

In the tracks of wolves



Svetlana Bet'ková and Robin Rigg



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A selection of websites:

www.wolf.org
www.cosmosmith.com/wolfpage.html
www.wolfweb.com
www.wolvesandhumans.org
www.indigenouspeople.net

www.canids.org
www.ethiopianwolf.org
www.wolf-ridge.org
www.slovakwildlife.org
www.alaskanativeartists.com

www.lcie.org
www.canidae.ca
www.wolfcountry.net
www.wolf.most.org.pl
www.deschutesgallery.com



Dear teachers and pupils,

Due to the great interest in and success of our teachers' manual "**In the Tracks of Bears**", we have prepared for you a similar collection of information, interesting facts, activities and drawings: "**In the Tracks of Wolves**". On getting to know them better, these animals, which often evoke in people fear and terrifying images and are detested and shunned, certainly deserve our respect and a place of honour in nature. After all, from their origins comes the domestic dog, which has inherited from them esteemed qualities such as faithfulness and intelligence.

You can use this source of materials for supplementing pupils' knowledge in lessons on natural history, biology, ethics or aesthetics as well as outside them during free-time activities. Cooperation between teachers of different subjects is favourable if they decide to work on a complete project with a certain class. It is also possible to use individual chapters (or activities) separately, for supplementing or enlivening lessons, according to the interest and ability of pupils aged 10 years and older. The time limit of exercises and activities is optional. Pupils can complete particular exercises either in groups or individually, or as homework. The various themes, exercises and passages from different literature sources give an opportunity for pupils to choose according to age and interest and to communicate among themselves about their new knowledge. As the computer is now an invaluable source of information, we have also listed several websites to help you encourage pupils to actively engage in searching for more information that we did not have room to include here.

We believe that this manual will be useful for both young and old as a source of knowledge and will contribute to increased tolerance, so helping to form a different public perception of the wolf in the wild.

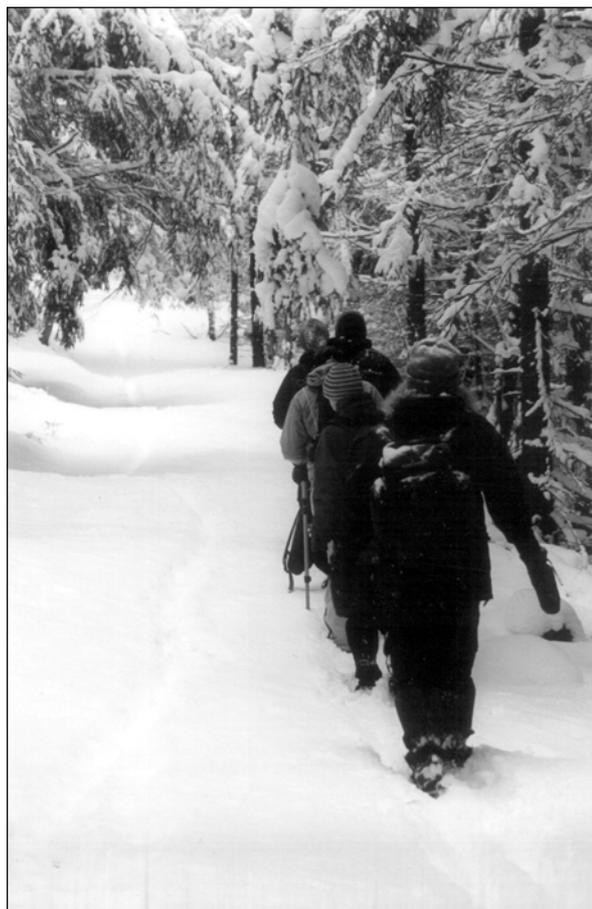
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“Snow has been falling constantly so the going was tough, walking in Robin’s footprints helped. Must have walked four miles when we came across pine martin tracks - then wolf! Fresh too, a small amount of snowfall in the pads but today’s. We followed his tracks for some time, taking us along the red boundary route parallel with the national park. Ahead of us a small fir tree in the centre of our path - to my surprise the wolf track became two. They circled the small tree, rejoined and as before continued on a direct path. Two wolves using the same track, one in the others paw prints! Like me, saving energy. Further still, following the two wolves across boundary lines into the forest. The tracks split once more but not into two... five.



