European Mud-minnow (*Umbra krameri*) near the Rába River

The European mud-minnow is a protected and endemic fish in Hungary. The species is mentioned in the Annex II. of the Habitat Directive and also in the Bern Convention which proves its high conservation value. Furthermore the species is listed in the IUCN Red List among the threatened taxa as vulnerable.

The European mud-minnow was a common species in Hungary in the past but its population began to decrease thanks to the river regulations in the last centuries. A lot of marshes and swamps - which are the preferred habitat of this fish - were disappeared or the surface of them is decreasing because of the drainage of the wetlands. Today only a few strong stock is known in Hungary (e.g. Kis-Balaton, Kolon-tó), the fish's Hungarian population consists of small and sporadic stocks.

In the summer of 2013 a fish fauna survey was carried out in 11 oxbow lakes along the Rába River on behalf of the BioAqua Pro Ltd. During this an adult European mud-minnow was caught on July 12th in an oxbow lake near Sárvár (EOV coordinates: X=492155, Y=216324). The habitat can be characterized by shallow water (40-50 cm average water depth) and thick sediment (ca. 1 m) which was rich in organic silt. The sampling was carried out by wading with a backpack electric fish catcher.

This observation is very important because the last known occurrence data of the species in the area is from 1976 (from an oxbow lake near Rum), so after almost 40 years we proved the existence of the European mud-minnow along the Rába River.

Roland Csipkés, László Polyák


A new locality of the Carpathian lamprey (*Eudontomyzon danfordi*) in the Tisza River

On 12th October 2013 we collected dragonfly larvae with limnological handnet, near Tiszamogyorós in the Tisza River. During the sampling in about one and a half feet deep water covered with detritus of the river muddy sediment, an approximately 6 cm live
Carpathian lamprey larva also appeared. The exact geographical site coordinates are: 48° 18' 41.18 "N, 22° 14' 34.82" E.

The Carpathian lamprey larva near Tiszamogyorós (Photo: Tibor Jakab)

It is the lowermost recent occurrence of the Carpathian lamprey in the Tisza. It would thus appear, that this species is wider spreaded in the river as far as we knew.

Tibor Jakab

Citation: Jakab T. (2014): A tiszai ingola (Eudontomyzon danfordi) újabb lelőhelye a Tiszában. Halászat 107/1: 13.

Fish returned to Rákos Creek in Budapest

In the beginning of the 2000s the water of the Rákos Creek in Budapest had been polluted in such a degree that there was no fish at all living in it. To this day it has got clean to some extent and a number of fish species have been able to return to it. In 2013 I carried out assessments in three localities of the middle streches of the creek (Figure 1.).

Using simple handnet for fishing twice in each locality I manage to make evident the presence of 20 fish species (Table 1).
Table 1: Number of individuals of the species caught in the Rákos Creek in 2013

<table>
<thead>
<tr>
<th>Species</th>
<th>Locality</th>
<th>Zugló (1)</th>
<th>Kőbánya (2)</th>
<th>Rákos-keresztúr (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roach – <em>Rutilus rutilus</em></td>
<td></td>
<td>0</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>Chub – <em>Squalius cephalus</em></td>
<td></td>
<td>12</td>
<td>29</td>
<td>16</td>
</tr>
<tr>
<td>Ide – <em>Leuciscus idus</em></td>
<td></td>
<td>2</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>Asp – <em>Aspius aspius</em></td>
<td></td>
<td>9</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>Bleak – <em>Alburnus alburnus</em></td>
<td></td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Silver bream – <em>Blicca bjoerkna</em></td>
<td></td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Vimba – <em>Vimba vimba</em></td>
<td></td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Nase – <em>Chondrostoma nasus</em></td>
<td></td>
<td>5</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Danube gudgeon – <em>Gobio obtusirostris</em></td>
<td></td>
<td>216</td>
<td>24</td>
<td>154</td>
</tr>
<tr>
<td>False razbora – <em>Pseudorasbora parva</em></td>
<td></td>
<td>9</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>Prussian carp – <em>Carassius gibelio</em></td>
<td></td>
<td>27</td>
<td>17</td>
<td>43</td>
</tr>
<tr>
<td>Weatherfish – <em>Misgurnus fossilis</em></td>
<td></td>
<td>0</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Danubian spined loach – <em>Cobitis elongatoides</em></td>
<td></td>
<td>24</td>
<td>4</td>
<td>57</td>
</tr>
<tr>
<td>Black Bullhead – <em>Ameiurus melas</em></td>
<td></td>
<td>0</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>Pike – <em>Esox lucius</em></td>
<td></td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>European threespine stickleback – <em>Gasterosteus aculeatus</em></td>
<td></td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Pumpkinseed – <em>Lepomis gibbosus</em></td>
<td></td>
<td>0</td>
<td>0</td>
<td>22</td>
</tr>
<tr>
<td>Perch – <em>Perca fluviatilis</em></td>
<td></td>
<td>15</td>
<td>2</td>
<td>31</td>
</tr>
<tr>
<td>Round goby – <em>Neogobius melanostomus</em></td>
<td></td>
<td>0</td>
<td>0</td>
<td>92</td>
</tr>
<tr>
<td>Western tubenose goby – <em>Proterorhinus semilunaris</em></td>
<td></td>
<td>76</td>
<td>35</td>
<td>88</td>
</tr>
</tbody>
</table>

