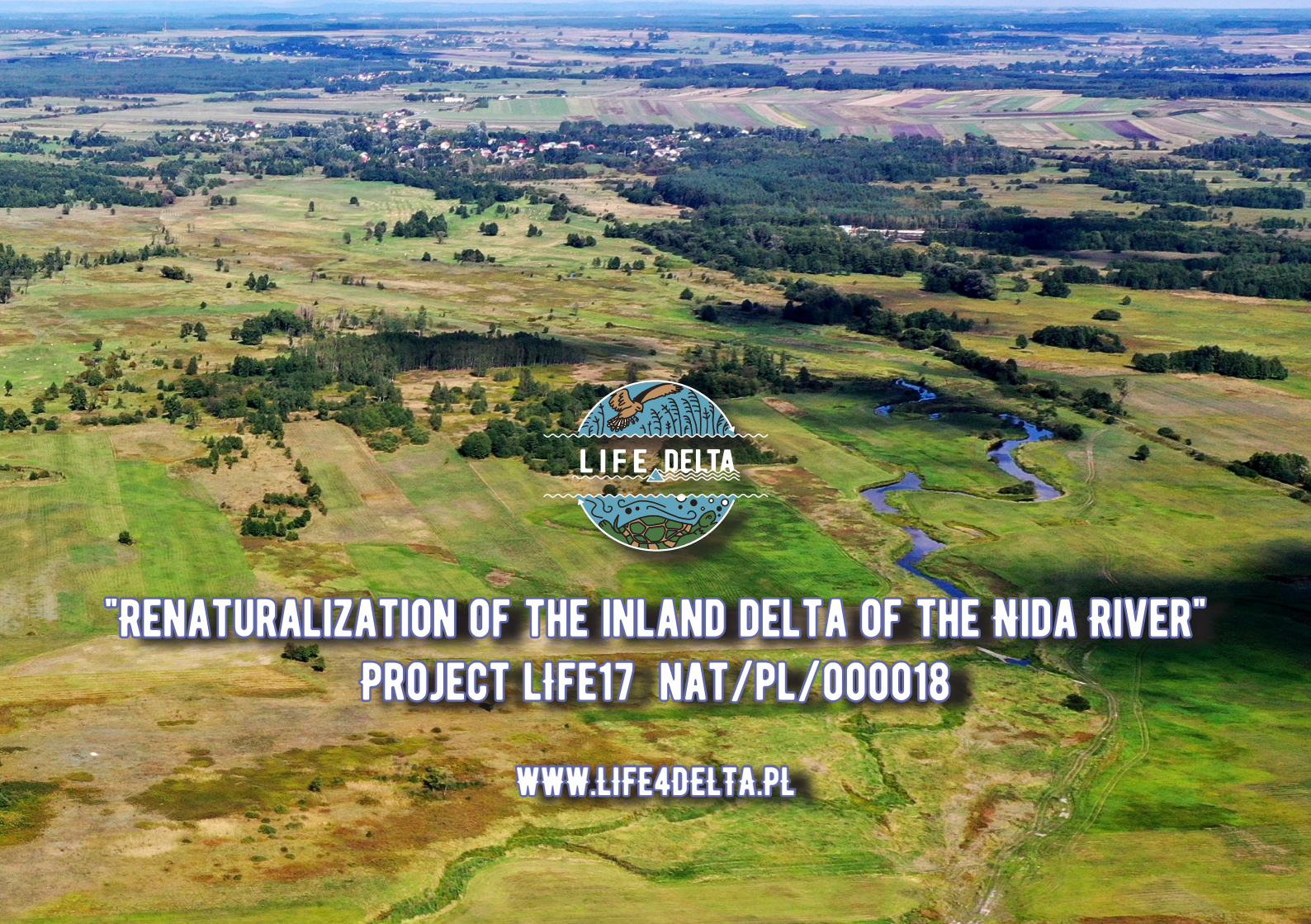


"RENATURALIZATION OF THE INLAND DELTA OF THE NIDA RIVER"

