News of the Hungarian Ichthyological Society, 2013

Juvenile huchen in the upper reach of the River Tisza

On 15th March, 2008 we were investigating huchen (*Hucho hucho*) in the upper reach of the River Tisza. A boat was used for fishing from the mouth of Batár (744.8 rkm) to Tiszakóród (725 rkm). The fauna investigation was carried out with the use of a pulsing direct current fishing gear. At the 743 river-km, near Tiszabecs we caught a juvenile huchen, with the standard length of 370 mm. The fish was photographed, measured and released.

Juvenile huchen caught near Tiszabecs (Photo: Zoltán Sallai)

On 16th April, 2012 we were also fishing on the upper Tisza. At Tiszacsécse we tried to pull out the boat from the river, but the riverside was covered by a thick mud layer. So we got stuck in the riverside mud with our car and boat. Only at 22 pm, after sunset we managed to come out from the mud. Before leaving for home we decided to fish at night on the nearby river reef, at the 731.5 river km. For the fishing we used a fishing gear with lower output. After catching an adult Kessler's gudgeon a small, juvenile huchen was caught with 195 mm of standard length. These two data proves that there are not only adult individuals of the species are present in the Hungarian reach of the River Tisza but juveniles too and the presence of a breeding population is also possible.

Zoltán Sallai

Citation: Sallai Z. (2013): Fiatal galócák (*Hucho hucho*) a Felső-Tiszáról. *Halászat* 106/1: 15.

Zingel *(Zingel zingel)* in the Tarna river

On 28th September 2012 in the section of the Tarna river between Tarnaörs and Jászdózsa two spindle-shaped, striped fish came into sight above the bottom. One of them – appr. 20-25 cm long – was successfully photographed. In spite of the fact that the photo presented a fish pressing itself to the bottom under the running water, the shape and the markings were rather well distinguished. On the basis of these it was stated with complete certainty that the fish belonged to the more stumpy species of zingel *(Zingel zingel)*.

One of the zingels pressing itself to the bottom (Photo: Róbert Füleki)

This endemic species of the Danube basin is under strict protection in Hungary with a protection value of 100,000 HUF. As far zingel has not been detected from the Tarna however its appearance could be expected as it was find in 2007 in the Zagyva river at Jásztelek and at Jászberény, it means in the vicinity of the Tarna mouth.

Róbert Füleki, Ákos Harka

Citation: Füleki R., Harka Á. (2013): Magyar bucó (*Zingel Zingel*) a Tarnában. *Halászat* 106/1: 15.

Perch *(Perca fluviatilis)* without ventral fins from the Danube

In the evening of 20th October 2012 in the quiet, peaceful water of the harbour called Foka-öböl connected to the Danube section in Budapest I caught a perch lacking in ventral fins. Obviously the fish was not simple deprived of ventral fins (eg. by a predator) rather it seemed they did not developed at all as a result of an inborn defect, even their places were not visible on the smooth abdomen.

Perch without ventral fins (Photo: Balázs Szendőfi)

I caught more perch specimens that evening in the same place and all of them were in good condition but the specimen without ventral fins was definitely more slender with a

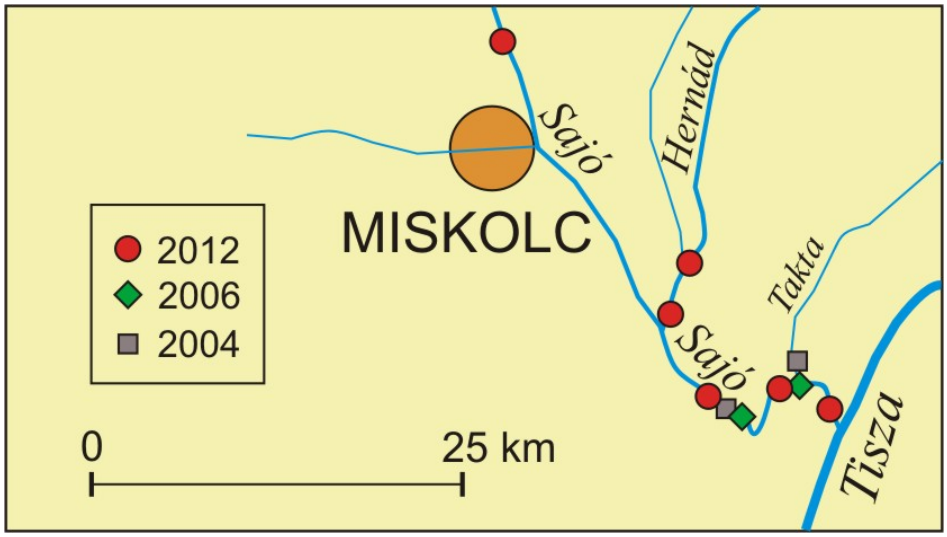
slightly concave abdomen. It is possible that the lack of ventral fins made the seizing of food more difficult. According to my observations in aquaria, the ventral fins play important role as retardative and navigating instrument during hurrying of the hunting perch, and also in standing position, watching for prey they are very helpful in maintaining the drifting stability. It can not be excluded that in addition to the lack of ventral fins there were also other non visible deficiencies, and the poorer condition of the fish was resulted in by the common effect of different factors.