It is satisfying that in the repopulation of the creek dominant role is played by the indigenous species representing 14 of the total of 20 species. Two species are natural immigrants and only four are introduced. In the total number of individuals indigenous fishes represent 78.4 per cent. It is hoped that by the improvement of the water quality the fauna of the creek will further enrich (Fig 1. and 2.).

Fishes from the Rákos stream (Photo: Balázs Szendőfi)

Balázs Szendőfi

Amur sleepers (*Percottus glenii*) in river Zagyva and tributaries

Amur sleepers (*Percottus glenii*) were first identified in Hungary in 1997 in Lake Tisza reservoir. The next year, specimens were found at several spots on the Tokaj-Csongrád section of river Tisza, alongside with the entire Hungarian portion of river Bodrog. In the river system of Zagyva, entering Tisza, the fish was first seen in Felső-Tápió river (at Tápióbicske) in 2003, where it was also present in successive years. However, it was not until 2008 that Amur sleepers were found at the mouth of river Tápió (at Újszász) and in river Zagyva (into which Tápió empties). Several samplings followed on lower Zagyva, all without success when, on 13 June 2013, an adult specimen was caught in the net two kms upstream of the Tápió river mouth (at Szászberek: N47°19'01.91", E20°05'17.39"). On 2 Sept 2013, five specimens were caught at the same spot, out of which four were age 1, which suggests that these fish are already spawning in river Zagyva.

Colonization figures of Amur sleeper up to date show that spread is fairly fast down the river while slow river up. In light of this, we were surprised to catch an adult Amur sleeper 63 river kms upstream of the above spot, in Tarnóca, branch stream of Tarna emptying into Zagyva (at Nagyut: N47°43'34.73", E20°08'58.61"), on 25 October 2013. It is very unlikely that that specimen had swum up from lower Zagyva because none were found in the river portion between the two spots. Rather, it may have been carried over here the same way as into upper Tápió and the Balaton region, all the more so because a fisherman club manages a few kms of upper Tarnóca where either through the stocking material or as bait fish, Amur sleeper might have been introduced.

Zsolt Szepesi, Ákos Harka

Citation: Szepesi Zs., Harka Á. (2014): Amurgébek (*Percottus glenii*) a Zagyva vízrendszerében. *Halászat* 107/1: 16.

Saving endangered fishes in Zemplén mountains

Like in other places in Hungary, in the Zemplén mountains, the early spring floods caused serious problems in 2010. In these places it is necessary to take measures which help to avoid damages in the future. Because of the works which affected a 900 meter long part of the stream Hotyka and a 300 meter long part of the Bózsva, fishes had to be saved with the help of the workers from the Aggtelek National Park, and transport the individuals into the safe parts of these streams. We closed the ends of the affected parts of both steams, and collected individuals by electrofishing.

Natural treasures from the streams of Zemplén mountains (*Photo: László Antal*)
In the stream of Hotyka on 18th of May 2012 at Makkoshotyka we captured and then released in safe places 1068 gudgeons (*Gobio sp.*), 2 whitefin gudgeons (*Romanogobio vladykovi*), 520 stone loaches (*Barbatula barbatula*), 932 chubs (*Squalius cephalus*) and 2 prussian carps (*Carassius gibelio*).

In the Bózsva on 17th of September 2013 at Mikóháza we saved 10 carpathian lampreys (*Eudontomyzon danfordi*), 113 Petenyi’s barbels (*Barbus sp.*), 64 gudgeons, 89 whitefin gudgeons, 317 stone loaches, 222 spirlins (*Alburnoides bipunctatus*), 285 chubs, 5 brown trouts (*Salmo trutta fario*) and 2 prussian carps.