“An overwhelming awareness of the unknown. We had in fact been tracking not one lone wolf but a pack of five. These five took us away from the pathway, through marked territories, dense forest, across streams - confusion ensued. Tracks moving back, fore, backtracking after only a short distance. Red deer on the move, flushed from their resting place high on a ledge overlooking the valley - too slow - lost. Out into a meadow we picked up a trail of two of the five. Movement from the left, we are running - I drop to my knees at the boundary line with a clear view beneath the branches - WOLF - he stopped, looked at us and was gone...”



Text:

Esther Tyson, artist,
with a group of ecotourists
in the Western Tatras
April 2003

I. A description of the wolf

I.1.a) Complete the text below by adding these words in the correct places:

intelligent, resting, smell, stalk, teeth, paws, years, eyes, carnivores, hearing, weight, tail, eyesight, jaws, carnassials, packs, gait, digestive system, prey, run, predators, length, hunting, fur, canines



The grey wolf is the largest of the canids, among which belong for example the fox, jackal, coyote and dingo, but also dogs. It has a stout body: its (1) is about 30-60 kg, its height is 70-90 cm and its (2) is about 130 cm. Females are smaller. In the wild, wolves live for 12-13 (3) , in captivity up to 16.

The wolf is a meat-eater and belongs among the (4) : carnivores that survive by hunting (5) These are the animals they find in their territory. Carnivores, including the wolf, are adapted for hunting using their (6) They have long eye teeth, called (7) , for grabbing and killing prey and strong (8) for tearing meat and crushing bone. They can open their jaws wide. The wolf's (9) is adapted for the consumption of large quantities of meat (up to 8 kg) in a short period; the wolf can then go for several days without eating. After eating its fill the wolf drinks a lot of water and for several hours lies (10) Almost all the prey is eaten, sometimes even the skin and fur.

The (11) are positioned in front, allowing for good prey localisation. Its (12) allows it to see in the dark. The wolf has excellent (13) : it can hear up to about 10 km. It can hear high-frequency sounds that humans cannot. Its sense of (14) is 100 times better than a human's. If the wind is blowing towards it, it can detect prey from more than 1.5 km away. The wolf has five toes (one is stunted) on its large front (15) and four on the hind paw, with the same numbers of claws. The long, thin legs are adapted for a lithe (16) over long distances. The (17) is composed of two layers: underneath is a thick soft layer, covered by a long outer layer that repels moisture and offers good insulation. A bushy (18) serves the wolf for communication, to cover its nose in the cold or to ward off flies.

Although wolves hunt, in (19) , mainly old, young or sick individuals, occasionally they manage to catch animals in their prime and in certain circumstances they kill more than they need. However, they can return to a kill months later, when they need it. When (20) they may use various strategies. They test the fitness and strength of animals by first observing the herd. They can (21) at speeds of 40-60 km/h and chase prey over long distances. They pursue their chosen quarry untiringly, catch up with it and with strong (22) bite into its legs, haunches and neck until it tires. However, wolves do not have long claws like feline (23) and are often injured, sometimes even killed, during attacks by blows from hooves or antlers or in falls. They adapt their hunt to the landscape by using paths and high grass where they can (24) unnoticed or they try to chase their quarry into deep snow or onto frozen lakes, where it is difficult for it to move.

These wary carnivores are (25) and social animals, which care for their young diligently, are loyal to one another and even in adulthood don't lose their playfulness.

I.1.b) Write down all the things that interested you about wolves from the text.
 (Physical appearance, special features and hunting skills, way of life and hunting ...)

I.2.a) Write down what comes into your mind when you hear the word wolf.

.....

I.2.b) Are your feelings positive or negative? Try to explain why.

.....

I.2.c) Where can we meet the figure of the wolf? How is the wolf described?

Explain the following proverbs and sayings. What wolf characteristics do they describe?

1. As hungry as a wolf.
2. Never cry wolf.
3. A wolf in sheep's clothing.
4. Keeping the wolf from the door.
5. To wolf down food.
6. He's a lone wolf.
7. To have a wolf by the ears.
8. To throw [something] to the wolves.
9. A wolf whistle.
10. The wolf is fed by his feet.