PROJECT LIFE17 NAT/PL/000018

WWW.LIFE4DELTA.PL

NIDA ŁANDSCAPE PARK

The largest landscape park in the Świętokrzyskie Province. Its area is characterized by a great diversity of habitats – from extremely dry through marshy, to even aquatic ones. The sunny slopes of the gypsum and limestone hills are one of the largest xerothermic vegetation sites, accompanied by a specific entomofauna, in Poland. These valuable habitats were included in the international CORINE system, protecting Europe's natural heritage. Unique plant species are associated with them, such as shed blossom, dorycnium germanicum, serratula lycopifolia, carlina, arabis recta Vill., sesleria caerulea, lathyrus latifolius, reseda phyteuma, sisymbrium polymorphum, stipa pennata, stipa capillata and linum hirsutum L, for which this is one of the few sites in Poland. Due to the variety of living and inanimate forms of nature, it was decided to create nature reserves: Skowronno, Grabowiec, Pieczyska, Krzyżanowice, Skorocice, Skotniki Górne, Winiary Zagojskie, Przęślin and Góry Wschodnie. Within the area of the Park and its buffer zone you can also find other forms of nature protection. There are: monuments of living and inanimate nature and ecological sites.

PROJECT LIFE17 NAT/PL/000018

The project will be implemented over a period of 6 years, until the end of 2024 in an area of about 400 ha. The plans include, among others, active protection of the old riverbeds within the inland delta in Umianowice, riparian forests, Molinia meadows, extensively used meadows and restoration of xerothermic grasslands. In addition, active protection of a number of bird living on reeds, sedges and open meadows is provided for. The construction of nests for the white stork was planned, as well as monitoring of the white-tailed eagle nest. The project also involves reintroduction of the pond turtle, restitution of the fire-bellied toad, crested newt, thick shelled river mussel, lesser ramshorn snail and Desmoulin's whorl snail.

NIDA RIVER

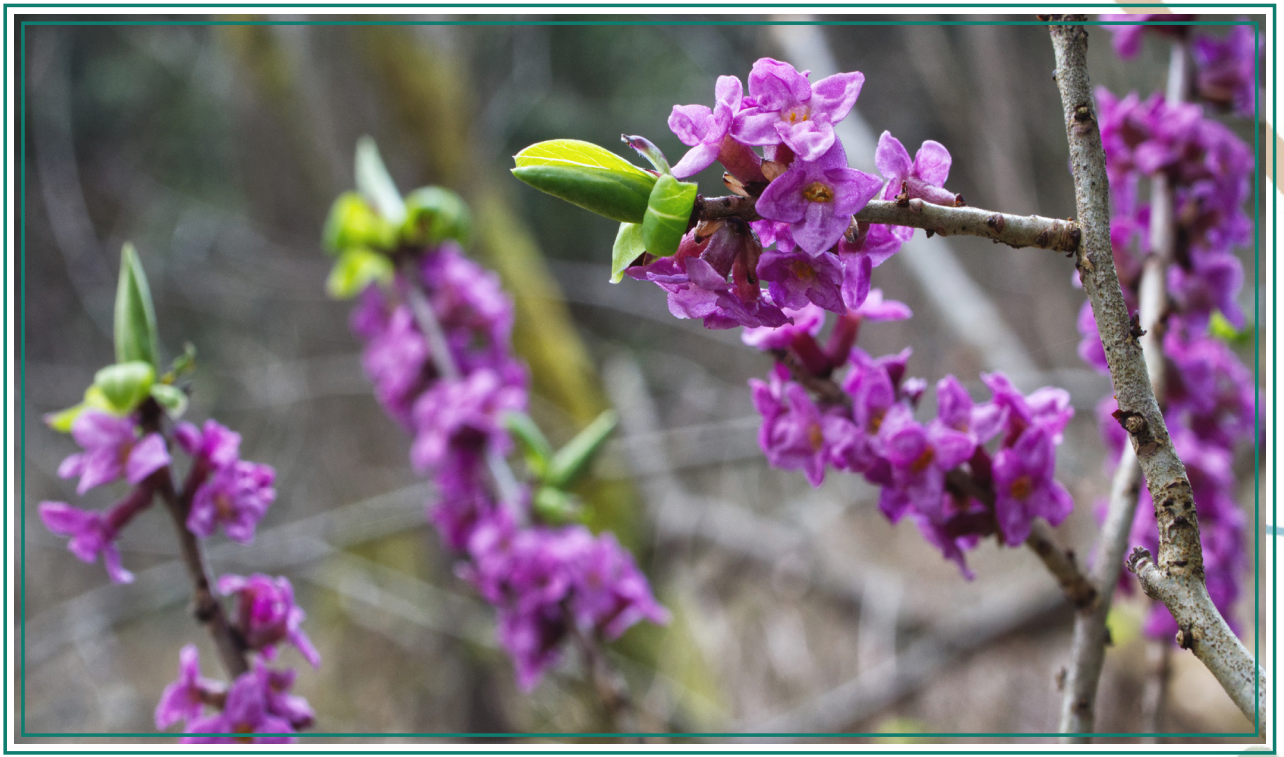
The name of the Ponidzie region comes from Nida, the longest river in the Świętokrzyskie Province. Its width at its narrowest point is 6 m and at its widest 79 m. The depth ranges from 0.4 m to 2.5 m. It is one of the most insolated and thus warmest Polish rivers. The water temperature reaches 27°C in summer which makes canoeing, fishing and other water sports very pleasant. The river is particularly charming due to its numerous meanders and old river beds. A meander, also called a bend, is a piece of the riverbed resembling an arch. Often, in order to swim 1 kilometer in a straight line you have to travel up to six times this length. Due to this diversity, many different natural habitats can be found here. Thanks to specific air currents occurring in the Pińczów region, the beauty and biodiversity of the Nida River can be admired from the bird's eye view (from a glider, paraglider).

