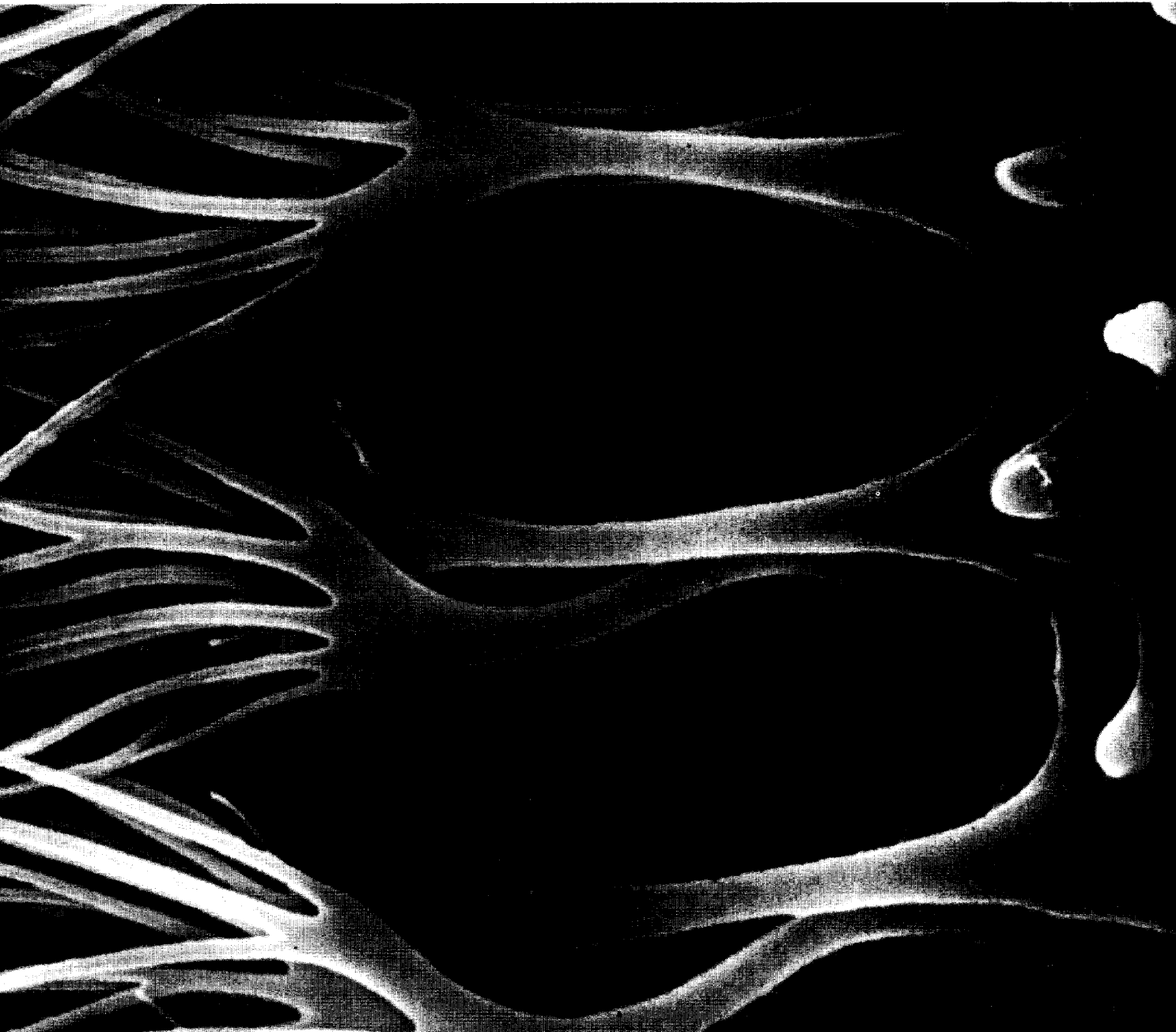




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TRICHOPTERA  
NEWSLETTER

# BRAUERIA 20



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**VERTICAL DISTRIBUTION OF CADDIS LARVAE IN VARIOUS TYPES OF LAKE LITTORAL**

Stanisław Czachorowski

This contribution is supplementary to papers: Czachorowski 1989 and Czachorowski in prep. General model of habitat distribution of Trichoptera in lakes was presented during the 7th International Symposium on Trichoptera. Detailed data of this problem will be published shortly. Investigations are now being continued in the Lobelian lakes (The Pomerania Lakeland, North-West Poland).

Caddis larvae were collected during three years (1988-1990) at monthly intervals in three lakes: Narckie, Warchafdzkie and Brajnickie (Northern Poland). Vertical distribution of caddis larvae were investigated at seven stations (various types of littoral, see Bernatowicz & Zachwieja 1966).

Fig.1. Narckie Lake (mesotrophic), littoral with great-lake helophytes, elodeids distant from helophytes. Species typical for submergent plant (Magnocaracetum, Ceratophyllum, Myriophyllum) do not occur in helophytes (group C2: *Cyrnus flavidus*, *C. crenaticornis*, *Oxyethira* sp.) or occur in small numbers (group C1: *Leptocerus lineiformis*, *Mystacides longicornis*, *Athripsodes aterrimus*). Limnephilidae occur only in helophytes.