II. Wolves in Europe and the rest of the world

Species and subspecies of wolf

There are currently thought to be three species of wolf: grey, red and Ethiopian.

Grey wolf (*Canis lupus*)

The grey wolf has adapted to the most diverse of habitats and can live in extreme conditions from tundra and high mountains to rainforests, temperate forests and even desert. Worldwide there are about 15-30 subspecies. Until recently subspecies were distinguished on the basis of geographical distribution, size and skull measurements or, in many cases, by colour. Modern methods of genetic research, however, offer new information, which is not always in agreement with the older methods.

The scientific name of the subspecies of wolf that lives in Slovakia is *Canis lupus lupus*. It has one of the largest distributions: from western Europe to the Far East. There are two other subspecies in Europe: *Canis lupus italicus* in Italy and France and *C. l. signatus* in Spain and Portugal. The Iberian wolf is smaller and has dark stripes on its legs. Many of them live in fields in the lowlands of Spain.

Of the other subspecies, the Arctic wolf (*C. l. arctos*), like many other animals, has adapted to extreme conditions of winter. It is characterised by its white colour, dense fur and by the fact that it is the largest subspecies – some individuals weigh up to 80 kg. The small Asian or Iranian wolf (*C. l. pallipes*) mostly doesn't howl and travels alone or only in small packs. It is found from Israel as far as India. Some wolves can live in desert conditions, for example in Saudi Arabia (*C. l. arabs*).

However, the native subspecies of several areas have died out or were eradicated, like the Japanese subspecies or the Great Plains wolf, the Texas grey wolf and others from North America. By the 17th-18th century wolves had disappeared from the British Isles and in the 19th century from most of western Europe.

Elsewhere, wolves are returning. In Scandinavia their number has increased to about 100, but the population's isolation results in low genetic diversity. Wolves returned to the French and Swiss Alps from the Italian Apennines. From Poland they are spreading into Germany and from Slovakia to the Czech Republic and Hungary. In the USA biologists have been trying to reintroduce them, for example in 1995-1996 to Yellowstone National Park.

Red wolf (*Canis rufus*)

This is a separate species and it only lives in America, where it was eradicated from most of its original range. Thanks to reintroduction, it occurs in small populations (about 100 individuals) in Texas and Louisiana. Some scientists think it is a hybrid of the grey wolf and coyote.

Ethiopian wolf (*Canis simensis*)

This animal of African highlands was once thought to be a jackal, but genetic analysis showed that it is a wolf. It lives in packs but hunts individually, mainly small mammals. It is critically endangered: there are only about 500 of them in the world. They are threatened mainly by humans: habitat loss, farming, persecution and diseases from domestic dogs.

“Wolves” that are not really wolves

The maned wolf (*Chrysocyon brachyurus*) of South America is easily recognisable by its very long limbs, fur and ears. It has been described as “a fox on stilts”. The Tasmanian wolf (*Thylacinus cynocephalus*) lived in Australia and resembled a wolf, but had stripes like a tiger. It had a pouch for its young like a kangaroo and so belonged among the marsupials. Sheep breeders caused its extinction in the 1930s. Some people claim to have seen it or its tracks since then; who knows, perhaps a few have survived in some remote areas.

II.1.a) Complete the following sentences:

1. According to the latest research there are species of wolves in the world: , and
2. Wolf subspecies are distinguished by the newest methods according to
3. The is the largest subspecies of wolf and has thick fur.
4. The red wolf is a separate, which lives in the states of and
5. In the lowlands of Spain lives the wolf, which has dark
6. The wolf is highly endangered: there are only about 500 of them in the world.
7. In 1995-1996 wolves were successfully in the USA.
8. The wolf, which lived in Australia, is interesting because it is called a wolf but is related to
9. Unlike other wolves, the little Asian wolf travels and doesn't
10. The “wolf” with long legs living in South America looks like a on



II.1.b) Why reintroduce wolves?

Play the roles of conservationists, farmers and hunters. The conservationists are trying to establish wolves in an area where they died out long ago, but the farmers and hunters are worried. Confront the various opinions and attitudes for and against and agree on a solution.