INLAND DELTA

The Nida River does not flow directly into the sea, but has its own delta, which is a geomorphological structure, unique in Poland. The river falls into a low area with an impermeable bottom, then slows down and divides into several smaller riverbeds flowing in parallel. In the Sobowice area, three river arms merge to form one riverbed again. As these areas were difficult to access and thus useless for agriculture, the most important fauna sanctuary in the Nida Landscape Park was created here.

RIPARIAN FOREST IN MŁODZAWY

Riparian forests are one of the richest and most endangered natural habitats in the world. These are wet or damp forests, formed on peats or alluvial soil, found in valleys of rivers, streams, often within the floodplain. These are very fertile forests, with a dense undergrowth and a lush, tangled groundcover, slimy and hard to reach. Habitats of this type are rare nowadays, because trees used to be cut down and the land dried to change them into meadows or pastures. The largest area of dense riparian forest in Ponidzie has over 120 ha and is located near the village of Młodzawy. This is the Ash-Alder Riparian Forest. In order to preserve optimal conditions for the development of this habitat, it is necessary to perform a number of treatments, e.g.: to clear and build small water retention structures like drainage ditches and gates to stabilize water conditions.

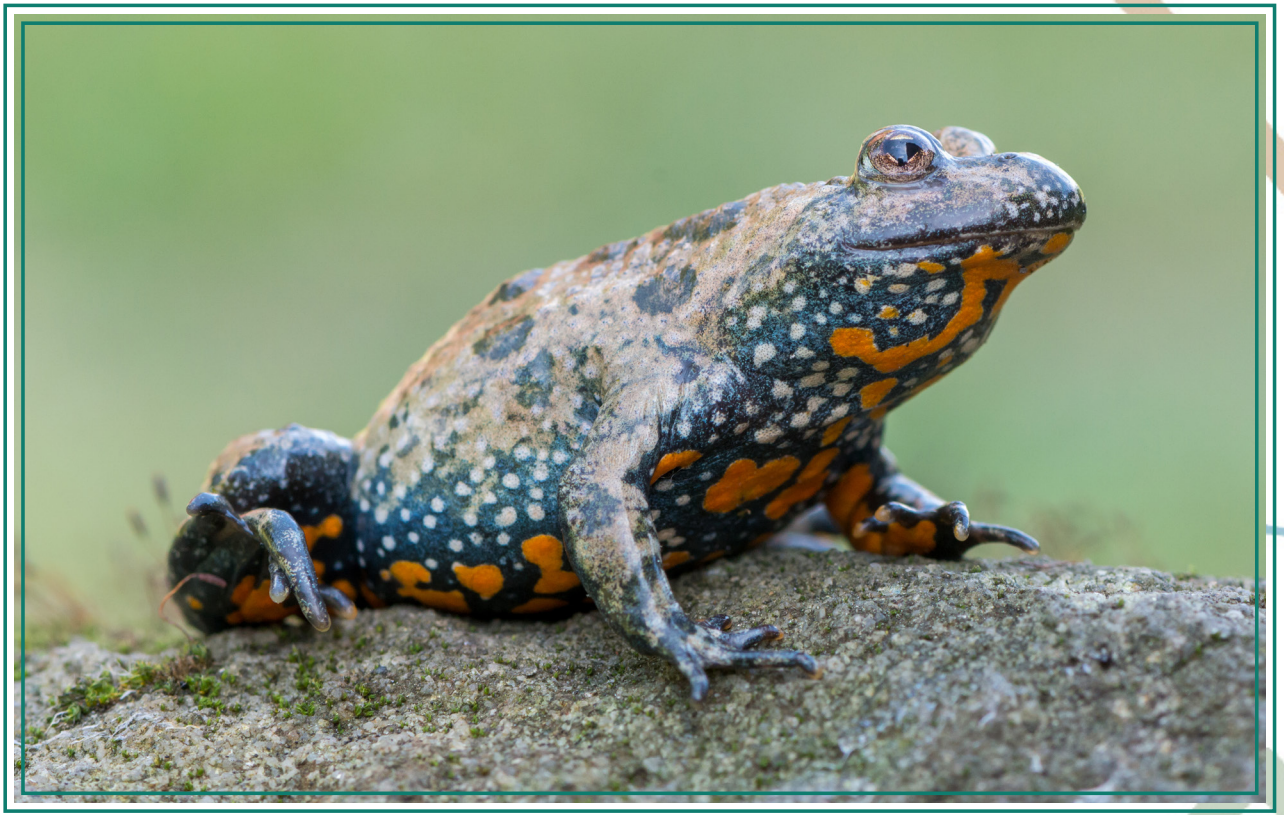


MEADOW AND MARSHY VEGETATION

