

1. When you see the landscape of the Ruhr area for the first time it seems to be a little paradise. But industrialisation has caused great damage over the years. For centuries animals had been rare or rather existing. But with the regression of the industry the Ruhr area started to change. This is the story about the change of the landscape, plants and animals.

2. In many places the Ruhr region, called "Ruhrpott" in German language, appears in a different light nowadays. Instead of glowing liquid steel - coloured lamps illuminate the landscape park nearby Duisburg (25 km north of Düsseldorf and about 80 km west of Unna). Like this, industrial ruins seem more beautiful- at least by night.

The Ruhr area is one of the areas with the highest density of population in middle Europe. It covers only half of the area of Luxemburg but it has ten times more inhabitants than Luxemburg. Five million people are living in 15 cities like Dortmund, Bochum and Essen.

This place was no living space for animals for a long time. ...

Up to today smoky chimneys colour the sky darker like in former times. But they become less and less. Falcons have specialised on birds of middle size. In the Ruhr area they like to hunt pigeons as pigeons are a common in this region. This bird species is so well-known that even a coal mine was named after it. (Den Rest würde ich weglassen - verwirrt nur)

3. The river Ruhr runs through the "Ruhrgebiet" area for more than 120 km. That's why the region is named Ruhr area. Despite the large industrialised area, there are still some really quite regions. There one can find rests of forests and imagine how this region looked like 300 million years ago. At that time there was a tropical climate and there were huge rain forests with enormous amounts of plants. Dying trees sank into the mud and changed -by losing oxygen- to black coal. Since many centuries coal was mined up to a depth of 100m. In 1956 over 125 million tons of coal were harvested - before and after this time the production was lower.

The energy won by coal empowered the production of iron and steel. Landscaped changed from a green to grey one. But since the 1970th coal and thick smoke decreased whereas industrial ruins increased. Leaving the ruins instead of tearing them down often seemed to be the best and cheapest option. That's when nature started to try to retake lost terrains.

Today, birch trees often grow between the old steel pipes. Birch trees are called pioneers among the trees because they only need water to grow.

4. The fox –well-known as a shy animal - is a newcomer in the Ruhr area. In abandoned iron and steel factories they find lots of places to hide. If there are parks and forest close by to the industrial ruins many forest animals become inhabitants of the ruins.

In areas where factories were only recently torn down by a detonation, nature needs time to regain the area. There is no bush or tree to hide for the animals.

But there is one bird that conquered this terrain already, the kestrel (From the falcon family that you have seen in the film before). Did the fox detect the bird family? The attentive male bird is warning the family members. The mother bird tries to draw the attention to herself, because she is able to fly away, whereas her children are not yet able to do so.

5. Elsewhere terrains with broken stones (and nothing more) next to old railway tracks are already overgrown. Recapturing the ground implies steady changes. Soon more and more plants will settle in those places. And they attract also other visitors. A lot of plant pioneers have difficulties to grow in the hard and contaminated soil. But after a while - when the ground turns to a mixture of rests from mining and plants – garden dwellers who can not find shelter in gardens with only short grass and nearly no bushes - find a new home. For instance the hedgehog can find a lot of opportunities to hide in the ruins.

Up to now the little family does not anticipate the danger of the visitor. But the hedgehog's nose is excellent. The fox gives up.

6. In former times the famous coal mine "Zeche Zollverein" in the city of Essen was the biggest coal mine of the world. Nowadays the industrial ruins can be visited as an industrial museum. At the end of the 1960s the amount of coal that had been produced there was 3 million tons a year. This coal mine closed after 135 years in 1987. The mine tips of former coal mines are now popular destinations for a weekend visit. On the mine tips between Rhein and Ruhr live more endangered toads (hugh frog) than elsewhere in the complete region of NRW. But why? Very often "mini" waterbodies are existing only for a short period of time – not enough time for fish to settle there and to eat the eggs of the toads. And it takes some time for the water to dry out, which is time enough for the tadpole to grow into

an adult toad. They only need three weeks to grow into an adult, which really is a record in the world of amphibian.

7. Also this paradise for frogs is short-lived. In the future plants will climb up the top of the mine tips. Older tips are already green and will be soon normal parts of the landscape. Material e.g. soil and stones on tips will cause a lack of soil at other places. Through mining hollow spaces developed under the ground. Water from the ground has to be pumped down and out forever; otherwise the Ruhr area will change to a water landscape. There is one part in the "Ruhrpott" that had been a water reservoir in industrial times. Today it has changed to a sort of marshland that appears to be quite natural rather than artificial. Black-headed gulls, that normally live at coasts of the Atlantic Ocean or Mediterranean Sea can be found there today.