Arguments for:

- The wolf has a place in nature like other animals.
- It helps to keep populations of its prey in good condition, because it mostly hunts the weaker ones.
- It reduces the damage that deer cause to trees.
- It causes a balanced spread of prey across its territory.
- The wolf is a very wary animal and it avoids humans; cases of attacks on people are extremely rare.

Arguments against:

- Wolves greatly reduce numbers of prey, they leave less for human hunters – they compete with them.
- They attack sheep, cows and other domestic animals.
- They kill more than they need.
- There isn't enough natural habitat for them anymore.
- They destroy rare species of animals.
- The wolf is a danger to people.

How many are there?

It's not easy to find out the exact numbers of animals living in the wild, especially of those that move across large areas and are very wary. These are only estimates of wolf numbers.

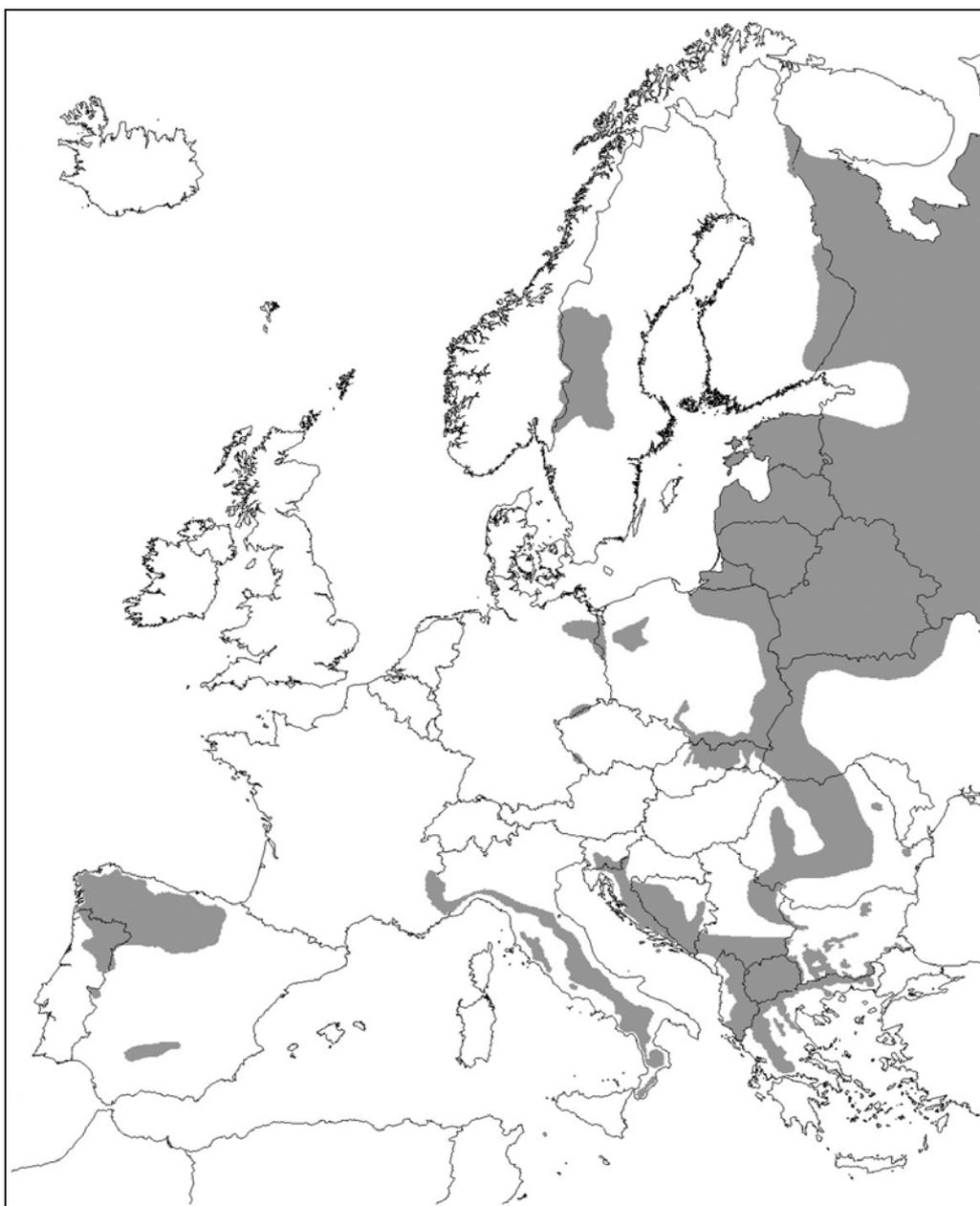
Czech Republic	< 20	Portugal	200 - 300
Hungary	< 50	Spain	2,000
Polish Carpathians	200 - 300	<i>Iberian wolf total:</i>	.....
Romania	2,500	<i>Europe (not Russia) total:</i>	.....
Slovakia	150 - 350		
Ukrainian Carpathians	200 ?	Egypt	< 50
<i>Carpathians total:</i>	.....	Israel	150
Albania	250	Jordan	200 ?
Bosnia and Hercegovina	400 ?	Lebanon	< 50
Bulgaria	800 - 1,000	Saudi Arabia	300 - 600
Greece	200 - 300	Syria	200 ?
Croatia	100 - 150	Turkey	1,000 ?
Macedonia	> 1,000	<i>Middle East total:</i>	.....
Austria	1 ?		
Slovenia	20 - 50	China	10,000
Serbia	500?	India	1,000
<i>The Balkans total:</i>	.....	Kazakhstan	30,000
France	30 - 70	Kirgistan	4,000
Switzerland	< 5	Mongolia	10,000 - 20,000
Italy	400 - 500	Russia	25,000 - 30,000
<i>"Italian" wolves total:</i>	.....	Tajikistan	3,000
Belarus	2,000 - 2,500	Tibet	2,000
Estonia	< 500	Turkmenistan	1,000
Finland	100 - 150	Uzbekistan	2,000
Lithuania	600	<i>Asia (with Russia) total:</i>	.....
Latvia	900		
Germany	5 ?	Alaska	6,000 - 7,000
Poland except Carpathians	400 - 500	Greenland (Denmark)	50 - 100
Ukraine except Carpathians	1,500 - 2,500 ?	Canada	52,000 - 60,000
<i>North-east total:</i>	.....	USA except Alaska	3,300
Norway	5 - 20	<i>North America total:</i>	.....
Sweden	60 - 80		
<i>Scandinavia total:</i>	.....	<i>Global estimate:</i>	.....

