat to you"

Walter S. Maguire,
New Westminster, B. C.

Some Longhorn Beetles of Vancouver Island.

by George A. Hardy,
Provincial Museum.

The extensive forests that form such a predominating feature of Vancouver Island afford a congenial home for the wood-boring beetles, among which the Longhorns take a prominent place.

The "Longhorns" as they are popularly known, belong to the family Cerambycidae of the order Coleoptera. The common name has reference to the very long antennae or "feelers" possessed by many of the species. The members of this family are attractive insects for study, for while there is considerable variation in form and colour, the species are not very numerous or difficult to identify.

Approximately ninety species and varieties of Longhorns are recorded for Vancouver Island.

There are four stages in the life history of a Longhorn. Briefly they are as follows:

EGG - laid in the crevice of the bark, or in an Abrasion of a tree.

LARVA, or Round-headed Borer. This is the feeding and growing stage of the beetle. Its whole life is spent within the wood of dead or dying trees.

PUPA, or chrysalis, the resting stage, is passed in an enlargement of the larval burrow just beneath the bark, though occasionally root feeders pupate in an earthen cell in the ground.

ADULT, or perfect beetle, the dispersal or reproductive phase. Some adults may be found by day on flowers, flying about, or at rest on newly fallen trees. Others are active at night and may be attracted to artificial light, while still others may best be obtained by "caging" infected wood.

Of the fifty-two species and varieties illustrated twenty-five have been selected for comment. Those shown on the outside cover are enlarged about one-third, the remainder are natural size.

Outside cover. Genus Phymatodes characterized by the swollen "thighs".

Fig.1. Phymatodes decussatus LeC.
Wing cases brown with paler basal third thorax, reddish. In some seasons it is very abundant on dead or dying Garry Oak trees. The larvae mine between the bark and wood. Found wherever the oak occurs from British Columbia to California. May-July.

Fig.2. Phymatodes decussatus var. latifasciatus H.& P. This is a form in which the white cross bars of the species have merged into a single broad band. Occurring, rarely, with the species. Vancouver Island.

Fig.3. Phymatodes decussatus var. obliquus Csy. Entirely black with the exception of the four white cross bars. To be seen with the species in even greater abundance. From British Columbia to California.

Fig.4. Phymatodes obscurus LeC. Unicolorous dark brown. Found on Garry Oak. Rare. June- September. It appears later in the season than the three preceding species. British Columbia to California.

Fig.5. Phymatodes dimidiatus (Kby.) Fuscous, with a lighter bar at the base of the wings. May be seen flying or running over newly felled coniferous logs or cordwood. Not common. June- July. Alaska to California and east to Lake Superior.

Inside front cover:

Fig.2. Prionus californicus Mots. Californian Prionus. Unicolorous brown three spines on edge of thorax. When picked up it makes a rasping sound by rubbing the hind legs against the edge of the wing cases. It flies at night, often announcing its presence with a loud thump against the window pane, attracted thereto by the light within the room. The larva feeds in the roots of both coniferous and deciduous trees. Common. June-Aug. B.C. to California.

Fig.19. Ergates spiculatus LeC. Spiny Wood-borer. Brown in colour. Larger than the preceding and with more and finer spines on the edges of the thorax.
It is active after nightfall. Breeds in coniferous trees. The larva often does considerable damage to new lumber by its extensive tunnelling in the heart-

wood. The larvae of this and the preceding species live for three or four years before reaching their full growth. July - August. Of frequent occurrence, British Columbia to California.

Fig. 24. Tragosoma depsarium var. harrisi LeC. Brown, with one spine on edge of thorax. A night reveller. It is easily attracted to artificial light. Breeds in coniferous trees. Not common. June - August. British Columbia to California, east to Newfoundland and south to Pennsylvania.

Fig. 3. Parapachyta spurca LeC. Wainscot. Fulvous, with a small black dot on each wing case. Another one of the night brigade. Most frequently seen about buildings whither it has been drawn by artificial light. Its host tree is the Garry Oak, the larva feeding in the roots. Fairly common. May-July. British Columbia to California.

Fig.23. Criocephalus productus LeC. Sooty-brown, with two round depressions on the thorax. The Larva feeds in coniferous trees. The adult is nocturnal in habit. It turns up in unexpected places, such as shop windows, doorsteps, in the water tub, entangled in spider's webs and so forth. Not common. July-October. British Columbia to California.

