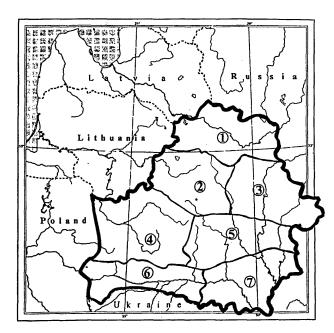
BRAUERIA (Lunz am See, Austria) 24:11-12 (1997)

THE FIRST CHECKLIST OF BELARUSIAN TRICHOPTERA

Stanisław CZACHOROWSKI

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 Coleoptara (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	
Rhyacophila fasciata Hag.	?	+		?		?		1
R. nubila (Zett.)	7	+	?	+	?	?	?	2
Ptilocoleptus granulatus (Pict.)				+				3
Hydroptila cornuta Mos	?		?	+				4
H. occulta (Eat.)				+				5
H. simulans Mos.				+				6
H. sparsa Curt.				+		?	?	7
H, tineoides Dal				+		?		8
Orthotrichia costalis (Curt.)	?		+	?		?		9
Ithytrichia lammelaris Eat.			?	+		?	?	10
Oxyethira flavicornis (Pict.)				+				11
O. tristella Klap.				+				12
O. sp. larvae]	+					
Ecnomus tenellus (Ram.)	+			0			?	13
Holocentropus stagnalis (Alb.)						+		14
Polycentropus flavomaculatus (Pict.) ?	+	+	+		?	7	15