8. Long time ago the oasis of nature was not more than a worthless waste product of mining. Animals have difficulties to settle on the small green islands that are in between big industrial sites, highways and busy cities. But the region also offers huge areas like for instance forests. One of these forests is called "Üfter Mark" and is situated in the north of the Ruhr area. Two hundred years ago it was only covered by heath plants. The forests also came into existence because of coal mining. For the pathways in the underground of the coal mines piles of wood were needed to stabilise the tunnels. So the need of wood was enormous so that huge areas were planted with pine trees. Nowadays these forests are left to themselves und offer enough space for deer, the largest inhabitants of the forests in our region. Today most parts of the "Ufter Mark" is a protected area. Centuries before the nature was not protected in the Ruhrpott area. Meanwhile - grey working settlements nearby the coal mines have changed into nice suburbs.

Today one tradition, which is over 150 years old, still exists and is typical for the Ruhrpott – the breeding of carrier pigeons (This pigeons carry letters/messages from one place to another). Klaus Schmelzer is one of these farmers. He worked in a coal mine before he retired. Pigeons –he says-were a compensation of his hard work and gave him energy for work and life. Competitions between pigeons of different owners are a highlight for him every year. In former times there were 25 pigeon lofts near his own one, now there are only four left. With the end of coal mines the pigeon lofts disappeared, too.

9. At some places the Ruhr area seem to be already quite green. Destroyed ruins are a relic of a noisy hectic time. But these pictures remind people of an era and an area in which nearly all people worked. From the last 40 years up to now the workplaces decreased more than 50 %. Today this area offers a place for many plants and animals as for example spiders. One is called "daddy longlegs", because it has legs that are longer than 20 cm. This spider species came from Africa and was seen the first time, in Germany, in 2004. They prefer to live in abandoned buildings and often live together in dozens or hundreds. If they get frightened they vibrate with their body to warn the other spiders or to confuse their enemies. The conditions in the Ruhr area are excellent for them because the temperature is often higher than elsewhere in Germany. Many different means of transportation facilitated their immigration. Supposingly they were once transported by ship. The River Rhine is an ideal immigration path for new species of animals. It is still unknown how they got to the harbour or on land.

10. It is sure that another animal also arrived by ship: The Chinese freshwater crab. The crab was transported in Chinese ballast water into the North sea and from there it occupied the rivers Rhein and Ruhr in the last century. The adult crabs go back to the sea because they can only spawn (give birth) in salt water. To do so, they cover a distance of 10 km per day and they need many months to reach the sea.

11. In the Ruhr area old landscapes mix up with newly created ones in a fascinating way. More than 150 artificial hills emerge from former flat landscape. They rise more than 100m into the air and their shaping is not yet finished. Some mining tips are still in use and are now creating new barren hills. Others are retaken by the forest. It is astonishing that the barren, poisonous wasteland on top of the mining tips and hills is a paradise for some specialists of plants and animals – even though they can also exist there for some time. The mining tips will be covered in green after some time. Squirrels will help accomplishing this by burying seeds from trees.

12. Self-regulating forces of nature need time. Some industrial places seem to be without any change. But some "well-travelled" animals have made unnoticed use of it since a few decades.

13. The chimneys of power plants don't bother the geese. On the contrary, the industrial waste-heat produced by the power plants is welcome because plants and vegetable are growing better and that means more food for the animals.

14. But up to today cities and huge industrial complexes line up in the Ruhrpott. Many chimneys still produce a lot of smoke. But the river Emscher shows how a region can be changed into a better one with the help of human influences. For decades the Emscher had been a cloaca. Nowadays a part of the Emscher is released from its artificial stone corset and winds in the landscape like in former times. The stinky smelly cloaca has turned to an unpolluted small river. The waste water is now drained below the ground.

15. For decades the Ruhr area was badly influenced by humans: The air had been polluted, landscape had been exploited and damaged. Nature had to pay the bill. But thanks to the incredible power of regeneration nature succeeds in changing the ruined landscape again.

16. The peregrine (falcon) is one of the winners of this structural change even though only with the help of humans. With huge efforts more raptor birds are now living in the Ruhr area than in other regions of Germany.

17. These birds use former industrial chimneys for nesting. This bird couple, one of hundreds in this region, raised their breed perfectly. The young falcons are now ready to spread their wings. The first flight is like a leap in the dark. But they have no choice. After a short training flight they have to trust their wings because their parents refuse to feed them in the nest from now on. Like that they successfully lure their breed out of their nest.

These young birds don't know anything about the smells, the glowing steel and noises in former times. They don't need wilderness – the only thing that counts for them is where they can hunt and have enough breeding space in order to raise their own breed later on.

18. Many steel giants all over the Ruhr area are nowadays only a reminder of former times. The Ruhrpott has made an incredible transformation: from coal and steel production to a home for animals, that can adapt very well. The Ruhrpott is an ideal region for everyone, who knows how to benefit from the changes in the last 50-60 years. This includes animals and plants.