Fig.13. Graphisurus obliquus LeC. Grey, with darker cross lines. The antennae are longer in proportion than any other species of Vancouver Island Longhorns. A night roamer, it may be found by day resting on palings or the bark of trees. Breeds in coniferous trees. Rare. June - October. British Columbia to California.

Fig. 7. Pidonia scripta (LeC.) Sw. & Hopp. Yellow with small black markings on the wing cases. A sun lover, it is found in abundance on the flowers of wild roses of which it is especially fond. The food plant is not definitely known, May-July. British Columbia to California.

Fig.10. Anoplodera dolorosa (LeC.) Sw. & Hopp. Dull black. It delights in the hot sunshine, when it may be found flying along roads and in woodland glades, or

settled on the blooms of spirea and other flowers. The larva feeds in Douglas Fir and other conifers. Very common, June-August. British Columbia to California.

Fig.8. Anoplodera vexatrix (Mann) Sw. & Hopp. Mostly black, (sometimes entirely), with yellow markings on the wing cases. It flies by day when it is most often seen on the flowers of spirea, yarrow etc. The larva lives in coniferous trees. Very common. June-August Alaska to California.

Inside back cover:

Fig. 34. Ulochaetes leoninus LeC. Bumblebee Longhorn. Black and yellow bands, hairy. The wing cases are reduced to small yellow scales, exposing the unfolded gauzy flight wings. This unique longhorn simulates the flight and action of the bumblebee to a remarkable degree, even to curling up the hind body and protruding the long yellow ovipositor as if about to sting, which of course it is unable to do. It may be found during the heat of the day hovering before the stumps and newly felled trunks of Douglas and Balsam fir. Not common. June to August. British Columbia to California.

Fig. 32. Necydalis laevicollis LeC. Light brown. As in the preceding species the wing cases are abbreviated to mere scales, leaving the flight wings unprotected. In general it closely resembles an ichneumon fly with which it can easily be confused. May be taken by day either in flight or at rest on bark and leaves. The larva inhabits the trunks and branches of dead or dying willow and alder trees. Scarce. July-August. British Columbia to California.

Fig. 38. Rosalia funebris Mots. Banded Borer. Pale blue grey, with black bands. A magnificent and most attractive insect. It flies by day about newly felled trees or cordwood of alder, willow and maple. Occasionally seen in town where it probably arrived with firewood. Common. July-August. Alaska to California.

Fig. 41. Monochamus oregonensis LeC. Black, lightly speckled with white flecks. A lover of sunshine, it may be found flying about or ovipositing on newly fallen coniferous trees during the hottest time of the day. Common. July-August. British Columbia to California.

Fig. 39. Synaphoeta guexi LeC. Barred Grey. Grey, with black zig-zag cross bars. It rests on bark, where its highly protective colouration makes it difficult to distinguish. The larva feeds in the wood of willow. Scarce, April-October. British Columbia to California.

Fig. 36. Anoplodera laeta LeC. Golden Oak-borer. Golden-yellow with velvet-black cross bars. It flies on hot sunny days, when it may be seen on flowers of yarrow or hovering about newly felled trees of Garry Oak. Not uncommon. July-August. British Columbia to California.

Fig.28. Anoplodera chrysocoma (Kby.) Sw.& Hopp. Golden Longhorn. Velvet-gold colour throughout. It is most active on sunny days, seeming to have absorbed the golden rays of the sun whose colour it reflects. To be found on the blooms of rose, yarrow, spirea and others during its season of activity. The larva feeds in coniferous trees. Common. May-July. Across northern Canada to British Columbia and south to California.

Fig. 37. Toxotus flavolineatus LeC. Black, with a broad, longitudinal yellow line on each wing case. It may be seen flying about on hot sunny days along woodland roads and trails, or settled on flowers of spirea. Little is known concerning the life history of this rare species. June-July. British Columbia to California.

Fig. 30. Leptura obliterata Hald. Yellow, with variable black bands and spots. To be found on flowers of spirea, at rest on newly felled coniferous trees, or flying in the hot sunshine. The larva feeds in the wood of dead cone-bearing trees. Very common. June-September. British Columbia to California.

Fig. 43. Xylotrechus undulatus Say. Black with white or yellow scroll-like markings. Usually to be found on newly felled coniferous trees or about cordwood, in which the larval stage is passed. Common. June-August. Eastern Canada to Alaska, south to California.

