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**RUTILUS (PARARUTILUS) FRISII MEIDINGERI
IN THE CZECHOSLOVAK STRETCH OF THE DANUBE RIVER**

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Abstract: The first find of *Rutilus frisii meidingeri* (Heckel, 1852), from the Czechoslovak stretch of the Danube river, is described.

Rutilus frisii (Nordmann, 1840) is a pontocaspian species. Its nominate form occurs in brackish waters of the northern part of the Black and Azov Seas, from which ascend the rivers Dniester, Southern Bug, Dnieper, Mius, Don, Rioni (it lives also in the Paleostom lake) and the rivers near Batumi. There is a lack of data on its presence in the delta of the Danube river (Antipa 1909, Berg 1949, Ljaščenko 1952, Bănărescu 1960), but the species is known from the Razelm lake (Bănărescu 1960). However, single specimens apparently ascend the Danube as proved by the finding at Svištovo in Bulgaria (Michajlowa 1967).

The upper part of the Danube river is inhabited by subspecies *Rutilus frisii meidingeri* (Heckel, 1852), which lives in lakes Chiem-, Mond-, Atter-, and Traunsee and also in their tributaries and effluents (Heckel 1852, Heckel and Kner 1858, Siebold 1863, Berg 1932, Bauch 1963). According to Kähnsbauer (1961) this subspecies occurs also in the proper main channel of the Danube, even in the Morava river in Lower Austria (personal discussion with dr. Kähnsbauer, however, did not confirm the last indication).¹⁾

In Czechoslovakia (Oliva and Hrabě 1968, Holčík and Hensel 1972), Hungary (Berinkey 1966, Mihályi 1954, Tóth 1970) and Yugoslavia (Taler 1953, Vuković and Ivanović 1971) this species has been not found at all.

Fisherman J. Vörös caught one specimen of *Rutilus frisii meidingeri* (Heckel, 1852) in the Danube near the village Radvaň nad Dunajom at the river km 1749 in the summer of 1975. The fish is a male, measuring 271 mm of standard length, ageing 6+. It is the first finding of this species in the Czechoslovak stretch of the Danube river. Its measurements and counts are introduced in Table 1.

¹⁾ For the sake of completeness it is necessary to add that in Southern Bulgaria, in the rivers Veleka and Rezovska another subspecies — *R. frisii velezensis* Chichkoff, 1932 — was found (Berg 1949, Michajlowa 1967). It is quite possible that populations living in Turkish lakes Terkos and Iznik (Kosswig and Battalgil 1943, Berg 1949) belong to this subspecies. Finally, in the Caspian Sea, mainly in its southern part, lives *Rutilus frisii kutum* (Kamensky, 1899). It also ascends the rivers.

Table 1. Counts and measurements of *Rutilus frisii meidingeri* recorded in the Danube at the river km 1749

Standard length (mm)	271	Praeanal distance	72.1
Counts:		Body depth	23.7
Soft branched rays in D	9	Body width	15.1
Soft branched rays in A	10	Caudal peduncle length	19.9
Soft branched rays in P	17	Caudal peduncle depth	10.9
Soft branched rays in V	8	Caudal peduncle width	7.8
Soft branched rays in C	17	Minimal body depth	8.5
Scales in lateral line	64	Distance P-V	27.5
Scales above/below lateral line	11/5.5	Distance V-A	23.7
Gill rakers	8	Length of D	12.5
Pharyngeal teeth, (left—right)	6—5	Length of A	11.1
Measurements:		Length of C (shortest middle ray)	6.6
(in % of standard length)		Length of C (longest lower lobe ray)	19.2
Head length	21.9	Length of P	15.3
Praeorbital distance	7.8	Length of V	14.2
Eye diameter	3.9	Depth of D (longest branched ray)	14.9
Postorbital distance	11.3	Depth of A (longest branched ray)	11.0
Head depth	16.8	(in % of head length)	
Head with	12.6	Praeorbital distance	35.2
Interorbital distance	9.5	Eye diameter	17.6
Internasal distance	5.1	Postorbital distance	51.2
Praedorsal distance	48.9	Head depth	76.3
Praeventral distance	48.9	Head width	57.2
		Interorbital distance	43.0
		Internasal distance	23.0

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The plates (Figs. 1—3) will be found at the end of this issue.

Hensel K.: *Rutilus* (*Pararutilus*) *frisii meidingeri* in the Czechoslovak stretch of the Danube river.

