

## NATURE PARK TIROLER LECH

The Nature Park Tiroler Lech covers 41.38 km<sup>2</sup> and is both a Natura 2000 area and a protected area in its own right. The Nature Park Center Klimmbrücke is home to both the administration of the Nature Park and the interactive “Wild River Adventures” exhibition. It offers free information about the LIFE Lech project and the protected area itself to visitors.



### Nature Park Center Klimmbrücke

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### LIFE LECH INFOBOX:

Project name:	LIFE Lech – Dynamic River System Lech
Project period:	2016 – 2021
Budget:	6.093.220 €
EU funding:	60 % (3.655.932 €)
Supported by:	Ministry for Sustainability and Tourism— Directorate 10/1
Project lead:	Federal Water Engineering Administration Tyrol, Baubezirksamt Reutte
Project partners:	State Office for Water Management Kempten, Germany Regional government of Tyrol, Department of Environment, Austria

[www.life-lech.at](http://www.life-lech.at)

#### Image credits:

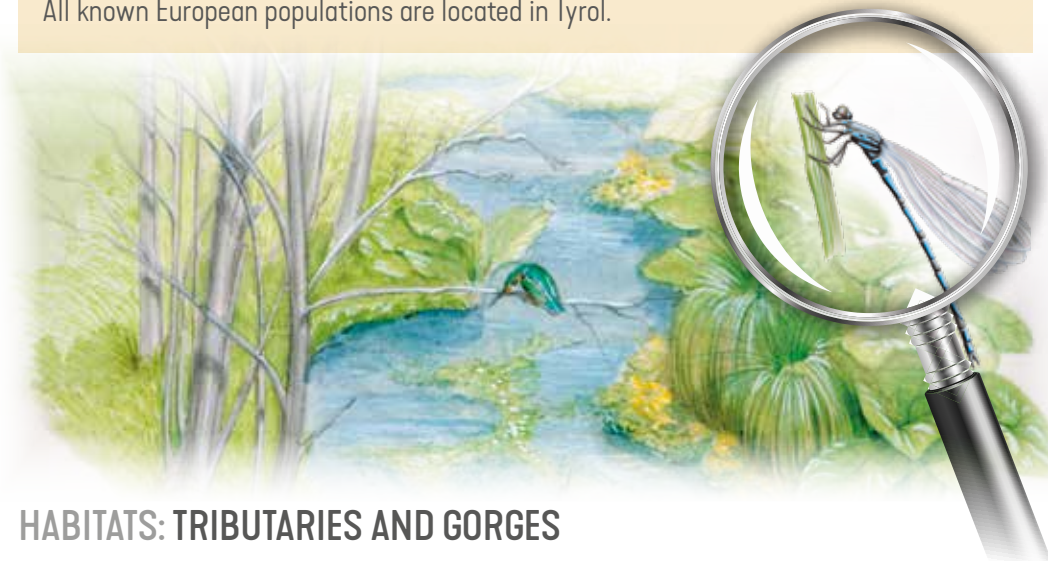
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DESIGNSKILLS  
HEADQUARTERS

## HABITAT: THE SOURCES

This habitat provides spawning grounds for fish and amphibians, breeding space for birds, and protected spaces for all.

The Siberian bluet (*Coenagrion hylas*) is the rarest damselfly in Central Europe. All known European populations are located in Tyrol.



## HABITATS: TRIBUTARIES AND GORGES

The tributary streams from the side valleys are its lifelines. They provide it with a constant flow of water and bed load (rocks, gravel and other material). The gorges, slope woods and mountain forests are important habitats and retreats for rare plants and animals.

The black woodpecker (*Dryocopus martius*) is Europe’s largest woodpecker. This bird is a carpenter, and builds its own nesting holes.



## HABITAT: SPRING HEATHER AND SCOTS PINE FORESTS

The upper and middle section of the Tyrolean Lech is accompanied by sparse forests of scots pine associated with spring heather. This habitat is characterised by dryness, low nutrient availability, and sporadic flooding.

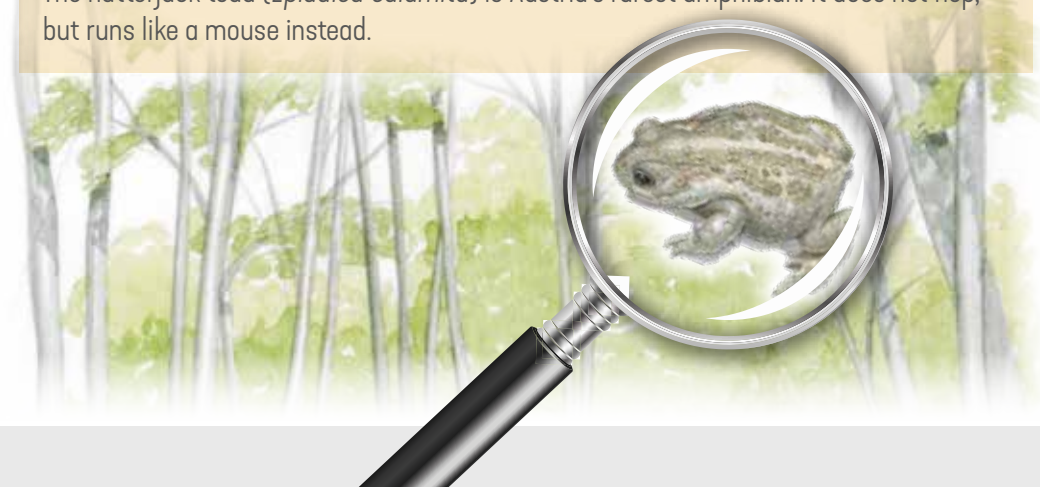
The lady’s slipper (*Cypripedium calceolus*) is the largest indigenous orchid in Europe. It takes up to 16 years before it blooms.