Fig. 44. Neoclytus conjunctus. LeC. Double Oak Borer. Black, with two white X-shaped markings on the wing cases. It is active on hot sunny days, on or about Garry Oak slashings or arbutus, in which the larva feeds. Common. March-May. British Columbia to California.

NOTES ON WHALES AND WHALE BARNACLES:

It was about forty-five years ago that whaling stations were established on Vancouver Island. Several were in operation on the East coast of the island, and these were the first to shut down. The last station on the island was the Cachalot Whaling Station at Kyouquot Sound, and it ran for the last time during the season of 1925.

In the old days only certain species of whale were hunted, as some species will sink when killed. But the method of hunting has changed since those days, and all species are now killed. When hunting the species that sink a heavy rope is attached to the harpoon, and the dead whale is hauled to the surface by steam power. It is then blown up by compressed air so that it will float.

A recent development is the floating whaling station. A large steamer is fitted with the apparatus for extracting the oil from the blubber, and there is a sloping runway in her bow for hauling out the whales. Several small steamers, like those operating from the shore stations, accompany her, and she can follow the whales all over the oceans.

The steam whale boats that operate from a shore station are about ninety-eight feet long. They have powerful engines, but not a very great cruising range. On the forward deck is a powerful winch which is used to haul the whale to the surface after it has been killed, that is if it is one of the species that sinks when dead. On the bow of the boat is a muzzle-loading gun. It is mounted on a swivel and arranged so that it can be very much depressed. This is necessary as it may have to be used at short range, perhaps fifteen or twenty feet. The harpoon is fired from this gun; it is made of steel and is about five feet long. The shaft which fits into the gun is double, that is, it is made of two semi-circular bars welded together at the ends in such a way that there is a space between them. Around one of these bars, and sliding in the space between them, is a loop of wire rope to which manila hauling-in rope is attached.

The sharp point of the harpoon is really a bomb filled with black powder. It is shaped like a spear head, and is made of cast iron. Below the bomb are four hinged prongs, or barbs, made fast to the shaft in such a way that they will be released and swing out at right-angles to the shaft after the harpoon has entered the body of the whale. When the prongs are released the charge in the bomb is exploded, and that usually kills the whale. These explosive harpoons were invented by Svend Foyn, a Norwegian, about 1866.

When several whales have been killed they are towed to the station and are tied up by the slip. The slip has a sloping portion that extends out below low tide mark, and this has to be very strongly built as a whale averages two tons per foot, and may be ninety feet in length. At the top of the slip the wharf is level, and here there are several powerful winches. These are used for pulling the whale up the slip and turning it over.

When the whale is on the wharf the first thing done is the removal of the blubber, or flensing as it is called. This is done with large knives called flensing knives. These knives are about eighteen inches long, two inches wide and are curved at the end. The blades are fastened to a wooden handle about three feet long. With these knives cuts are made through skin and blubber from one end of the whale to the other. Cuts are from eighteen inches to two feet apart, according to the size of the whale. As each cut is made a cable is attached to the end of the strip and it is ripped off by one of the winches. When one side is stripped the whale is turned over and the process is repeated. If the whale is fresh some of the meat may be taken off for canning. The meat of the Sei whale looks, and tastes, like beef.

The smallest whale brought in is the Sei, Balaenoptera borealis Lerson. It is one of the baleen whales, and is sometimes called the "Sardine". For some unknown reason this species have very few external parasites on them. The next largest whale is the finback, Balaenoptera velifera Cope. These are also remarkably free from parasites, but occasionally one is found with what at first sight, appears to be very coarse hair on its throat, but

it is really thousands of parasites. These are long worm-like copepods, Pennela balaenoptera. This copepod is one of the largest known, it is shaped like a worm and has its head buried in the blubber of the whale. The body is about eight inches long, and near the head are two cross pieces growing at right angles to the body and acting as an anchor. There are some specimens of this copepod in the Provincial Museum. The usual food of this whale is the plankton, or whale food, but I saw one of this species brought in with its stomach full of small squid Gonatus fabrici.

It is not correct to say that a barnacle is a whale parasite as barnacles do not live on the substance of the whale. They simply steal a ride. Whale barnacles make themselves fast to the skin of the whale, but get all their food from the sea-water.

It seems probable that whale barnacles have gone through the whole process of evolution with the whale. That is since the whale became a marine animal. They have developed a very secure method of attaching themselves to the skin of the whale, in fact they cannot make themselves fast to anything else and are not found anywhere else.