Balázs Szendőfi

Citation: Szendőfi B. (2013): Hasúszó nélküli sügér (*Perca fluviatilis*) a Dunából. *Halászat* 106/1: 16.

Spreading of tubenose goby (*Proterorhinus semilunaris*) in the Sajó and Hernád rivers

The tubenose goby, which is still spreading in River Tisza and its tributaries, was detected in the Sajó river system in the autumn of 2004. Two voucher specimens were caught then, one in the mouth of the Takta canal at Kesznyéten and another from the Sajó downstream of Girincs (N 47°58'06.61"; E 20°59'50.66"). The length of the Sajó was fished again two years later, but further dispersal of the species was not experienced. Only two specimens were found again, both in the already colonized reach, at Kesznyéten and Sajóörös.



Spreading of tubenose goby in the Sajó river system

The next survey took place in the autumn of 2012. During this study, as we moved upstream from the mouth of the river, the species was found at three sampling sites. Two specimens were netted at Tiszaújváros (N 47°56'38.93"; E 21°06'16.86"), six at Kesznyéten (N 47°58'29.41"; E 21°02'57.29") and one at Sajókeresztúr (N 48°10'37.98"; E 20°46'56.65"). The latter site is situated 64-65 km away from the mouth of the river and more than 40 river kilometres away from the Girincs site, previously regarded as the most upstream one. Therefore, in spite of its relatively low abundance, the species spread upstream with an average speed of a little more than 5 river kilometers per year. Considering the flow velocity of the Sajó, it seems to be a realistic value, as it is about two-thirds of the spreading valocity measured by *Antal et al.* in the hardly flowing canals of the Berettyó water system.

As expected, the tubenose goby has entered into the largest tributary of the Sajó, too. It was first found here in the autumn of 2012 in the mouth of River Hernád, at Sajóhídvég (N 47°59'24.12"; E 20°55'56.08"). The overgrown shallows here provide favourable conditions

for the species, whish is shown by the fact that we managed to catch 16 specimens. A further 4 specimens were netted at Bőcs (N 48°02'29.03"; E 20°57'14.39"), 12 river kilometres upstream of the mouth, showing that the spreading of tubenose goby in the Hernád proceeds similarly to River Sajó.

Ákos Harka, Zsolt Szepesi

Citation: Harka Á., Szepesi Zs. (2013): A tarka géb (*Proterorhinus semilunaris*) terjedése a Sajóban és a Hernádban. *Halászat* 106/1: 16.

European mud-minnow (*Umbra krameri*) in the channel of Bácsa

We monitored the Amphibien population in the Bácsa channel between Vámosszabadi and Győr-Bácsa on the 22 March, 2012, when we caught a small fish with the net. We could not identify it, and after taking tures of it, we let it back.

