

A tribute to Ryszard Sowa (1934-1989) His Scientific Work

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In December 1989, on the day after Christmas, Professor Ryszard Sowa died suddenly, in Krakow, at the early age of 55. He left his bereaved wife Ewa and their twin daughters Barbara and Catherine aged 17. While the small world of specialists quickly learnt about this sad event, many hydrobiologists/ecologists are still not aware of it. This state of affairs is probably partly due to the upheaval which occurred in Eastern Europe in the meantime. An enumeration of his work is given here at the request of a number of his non-ephemeropterist colleagues, his work not being strictly limited to the mayflies. To begin with, I would like to pay the last tribute to him who was the friend of many of us.

Ryszard described over 50 species of European mayflies out of a total estimated, at present, to be some 300 species, which illustrates the extent of his contribution to the knowledge of this order. In particular, he was the best taxonomist in the world as regards the large genus *Rhithrogena*: almost all the publications which still appear at present on this subject, have been inspired by his work. Most ephemeropterists have had, at one time or other, the opportunity of co-operating with him; this fact bears witness to the extent of his influence. The finesse with which he was able to distinguish certain specimens belonging to closely allied species was particularly impressive, if not extraordinary, and led us all to consider the concept of a species by pushing far back the frontiers of the utilisation of classical morphology.

During this period of striving for results, and in view of the operating budgets of a number of laboratories working on the subject of Ephemeroptera, may I also mention with due admiration the modest financial means with which he had to be satisfied during the whole of his career. From his field work (done moving about on his scooter for many years) up to the incongruous disparity of jars

and tubes of his collection, not to mention the need for high-tech computerized or optical facilities or management of a decent library, Ryszard was, without any doubt, a world champion in output and productivity, regarding the funding he had: his scientific merit was particularly great, considering that he is author or co-author of 78 publications. He was also chief editor of the journal *Acta Hydrobiologica*.

Among his great qualities were courtesy and fair play. He showed himself capable of renouncing an interesting study proposition so as not to get in the way of a colleague already engaged in a similar programme. As a Frenchman, I consider it my pleasant duty to mention an important service he rendered to the hydrobiology of our country and the enormous rôle he played, thanks to his competence and generosity, in the exploitation of a large collection from the South-East of France. It should be mentioned that all this happened during the last years of his life, regardless of the health problems which were to put an end to his life.

A very modest man, Ryszard was always quiet, well wishing and completely devoid of aggressiveness. We shall miss his melancholy smile.

My affectionate thanks are extended to his wife Ewa for her help in compiling the following list.

Publications list of Prof. R. Sowa (1959-1992):

- 1959. Przyczynek do poznania fauny jetek (Ephemeroptera) okolic Krakowa [Contribution to the knowledge of the fauna of mayflies (Ephemeroptera) in the environs of Krakow]. *Acta zool. cracov.*, 4 (12): 655-697.
- 1959. Fauna unoszona (syrton) rzeki Bajerki [Surton of stream Bajerka]. *Acta hydrobiol.*, 1 (3-4): 197-213.
- 1961. Fauna denna rzeki Bajerki [The bottom fauna of the river Bajerka]. *Acta hydrobiol.*, 3 (1): 1-32.