II.2.a) Add up how many wolves live in the different regions and continents and add your results to the table.

II.2.b) Answer these questions:

1. On which continent are there the most wolves?
2. Name five European countries where wolves are missing.
.....
3. Which European population is the biggest?
4. Which European population is the most threatened?

II.3.a) Add to this map of Europe the names of the wolf populations given in the table, find out where there are different subspecies and draw arrows to show where wolves have been returning to some European countries.



II.3.b) From this map of Slovakia, work out from which areas wolves are spreading into the Czech Republic and Hungary.



III. Life in the pack

According to observations of wolves in captivity biologists have concluded that wolves live in ordered societies, which have a precise social structure – a hierarchy – based on dominance and submission. Cooperation, cohesion and harmony are considered important for all members of the pack and for survival in the wild. World-renowned scientist Dr. David Mech, who has studied wolves in the wild for more than 40 years, believes that the structure of most packs of wild wolves should be regarded as a family with the parents in charge, deciding and dividing their duties. The mother cares more for the young and their safety, while the male obtains food, which dictates the movements of the whole group.

The parents are dominant (the so-called “alpha male” and “alpha female”); they have the respect of the other pack members. This pair has the preferential right to mate. There can also be a “beta male” in the group, which might become the father of young instead of the alpha male. In the middle are adult and sub-adult individuals: they can be last year’s young. They help with the raising of weaned young like the other pack members. Wolf pups probably begin to battle for their position at one month of age and they have their own hierarchy among themselves. The lowest positioned are the so-called outcasts or omega individuals that the pack has not admitted as equals. The hierarchy can change, if an individual becomes sick or dies or if a new individual joins the group.