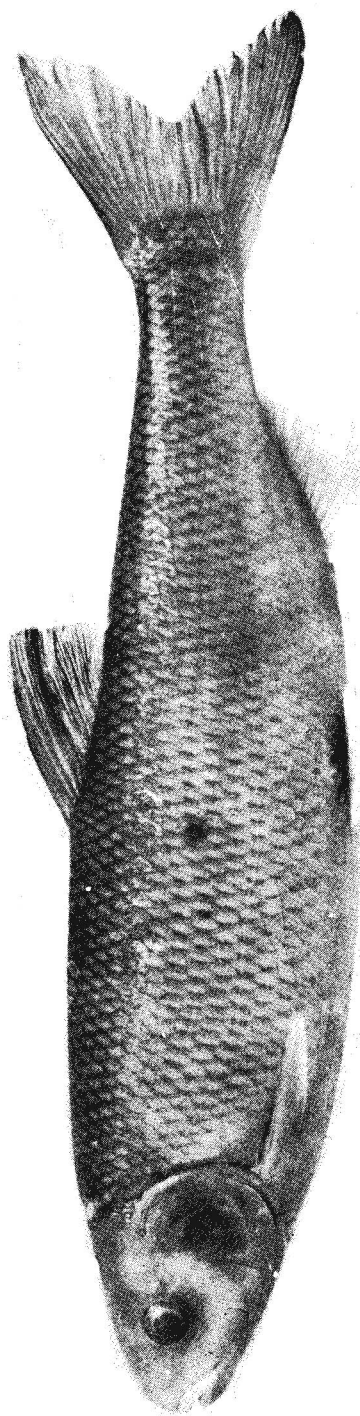


Fig. 1. *Rutilus frisii meidingeri* recorded in the Czechoslovak stretch of the Danube river at the river km 1749 (a male of 271 mm SL).

Hensel K.: *Rutilus* (*Pararutilus*) *frisii meidingeri* in the Czechoslovak stretch of the Danube river.