species	1	71	2	3	11	1 1	5	6	71	7]
leureclipsis bimaculata (L.)	?	1	_	?	1	1/2		?	1/2	-	16	ᆌ
lectrocnemia conspersa (Curt.)	+	1	7	+	11		-		٦ŀ		17	٦
sychomyia pusilla (Fab.)	?	?			Œ	?		?	7		18	
lydropsyche angustipennis (Curt.)	?	?		?	+	?		?	7/7		19	٦
I. pellucidula (Curt.)	?]王		+	Ŧ			?	7		20	J
richostegia minor Curt.			_]		+						21	
agrypnia obsoleta (Hag.)	+	+			0				\Box [22	
a. pagetana Curt.	?	<u> </u>]][+_				\Box [23	
A. varia Fabr.		JL][+	┸					24	
Digostomis reticulata (L.)		?			+			?	IJĽ		25	_
Iagenella clathrata (Kol.)	?	┵			+			+			26	
embilis atrata Gmelin [??]	?	┵										
. phalenoides L.		41			11+	ЩL		<u></u>	ᆚ		27	4
Digotricha striata (L.)		ᆚᆫ			<u> + </u>	-			ᆚ		28	
Phryganea bipunctata Retz.	?	ᆚᆫ	_		+				_ :	-	29	
h. grandis L.	<u>_</u>	4l±	-4		1+	-11-			4		30	_
Brachycentrus subnubilus Curt.	?	?		?	ΙŒ			?	4		31	
Goera pilosa (Fab.)	?	- ÷		+	4 <u> </u> ±	⊣⊦		<u> </u>	413		32	_
Silo graellsii Ed. Pict. [??]	<u> </u>	╢		+	7	┵		┝	┵		-	-
S. pallipes (Fab.)	?	-II ⁺		+	╢						33	_
asiocephala basalis Kol.	7	ᆛ	-4	<u> </u>	1+	۔ا	,—	_	 -	-	34	_
epidostoma hirtum (Fab.)	1			ļ	12	2	' —	?			35	_
Crunoetia irrorata (Curt.)	+	4l±		+	-11	— ŀ	-	┝	⊣⊦		36	_
ronoquia dubia (Steph.)	١	⊣⊢		+	- <u>+</u>			<u> </u>	⊣⊦		37	_
Apatania hispida Curt. Drusus annulatus (Steph.)	1	$\dashv \vdash$	-4	+	╢	}		-	}		38	_
Phacopteryx brevipennis (Curt.)	l	4	\dashv	+	╢			-	-		40	_
Anabolia laevis (Zett.)	₩-	╢╌	\dashv	+	╢		, 	2		╤┯┥	41	
Grammotaulius nigropunctatus (Ret.)	7	٦f		١	╢┾			۳	—1	+	41	_
G. nitidus (Mull.)	11-	╢╪	\dashv		┧╬				-1	—-	43	_
Glyphotaelius pellucidus (Retz.)	2	1/7	\dashv	+	٦Ė						44	_
Nemotaulius punctatolineatus (Retz.)	17	٦ř	-	+	╢┼				 }	?	45	_
Rhadicoleptus alpestris (Kol.)	ir—	7	\dashv	+	1					_	46	_
Limnephilus auricula Curt.	?	7 +	-		1				-		47	_
L. bipunctatus	7	1/7		+	11						48	_
L. borealis (Zett.)	╟┼	7			1				۱۱		49	
L. centralis Curt.	11	7			71	-1			-11		50	
L. decipiens (Kol.)	7	7			7				۱۱	+	51	_
L. dispar McL.	7	717	-		٦I∓					?	52	_
L. elegans Curt.	1	╗	-		7 +						53	_
L. extricatus McL.		7			⋾						54	_
L. flavicornis (Fab.)	+	30			∃E			+		+	55	_
L. fuscicornis Ramb.		7			∃			Ŧ		?	56	
L. fuscinervis (Zett.)								+		?	57	
L. griseus (L.)	7	⊒Œ			Ŧ			+		+	58	_
L. hirsutus (Pict.)		30			0				\Box		59	Ξ
L. ignavus McL.		ַתַ			_ [+						60	Ξ
L. incisus Curt.][+						61	Ξ
L. lunatus Curt.	?	2			0					+	62	Ξ
L. marmoratus	?				_ 0			?			63	Ξ
L. politus McL.	11+	117	,	1 ?	11+		?	11?	\neg	?	64	_
L. rhombicus (L.)	7	78	+	+	⋾		?	Ŧ	\neg	7	65	
L. sericeus (Say)		$\exists L$			JŒ						66	_
L. sparsus Curt.	?	IJL			_][+			lШ		?	67	
L. stigma Curt.	?		_	?	+		?] + _		+	68	
L. subcentralis Brau.	_ ?	[2		<u> </u>	_l±			+			69	
L. vittatus (Fab.)][_			+	_l±					+	70	
Chaetopteryx fusca Brau.				<u> </u>	_][71	
Ch. villosa (Fab.)	?			[?	_ ±			1	_	?	72	
Potamophylax cingulatus (Steph.)	41_	<u> </u>	+	1	_]±			41—			73	_
P. latipennis (Curt.)	-112	-41	<u>+</u>	1 <u>†</u>	ᅫ		ļ		\dashv		174	
P. nigricornis (Pict.)	- <u>+</u>	-11	+	?	1		?	412	—	?	75	
P. rotundipennis (Brau.)	╢	4		 	-11:	_	-	╢	_	<u> </u>	76	
Halesus digitatus (Schr.)	╢	-	+	+	-11:		—	41-	\dashv		177	
H. radiatus (Curt.)	+				-14		-	╢		<u></u>	78	
H. tesselatus Ramb.	7		+	┨—	4		-		\dashv	 	79 80	
Parachiona picicornis (Pict.) Sericostoma personatum (Spen.)	╢┿	-41	•	╢┯			\vdash	╢-	-	-	81	
Notidobia ciliaris (L.)	17		+	╢	;			╬			82	
Molanna albicans (Zett.)	٦۴		-	╢┯	-11		\vdash	1	-	_	83	
M. angustata Curt.	1/7	┥	+	╢┿				1	-	-	84	
M. submarginalis McL.	11/7	╢	_	╢	٦٢		-	1		—	85	
Molannodes tincta Zett.	1/2	╢	+	1	1		 	╁	-	-	186	
Beraea pullata (Curt.)	٦۴		+	╫		,	1	1		II	1 87	
Beraeodes minutus (L.)	⊣ ⊢	 		11		-		1 -			88	
Ernodes articularis (Pict.)	- -	ᅰ		1	\dashv			┪┝╴			1 89	
Triaenodes bicolor (Curt.)	╢┼		?	1	- ∤ŀ	+	1	╢┼		+	160	
T. conspersa Curt.	1/7	╢	<u> </u>	┧├──	-		11-	٦Ė		1	16	
Mystacides azurea (L.)	11/7	-11	?	1	11:	+	1	1		?	92	
M. longicornis (L.)	┨╪		?	╁		+	7	7		7	16	
M. nigra (L.)	1/7	-1	<u> </u>	┧;		+		71-		1	16	
Athripsodes aterrimus (Steph.)	1/7	\dashv	?	╢┼		+		7		+	9	-
A. cinereus (Curt.)	717	ᅦ	+	1		+	1	7		1	100	
A. commutatus (Rost.)	٦H		_	1		+	1	71-		1	16	
Ceraclea aurea (Pict.)	ᆉ	-	-	1		+	1	7		1	16	
C. disimilis (Steph.)	-11-	\dashv	_	┧		+	11	7		1	16	
C. nigronervosa (Retz.)	⊣⊢	\dashv			_	+	1	-1	_	1	ᆙ	_
C. sp. larvae	$\dashv\vdash$	\dashv	_			-	1	- -		 	٦۴	
Leptocerus interruptus (Fab.)	╢┼	\dashv	7	┰			1	41-		1/2	1/1	ī
L. tineiformis Curt.	╢	\dashv	?			+	11-	11-	_	11	٦fi	
Oecetis furva Ramb.	1/7	\dashv	<u> </u>	⊣			11	-1		1	- i	
O. lacustris Pict.	- -	\dashv	Η-	╢		+	1-			╬	٦ť	
sucuau is 4 lbb.	⊣뜯	_	=	∹;				ᆛ는		:==		
		- 1		_		+	4	ᆚᄂ		الـ	ᅫ	10
O. testacea (Curt.)	⊣⊢									11		-
	非	\exists	<u> </u>	╢			╢	╢		╫	4	_
	#	\exists		上	4		上	╬		上	非	_