In Europe wolf packs usually have 2-8 members, but in countries where there are a lot of wolves, such as Siberia or Canada, the number of individuals in a pack can be 20 or more. A pack adapts its territory according to season, number of members and food availability. The territory is bigger in winter, when the pack follows prey; in the summer it does not move far away from the den with pups. Through howling and scent marks wolves advertise that their territory is occupied, they defend it from strangers and sometimes kill “intruders”.

III.1.a) Put the wolves into the social structure of the pack.

Make a family tree by hierarchy: according to the relationships and importance write these pack members under (or next to) each other:

beta *alpha female* *yearlings* *alpha male* *omega*

III.1.b) Connect the right description with each pack member (in previous task).

1. Has ears and tail raised, decides when and where the pack hunts.
2. Lowers its head and tail when it meets the alpha pair, occasionally cares for young.
3. Outcast – tucked in tail and folded ears, has last place at prey.
4. Obeys the other members, is learning how to hunt, track, etc.
5. At the beginning protects and warms young, feeds them with her own milk.

III.2. Answer these questions:

1. Why do wolves live in packs? Give at least two possible answers.

.....
.....
.....

2. Find in the text scientific terms with the same meaning as these expressions:

a) arrangement =

b) superiority =

c) inferiority =

3. What is important in order for a pack to be successful in hunting?

.....
.....
.....

4. In what ways is a pack like a family?

.....
.....
.....

III.3. Find and join the territorial marks of 2 packs (10 marks: ● , 10 marks: *).



IV. Pups

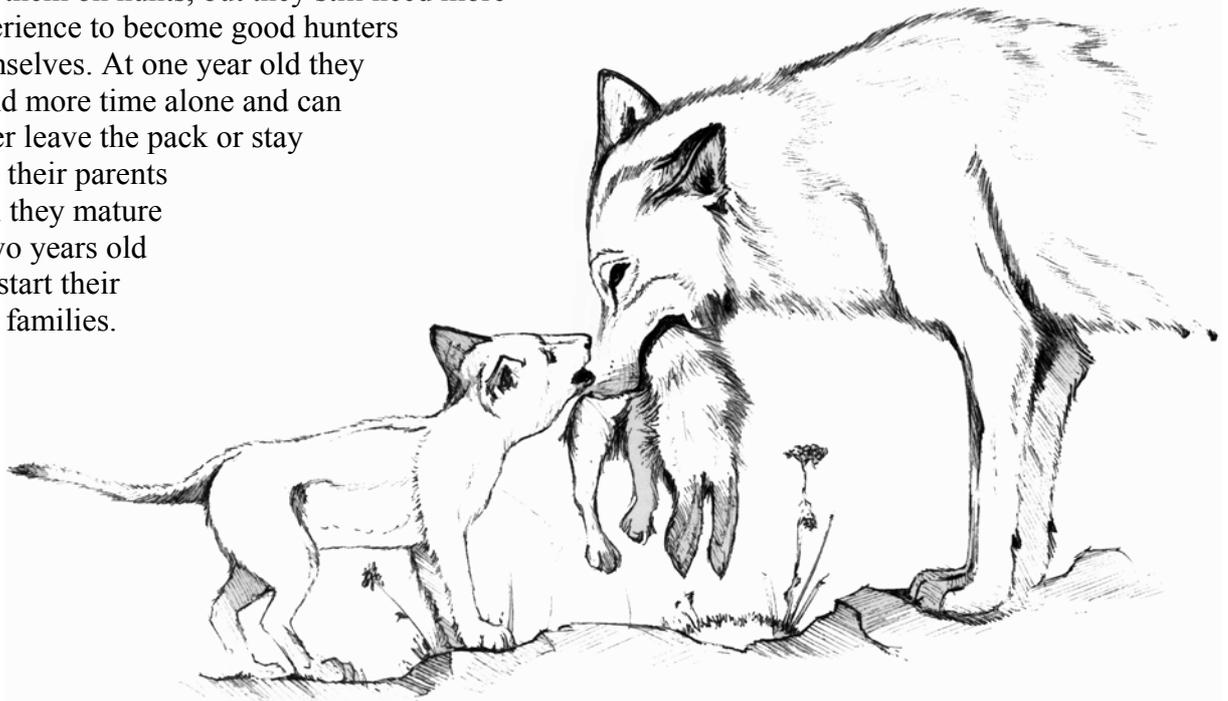
Mating takes place from February to March. The alpha female prevents other females from mating, so that the pack can manage to raise and feed the young that are born. If there is a shortage of food or a lot of pack members, no young are born at all.