Mud-minnow from Bács channel (Photo: Balázs Pintér)

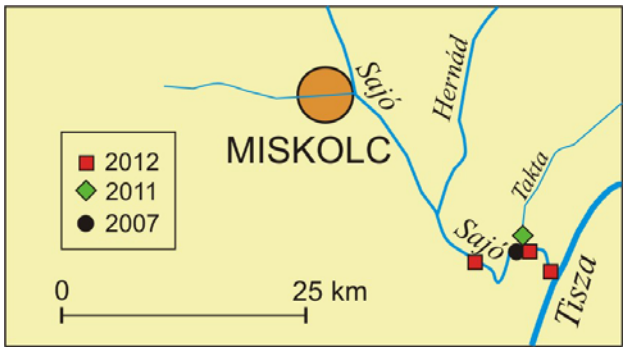
Using the photo, András Sevcsik pic identified it as a European mud-minnow. The presence of this species was not known here by the colleagues of the Fertő-Hanság National Park, and it wasn't mentioned in the literature. The sedgy and reedy habitat of the channel with dense vegetation is ideal for the mud-minnow, the assessment of its population is recommended.

Balázs Pintér, Csaba Varga

Citation: Pintér B., Varga Cs. (2013): A tarka géb (*Proterorhinus semilunaris*) terjedése a Sajóban és a Hernádban. *Halászat* 106/2: 11.

Spreading of the monkey goby (*Neogobius fluviatilis*) in the Sajó

Occurrence of the monkey goby in the Sajó was first described by Zoltán Sallai on the basis of two specimens caught by him at Kesznyéten in autumn 2007. The place of finding is located in the distance of 10.6 kms from the flow into the Tisa. Since that time the species has not been found in the Sajó however in 2011 we managed to catch a single specimen in the mouth of the Takta (N 47°58'34.74"; E 21°03'0.76"). Reversely in the next year, 2012, we observed its dense population in the lower reach of the Sajó. In the vicinity of the mouth of the river at Tiszaújváros (N 47°56'38.93"; E 21° 6'16.86") 42 and at Kesznyéten (N 47°58'29.41"; E 21° 2'57.29") 7 speciemens were found in our net. More upward the river at Girincs (N 47°586.61"; E 20°59'50.66") we caught further 8 specimens.



Finding localities of monkey goby

This locality is as far as 20 riverkilometers from the mouth, it means that the upward spreading of the species has not been interrupted in the last years.

Zsolt Szepesi, Ákos Harka

Citation: Szepesi Zs., Harka Á. (2013): A tarka géb (*Proterorhinus semilunaris*) terjedése a Sajóban és a Hernádban. *Halászat* 106/2: 11.

Weatherfish (*Misgurnus fossilis*) in the Nagyberek

The Nagyberek Nature Conservation Area seated 2 m below the water level of Lake Balaton and considered as the last remnant of the ancient Nagyberek area. Although this area has been protected since 1977, the detailed survey of its fish fauna has never been carried out. At the beginning of the 2000 years a habitat restoration has been started, which resulted 300-350 ha shallow (0.5-1.2 m) reed-spotted open water surface. The area of the wetland is strongly depending on the water level, which could regulated by a sluice. In June 2011 the area became internationally protected as the member of the Ramsar-network. In the following months, the area has been drought almost completely, the majority of the fish inhabiting (mainly gibel carp) the habitat has been killed or eaten out by wild boars. The survive of fish was only possible in the deepest region of the main draining channel.

A Nagyberek közepes vízállásnál (Ferincz Árpád felvétele)

The legal status of the area has seemingly clarified recently, then a monitoring program addressed to follow the fish assemblage development was started in 2012. An electrofishing has been carried out on 25. 07. 2012 in the area of the drainage channel mentioned above (EOV: X531 777, Y146 820), when 7 specimens of weatherfish from different age classes gibel carp and the presence of topmouth minnow in lower quantities.

Our catch data proved again, that weatherfish can survive under extreme environmental conditions and also the value of Nagyberek even in its recent disturbed state. This value could be easily conserved with providing of appropriate quantity of water.

Nagyberek at mean water level (Photo: Árpád Ferincz)

Árpád Ferincz, Ádám Staszny, Bettina Sánta,
Edit Eszterbauer, Gábor Paulovits

Citation: Ferincz Á., Staszny Á., Eszterbauer E., Sánta B., Paulovits G. (2013): Réticsík (*Misgurnus fossilis*) a Nagyberekben. *Halászat* 106/2: 12.

