Topic: Grassland Author: Janina Witte Quality assessment: Carsten Hobohm, University of Flensburg Level: Primary (class level 3/4) Material: Story by a crow about the changing landscape, crop fields, meadow and pasture. Object: Getting to know and learning to appreciate a habitat which deserves protection.

Factual information:

Grassland areas such as meadows and pastures are among the most species-rich habitats for animals and plants.

The grasslands serve our farm animals as species-appropriate habitats, in which they can graze and be outdoors. The meadows are mowed regularly.

Overall, the total grassland area has declined significantly in recent years and continues to decrease. Grassland areas are usually converted into farmland, but if the land is not mowed or used for grazing, over time it becomes overgrown by bushes and trees.

Amongst other things this leads to a reduction in biodiversity. For climate protection it is very important that the carbon stored in the soil is not released as a result of farming practices.

Theory:

The students should recognise the importance of pastures for animal welfare and the variety of species should be addressed.

Species diversity should be dealt with.

The importance of landscape management by humans and animals should also be demonstrated.

Methodology:

The students are given a work sheet and should work on the tasks in the correct order so that the text is introduced to them step by step.

The story is divided into different chapters to make it easier for the students to understand the text and even the weaker readers can understand and work with it. They will discover in reading the story of Rudi the Crow how grazing is used, who are the natural custodians of the countryside, which animals Rudi encountered on the pasture, what has changed over the years and what zero farming operations can lead to.

Work sheet: Grassland

1. <u>Match the pictures to the appropriate description</u>



a goat with horns

a pig with a piglet

cows grazing on a pasture

a horse grazing

harvesting a field

a field with carrot plants

a sheep on a pasture

a meadow being mowed

- 2. <u>Read the first chapter of the text</u>
 - a) Name two crops which a farmer can grow on his field.
 - 1._____
 - 2._____
 - b) Why does the farmer mow the meadow? Write a sentence.

- 3. <u>Read the second chapter of the text</u>
 - a) What animals does the crow Rudi see kept inside the fence of the pasture? Write down three animals.

b) What kind of food do these animals eat on the grasslands? Write down three keywords.

- 4. <u>Read the third chapter of the text.</u>
 - a) What other animal did the crow Rudi see on the grasslands in the past?
 - b) Do you have an idea where that animal might live now? Talk to your neighbour. Write down your ideas in keywords.

- 5. <u>Read the fourth chapter of the text</u>
 - a) What happens to the grasslands where there are no longer any animals to eat the grass and where the farmer doesn't mow either?

Draw a picture of this grassland in the box.

6. <u>Are these statements true or false?</u>

	<u>true</u>	<u>false</u>
Cows eat grass and small bushes on a pasture.		
If no one mows or eats the grass, it stays short.		
Most pigs live in farm sheds nowadays.		
<u>There are more and more pastures with animals on them in</u> <u>our environment.</u>		
The farmer mows the pastures to make hay for the winter.		
<u>After a while bushes and trees grow on pastures which are</u> not mowed.		

1) Hello kids,

I am Rudi and I am an old crow. I am 16 years old, about twice as old as you are. I would like to tell you what the environment I live in looks like. Every morning I fly over the crop fields, meadows and pastures. It is always very exciting to see what is happening there. There are many **crop fields** where farmers grow different grains or vegetables like carrots and potatoes. In addition to the crop fields there are **meadows** which are harvested by the farmer several times a year to produce hay as food for their animals during winter.



2) On the **pastures** there is always something going on, there are cows, horses, sheep and goats. These animals are kept in their paddocks with a fence which apparently doesn't upset them because they have ample space to move and graze. They live in a group together with others of their own breed and they eat the grass and other plants like clover or small bushes, which keeps them nourished.

In addition to the livestock there are other animals sharing the farmland like birds, rabbits, butterflies and insects who all feed off the fields. There is really always something going on here!

3) When I was a very young crow, the landscape looked different than it does now. Years ago there was much more grassland and more animals living in the fields. For example, there were many pigs, which I hardly see now at all. I have asked myself, "Where have all the pigs gone?", "Where do the pigs live now?".

Other crows have told me the pigs are still there, but they now live in farm sheds and are fed by the farmers indoors and that is why I do not see them any more on my flights. What a pity!

4) In addition, many pastures have been ploughed by the farmers and are used to grow grain.

On pastures where no animals are kept any more or where the farmer hasn't mowed, bushes and small trees have grown, and over the years they become bigger and bigger. Every year there are fewer meadows and pastures, although there are many animals and plants, which still thrive in these environments.

References:

FRANCK, N. (o. J.): Wiesen und Weiden: bunte Oasen der Artenvielfalt. http://www.bund.net/themen_und_projekte/biologische_vielfalt/wiesen_weiden/ (hit: 05.02.2014)

SCHÖNE, E. (2008): Alarmierender Verlust von Wiesen und Weiden. http://www.nabu.de/themen/landwirtschaft/landwirtschaftundnaturschutz/agrargipfel.html (hit: 05.02.2014)

Picture references:

ANONYMOUS (2009): grasende Fjordpferde auf der Schwäbischen Alb. http://commons.wikimedia.org/wiki/File:Grasende_Fjordpferde.jpg (hit: 07.02.2014)

BAUER, S. (o. J,): Sau mit Ferkel. http://commons.wikimedia.org/wiki/File:Sow_with_piglet.jpg (hit: 07.02.2014)

GÄBLER, M. (2013): Weizenernte bei Eldagsen. Der Claas Lexion 584 06833 mäht, drischt, zerkleinert die Spreu und bläst sie über das Feld. Währenddessen wird der gedroschene Weizen bei voller Fahrt auf einen Hänger umgeladen. http://commons.wikimedia.org/wiki/File:Unload_wheat_by_the_combine_Claas_Lexion_584.jpg (hit: 07.02.2014)

GRÄBER, T. (o.J.): Malvorlagen. http://www.inselschule-zizishausen.de/content/malvorlagen (hit: 05.02.2014)

MANSKE, M. (2004): Hausziege in Leoni am Starnberger See. http://commons.wikimedia.org/wiki/File:Hausziege_in_Leoni.jpg (hit: 07.02.2014)

NEBELSIEK, K. (2009): Hausrinder. http://commons.wikimedia.org/wiki/File:Rinder.jpg (hit: 07.02.2014)

ORIENTALIS, F. (2008): Hausschaf, von der Seite, aufgenommen auf dem Emsdeich bei Emden. http://de.wikipedia.org/w/index.php?title=Datei:SchafSeite.JPG&filetimestamp=20080807131719& (hit: 07.02.2014)

SLICKERS, G. (2004): Karottenfeld (*Daucus carota*) in Haßloch (Pfalz), Deutschland. http://commons.wikimedia.org/wiki/File:Carott_20041012_2598.jpg (hit:07.02.2014)

STEINBRICH, U. (2006): Grasmahd mit einem Deutz-Fahr-Traktor *Agrotron …* mit Pöttinger-Mähwerk. http://commons.wikimedia.org/wiki/File:Deutz-Fahr_Agrotron_20060523_uwest.jpg (hit: 07.02.2014)