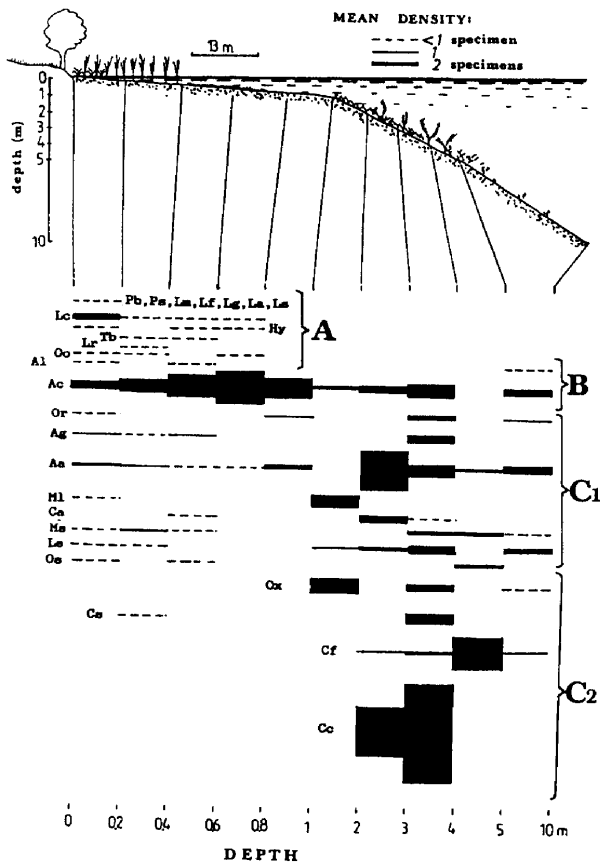


FIG. 1

Abbreviations in the figures:

A (A1, A2) - species occurring only in the most shallow littoral (helophytes zone).  
 B (B1, B2) - species occurring throughout the vertical range.  
 C (C1, C2, C3) - species occurring only or mainly in elodeids zone.

Mean density: mean density of caddis larvae to 0,3 - 0,5 m<sup>2</sup> of bottom.

Fig.2. Narckie Lake, small-lake phytolittoral, elodeids directly adjoin helophytes. Special typical for large under-water meadows occur in helophyte zone in great numbers and species typical for helophytes (rushes and bulrush zone) in deep water.

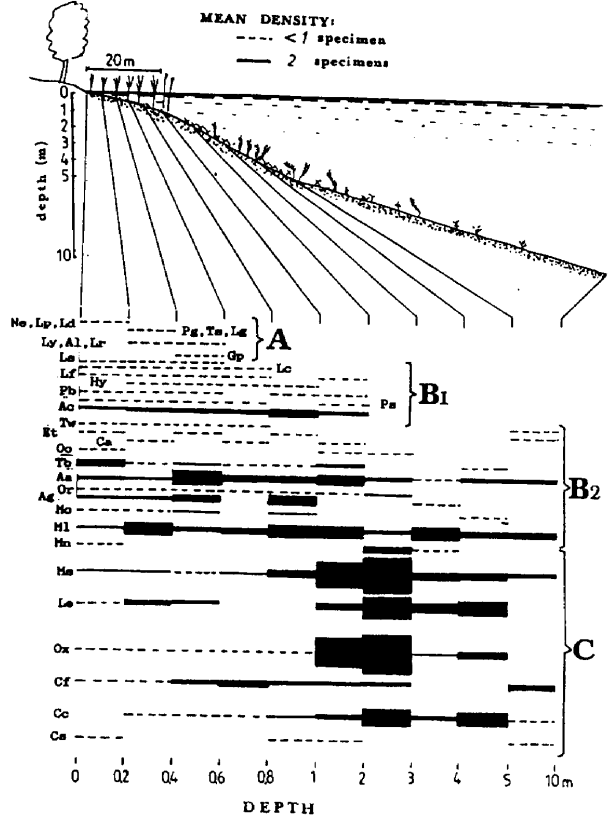


FIG. 2

Fig.3. Narckie Lake, atrophic phytolittoral, muddy bottom, elodeids represented mainly by *Stratiotes aloides*, Characeae, *Elodea canadensis*. *Limnephilus griseus* occur in temporary pools. Species of elodeids occur very near-by marsh helophytes.