Zingel (*Zingel zingel*) in Kerka stream

The zingel (*Zingel zingel)* is a protected endemic species in Hungary and is also of EU interest because of its European rarity. A fish fauna survey was carried out on the whole length of the Hungarian section of the Kerka between the 15th and 19th October in 2012, on behalf of the BioAqua Pro Ltd. There were 10 sampling sites designated between the settlements of Magyarföld and Kerkaszentkirály. The samplings were carried out by wading with a backpack electric fish catcher. During the survey an adult zingel was caught in the stream under a bridge by Lovászi. The bottom and the bank of the stream was covered with rip-rap.

A Kerka section (Photo: Roland Csipkés)

This result is interesting because we have recent occurrence data of the zingel exclusively from the main course of medium and large rivers in Hungary. The species prefers sandy and gravelly bottom and fast-flowing water. The nearest known populations of the species live in the rivers Mura and Drava. The abovementioned specimen could probably get to the sampling site from the Mura, as the Kerka falls into it.

Roland Csipkés, Ádám Izsó

Citation: Csipkés R., Izsó Á. (2013): Magyar bucó (*Zingel zingel*) a Kerkában. *Halászat* 106/2: 12.

Distribution of the Western stickleback (*Gasterosteus gymnurus*) in the Hanság

There have been differentiated two species of the genus stickleback (*Gasterosteus*) in Europe: the Eastern form (*G. aculeatus*) and Western stickleback (*G. gymnurus*). While the typical form of the previous one is fully armed with bone plates from the head to the tail, the Western stickleback has bone plates only on the front half of the body, its number does not exceed ten in one side. In the hybridization zone of the two species there may occure atypical individuals, Eastern stickleback specimen can be without bone plates on the tail part and Western species can have more than ten plates.

Since 1990 the stickleback individuals were reported from several localities of the Szigetköz (not far from the Hanság area) without counting the plates as there was not distinguished the two stickleback species. The first evidence of the occurrence of the western stickleback was recorded from the Sokorói-Bakony-ér right at the falling into the river Marcal, belonging to the Rába river system. The first records in the Hanság area was reported from the Bordacs-Császárréti-canal at Újrónafő in 2003 (coordinates of the site: 47°45'54.66"N, 17°14'34.48"E). One of the pictures of those individuals shows typical characteristics of the Western stickleback. The next known record was taken from the Úrhanya-canal in 2012 nearby Lébény (47°44'59.27"N, 17°19'8.31"E). The picture of this individual shows atypical characteristics of the hybridization zone.

Western stickleback from the Hanság (Photo: András Ambrus)

Despite of the evidence of photographs, a real individual was needed to approve the existence of the Western stickleback in the region. A clear and sure evidence was given by an individual collected on 12. 03.2013. from the Ottómajor-canal nearby Lébény (47°45'8.69"N, 17°17'36.29"E). It is typical Western stickleback with 6-6 bone plates on each sides of its body. Based on the recent findings the Western stickleback has found suitable habitat in the canals of the Hanság area and further spreading is expected.

András Ambrus, Ákos Harka

Citation: Ambrus A., Harka Á. (2013): Terjed a Hanságban a nyugati pikó (*Gasterosteus gymnurus*). *Halászat* 106/2: 13.

Dace (Leuciscus leuciscus) in the Sződi creek

First May 2013 In the outskirts of Sződliget, near the bridge of Új utca, about one and a half km from the mouth (GPS: N 47.7241057, E. 19.1491539) I caught a dace of 14 cm in the Sződi creek. Later on I also found two smaller specimens.

Dace from the Sződi creek (Photo by Zita Szakonyi)

It is not a standard habitat of the species as the dace lives characteristically in faster flowing waters but the Sződi creek in this segment is flowing very slowly, its bed is sandy and muddy. Lower in the creek the concrete base of the bridge of the No. 2. highway closes the way of fish migration in the better part of the year, fish are able to swim through it only when the water-level of the Danube is above 400 cm and the water in the creek mouth is poured back to the bridge. This fact and the one and a half km distance of the founding locality of the daces from the mouth allow concluding that the observed specimens are not occasional immigrants but permanent inhabitants of the creek.

Balázs Szendőfi

Citation: Szendőfi B. (2013): Nyúldomolykó (*Leuciscus leuciscus*) a Sződi-patakban. *Halászat* 106/3: 13.