Meadow and marshy vegetation is concentrated along the bed of the Nida River, which for the most part has retained natural „wild" character. Together with old river beds, water ponds, backwater and bends it creates picturesque landscapes. Wetlands, swamps and peats characteristic of river valleys are associated with this area. In permanently wet places, you can meet many beautiful, protected plant species like Orchis militaris L., Rhododendron tomentosum Harmaja L., and Daphne mezereum L. The latter became a protected plant as early as 1946. It is the second blooming bush in our forests, next to hazel. Its flowers smell of hyacinths and can be noticed from several tens of meters. Daphne is a melliferous plant, sensitive to drought. At the end of June and the beginning of July, spherical fruits that are poisonous for people but harmless for birds ripen on it.

POND TURTLE

The pond turtle is a widely liked reptile in Poland. It deserves to be called a relict animal because it has not changed its appearance for 200 million years. Pond turtles survived the era of dinosaurs. The oldest living members of the species are almost 120 years old. As early as in the 1990s, it could be still observed in delta of the Nida River, but the drainage of the area caused its extinction. The project plans to reintroduce this rare reptile in the Ponidzie region.



FIRE-BELLIED TOAD

There are 12 species of amphibians in Ponidzie, including the fire-bellied toad. Its rough, warts-covered skin contains one of the strongest venoms among amphibians in Poland. Nature has equipped it with interesting defensive behavior. A frightened animal bends its body and shows bright orange spots. This phenomenon is called “unken reflex” and discourages predators from attacking. Destruction of the water environment it lives in is tantamount to the death of the toad because it cannot migrate more than a few hundred meters away.