The saved 2 strictly protected and 4 protected species show what kind of assets hide in these small steams. In total we saved 36 million forints (approx. 120,000 €) worth intangible value of natural treasure, and reintroduced to the safety habitat.

László Antal, István Czeglédi, Attila Mozsár, Sára Kati, László Lontay

**Burbot (*Lota lota*) in the Upper-Zagyva**

On 25th September 2013 in the outskirts of the village Tar I noticed a larger dead fish under the bridge of the road No. 24105 on the gravelly-stony bottom of the river (coordinates of the site: EOV 702777-290979; WGS 47.960300-19.754200; DU01D1 UTM 2.5x2.5 km quadrat).

Taking out the 40-50 cm long dead fish it was stated that it was a burbot that had perished through an unlucky predation. A rather big pumpkinseed was hanging out of its mouth that – probably because of the hard finrays – the burbot was not able to swallow nor to spit forth it, so died due to drowning. This data is worth special attention also because it was the most upper proved occurrence of the burbot in the Zagyva stated in the last decades.

István Lantos

**The Zagyva River near Tar (Google)**


Fishes of the Horgas-ér near Pápa

Springs of Tapolca creek near Pápa that had gone dry in 1967 as a result of working of mines in 2011 newly came to the surface. Their water is drained off by a 7 km long creek, the Horgas-ér.

Collecting locality on the Horgas-ér (Photo: László Koller)

I collected data on the fishfauna of this water course in 2012-2013 identifying 260 specimens belonging to 13 species (Table 1).

Table 1: Specimens of fish species identified from the Horgas-ér

<table>
<thead>
<tr>
<th>Species</th>
<th>2012</th>
<th>2013</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roach (Rutilus rutilus)</td>
<td>4</td>
<td>13</td>
<td>17</td>
<td>6.5</td>
</tr>
<tr>
<td>Rudd (Scardinius erythrophthalmus)</td>
<td>2</td>
<td>-</td>
<td>2</td>
<td>0.7</td>
</tr>
<tr>
<td>Dace (Leuciscus leuciscus)</td>
<td>8</td>
<td>34</td>
<td>42</td>
<td>16.1</td>
</tr>
<tr>
<td>Chub (Squalius cephalus)</td>
<td>3</td>
<td>20</td>
<td>23</td>
<td>8.8</td>
</tr>
<tr>
<td>Bleak (Alburnus alburnus)</td>
<td>-</td>
<td>2</td>
<td>2</td>
<td>0.7</td>
</tr>
<tr>
<td>White bream (Abramis bjoerkna)</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>2.3</td>
</tr>
<tr>
<td>Gudgeon (Gobio gobio)</td>
<td>9</td>
<td>74</td>
<td>83</td>
<td>31.9</td>
</tr>
<tr>
<td>Topmouth minnow (Pseudorasbora parva)</td>
<td>-</td>
<td>3</td>
<td>3</td>
<td>1.1</td>
</tr>
<tr>
<td>Gibel (Carassius gibelio)</td>
<td>-</td>
<td>3</td>
<td>3</td>
<td>1.1</td>
</tr>
<tr>
<td>Pumkinseed (Lepomis gibbosus)</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Perch (Perca fluviatilis)</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Monkey goby (Neogobius fluviatilis)</td>
<td>33</td>
<td>8</td>
<td>41</td>
<td>15.7</td>
</tr>
<tr>
<td>Roud goby (Neogobius melanostomus)</td>
<td>19</td>
<td>17</td>
<td>36</td>
<td>13.8</td>
</tr>
<tr>
<td>Total number of species</td>
<td>9</td>
<td>11</td>
<td>13</td>
<td>-</td>
</tr>
<tr>
<td>Total number of specimens</td>
<td>81</td>
<td>179</td>
<td>260</td>
<td>-</td>
</tr>
</tbody>
</table>

From the water-system of the Kis-Séd, where the Horgas-ér belongs, previously 7 fish species were known the list of which has been enlarged by eight species. These are: dace, chub, bleak, gudgeon, topmouth minnow, pumpkinseed and two spreading species, the monkey goby and the round goby.

László Koller

Appearance of the schneider (*Alburnoides bipunctatus*) in the river Ér (Ier)

While examining the fish fauna of the river Ér (Ier) on 4th September 2013, a species previously undetected in the river, the schneider (*Alburnoides bipunctatus*) also appeared. We were sampling in the outskirts of Székelyhíd (Săcueni, Romania) (geo-coordinates: N 47º 21' 19.10'', E 2º 04' 18.65''), where we managed to catch eight specimens.