The humpback whale usually carries the greatest load of barnacles, and it is said that there may be a ton or two of barnacles on one whale. The humpback, Megaptera versibilis Cope, has very large fins, and the lower part of these, also the throat and front part of the belly are often covered with large barnacles. Most of these are the beautiful Coronula diadema (Linnaeus). Some of the shells of this species are three inches in diameter and two inches high. They are not embedded in the skin of the whale at any stage of their growth, but the skin of the whale grows into cavities formed by the shell. There is a large shell-less barnacle that grows in great numbers on the shell of Coronula. This is Conchoderma auritum (Linnaeus). It is not a whale barnacle and cannot make itself fast to the skin of the whale, and is found on ships, and other floating objects.

There is another barnacle that is found in great numbers on the humpback. This is Coronula reginae (Darwin) It is related to C.diadema, but grows in a different manner, as it is partly under the skin.

There is a queer little barnacle that is sometimes found on the tip of the fin of the Sei whale, this is Xenobalanus globicipitis Steenstrup. The shell is embedded in the skin of the whale, but the whole body of the barnacle hangs free like a tassel.

Among the barnacles growing on the whale are usually a great number of the so-called whale-lice. These are really a small amphipod Paracyamus boopis. They are mostly legs, and have hugh branchia, as have all the barnacles and other creatures living on the whale. The question of why whale barnacles and these other creatures have such large branchia, or lungs, is rather interesting. One reason may be the passage of the whale through the warm water of the tropics. It is well known that the warm water of the tropics contains less oxygen than the waters of the temperate zones, and only those creatures with large lung capacity would be able to survive this passage.

There seems little doubt that the whales are getting scarcer year by year, and will continue to do so until some international agreement is made to regulate the hunting of them. When the whales are extinct all those interesting things that grow on them will also become extinct as they cannot grow on anything else. Some of these have only been found on one species of whale, as for instance, Tubicinella major Lamarck, this tube-like barnacle is found only on the upper jaw, forehead and over the eye of the southern right whale, Balaena australis.

Ira E. Cornwall, F.G.S.

NOTICE OF MEETINGS

MONTHLY MEETING

Tuesday
Dec.11th: Provincial Library Reading Room.
Speaker: Mr. L. Colin Curtis
"Early Naturalist of the Northwest".

GROUP MEETINGS

Tuesday
Dec.18th: Entomology -- - - - - - - - - - - Mr. W. Downes
"Queer Insects of B.C."
(with slides)
Dominion Entomology Lab. 545 Superior St.

Wednesday
Dec.26th: Ornithology - - - - - - - - - Mr. J. O. Clay
An outdoor meeting for the purpose of taking a Christmas sensus of the birds that winter in Beacon Hill Park and the foreshore in the immediate vicinity.

Meet at Band Stand in Beacon Hill Park at 1 p.m.

JUNIOR GROUP MEETINGS

Saturday at 10 a.m. Dec.8th,1945 — Saturday at 10 a.m. Dec.15th,1945 — Sat. at 10 a.m. Jan.5th, 1946.

These three meetings will be held in the Provincial Museum and all those interested are invited to attend.

Note: The Program Committee would be pleased to hear any suggestions from members as to speaker (either local or transient) for monthly meetings, form of meetings or topics they would like to have discussed.

Also, if any member is willing to lend a room for any of the group meetings during the coming months it would be a great help to the Society.

The Program Committee consists of Mr. Winkler (Chairman) Mrs. Woodward and Mr. L. Colin Curtis.