Rainbow trout *(Oncorhynus mykiss)* from the leaking canal at Rajka

Hungary is not abounding in waters suitable for trouts so trout catches are not frequent. Nevertheless sometimes single specimens come up from waters that cannot regarded at all as typical trout habitats.

The maize-eating rainbow trout (Photo by Csaba Somodi)

A good example is the leaking canal of the Dunacsúny reservoir in which I caught a rainbow trout of 31 cm length at Rajka on 13rd July 2013. Before angling I scattered soaked maize and groats to the water to make the place more attractive for non-predatory fishes. A bunch of grubs was used as bait that was taken by a predator, a trout. The fact of the catch was already astonishing but the processing in the kitchen also gave me a surprise. Opening the stomach I found 12 hard grains of maize. According to György Hoitsy well-known trout specialist the reason is the voracity of the trout. The hungry fish takes and swallows the maize which reminds an insect falling to the water and he is unable to distinguish. As a matter of fact, the process is similar to the trout angling with artificial fly.

Csaba Somodi

Citation: Somodi Cs. (2013): Szivárványos pisztráng (*Oncorhynchus mykiss*) a rajkai szivárgócsatornából. *Halászat* 106/3: 13.

Presumption justified by genetic examination: the Caucasian dwarf goby is the new member of the Hungarian fish fauna

The newest and at the same time smallest fish species – of which a single specimen was caught in the Szamos river in 2009 and a stable population was observed in the Tisza-tó reservoir in 2012 – has been undoubtedly identified. By this time it is sure: the new-comer is the Caucasian dwarf goby – the chairman of the Hungarian Ichthyological Society informed MTI.

Our newest and smallest fish species: the Caucasian dwarf goby (photo by János Bugány)

Researchers from the beginning have been of the opinion that the new fish belongs to the species of Caucasian dwarf goby *(Knipowitschia caucasica)* known from coastal waters of the Black Sea and the lowest stretch of the Danube. However on the basis of some morphological features of this small fish – attaining a lifespan of 1 year and a maximum length of 3 cm – the

identity with the Panizzae's goby *(K. panizzae)* living in the coastal waters of the Adriatic could not been excluded. Finally a genetic examination proved that the population in the Tisza really represents the Caucasian dwarf goby and originates from the Black Sea. In the *Pisces Hungarici* periodical of the Society – available on-line – the new species has been presented in details, however it is still questionable how and when has it got to the Tisza.

János Bugány – MTI

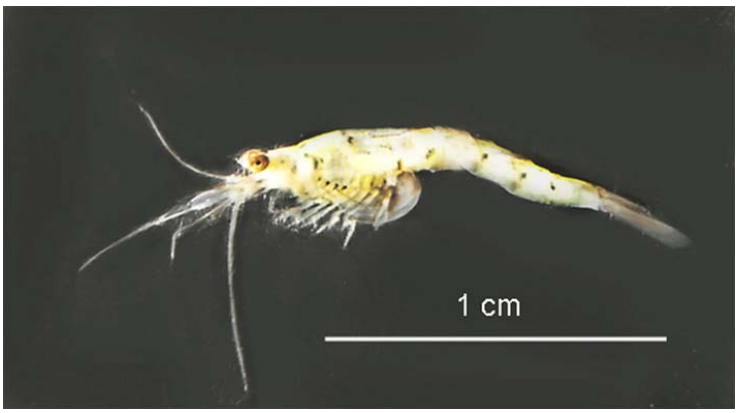
Citation: Bugány J. (2013): Genetikai vizsgálat igazolta a korábbi feltevést: hazánk új halfaja valóban a kaukázusi törpegéb. *Halászat* 106/3: 14.

