

THE FIRST CHECKLIST OF BELARUSIAN TRICHOPTERA

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The first note regarding the Trichoptera of Belarus appeared towards the end of the 19th century (McLachlan 1884). In this note, about five species that were collected in the vicinity of Minsk were listed. It was not until more than 30 years later that additional information appeared, first from the Bialowieza Forest (Ulmer 1925) and then in papers by Raciecka (1931, 1937), who investigated the caddis flies of old eastern Poland, including some of the areas that are now in Belarus. The data were supplemented by Radkevich (1969) and Pisanenko (1985) but these data were based on larvae and the identifications are not certain. In 1987 the collection of Trichoptera in various habitats in Belarus was begun, and part of this research has been published (Czachorowski & Nesterovich 1992, Khmeleva et al. 1994, Nesterovich 1996, Czachorowski & Moroz 1997). Results from the investigation of caddis flies of temporary waters in the vicinity of Minsk and caddis flies of water habitats of the Chernobyl region will be published within the next few years. Intensive investigations will continue.



Map of Belarus and geobotanical districts used in table 1.

Table 1. Trichoptera recorded in Belarus, 1-6 - geobotanical districts of Belarus used in "A Catalogue of Coleoptera (Insecta) of Belarus", ? doubtful determination or locality undecided, o - the species has not yet been found in this area, but can be expected almost certainly

species	1	2	3	4	5	6	7	
<i>Rhyacophila fasciata</i> Hag.	?	+		?		?		1
<i>R. nubila</i> (Zett.)	?	+	?	+	?	?	?	2
<i>Ptilocoleptus granulatus</i> (Pict.)			+					3
<i>Hydroptila cornuta</i> Mos.	?		?	+				4
<i>H. occulta</i> (Eat.)				+				5
<i>H. simulans</i> Mos.				+				6
<i>H. sparsa</i> Curt.				+		?	?	7
<i>H. tineoides</i> Dal.				+		?		8
<i>Orthotrichia costalis</i> (Curt.)	?		+	?		?		9
<i>Ithytrichia lammellaris</i> Eat.			?	?		?	?	10
<i>Oxyethira flavicornis</i> (Pict.)				+				11
<i>O. tristella</i> Klap.				+				12
<i>O. sp. larvae</i>			+					
<i>Ecnomus tenellus</i> (Ram.)	+			o		?		13
<i>Holocentropus stagnalis</i> (Alb.)						+		14
<i>Polycentropus flavomaculatus</i> (Pict.)	?	+	+	+		?	?	15