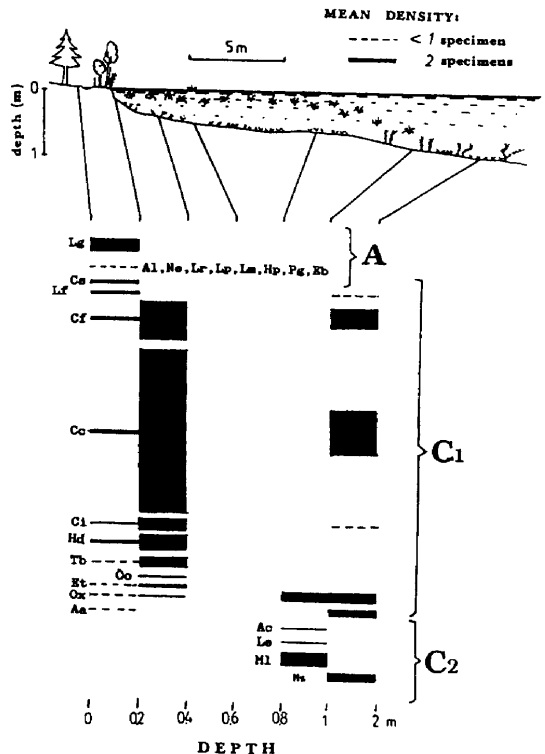


FIG. 3

Marks of species used in fig. 1 - 7:

Aa - Athripsodes aterrimus (Steph.), Ac - A.cinereus (Curt.), Ag - Agraylea multipunctata Curt., Al - Anobolia laevis (Zett.), Ca - Ceraclea annulicornis (Steph.), Cc - Cyrnus crenaticornis (Kol.), Cf - C.flavidus McL., Ci - C.insolutus McL., Cs - C.sp.juv., Eb - Erotosis baltica McL., Et - Ecnomus tenellus (Ramb.), Hd - Holocentropus dubius (Ramb.), Hp - H.picicornis (Steph.), Hy - Hydroptila sp., La - Limnephilus auricula Curt., Lb - L.borealis (Zett.), Lc - L.fuscicornis Ramb., Ld - L.decipiens (Kol.), Le - Leptocerus tineiformis (Curt.), Lf - Limnephilus flavicornis (Fabr.), Lg - L.griseus (L.), Ll - L.lunatus Curt., Lm - L.marmoratus Curt., Ln - L.nigriceps (Zett.), Lp - L.politus McL., Lr - L.rombicus (L.), Ls - L.sp.juv., Lu - L.sparsus (Curt.), Ly - Lype sp., Ml - Mystacides longicornis (L.), Mn - M.nigra (L.), Mo - Molanna angustata Curt., Ms - Mystacides sp.juv., Ne - Nemotaulius punctatolineatus (Retz.), Of - Oecetis furva (Ramb.), Ol - O.lacustris (Pict.), Oo - O.ochracea (Curt.), Or - Orthotrichia sp., Os - Oecetis sp.juv., Ox - Oxyethira sp., Pb - Phryganea bipunctata Retz., Pg - P.grandis L., Ps - P.sp.juv., Tb - Trianaodes bicolor (Curt.), Ts - Tinodes sp., Tw - T.waeneri (L.).

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#### MEETINGS

5th European Congress of Entomology,  
28.8.-2.9.1994:  
Institute of Applied Biology, University of York,  
York YO1 5DD, U.K.

14. Internationales Symposium über Entomofaunistik in Mitteleuropa, München (BRD), 5.-10.9.1994  
Information: Dr. Gerhard SCHERER, Zoologische Staatssammlung, Münchhausenstraße 21,  
D - 8000 München 60, BRD.

8th International Symposium on Trichoptera  
Minneapolis/St. Paul, Minnesota, USA,  
9 - 15 July 1995  
Information: Ralph Holzenthal,  
University of Minnesota, Department of Entomology, 219 Hodson Hall,  
1980 Folwell Ave., St. Paul MN 55108-6125

20th International Congress of Entomology  
Florence, Italy, August 25 - 31, 1996  
Information: Organizing Secretariat,  
Via A. La Marmora 24, I - 50121 Firenze

BRAUERIA (Lunz am See, Austria) 20: 9

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#### A.G. McFARLANE: Obituary

A direct link with the 19th century was broken on 24 August 1992 when Alexander Grant McFarlane, who spent most of his life working on the systematics and life histories of the New Zealand Trichoptera, died after a short illness. Alex was born in Takapau, North Island of New Zealand on 9 December 1899. He graduated as a teacher from Wellington Training College in 1923; whilst teaching, he studied at Canterbury University part-time. His chosen thesis topic was the biology of the Rhyacophilidae.

Alex completed his M.A. degree in Zoology with First Class Honours at Canterbury University in 1937; he continued to work on Trichoptera part-time during his career as a school teacher. After retirement he came to Canterbury Museum, where he was appointed Technical Assistant in 1964 and Research Associate in 1965. He retired from the Museum in 1987. By this time he had named and described about (1/3) of the known New Zealand caddisfly fauna; he also studied and described the immature stages of many of the species. His 1951 paper on the larval Rhyacophilidae (now Hydrobiosidae) remains the standard work on the group.

Alex was a keen fisherman and lover of the outdoors all of his life. He is remembered with special affection by all who worked with him as a quiet, unassuming man, with a great interest in people.

#### A.G. McFarlane: Bibliography

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John B.Ward, Research Associate, Canterbury Museum.