Spreading new fish food organism – the mysid species: *Paramysis lacustris*

For a very long time only one representative of the Mysidacea family has been known from Hungarian waters: the Ponto-Caspian relict mysid *(Limnomysis benedeni)* living in the Danube and introduced also to the Lake Balaton by Elek Woynarowich in order to enhance the food resources for the pikeperch fry. Thereabout the turn of the millennium the number of mysid species in our waters increased to three due to the appearance of further two species as it was reported by Péter Borza in the 2/2009 issue of *Halászat.*

In the years 2011-2012 the group increased by an additional species as Péter Borza and Pál Boda demonstrated the presence of an up till then in Hungary unknown species, the *Paramysis lacustris* in five localities of the Tisza river (between Szeged and Tokaj). They first reported their discovery by a poster during 2012 Hydrobiological Days in Tihany then in 2013 their publication is to be appeared in the scientific journal *Crustaceana.*

In 2013 further habitats have become known of this species that one or two years ago was a rare catch even during night time collections. In May we observed its mass proliferation in the Tisza-tó reservoir resulting in quick growth and good condition of the young pikeperch fry and in August we found it in the Tisza stretch above Tokaj where during the collections in 2012 no mysid species came into sight.



Mysid belonging to the species Paramysis lacustris from the Tisza stretch above Tokaj (photo by Ákos Harka)

As a matter of fact we were collecting data on spreading of goby species meanwhile at Gávavencsellő, near the outlet of the Lónyai channel we took note of a mysid that had got caught in our fry-collecting net. On the spot we were not able to identify the specimen but later under the microscope it was proved that it belongs to the species *Paramysis lacustris.*

The new locality (its geocoordinates: 48°10'42.57" N, 21°33'8.71" E) lays 15 kms above the most upper habitat known as far, so it seems that the spreading of the species goes on.

Ákos Harka, Zsolt Szepesi

Citation: Harka Á., Szepesi Zs. (2013): Terjedőben egy új haltáplálék-szervezet, a tavi hasadtlábúrák (*Paramysis lacustris*). *Halászat* 106/4: 13.

Zingel *(Zingel zingel)* from the riverine section of the Tisza-tó reservoir

The zingel is a typical current-lover however due to his adaptability it can find living conditions in the rivers from the rapid flowing nase-zone to the slow water bream-zone. Nevertheless it avoids dammed sections, so the zingel is a rarity in the region of the Tisza-tó reservoir. During high flood periods when damming is suspended sometimes single specimens can be found but as far there has been no data on catch of the species under normal operating damming conditions. It happened first time before noon on 14th October 2013 at the northern edge of the Aranyosi island belonging to Tiszaszőlős (geographic co-ordinates: N 47°34'4.88"; 20°40'35.18").

Zingel caught by rubber fish from the Tisza-tó reservoir (photo by Ágnes Elekné Paltesz)

In the slowly flowing water of the riverbed of 6 ms depth a 30 cms long zingel *(Zingel zingel)* took the neon-green rubber fish bait used by *Gyula Elek* angling for pikeperch. This way it was demonstrated that the strictly protected species – being a strong candidate of the actual „Fish of the Year" competition - may occur also in dammed river streches. We hope that the zingel carefully released from the hook and put back to the water went through the difficulties without serious injury.

Ákos Harka

Citation: Harka Á. (2013): Magyar bucó (*Zingel zingel*) a Tisza-tavi folyószakaszról. *Halászat* 106/4: 13.

Recordsized razorfish *(Pelecus cultratus)* from the Tisza-tó reservoir

It might command interest that even nowadays recordsized razorfish – a species of reduced number in the whole country, candidate to the title „Fish of the Year" – specimens can occur. Such a fish was caught on 17th September 2011 in a rather unusual site, in the open water of 1.5 m depth in the section called Rebence of the storage area of the Tisza-tó reservoir. The half meter long fish weighing 1.2 kgs was caught – giving him a surprise – by *József Gacsal* angling for pikeperch with his gear baited with a bleak.

Recordsized razorfish from the storage area of the Tisza-tó reservoir (photo by József Gacsal)

It was not registered as an official record however its weight exceeds the 1.05 kgs of the Hungarian official anglers' record specimen caught in 1997.

Ákos Harka

Citation: Harka Á. (2013): Rekord méretű garda (*Pelecus cultratus*) a Tisza-tóból. *Halászat* 106/4: 14.