species	1	2	3	4	5	6	7	
<i>Neureclipsis bimaculata</i> (L.)	?	+	?	+	?	?	?	16
<i>Plectrocnemia conspersa</i> (Curt.)	+	+	+	+	+			17
<i>Psychomyia pusilla</i> (Fab.)	?	?	?	?	?	?	?	18
<i>Hydropsyche angustipennis</i> (Curt.)	?	?	?	+	?	?	?	19
<i>H. pellucidula</i> (Curt.)	?	+	+	+	?	?	?	20
<i>Trichostegia minor</i> Curt.				+				21
<i>Agrypnia obsolata</i> (Hag.)	+	+		o				22
<i>A. pagetana</i> Curt.	?			+				23
<i>A. varia</i> Fabr.				+				24
<i>Oligostomis reticulata</i> (L.)		?		+		?		25
<i>Hagenella clathrata</i> (Kol.)	?			+		+		26
<i>Semblaia atrata</i> Gmelin [??]	?							
<i>S. phalenoides</i> L.				+				27
<i>Oligotrichia striata</i> (L.)				+				28
<i>Phryganea bipunctata</i> Retz.	?			+			+	29
<i>Ph. grandis</i> L.		+		+				30
<i>Brachycentrus subnubius</i> Curt.	?	?	?	+	?	?	?	31
<i>Goera pilosa</i> (Fab.)	?	+	+	+			?	32
<i>Silo graellsii</i> Ed. Pict. [??]				?				
<i>S. pallipes</i> (Fab.)	?	+	+					33
<i>Lasiocephala basalis</i> Kol.				+				34
<i>Lepidostoma hirtum</i> (Fab.)	?	?		?	?	?	?	35
<i>Crunoetia irrorata</i> (Curt.)	+	+	+		+			36
<i>Ironoquia dubia</i> (Steph.)			+	+				37
<i>Apatania hispidula</i> Curt.				+				38
<i>Drusus annulatus</i> (Steph.)				+				39
<i>Phaeopteryx brevipennis</i> (Curt.)				+	o			40
<i>Anabolia laevis</i> (Zett.)	+	+	+	+	?	?	+	41
<i>Grammotaulius nigropunctatus</i> (Ret.)	?			+			+	42
<i>G. nitidus</i> (Mull.)		+		+				43
<i>Glyptotaelius pellucidus</i> (Retz.)	?	?	+					44
<i>Nemotaulius punctatolineatus</i> (Retz.)	?		+	+			?	45
<i>Rhadicoleptus alpestris</i> (Kol.)			+					46
<i>Limnephilus auricula</i> Curt.	?	?		+				47
<i>L. bipunctatus</i>	?	?	+	+				48
<i>L. borealis</i> (Zett.)	+	+		+				49
<i>L. centralis</i> Curt.		+						50
<i>L. decipiens</i> (Kol.)	?			?			+	51
<i>L. dispar</i> McL.	?	+		+			?	52
<i>L. elegans</i> Curt.		+		+				53
<i>L. extricatus</i> McL.		+		+				54
<i>L. flavicornis</i> (Fab.)	+					+	+	55
<i>L. fuscicornis</i> Ramb.		?		+		+	?	56
<i>L. fuscicornis</i> (Zett.)		+				+	?	57
<i>L. griseus</i> (L.)	?	+		+		+	+	58
<i>L. hirsutus</i> (Pict.)				o				59
<i>L. ignavus</i> McL.				+				60
<i>L. incisus</i> Curt.				+				61
<i>L. lunatus</i> Curt.	?	?		o			+	62
<i>L. marmoratus</i>	?			o		?		63
<i>L. politus</i> McL.	+	?	?	+	?	?	?	64
<i>L. rhombicus</i> (L.)	?	+	+	+	?	+	?	65
<i>L. sericeus</i> (Say)				+				66
<i>L. sparsus</i> Curt.	?			+			?	67
<i>L. stigma</i> Curt.	?	+	?	+	?	+	+	68
<i>L. subcentralis</i> Brau.	?	?		+		+		69
<i>L. vittatus</i> (Fab.)	?	?	+	+			+	70
<i>Chaetopteryx fusca</i> Brau.		+						71
<i>Ch. villosa</i> (Fab.)	?	?	?	+				72
<i>Potamophylax cingulatus</i> (Steph.)		+		+				73
<i>P. latipennis</i> (Curt.)	?	+	+	+				74
<i>P. nigricornis</i> (Pict.)	+	+	+	+	?	?	?	75
<i>P. rotundipennis</i> (Brau.)				+				76
<i>Halesus digitatus</i> (Schr.)		+	+	+				77
<i>H. radiatus</i> (Curt.)	+			+				78
<i>H. tessellatus</i> Ramb.	?			+				79
<i>Parachiona picicornis</i> (Pict.)		+						80
<i>Sericostoma personatum</i> (Spen.)	+		+					81
<i>Notidobia ciliaris</i> (L.)	?	+		+				82
<i>Molanna albicans</i> (Zett.)			+					83
<i>M. angustata</i> Curt.	?	+	+	+				84
<i>M. submarginalis</i> McL.	?							85
<i>Molannodes tincta</i> Zett.	?	+		o				86
<i>Beraea pullata</i> (Curt.)		+		+				87
<i>Beraeodes minutus</i> (L.)				+				88
<i>Ermodes articularis</i> (Pict.)	+							89
<i>Triaenodes bicolor</i> (Curt.)	+	?		+		+	+	90
<i>T. conspersa</i> Curt.	?			+				91
<i>Mystacides azurea</i> (L.)	?	?		+		?	?	92
<i>M. longicornis</i> (L.)	+	?	+	+	?	?	?	93
<i>M. nigra</i> (L.)	?		+	+				94
<i>Athripsodes aterrimus</i> (Steph.)	?	?	+	+			+	95
<i>A. cinereus</i> (Curt.)	?	+	+	+				96
<i>A. comutatus</i> (Rost.)			+	+				97
<i>Ceraclaea aurea</i> (Pict.)				+				98
<i>C. disimilis</i> (Steph.)				+				99
<i>C. nigronervosa</i> (Retz.)				+				100
<i>C. sp. larvae</i>				+				
<i>Leptocerus interruptus</i> (Fab.)	+	?					?	101
<i>L. tineiformis</i> Curt.	+	?		+				102
<i>Oecetis furva</i> Ramb.				+				103
<i>O. laustris</i> Pict.	?			+				104
<i>O. testacea</i> (Curt.)				+				105