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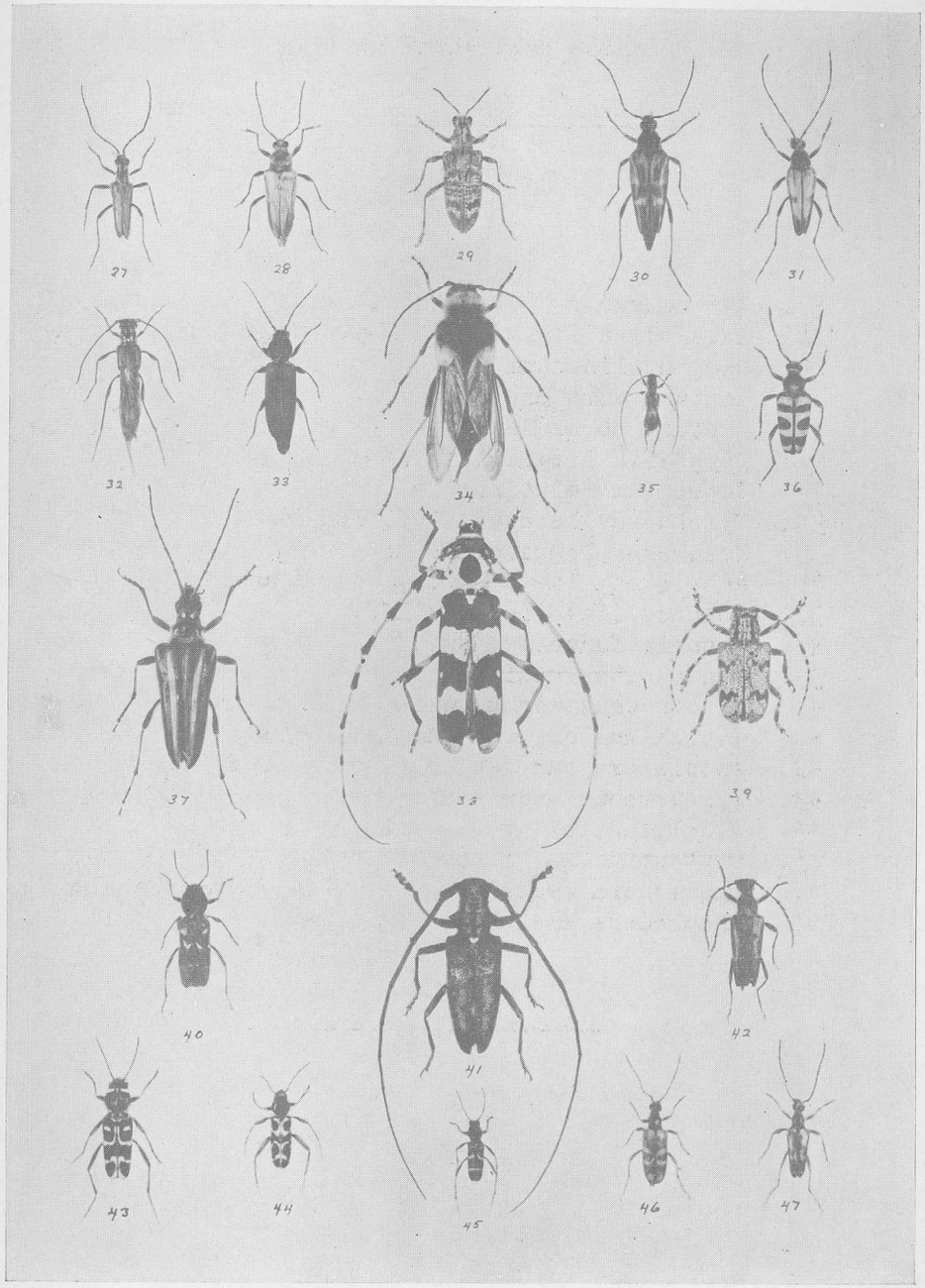
Inside back cover Page 99

Cerambycidae (Longhorns)

Natural size

Fig.

27. Stenocorus vestitus Hald.
28. Anoplodera chrysocoma (Kby.) Sw.& Hopp.
29. Rhagium lineatum Oliv.
30. Leptura obliterata Hald.
31. Leptura soror LeC.
32. Necydalis laevicollis LeC.
33. Tetropium velutinum LeC.
34. Ulochaetes leoninus LeC. Female.
35. Molorchus longicollis LeC.
36. Anoplodera laeta (LeC.) Sw. & Hopp
37. Toxotus flavolineatus LeC.
38. Rosalia funebris Mots.
39. Synaphoeta guexi LeC.
40. Xylotrechus mormonus LeC.
41. Monochamus oregonensis LeC. Male
42. Anoplodera canadensis (Oliv.) Sw.& Hopp
43. Xylotrechus undulatus (Say.)
44. Neoclytus conjunctus (LeC.)
45. Clytanthus pacificus Van Dyke.
46. Anoplodera crassipes (LeC.) Sw.& Hopp.Female
47. Anoplodera crassipes (LeC.) Sw.& Hopp. Male



To

Mrs Leveson-Gower
1417 Fernwood Rd
Victoria B. C.

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Annual Subscription: Single, $2.00; Family, $3.00; Junior, $1.00.

NOTICE OF NEXT MEETING

The next meeting of the Society will be held in
PROVINCIAL LIBRARY, PARLIAMENT BUILDINGS
at 8 p.m. on Tuesday, the 11th December, 1945.

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