CRESTED NEWT

Crested newt is the largest and most beautiful species of newt in Poland. During the mating season a characteristic skin fold appears in males – its similarity to a crest is the reason of the species name. It has two functions: it lures a female and increases the surface area of the skin through which gas exchange occurs. When the mating is over, some newts go ashore. They can be found in meadows, pastures, as well as in forests, especially riparian, willow, poplar, alder and ash forests.

THICK SHELLED RIVER MUSSEL

The name of the thick shelled river mussel comes from its thick shell walls. The species can filter 40 l of water per day, hence it is sensitive to pollution, especially ammonium and nitrate ions from over-fertilization of agricultural land. Several decades ago it was common and its shells were used to make buttons, musical instruments linings and decorative objects. The river mussels are able to travel the distance of merely 2 meters, but their offspring attach themselves to the gills of certain species of fish, move with them over long distances and colonize new habitats.

BIRD LIFE OF THE INLAND DELTA

The Nida Valley is a bird sanctuary of European importance. 264 bird species were found here, including 165 breeding species. White-tailed eagle and black stork among others have their habitats here. In the village of Umianowice, 5 white stork nests were inhabited every year as early as in the 1990s, of which there is only left nowadays. Often, storks establish their nests directly on energy poles, which poses a danger of electric shock to the clutch and adult specimens. The construction of nest platforms is one of the most widespread and effective forms of support for the population of the species. The project plans to install 10 such structures, including 7 in the Umianowice area. A narrow-gauge railway from 1917 facilitates the observation of birds in the area of the delta. During the journey, participants can admire the natural wealth of the delta area from the windows of the carriages in a safe way for themselves and for nature.

EDUCATION IN ŁIFE

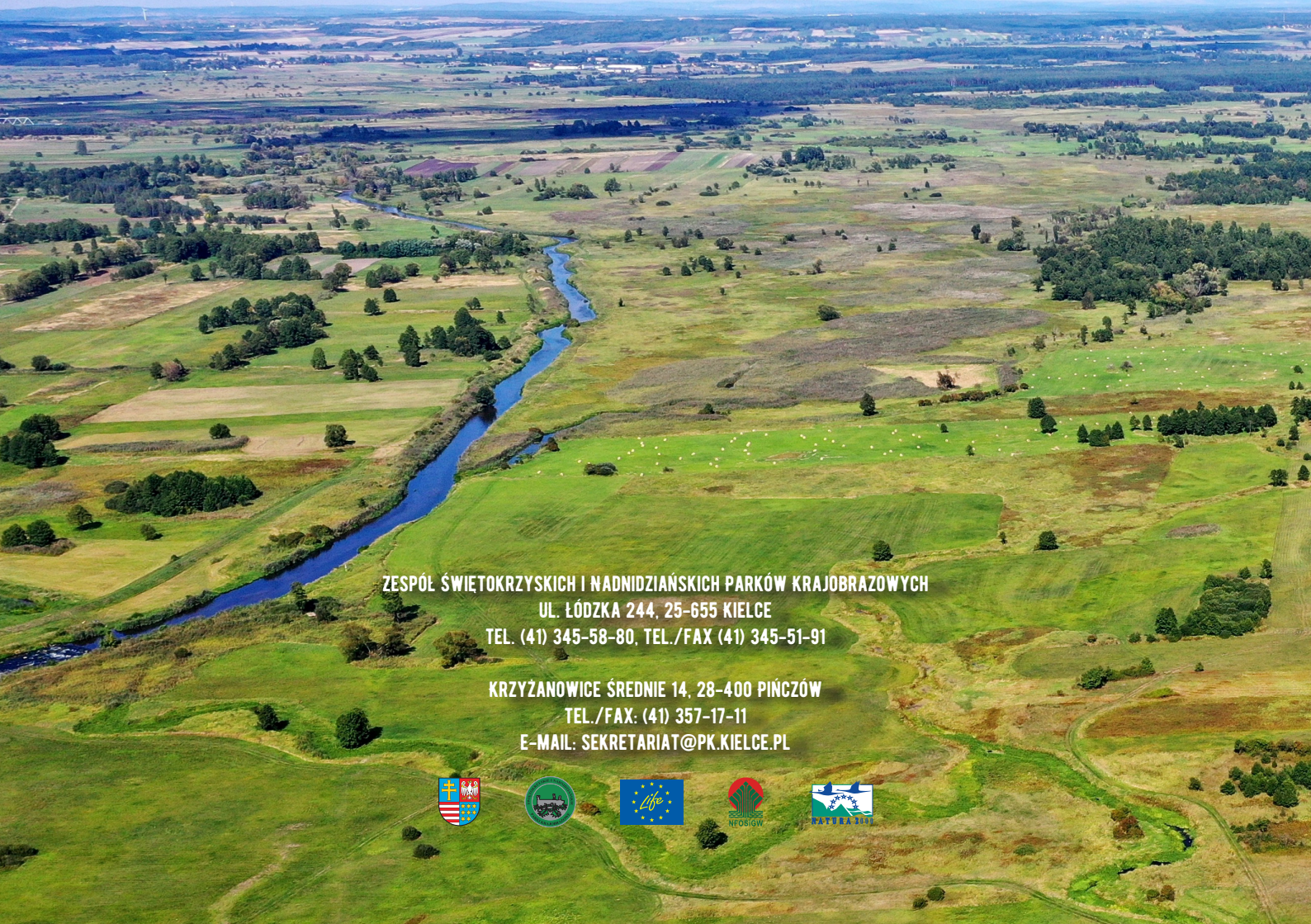
In the years 2014-2018, the Świętokrzyskie and Nadnidziadzkie Landscape Parks Complex implemented the Life + project entitled „Protection of valuable natural habitats in Ponidzie". Restoring the appropriate condition of rare habitats and increasing the population of protected plant and animal species constitutes an important element of the natural education program. 2,100 in total participants took part in the project throughout its duration. The Life 17 project entitled „Renaturalization of the Inland Delta of the Nida River", which the Team will implement until 2024, provides for various forms of environmental education of the society, including one-day nature workshops for 7,400 students and two-day workshops for 4.900 students. A two-day education will allow for observation of nature at dawn and at night. Educational activities will also include youth, teachers and farmers.