The presence of this fish is unusual in Érmellék, as it occurs typically in hilly sections of the rivers originating in the mountains, although – according to Bănărescu – in Transylvanian rivers, this fish migrates down to the plains as well. In recent years, it’s been also found in several sites in Hungary, being an expanding species of fish that is slowly becoming established in the slower-moving waters of the plains.

![Schneider from the Ér section near Székelyhíd (*Photo: István Szabó*)](image)

After the drought year of 2012, some sections of the Ér completely dried. However, the first half of next year was very wet, causing high water level and strong current for several weeks. This could be attractive for the schneiders living in Berettyó river, as some of them penetrated all the way up to Székelyhíd in Ér and remained in the region even after the reduction of the flow. If it finds the appropriate conditions for reproduction, schneider may become a stable member of the local fish fauna.

*István Szabó*


Sunbleak (*Leucaspius delineatus*) from the Mohács Island

The sunbleak is one of the smallest and less conspicuous fishes in our waters, moreover its seemingly stable populations may disappear after a few years period from the given locality. These all may have some share in the fact that – in spite of being a protected species – even now we have a rather incomplete picture on its distribution in the country. For example the distribution map in the book *Magyarország halfaunája* by Harka and Sallai shows no locality of its occurrence along the Danube stretch south from Paks. For even this reason it is worth attention that on 31st October 2013 by the help of a low output battery electric fishing machine, together with other fishes we caught 10 specimens of sunbleak from the Riha lake located on the Mohács Island near the village Homorúd, belonging to the Béda-Karapancsa district of the Danube-Drava National Park. As far we have had only three data on the occurrence of the species in the Béda-Karapancsa district, however this last one is the only one from east from the Danube as the others originated from the Transdanubian part of the district. The small number of data can be explained by underevaluation of the region as we have registered there 231 water-bodies with a surface of 2200 hectares many of which may present suitable habitat for the sunbleak.

*Tamás Deme, Tibor Pécz*

Attempts on ex situ conservation of *Melanopsis parreyssii* and *Scardinius racovitzai*

*Melanopsis parreyssii* and *Scardinius racovitzai* are species "left behind" of Pannonian biogeographical region, which can be found exclusively in a surface area of 1 hectare natural thermal lake at Püspökfürdő (Băile 1 Mai) near Nagyvárad (Oradea).

The lake and its surroundings are reservoir since 1932, and currently a Natura 2000 site as well. According to the international IUCN Red List of Threatened Species, fish and snail are classified as "critically endangered" animals, and they will possibly extinct in the next few years because the level of the thermal water is dangerously decreased by tapping and drilling of deep wells.

During heating season (between end of 2012 and beginning of 2013) thermal water consumption significantly increased in the surrounding buildings which caused an intensive lake shrink. Most of the bottom of the lake was just covered by a few centimeters of cold water. At this time, biologists of *Muzeul Țării Crișurilor*, Oradea in Romania saved some fish and snails to aquaria. Since these animals had not yet been propagated in artificial conditions, thermal water was pumped to the lake to protect and rescue the trapped specimens. In 2013, a Romanian-Hungarian cooperation has started with the support of the *Mohamed bin Zayed Conservation Fund* and leadership of *Muzeul Țării Crișurilor* with the aim of the two species to save (participants of Romanian and international organizations: *Department of Aquaculture*, Szent István University; *Muzeul Țării Crișurilor*; *Aquarium Galați*; *Department of Parasitology and Zoology*, Szent István University; *Tavirózsa Association of Environmental Protection and Nature Conservation*; *Department of Geology and Palaeontology*, University of Szeged; *Hungarian Natural History Museum*). Colleagues of the Department of Aquaculture, SZIU obtained a permit of importing 15 snails and 20 fish. Staff of the department managed to provide conditions similar to the original habitat in the laboratory in Hungary, furthermore reproduce both highly sensitive species (first time, according to literature data!). So there is a chance to rescue these endangered/protected relict animals. Genetical tests are under process to identify racial and genetical place of *Scardinius racovitzai*.

It is important to mention that captive propagation and rearing is temporary help to save the two species. The next step is for *Tavirózsa Association* (Veresegyház) to look for a habitat with thermal water in Hungary which may lead to a long-term survival of the species.

