ANNOTATED LIST OF FOREST INSECTS OF BRITISH COLUMBIA PART X—NOTODONTIDAE¹

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The larvae of this family feed exclusively on broad-leaved hosts, chiefly of Salicaceae and Betulaceae. Several species are commonly found on members of Rosaceae as well. Datana ministra and Schizura concinna occasionally have been sufficiently numerous to cause noteworthy defoliation.

Notodontid larvae are quite similar to the cutworms, Noctuidae, but usually have more elongate heads. The majority are strikingly marked; most species have prominences. Setae on the upper body are primary, excepting Datana and Ichthyura which have a light clothing of fine secondary hairs. There are ventral prolegs on A3-6; and the anal prolegs are more or less reduced or modified. The anal prolegs may be held up at rest, and are not used by Schizura or Cer-The eversible yra for locomotion. gland on the prothoracic venter is branched on some species. Most notodontids overwinter as larvae in cocoons.

Ichthyura apicalis Walker. Populus tremuloides (1). Mile 50 Big Bend Highway. LARVA: head brown, excepting unpigmented configuration about the frons; no swellings apparent; pronotal shield with pair of brown patches; body drab creambrown; faint dorsal lines. Head and body moderately clothed with fine short white hairs.

Ichthyura strigosa Grote. Populus tremuloides (1). Wasa. LARVA: unknown to writers.

Ichthyura albosigma Fitch. Populus tremuloides (4), Salix sp. (1), Alnus sp. (1). Squilax, Kersley, Marguerite, Prince George, and southern V.I. One from Mile 49 Dawson Rd., Y.T. LARVA: young instars prominently humped, pale green with fine red lines and abdominal segments 1, 3, and 8 also red. Late instars stippled mauvegrey and brown, with indistinct brown lines pale edged; large black spiracles; shallow yellow tubercles, long silvery setae; the head large and mottled.

Ichthyura brucei Hy. Ed. Populus tremuloides, Salix sp. (1). Central Interior. LARVA: head black, excepting unpigmented inverted Y above and bordering frons; small transverse swellings on dorsum of A1 and 8, lateral portions of prothoracic shield, small supraspiracular patches, and spiracles, black. Head and body lightly clothed with fine, moderately long, white hairs.

Datana ministra Dru. Yellow-necked caterpillar. Betula spp., Amelanchier sp., Crataegus spp., Prunus sp. (1), Salix sp. (1). Central portion Southern Interior. LARVA: inches; head and body black (body reddish-brown in earlier instars): prothoracic shield yellowish-brown; subdorsal, yellow supraspiracular, subspiracular, subventral and ventral lines; body sparsely clothed with long grey hairs.

Odontosia elegans Stkr. *Populus tremuloides*, Southern Interior, and Cuisson Creek. LARVA: 13/4 inches; head and thorax reddish to yellowish brown, glossy; dorsum of body mottled brown, venter of abdomen cream;

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brown prothoracic shield; brown shallow transverse ridges on A2 and A8; brown blotch about spiracles down to prolegs on A3-6.

Notodonta simplaria Graef. Salix sp. (3), Populus tremuloides (1). Golden, Ochiltree, Lardo, and Burns Lake. LARVA: 1½ inches; head tapered to vertex, stippled with black; body purplish, mottled; pale diagonal lines; conical humps on A2, 3 and 8; faint pale subspiracular stripe running down to tip of ventral proleg on A6. Black above bases of thoracic legs; black double dorsal stripe on thorax and on humps of A2 and 3.

Pheosia rimosa Pack. Salix spp., Populus tremuloides, P. trichocarpa, Betula sp. Interior B.C. LARVA: about 2 inches; green or yellowish-brown, glossy; horn on A8; black transverse band on T2 and A8, may be broken on the former segment; thoracic legs red; spiracles black, pale-ringed.

Pheosia portlandia Hy. Ed. Vancouver Island. LARVA: unknown to writers.

Nadata gibbosa A. & S. Betula spp., Salix spp., Alnus spp., Quercus garryana, Populus trichocarpa (1), Acer circinatum (1), Prunus sp., Rosa spp. General throughout B.C. LARVA: 134 inches; head and body pale bluish-green, covered with a bloom; body flecked with yellow laterally; subdorsal stripe, base of prolegs and posterior margin of suranal plate, pale yellow; no protuberances; setae minute; spiracles small, reddishbrown.

Dicentria pallida Stkr. Vancouver Island. Hosts and larvae unknown to writers.

Schizura semirufescens Wlk. Alnus spp., Salix spp., Betula papyrifera (3), Quercus garryana (1), Acer circinatum (1), Amelanchier sp. (1). South-

ern B.C. and V.I. LARVA: 1½ inches; cream and brown head and body; abdomen may be tinged with green; brown M on head, X between arms; hump at posterior margin of metathorax; elongate forked protuberance on A1 bent forward; forked hump on A5 and 8. White V on A6 and 7.