PROJECT OBJECTIVES

- Improvement of water conditions in the middle delta of the Nida River.
- Active protection of willow, poplar, alder and ash riparian forests.
- Active protection of old river beds and natural eutrophic water bodies.
- Restoration of meadow habitats to favorable conservation status.
- Protection of birds living on reeds, sedges and open meadows.
- Replacement or restitution of populations of species subject to strict species protection: thick shelled river mussel, lesser ramshorn snail, Desmoulin's whorl snail, fire-bellied toad, crested newt, pond turtle.
- Grazing restitution.
- Channeling tourist traffic.
- Activating the local community.

EXPECTED RESULTS

Restoration of unique natural values, as defined by the Habitats and Birds Directive, especially:
· *91E0 Willow, poplar, alder and ash riparian forests;
· 3150 Old river beds and natural eutrophic water bodies;
· restoration of meadow habitats to the favorable conservation status, including creation of optimal habitat conditions for birds (e.g.: bittern, corn crake, spotted crake, white stork);
· recovery or restitution of populations of species subject to strict species protection: thick shelled river mussel, lesser ramshorn snail, Desmoulin's whorl snail, fire-bellied toad, crested newt and pond turtle.
Name of the coordinating beneficiary:
· Świętokrzyskie Province – The Świętokrzyskie and Nadnidziańskie Landscape Parks Complex.
Total project value: EUR 5,473,145 (PLN 23,132,247).
The European Commission awarded 60% of the amount, the National Fund for Environmental Protection and Water Management in Warsaw – 30%, and the remaining 10% of the project value are the beneficiary's and co-beneficiaries' own funds.
Associated Beneficiaries:
· Institute of Nature Conservation of the Polish Academy of Sciences in Krakow;
· State forests – Pińczów Forest District;
· University of Agriculture in Krakow.
Lead time: from 1 January 2019 to 31 December 2024.



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