Nase (*Chondrostoma nasus*) and Zingel (*Zingel zingel*) in river Zagyva and tributaries

River Zagyva, 179 km long, with an average discharge of 5 $m^{3/}$sec, is a right tributary of river Tisza. According to István Vásárhelyi, nase (*Chondrostoma nasus*) used to be common up to the 1960s in the Szolnok to Pásztó section of Zagyva (0-134 rkms) but due to contamination, it disappeared. No nase was found in samples between 1980 and 2010 nor are there angling data for catching nase.

Juvenile nase (photo by Ákos Harka)

However, nase has lately been seen again in this water system, which is associated with improving water quality. First in 2011, one specimen was caught near the river mouth, then in 2012, another three in the same area (Szolnok, 2 rkm; N47°11'18.07", E20°12' 04.17"). On 18.08.2013, a 170 mm long nase was caught at a distance from the river mouth (Jasztelek, 54 rkm; N47°28'40.15", E20°00'12.56") but it was not seen any more that day at Ujszasz (25 rkm). Some days later, on 24.08.2013, three specimens, each longer than 200 mm, were found at one spot 92 river kms away from river Tisza (Kál, 33 rkm; N47°42'47.17", E20°14'34.42") on a 150 m long sampling section on the Tarna, tributary of river Zagyva. An indicator of rarity is that a few hundred metres downstream, on a sampling section that compared in length to that above, no single specimen were caught, nor are there data from lower Tarna. Nase is still rare in this river system, but there is hope for it to return an grow in number in the river section described by Vásárhelyi.

Zingel (*Zingel zingel*) returned to river Zagyva before the nase. In 2007, one zingel was caught downstream of Jaszbereny, while in 2011, one at the village of Zagyvarekas. In recent years, zingel has been reported more and more frequently by angling magazines in catch in river Zagyva. In the Tarna, the fish was first seen in 2012, when two specimens were identified on a river section downstream of Tarnaörs (9 river km), then on 24.08.2013, a 210 mm long specimen was caught from river Tarna at the town of Kal (33 rkm). Data show that zingel is slowly but firmly setting foot in these bodies of water and by now it has taken its place in the fish fauna of river Zagyva.

It has been observed that some species of fish (Danube whitefin gudgeon /*Romanogobio vladykovi*/ or the Pontian monkey goby /*Neogobius fluviatils*/) that make it to river Tarna produce a large population in the Tarna river system on the plain areas within a few years while they make little progress into river Zagyva. Nowadays, there is no big difference in terms of water quality in these two rivers unlike in past decades, therefore, it is the cross river dam at Jászberény that is suspected to prevent fish species from moving upstream. At medium water level, there is a 1 m level difference between upstream and downstream sections, a barrier for fish species to move in the river.

Zsolt Szepesi, Tibor Erős, Péter Sály, Árpád Ferincz, Péter Takács

Citation: Szepesi Zs., Erős T., Sály P., Ferincz Á., Takács P. (2013): Paducok (*Chondrostoma nasus*) és magyar bucók (*Zingel zingel*) a Zagyva vízrendszerében. *Halászat* 106/4: 14.

Sunbleak (*Leucaspius delineatus*) from the Lesence-Nádasmező

Although the 104 hectares area of Lesence-Nádasmező is basically a constructed wetland, a reed-filter reservoir, the territory has belonging to the Balaton Uplands National Park. The area is well known about its valuable bird assemblage, but its fish fauna is being a white patch in the well surveyed Balaton-catchment. The area of the reservoir has been inundated in 1987 and mostly very shallow (5-15cm) the electrofishing was only possible in the deeper (2-3 m) collector channels. The sampling has been carried out from a small rubber boat, on 05.09.2013, using a 12V battey powered pulse DC device. Two individuals of sunbleak (*Leucaspius delineatus;* SL= 30mm, SL=47mm) have been caught during the fishing.

Sunbleak (Leucaspius delineatus) from the Balaton-catchment (photo by Ádám Staszny)

This occurrence is important, because this small sized protected species has only been reported previously from only one site (Egervíz stream, 1991 and 2004) of the northern catchment of Lake Balaton.

Ádádm Staszny, Árpád Ferincz, András Weiperth, Gábor Paulovits

Citation: Staszny Á., Ferincz Á., Weiperth A., Paulovits G. (2013): Kurta baing (*Leucaspius delineatus*) a Lesence-Nádasmezőből. *Halászat* 106/4: 15.