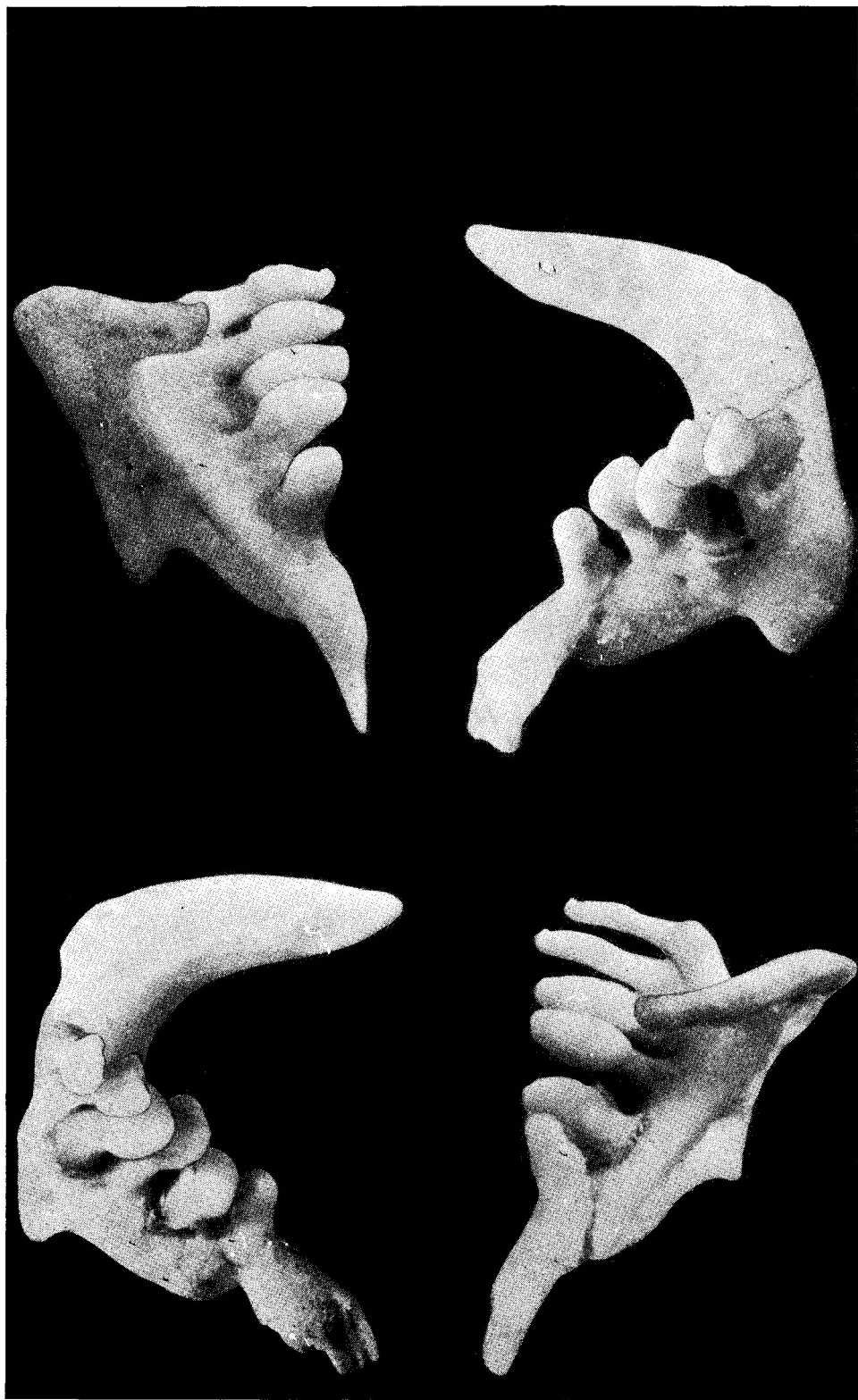


Fig. 2. The right (above) and the left (below) lower pharyngeal bone of *Rutilus frisii meidingeri* recorded, shown in medial (upper right, lower left) and in posterior view (upper left, lower right).

Hensel K.: *Rutilus* (*Pararutilus*) *frisii meidingeri* in the Czechoslovak stretch of the Danube river.

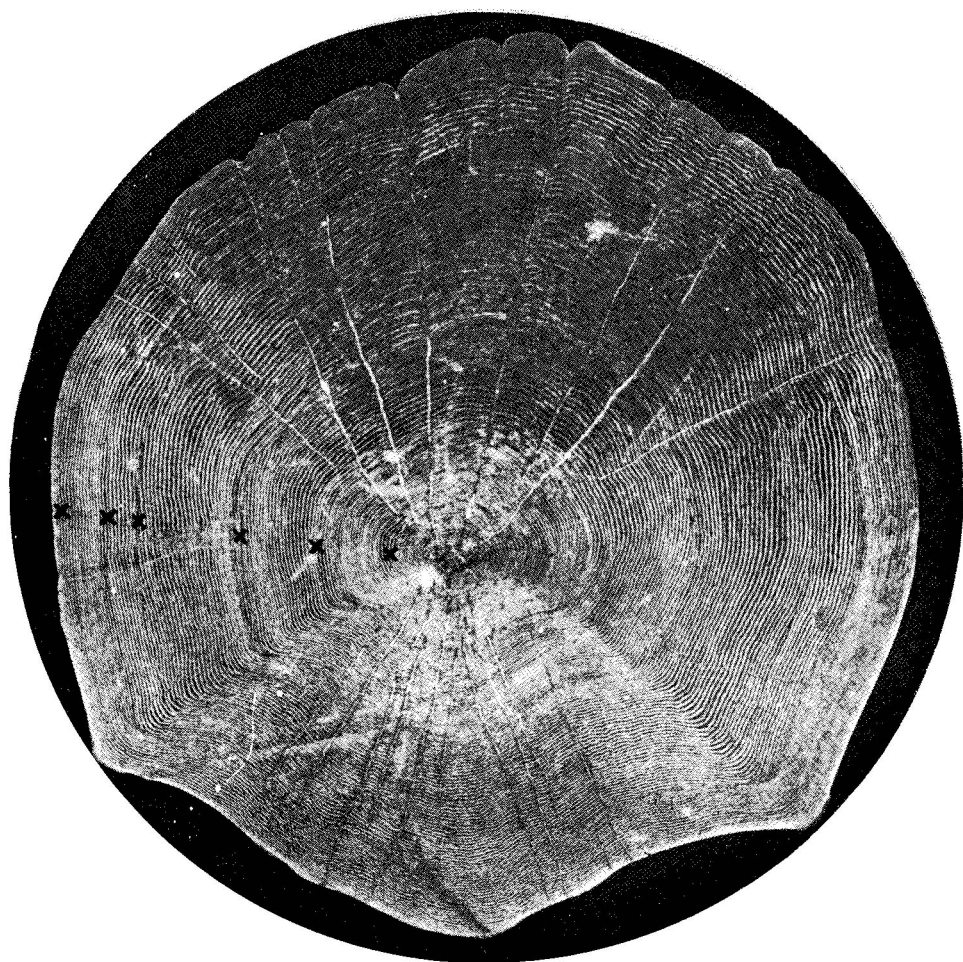


Fig. 3. Scale of *Rutilus frisii meidingeri* recorded, showing six complete annuli and new increment. Growth rate (according to the E. Lea method): 46 mm at the end of its first year, 85 mm at second, 149 mm at third, 199 at fourth, 236 mm at fifth, and 261 mm at sixth year.