

Newsletter LIFE FOR LASCA

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Like the Lasca in Slovenia, also in the Ticino River there are native species that are at high risk of survival due to numerous threats such as artificial barriers, pollution, habitat alteration, introduction of alien species, excessive fishing pressure, etc. In this issue we dedicate ourselves to two fish species for which the Ticino Park has committed and / or is still committed to their protection (https://www.lifeprojects LIFE CON.FLU.PO. thanks the confluo.eu/index.php?lang=it) and LIFE TICINO **BIOSOURCE** (http://ticinobiosource.it/).

THE ADRIATIC STURGEON (Acipenser naccarii)

Family: Acipenseridae

Morphology: the body is slender, with a skeleton for the most part cartilaginous, and has 5 series of bony shields (1 dorsal, 2 lateral and 2 ventral). These shields thin with age and may disappear in older specimens. The muzzle is short and wide, rounded at the tip where there are 4 short barbels that do not reach the mouth (in other species of sturgeon they reach it). The mouth is pointing downwards. The caudal fin is heterocercal: the upper lobe much more developed than the lower one. The other fins are set far back on the body. The livery is variable gray-brown, with yellowish or greenish shades, and gradually lightens on the sides until it becomes almost white on the belly.



Habitat and behavior: the adriatic sturgeon is an anadromous migrant, it grows in the sea, but reproduces in fresh water, and is therefore able to withstand a wide variability in salinity. In the sea it occupies the sandy and gravelly bottoms near the estuaries, remaining between 10 and 40 m of depth. In the prereproductive period it goes up the great rivers in search of areas suitable for reproduction. However, it's known of individuals able to carry out the entire life cycle in fresh water.

Feeding: it mainly feeds on aquatic macroinvertebrates found on the seabed such as crustaceans, diptera larvae and above all oligochetes (earthworms), but when it reaches larger sizes it can also feed on fish.

Reproduction: the reproduction period is late spring and the first part of summer (May-June). Over 12 hours, through successive emissions, the females lay their eggs in still waters or with little current, on a gravelly bottom and with good oxygenation. The eggs are then fertilized by the males. A female can lay up to 5 million eggs. Sexual maturity is reached at 6 years by males and 9 years by females, who ovulate every 2-4 years.

Distribution: this species is endemic in the Adriatic Sea basin, where it frequents the northern and eastern coasts. In inland waters. its range includes the main rivers of northern Italy the such \as Po, Tagliamento, Ticino, Adige, Brenta, Piave and Livenza, and also present Dalmatia.

State of conservation: it is in sharp decline everywhere.



THE PIGO (R<mark>util</mark>us pigus)
Family: Cypr<mark>inid</mark>s

Morphology: the body is slender, robust, oval in shape, laterally compressed, with a high back. It is covered with circular scales. The head, in proportion to the rest of the body, is small. The muzzle is pointed, with the mouth turned slightly upwards. The eye is also small. The fins, on hand, the other are well developed: the dorsal fin is high and is located in the middle of the back in correspondence with the ventral fins; the caudal fin is bilobed, with a clear median incision. The dark livery on the back lightens on the sides where bronze or golden reflections can be seen; on the belly it is whitish with silvery shades.



Dimensions: it can exceptionally reach 50-55 cm even 65 cm in length and 2-3 kg in weight in the Italian area.

Habitat and behavior: it loves calm or low current waters, where it remains in large banks that move quickly horizontally and vertically. During the winter, in the lakes, it lives in depth because the water temperature is milder and allows the survival of organisms that the pigo feeds on. In the warm months it returns to the surface, looking for sunny areas sheltered from the winds. The pigo is often found in streams, canals and fountains communicating with larger rivers. Its presence in these environments is due to floods, situations in which turbidity and the current of the water push it to seek cleaner and quieter areas.

Feeding: it is amnivorous. It feeds on vegetables, larvae and adult insects, small crustaceans and mollusca, it can also feed on eggs, larvae or fry of other fish. Nutrition is linked to the seasonal cycle and changes according to the period:

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Larvae and small insects in spring and autumn, plants in summer, invertebrates and plant residues in winter when, unlike other cyprinids, it does not hibernate and continues its food activity by taking refuge at greater depths.

Reproduction: the reproductive period begins in February and ends in early spring, sometimes even in June. It reproduces in clean, shallow waters with rapid current, temperature not exceeding 14 ° C, on pebbly bottoms. The eggs, from 35,000 to 60,000 per kg of body weight, are adhesive and are laid on the vegetation and on the bottom stones. Sexual maturity is reached at 2-3 years of age for males and 3-4 years for females. During the scrubbing period, the heads and backs of the males are covered with huge pungent and whitish wedding buttons, this makes them easily distinguishable.

Distribution: currently there are populations of pigo in the Danube basin and in the Po-Veneto district. The pigo is the native species of the genus Rutilus less widespread in Italian waters. In our country it is present almost exclusively in the northern regions, especially in the large subalpine lakes of glacial origin in Lombardy (Lario, Maggiore, Olginate). The pigo is then present in the Po and in the lower course of some of its left tributaries: sub-lake Ticino, Adda, Serio and Oglio in Lombardy; Brenta, Livenza, Adige, Piave and Sile in Veneto. It is also found in the lakes of Mantua while it is almost absent in Garda Lake. For just over a decade it has been introduced into the Tuscan-Emilian Apennines and Lazio.

Conservation status: everywhere in contraction in the ranges of the original populations.