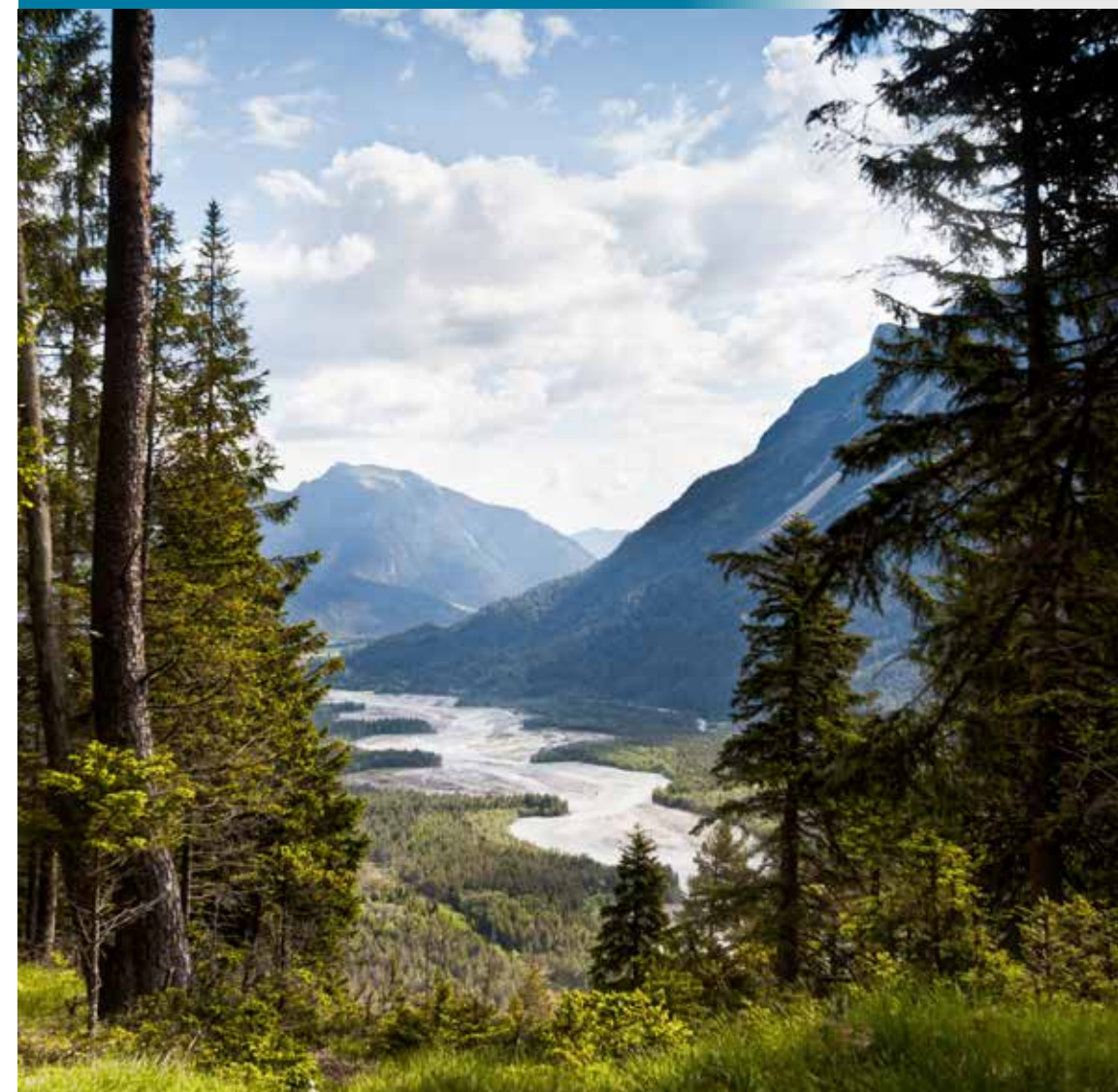
## HABITATS: GREY ALDER WOODS

Along the Tyrolean Lech, grey alder woods are found mostly along its lower course. They are called “wet riparian forest” because they are flooded frequently, which provides them with nutrients.

The natterjack toad (*Epidalea calamita*) is Austria’s rarest amphibian. It does not hop, but runs like a mouse instead.