*Melanopsis parreyssii and propagated Scardinius racovitzai specimens (Photo: Tamás Müller)*
The research has been supported by Mohamed bin Zayed Species Conservation Fund (Project no: 13255722), Bolyai János Research Grant (BO 54/12/4) and Research Centre of Excellence- 8526-5/2014/TUDPOL as well.

Tamás Müller


Some data on the reproduction of the zingel (Zingel zingel)

In 2014 the zingel has been decorated with the title of Fish of the Year in Hungary, so the species is surrounded with special attention. However on its reproduction we have only very few data in the country. Because of this our observations might be interesting even after more than a decade.

On 2nd May 2003 we were collecting faunistic data in the Upper-Tisza at Tiszabecs. We were netting a cca. 100 m long riverside section – used as a beach in summertime – with the help of a 3 m long, wide fingerling-net of 6 mm meshsize. The water-level was already a little above the midwater bed, slightly flooding but not deeper than 1 m. We caught all together 18 fish species. Among them the schneider (Alburnoides bipunctatus) was multitudinous, the nase (Chondrostoma nasus), the barbel (Barbus barbus) and the Kessler’s gudgeon (Romanogobio kessleri) were very frequent. To our surprise, we also caught some 150 zingel (Zingel zingel) specimens in similar frequency like the last species. It means that when we lifted the net after every 8 steps, we found 4-8 zingel specimens with more or less swollen belly.

Catching site of zingels at Tiszabecs on 2nd May 2003 (Photo: Ákos Harka)

In addition to the fantastic experience, it became clear on the basis of catches that the zingels were just in the phase of preparation to the spawning, so the month of May – in spite of the March-April given in the book of Kottelat and Freyhof (Handbook of European Freshwater Fishes, 2007) - can be rightly added to the spawning period of the species. We also observed some disparity in the quality of the spawning substrate that is sand according to
Kottelat and Freyhof while in the Upper-Tisza it was gravel of 1-5 cm granulation. In the end we should mention that during the sampling also the streber (Zingel streber) was found but only 3 specimens indicating the difference in the reproduction of the two species.

Ákos Harka, Tibor Jakab


An interesting anomaly: cascading lateral line found in the schneider

On 2nd February 2014 I was angling in the river Ér (Ier) in Székelyhíd (Săcueni, Romania) area on a section called by the locals Homokos (Sandy). In fact, it is a section with an artificial pool of 2–3 meters water depth, offering good wintering sites for fish. In particular, I was interested whether the schneider (Alburnoides bipunctatus), discovered in the previous autumn, remained there for the winter. Cutting leak into the ice and using a very light angling equipment I’ve managed to catch a 9.5 cm long specimen, so I got the answer for my question.

Schneider with irregular lateral line (Photo: István Szabó)

I noticed, however, that while the lateral line on one side of the fish was regular; on the other side it was interrupted reaching the end of the first quarter of the body length, then it continued one scale line down, but four scales back in the direction of the head. Halfway of the body length another break occurred, and then the lateral line continued one row down to the caudal fin. I assume, concluding the size and good condition of the specimen, that this anomaly probably caused no disadvantages and worth of attention only as a rare phenomenon.

István Szabó


Ottó Herman founder of scientific ichthyology in Hungary

Ottó Herman, the founder of Hungarian ichthyology, died 100 years ago. He is often referred to as the last Hungarian polymath.

Considered the most influential scientist of his age, the foundation of several disciplines is attributed to him, despite the fact that he has received little formal education. He was the founder of Hungarian ethnography, archeology, arachnology, ornithology, ichthyology, as well as a popularizer of science. He established numerous institutes and societies, as a journalist he actively participated in public issues, and as a Member of the Parliament stood up for Hungarian independence.
Carl Otto Herrmann was born in Breznóbánya (Brezno, today in Slovakia) in a German family. He was about seven years old, when he began to learn Hungarian. Later he changed his name to Ottó Herman.

After a century, he is still remembered as a simple-hearted, unbendable character notable for his amazing scientific/academic work. His insistent work revived Hungarian scientific life, which had been stranded in comparison to Europe. 14 books, a bibliography of about 1140 items, studies, published presentations, illustrations, journals, NGOs, a science centre, a museum and numerous streets bear his name, several statues, reliefs and plaques commemorate him and testify of an ongoing interest in an exemplary personality.

