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Newsletter

LIFE FOR LASCA

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Spring: flakes for Lasca

Spring is the period of reproduction of the Lasca: the fish complete the maturation of the male and female gametes and prepare for the laying of the eggs and the fertilization. Precisely these days, therefore, both in Italy, at the fish hatchery of the Ticino Park in La Fagiana in Pontevecchio di Magenta, and in Slovenia, at the FRIS hatchery in Kobarid on the Soca River, preparations are underway for breeding in captivity. .

This year the stock of breeding specimens of the Ticino Park has been expanded thanks to a network activated between the staff of the Park and the team of researchers coordinated by Prof. Francesco Nonnis Marzano of the Department of Chemical Sciences, Life and Environmental Sustainability of the University of Parma which has made possible to recover some breeding specimens in the Parma area, on the Ceno river (in the Varano de Melegari locality) and the Enza river (in the Sant'Ilario d'Enza locality). In this operation, the technicians of the Ticino Park were accompanied by Dr. Pietro Rontani who is specializing in the genetics of many native fish species and conducted a series of samplings recovering about 200 young adults (1-2 years). 15 adult reproducers have been transferred to the Ticino Park structures as a precious support for captive reproduction.

In the photos, places and moments of the recoveries carried out in the Parma area – Photos by Monica Di Francesco



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Preparation of the substrate

In captivity, Lasca reproduce only if the conditions they would find in the wild are recreated. For this reason, the technicians of the Ticino Park have recovered pebbles from a dry gravel. The gravels are natural deposits of stones and pebbles carried by the river in periods of flood or strong current, therefore they are environments in constant change. They represent ecological niches for numerous animal species such as the Lasca, when the water covers the substrate, or like the sandpipers and couriers, when the water withdraws. Ticino, thanks to a path that is for the most part still natural and to the irregular flow of water, allows us to admire these fundamental environments for wild nature, but unpredictable and temporary.

A layer was created, with the collected material, on special metal grids, which were positioned in the tanks for Lasca reproduction. In nature, Lasca lays its eggs in areas with direct current, for this reason a continuous exchange of water is required in the hatchery tanks. Females concentrate their eggs right where the jet of water is present as it closely simulates natural conditions.

Gravel recovery for the scrub bed- Photo by Marco Valenti



Tanks preparation- Photo by Marco Valenti



Gravel substrate preparation- Photo by Marco Valenti



Continuous water current in the reproduction tanks - Photo Marco Valenti



Lasca reproduction in the hatchery

Once the gravelly substrate, or rather the bed of scrubs, has been prepared, a flow of water is created in the tanks and the temperature is gradually increased, using a heater. The reproducers are then introduced: adult fish that have reached sexual maturity (3-4 years of age). This year the reproducers come from previous reproductions of the Park and from recoveries in the wild carried out in the Parma area.

Subsequently, the water temperature is gradually raised further in order to simulate the rise in spring temperature that occurs in nature.



Lasca specimens in reproduction in the tanks of the Ticino Park-Photo by Marco Valenti

The females lay adhesive eggs on the pebbles of the scrub bed and the males, after having developed slight modifications such as a more intense orange coloration of the pectoral and anal fins and the appearance of nuptial tubercles on the head, fertilize the eggs.

Embryonic development takes about ten days. The fry, after having reabsorbed the yolk sac which acts as the first nourishment, are fed. At 3 months of life, the small fishes reach 2-4 cm in length, when adult they will reach an average of 14-20 cm up to a maximum length of 20-25 cm.