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.

Acknowledgements. I would like to thank Drs.Oleg Alexandrovitch, Andriej Nesterovich and Mikhail Moroz from Belarus for providing caddis flies collected in Belarus and for helping to complete the data about Belarusian caddis flies, and Michael O'Shea for editing the English translation of this article.

Czachorowski S, A. Nesterovich, 1992. Caddis larvae from some Belorussian springs. Braueria,

Czachorowski S., A. Nesterovich, 1994. Ruchejniki (Insecta, Trichoptera) Belarusi, stepen izuchennost. Proc. of VII zool. con., Minsk, pp. 98-100.
Khmeleva N., A. Nesterovich, S. Czachorowski, 1994. The macroinvertebrate fauna of some Byelorussian, Karelian, and Altaian springs and its relation with certain factors. Acta Hydrobiol., Kraków, 36: 75-90.

Nesterovich A., 1996. Studies of the fauna of Belarusian springs. Crunoecia, 5: 79-85. Pisanenko A. D., 1985. Obzor fauny i zoogeograficheskij analiz ruchejnikov (Trichoptera) Belorusii. [Manuscript, in Russian]

Racięcka M., 1931. Die Trichopteren des nordöstlichen Bolen, insbesondere der Umgebung von Wilno und Troki [in Polish, Geman Summary]. Travaux de l'Institut de Zoologie de l'Universite de Vilno, 20: 1-34.

l'Universite de Vilno, 20: 1-34.

Racięcka M., 1937. Neue und seltenere Trichopterenarten der Umgegend von Wilno [in Polish, Geman Summary]. Travaux de l'Institut de Zoologie de l'Universite de Vilno,38: 1-6

Radkievich A. I., 1969. Ruchejniki gruppy ozer Tiosto-Vymno (Vitebskaja oblast). Tezisy dokladov I nauchno-prakticheskoj konferencji, Vitebsk, 103-108 pp [in Russian].

Ulmer G., 1925. Trichopteren und Ephemeropteren aus dem Bialowiser Wald. Abh. Bayer. Akad. Wiss., Suppl., 6-9: 339-342.

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

TRICHOPTERA STUDIES IN AUSTRALIA

John DEAN

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 Triaenodes. Described species will be increased from four to forty-eight. Arturs has now commenced a revision of the Triaenodes 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 dispersal. 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

Keys are being prepared by the following workers: David Cartwright: Glossosomatidae, Philopotamidae, Polycentropodidae, Dipseudopsidae, Ecnomidae, Psychomyiidae, Tasimiidae.

two or more species.

John Dean: Hydrobiosidae, Stenopsychidae, Hydropsychidae, Limnephilidae, Plectrotarsidae, Antipodoeciidae, 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 synonymies, location of types, s s, available biological literature taxonomy, distributions, available biological literature etc. Ultimately it is planned that this will be available on the internet.

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

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