## LIFE LECH Dynamic River System Lech Actions for a Wild River Landscape





HELP FOR ENDANGERED SPECIES

After a catastrophic flood laid waste to the valley in 1910, the Tyrolean Lech was hemmed in and regulated in the early 20th century. In the 1960s, check dams were built at the tributaries, which meant that their rock and gravel load did no longer reach the Lech river. Without this material, the Lech eroded its bed quickly, cutting up to 4 metres deeper. This had grave consequences for the highly specialised flora and fauna of the wild river landscape. Since they depend on regular flooding, species like the German tamarisk (*Myricaria germanica*) or the rose-winged grasshopper (*Bryodemella tuberculata*) suffered. Their numbers dropped sharply.

A first LIFE revitalisation project in the years 2001-2007 improved the situation in many respects. Due to its great success, a second LIFE project is currently ongoing.



View of the regulated Lech river near Reutte [1934]



Rose-winged grasshopper



Removal of the Hornbach check dam [2005]



German tamarisk

CURRENT LIFE PROJECT AT THE TYROLEAN LECH RIVER

Between 2016 and 2021, 13 river revitalisation measures and a number of species protection actions are being realized.

Riverbank protections and groynes (rock bars projecting into the river, influencing its flow) are removed in suitable places. This allows the Lech to build up gravel banks, which then become habitats for pioneer species, which are often rare pioneer animals and plants. The riparian forest and its inhabitants benefit from these actions. But people do as well – through better flood protection. At the same time, this stops further bed erosion, and the ground water table is raised.



RIVER REVITALISATION: VISIBLE RESULTS  
STANZACH-VORDERHORNBACH

The old bank protections and groynes along the stretch between Stanzach and Vorderhornbach were removed. The riverbank trail was also moved farther inland. Once more the Lech is sprawl out and shape its own banks. This also allows the growth of plants typical for this landscape, such as the rosemary willow (*Salix eleagnos*).



Before



After

BORDER TO LECHSCHLUCHT

Six new groynes and a larger bulge along one bank direct the river into Bavarian territory. There, the Lech will once again be able to transform its surroundings into a braided, natural river landscape. This benefits a large number of rare and endangered species, especially the dwarf bulrush (*Typha minima*).



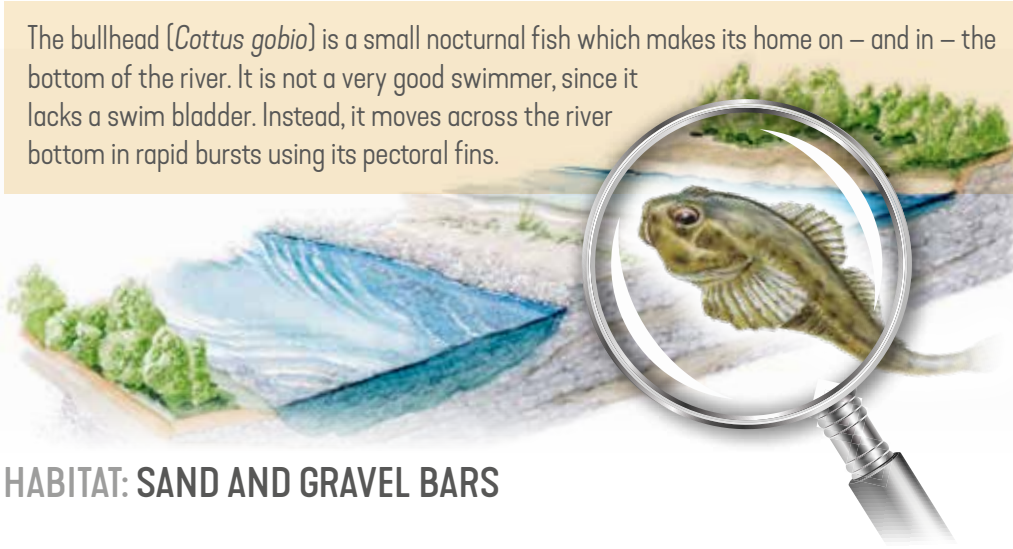
Before



After

HABITAT: RIVERBED

Change is the only permanent feature of the Lech. Over large stretches, the Tyrolean Lech is free to do what every mountain stream once could: to sprawl and constantly remake its bed. During thaws or heavy rain, the whole width of the bed and the adjacent riparian forest is flooded.



The bullhead (*Cottus gobio*) is a small nocturnal fish which makes its home on – and in – the bottom of the river. It is not a very good swimmer, since it lacks a swim bladder. Instead, it moves across the river bottom in rapid bursts using its pectoral fins.

HABITAT: SAND AND GRAVEL BARS

Where the Lech sprawls far apart, it forms large islands of sand and gravel. These are miniature deserts, characterised by extreme sun exposure, cold, heat, dryness and wind. Only specialists like the dwarf bulrush (*Typha minima*) can survive and thrive here.

The dwarf bulrush (*Typha minima*) depends on floods. As a pioneer plant, it colonises sandy or muddy areas on regularly flooded banks.