So far, 105 species of Trichoptera have been found in Belarus, but perhaps there are 150-180 species altogether. The caddis fly fauna of Belarus is fairly homogenous and typical for lowland fresh waters. Mountain species are very rare, while species typical for fens, bogs, marshes and wetlands are very common. Some species which are rare or extinct in western Europe are still common in Belarus.

Researchers of caddis flies in Belarus are sorely needed. Therefore, I would like to organize summer expeditions for collecting caddis larvae and adults. I should be glad to hear from anyone interested in these trips.

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TRICHOPTERA STUDIES IN AUSTRALIA

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In recent times the taxonomy of Australian caddis-flies has been investigated by an expanding number of workers, and the next few years should be very productive. While the Australian fauna is well known both at Family and Generic levels, several genera which at present are being revised contain large numbers of undescribed species (e.g. *Chimarra*, *Ecnomina*, *Cheumatopsyche*), while there are many genera with at least some undescribed species.

Arturs Neboiss and Alice Wells have submitted a manuscript revising the Australian species of *Trienodes*. Described species will be increased from four to forty-eight. Arturs has now commenced a revision of the *Trienodes* of New Guinea and Sulawesi, while Alice has turned her attention to the *Oecetis* of Australia. She anticipates that the number of described species will be increased from 19 to approximately 60.

Alice made a flying visit to Lord Howe Island last November, where she collected about ten species of caddis-flies. Lord Howe Island is a small (less than 1500 hectares), isolated volcanic island located almost 500 km east of Australia. It is relatively recent (probably late Miocene), and colonisation by caddis-flies has probably involved trans-oceanic dispersal. Nevertheless, the caddis fauna appears to exhibit a relatively high level of endemism at the species level. David Cartwright continues his work on the genus *Ecnomus*, and currently has a paper in press describing about 20 new species from New Guinea.

A major effort is being directed at the preparation of identification keys to Australian Trichoptera larvae. This is being undertaken in conjunction with an Australia wide river invertebrate monitoring program, funded by the Federal Government through the Land and Water Resources Research and Development Corporation. The first phase of the program has involved sampling of more than 1400 running water sites twice a year over two years, and has resulted in the accumulation of a large amount of material from all over the continent. Formal taxonomy is far from complete for many Australian caddis Families, and many species either have not been described or the larvae have not been associated with adults. Where formal identification is not possible the project will provide standard designations for larval morphotypes (e.g. *Agapetus* sp. AV3), and recognises that with future rearing and formal taxonomic studies some morphotypes will prove to be complexes of two or more species.

Keys are being prepared by the following workers:

David Cartwright: Glossosomatidae, Philopotamidae, Polycentropodidae, Dipseudopsidae, Ecnomidae, Psychomyiidae, Tasimiidae.

John Dean: Hydrobiosidae, Stenopsychidae, Hydropsychidae, Limnephilidae, Plectrotarsidae, Antipodocciidae, Atriplectidae.

Jean Jackson: Conoesucidae, Calocidae, Helicophidae.

Ros StClair: Hydroptilidae, Oeconesidae, Helicopsychidae, Kokiriidae, Philorheithridae, Odontoceridae, Calamoceratidae, Leptoceridae.

Keith Houston of ABRS has transferred "The Trichoptera Catalogue of Australia", a component of Volume 6 of the "Zoological Catalogue of Australia" (compiled by Arturs Neboiss in 1988), onto the "Platypus" data-basing program. This will allow easy updating of the Catalogue and give ready access to information on current taxonomy, synonymies, location of types, species distributions, available biological literature etc. Ultimately it is planned that this will be available on the internet.



Photographs from the 8th Trichoptera Symposium: Holzenthal, Nations, de Moor at Fayette Lake, Wyoming, 26 July 1995