Schizura ipomoeae Doubleday. Betula papyrifera, Alnus spp. (3), Salix sp., Amelanchier sp. (1). Southeastern B.C. (Jones, 1951, also records it from southern V.I.). LARVA: 11/2 inches; brown and green with markings on dorsum of abdomen; a pair of black longitudinal lines on each side of the front of the head, with a reddish-brown X between; thorax green, speckled with brown; broken, stripe with reddish-brown dorsal white edge, split on thorax and diverging on T1; pleura on T1 partly brown; white dorsal patches on A1-4, shield-shaped on A2 and 3 and white broad-based V on A6-7; elongate short-forked tubercle on A1; smaller paired tubercles on A5 and 8. setae on this species are more prominent than on the other three species.

Schizura concinna S. and A. Redhumped caterpillar. Salix spp., Betula spp., Prunus spp., Populus tremuloides, P. trichocarpa, Alnus spp., glabrum and miscellaneous Acer other broad-leaved hosts. Southeastern B.C. Occasionally known to completely denude single trees or clumps of trees. LARVA: 11/2 inches; head and transverse swelling on A1, a dull red; body glossy, dull yellow black or reddishstreaked with brown; subdorsal, supra- and subspiracular stripes white, edged with black; tubercles black, those on dorsum elongated, the longest on A1.

Cerura occidentalis Lintner. Populus trichocarpa, Salix spp. Kelowna, Houston, Vernon, Prince George,

B.C., and Carmacks, Y.T. LARVA: body $1\frac{1}{2}$ inches $+\frac{1}{4}$ inch stemapods; head brown, dark brown bar from ocelli to vertex; body green; dorsal stripe brown-edged with cream. stripe broad at front of T1, tapered to posterior margin of T2, the "abdominal saddle" broadest on A4 where it encompasses the spiracles; brown subventral patches on prolegs of abdominal segments; pair of vestigal subdorsal warts on T1; small slightly bilobed swelling on T2.

Boisduval. Cerura scolopendrina Populus tremuloides. spp., Southern B.C. and V.I. and two records from Skeena River Valley. LARVA: $1\frac{1}{2}$ inches + 1/3 inch stemapods; head brown, darkest near vertices; body yellow-green; dorsal "stripe" purplish-brown, broad at front of T1, tapered to the posterior margin of T2, slightly interrupted at leading edge of T3. The "abdominal saddle" broadest on A4 where it extends down behind the spiracles; a pair of small subdorsal warts on T1; swelling if present on T2, not bilobed.

Schizura unicornis A. & S. Alnus spp., Betula spp., Salix spp., Malus spp., Prunus spp. (3), Amelanchier sp. (1), Populus tremuloides. Southern B.C. and V.I. LARVA: similar to ipomoeae. Head light brown with darker brown longitudinal stripes from ocelli to vertices; thorax green, pleura of prothorax partly brown, not joined to dorsal stripe; abdomen light brown and olive green; brown dorsal stripe on thorax, split on prothorax but not diverging; whitish triangular, and truncated triangle-like markings on dorsum of A1-3; narrow-based white dorsal V on A6 and 7; prominent forked tubercle on A1; paired swelling on A5 with vestiges of tubercles: pair of prominent tubercles on prominent swelling on A8.

Gluphisia septentrionis Wlk. Populus tremuloides, P. trichocarpa. Vernon, Squilax, 70 Mile House, 83 Mile House, Place Lake, Exchamsiks. LARVA: Head yellow-green with or without black stripe on either side of front; body yellow-green; yellow subdorsal stripe; reddish broken patches on dorsum of thoracic and abdominal segments — excepting A1 and sometimes A2.

The California Tortoise-Shell, Nymphalis Californica Bdv., on Vancouver Island

After an apparent absence of eight years this butterfly has again been seen in southern Vancouver Island. It was first noticed on September 8, 1960, and was last seen on October 18. The butterflies frequented highways, sheltered valleys, and slopes, usually flying back and forth, settling occasionally on roads, fences or bushes. While not observed to visit flowers, they sought damp places and over-ripe fruit such as blackberries and apples. A slight tendency to drift eastward was at times indicated but

not so noticeably as in 1952.

At least some individuals hibernate here, for one was seen on the warm southern slope of Mount Douglas on January 26, 1961.

Following the immigration of 1952, this butterfly was frequently seen up to April 23, 1953, after which it disappeared. Whether the same pattern will eventuate in 1961 remains to be seen.

-George A. Hardy, Provincial Museum (Rtd.), Victoria, B.C.