The Book of Hungarian Fishing
His work “The Book of Hungarian Fishing” was published in 1887 and became the primary source of information on ichthyology, ethnography and philology related to fishery. This monograph, illustrated with spectacular drawings excels both in its content and appearance. The first volume deals with the relationship of man and fish, and describes various fishing methods, while the second volume treats fish in their complexity. In addition to a study of the general anatomy of fish, all Hungarian species are described in great detail, including their ecology, distribution in the Carpathian Basin and methods employed for their catching, often enriched with Herman’s own personal observations. The book also contains an enormous dictionary explaining fishery terms, as well as a list of popular species names in four languages (Hungarian, German, Slavonic and Romanian), arranged according to alphabetic order of scientific names, and closes with nine beautiful plates of fish, all executed by the author.

The book highlights the exceptional talent and precision of its author and is of lasting value even after nearly 150 years. Today, most Hungarian ichthyologist do not only cherish this book in their libraries but frequently consult it.

Antal Vida


Amur sleeper (*Percottus glenii*) in the Takta river system

The first open water occurrence of Amur sleeper in the Carpathian basin was published in 1998 from the Lake Tisza (Kisköre Reservoir). However, it soon became obvious, that the reservoir was not the starting point but an intermediate station in the quick expansion of the species, advancing downstream along the river Latorca, Bodrog and Tisza. It has been observed in several water bodies situated in the eastern part of the country, but the colonization process is still continuing nowadays, therefore it appears in more and more places. Takta river system is a good example of it, where 13 new localities of the Amur sleeper were identified by the experts of the Aggtelek National Park Directorate (Attila Huber and Tamás Zsólyomi), also by the researchers working in an Interreg projekt (ID Number HUSK/1101/2.2.1/0004: Roland Csipkés, István Diczházi, Ákos Harka, Péter Juhász, Péter Olajos, László Polyák, Zsolt Szepesi).
The names and the geographical situation of the localities represented by numbers in the map above and the date of captures are given below:

1: Laposi Spring, Újcsanálos (N48°08'30.81", E21°02'38.54"), 09.05.2007.
4: Sark Brook, Tarcal, (N48°08'01.44", E21°17'53.59"), 20.05.2010.
5: River Takta, Taktaszada (N48°06'41.98", E21°11'18.16"), 24.05.2014.
8: River Takta, Taktaharkány (N48°04'50.60", E21°08'42.76"), 25.06.2014.
9: Peres-Kígyós Brook, Prügy (N48°05'32.85", E21°16'49.72"), 14.05.2008.
11: Ox-bow lake called Kengyel-lapos, Tarcal (N48°06'00.12", E21°20'56.02"), 22.09.2009.
13: River Takta, Taktaharkány (N48°03'43.88", E21°06'42.74"), 25.06.2014. (The number of fish specimens varied between 1 és 10.)

Male Amur sleeper in nuptial colours from the Laposi Spring (Photo: Attila Huber)

The Amur sleeper has been spreading rather quickly downstream, but very slowly upstream in the Hungarian rivers. It was present in the River Tisza at the estuary of the River Sajó already in 1998, but up to now it has not been found in the River Sajó itself. Consequently, the population found in the Takta catchment area, might have arrived from the River Tisza through the canal called Taktaközi-öntöző-főcsatorna or might have been introduced by birds, or by chance as a result of escapes from an aquaculture facility in the course of fish introduction. However, the population reproducing in the River Takta sooner or later reaches the recipient river, so we can expect the appearance of the species in the lower reach of the Sajó.

Ákos Harka, Attila Huber

Monkey goby (*Neogobius fluviatilis*) in the Romanian reaches of the Szamos river

During an ichthiological survey on September 9th 2014 a monkey goby (*Neogobius fluviatilis*) was captured in the Szilágy County reaches of the Szamos River, in the region of Benedekfalva (Benesat). The whole length of the mature fish was 13 cm.

According to their relatings, fishermen were familiar with the fish, although they were not aware of its species. It has previously appeared around Szatmárnémeti; however, due to its small size, the fishermen were not interested in catching it.

The monkey goby caught in the Romanian reaches of the Szamos (*Photo: Sándor Wilhelm*)

Interestingly, as communicated by Ákos Harka, this species has not been found either during the earlier surveys or in 2013 in the Hungarian reaches of the river. Its presence was only noted now, after our observation.

The gobiid species have started to conquer the rivers of the Partium starting from the region of the Black Sea. In the near past the tubenose goby (*Proterorhinus semilunaris*) was found in the Ér/Ier River, and besides this and the monkey goby the Caucasian dwarf goby (*Knipowitschia caucasica*) is probably also present, since it has been found in the Hungarian reaches of the Szamos, close to the border.

Sándor Wilhelm