1961. Nowe stanowisko jetki *Ephemerella karelica* (Tiensuu) (= *Eurylophella karelica* Tiensuu) [New stand of the *Ephemerella karelica* (Tiensuu) (= *Eurylophella karelica* Tiensuu)] (sic). *Acta hydrobiol.*, 3 (1) : 59-62.
1961. *Oligoneuriella mikulskii* n. sp. (Ephemeroptera). *Acta hydrobiol.*, 3 (4) : 287-294.
1961. New and rare species of stoneflies (Plecoptera) in the fauna of Poland. *Acta hydrobiol.*, 3 (4) : 295-302.
1962. Materiały do poznania Ephemeroptera i Plecoptera w Polsce [Material for the study of Ephemeroptera and Plecoptera in Poland]. *Acta hydrobiol.*, 4 (2) : 205-224.
1964. Drei interessante Arten der *Nemoura*-Gattung (Plecoptera) in Polen. *Bull. Acad. pol. Sci.*, Cl. II, Sér. Sci. biol., 12 (8) : 347-349.
1965. Invertebrate water animals of the Dunajec River. in : Starmach, K. ed. : Along the Dunajec River, *XVI Limnologorum Conventus in Polonia* : 11-14.
1965. Invertebrate water animals of the Polish Tatra. in : Starmach, K. ed. : Tatra Mountains, *XVI Limnologorum Conventus in Polonia* : 41-50.
1965. Ecological characteristics of the bottom fauna of the Wielka Puszczka stream. *Acta hydrobiol.*, 7 suppl. 1 : 61-92.
1966. Brachyptera starmachi sp. n., pléoptère nouvellement trouvé des Carpathes. *Bull. Acad. pol. Sci.*, Cl. II, Sér. Sci. biol., 14 (6) : 427-432.
1969. *Rhithrogena degrangei* sp. n. des Alpes françaises (Ephemeroptera, Heptageniidae). *Bull. Acad. pol. Sci.*, Cl. II, Sér. Sci. biol., 17 (9) : 563-567.
1970. Note sur quelques Pléoptères de la Pologne. *Bull. Acad. pol. Sci.*, Cl. II, Sér. Sci. biol., 18 (3) : 153-157.
1970. Deux Pléoptères nouveaux de Bulgarie. *Bull. Acad. pol. Sci.*, Cl. II, Sér. Sci. biol., 18 (12) : 767-772.
1971. Sur la taxonomie de *Rhithrogena semicolorata* (Curtis) et de quelques espèces voisines d'Europe continentale (Ephemeroptera : Heptageniidae). *Revue suisse Zool.*, 77 (4) : 895-920.
1971. *Ecdyonurus starmachi* sp. n. et *E. submontanus* Landa des Carpathes polonaises (Ephemeroptera, Heptageniidae). *Bull. Acad. pol. Sci.*, Cl. II, Sér. Sci. biol., 19 (6) : 407-412.
1971. Note sur quelques *Rhithrogena* Eaton de la collection Esben-Petersen et la redescription de *Rhithrogena germanica* Eaton (Ephemeroptera, Heptageniidae). *Bull. Acad. pol. Sci.*, Cl. II, Sér. Sci. biol., 19 (7-8) : 485-492.
1971. Note sur les deux [sic] espèces de la famille Heptageniidae des Carpathes polonaises (Ephemeroptera). *Acta hydrobiol.*, 13 (1) : 29-41.
1972. *Baetis beskidensis* n. sp. des Carpathes polonaises [sic] (Ephemeroptera : Baetidae). *Bull. Acad. pol. Sci.*, Cl. II, Sér. Sci. biol., 20 (10) : 711-712.
1973. Note sur quelques espèces paléarctiques de *Rhithrogena* Eaton (Ephemeroptera, Heptageniidae). *Bull. Acad. pol. Sci.*, Cl. II, Sér. Sci. biol., 21 (1) : 21-26.
1973. Taxonomie et écologie d'*Ecdyonurus carpathicus* sp. n. des Carpathes polonaises (Ephemeroptera, Heptageniidae). *Bull. Acad. pol. Sci.*, Cl. II, Sér. Sci. biol., 21 (4) : 285-289.
1973. Taxonomie et écologie de *Caenis beskidensis* sp. n., des Carpathes polonaises (Ephemeroptera, Caenidae). *Bull. Acad. pol. Sci.*, Cl. II, Sér. Sci. biol., 21 (5) : 351-355.
1973. Contribution à l'étude des *Oligoneuriella* Ulm. européennes (Ephemeroptera, Oligoneuriidae). *Bull. Acad. pol. Sci.*, Cl. II, Sér. Sci. biol., 21 (10) : 657-665.
1973. Ocena fauny dennej Sanu i jego gorskiego dorzecza z uwzględnieniem wpływu gospodarczej działalności człowieka [Evaluation of the bottom fauna of the river San and its mountain catchment basin taking into consideration the influence of human economic activity]. *Biblioteka Przemyska*, 6 : 81-92.
1974. *Ecdyonurus fasciocolatus* sp. n., espèce voisine d'*E. affinis* Eaton du midi de la Pologne (Ephemeroptera, Heptageniidae). *Bull. Acad. pol. Sci.*, Cl. II, Sér. Sci. biol., 22 (5) : 315-323.
1975. Notes on the European species of *Procloeon* Bengtsson with particular reference to *Procloeon bifidum* (Bengtsson) and *Procloeon ornatum* Tshernova (Ephemerida : Baetidae). *Ent. scand.*, 6 : 107-114.
1975. What is *Cloeon dipterum* (Linnaeus, 1761) ? *Ent. scand.*, 6 : 215-223.
1975. Ecology and biogeography of mayflies (Ephemeroptera) of running waters in the Polish part of the Carpathians. 1. Distribution and quantitative analysis. *Acta hydrobiol.*, 17 (3) : 223-297.
1975. Ecology and biogeography of mayflies (Ephemeroptera) of running waters in the Polish part of the Carpathians. 2. Life Cycles. *Acta hydrobiol.*, 17 (4) : 319-353.
1979. Le développement des Ephéméroptères de la rivière Dunajec aux environs de Pieniny. in : K. Pasternak & R. Sowa eds., *Proc. Second Int. Conf. Ephemeroptera* : 125-131, Warszawa, Krakow.
1980. Taxonomy and ecology of European species of the *Cloeon simile* Eaton group (Ephemeroptera : Baetidae). *Ent. scand.*, 11 : 249-258.
1980. La zoogéographie, l'écologie et la protection des Ephéméroptères en Pologne, et leur utilisation en tant qu'indicateurs de la pureté des eaux courantes. in : J.F. Flannagan & K.E. Marshall eds., *Advances in Ephemeroptera biology* : 141-154, Plenum Press, New York, London.
1981. Taxonomy and ecology of *Ecdyonurus ujhelyii* sp. n. (Ephemeroptera, Heptageniidae) from the tributaries of Lake Balaton. *Acta hydrobiol.*, 23 (4) : 375-380.
1984. Contribution à la connaissance des espèces européennes de *Rhithrogena* Eaton (Ephemeroptera, Heptageniidae) avec le rapport particulier aux espèces des Alpes et des Carpathes. in : V. Landa & al. eds, *Proc. Fourth Int. Conf. Ephemeroptera* : 37-52, Ceske Budejovice.
1984. Two new species of *Ecdyonurus* Eaton of *lateralis* (Curt.) group (Ephemeroptera, Heptageniidae) from the Crimea and Western Caucasus. *Acta hydrobiol.*, 25/26 (2) : 181-188.
1985. *Pseudocentropilum fascicaudale* n. sp. (Ephemeroptera, Baetidae) from Greece. *Acta hydrobiol.*, 27 (1) : 75-80.
1991. Jetki (Ephemeroptera). in : Razowski J., ed. : *A check list of the animals of Poland*. Ossolineum publ., Wroclaw-Krakow : 33-38.
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