The den can be dug out under tree roots, in a slope, in a cave or hollow. Wolf pups are born after 63 days in April-May. Most often 4-6 young are born. They are blind and deaf. They start to hear after several days and their eyes open after about two weeks. When they are around two months old the pups are already playing in front of the den. Even the adults frolic with the young, chase them and play with their tail tips.

Gradually the little wolves get used to other food besides milk. With needle sharp teeth they try to bite and play with bones. The pack stays close by and together to ensure there is food and safety. Most wolf pups die in their first year of life. The cause can be insufficient food, injury, cold or disease. In many areas the most common cause of death is man: wolves fall victim to hunters and poachers or are hit by cars.

The older wolves take care of the alpha pair's young, which respectfully learn from them. In late autumn the young reach a weight of about 25 kg and the adults take them on hunts, but they still need more experience to become good hunters themselves. At one year old they spend more time alone and can either leave the pack or stay with their parents until they mature at two years old and start their own families.



IV.1. What are all the things the young have to learn?

Find the correct endings to these sentences:

- | | |
|------------------------|---|
| 1. To listen ... | A. ... among themselves, who is stronger. |
| 2. To test ... | B. ... hunting, tracking, biting food. |
| 3. To form ... | C. ... that they don't hurt each other. |
| 4. To practise ... | D. ... a place in the pack. |
| 5. To play so ... | E. ... with the other pack members. |
| 6. To make friends ... | F. ... their own hierarchy. |
| 7. To find ... | G. ... to the pack's leaders and other members. |



IV.2. Complete the calendar with what happens in the lives of young wolves.

You can find the answers in the text.

Period	Event
April – May	
First week	
Second week	
Second month	
First year	
Second year	

“The Grey Cub”

Jack London

A. “The grey cub’s eyes had not been open long, yet already he could see with steady clearness. And while his eyes were still closed, he had felt, tasted, and smelled. He knew his two brothers and his two sisters very well. He had begun to romp with them in a feeble, awkward way, and even to squabble, his little throat vibrating with a queer rasping noise (the forerunner of the growl), as he worked himself into a passion. And long before his eyes had opened he had learned by touch, taste, and smell to know his mother – a fount of warmth and liquid food and tenderness ...

B. But he was, further, the fiercest of the litter. He could make a louder rasping growl than any of them. His tiny rages were much more terrible than theirs. It was he that first learned the trick of rolling a fellow-cub over with a cunning paw-stroke. And it was he that first gripped another cub by the ear and pulled and tugged and growled through jaws tight-clenched. And certainly it was he that caused the mother the most trouble in keeping her litter from the mouth of the cave ...

C. Always, in the beginning, before his conscious life dawned, he had crawled toward the mouth of the cave. And in this his brothers and sisters were one with him. Never, in that period, did any of them crawl toward the dark corners of the back-wall. The light drew them as if they were plants; the chemistry of the life

that composed them demanded the light as a necessity of being; and their little puppet-bodies crawled blindly and chemically, like the tendrils of a vine ...

D. It was in this way that the grey cub learned other attributes of his mother than the soft, soothing, tongue. In his insistent crawling toward the light, he discovered in her a nose that with a sharp nudge administered rebuke, and later, a paw, that crushed him down and rolled him over and over with swift, calculating stroke ...

E. There was one strange thing about this wall of light. His father (he had already come to recognise his father as the one other dweller in the world, a creature like his mother, who slept near the light and was a bringer of meat) - his father had a way of walking right into the white far wall and disappearing.

The grey cub could not understand this ... Without thinking about it, he accepted this

disappearing into the wall as a peculiarity of his father, as milk and half-digested meat were peculiarities of his mother ...

F. Like most creatures of the Wild, he early experienced famine. There came a time when not only did the meat-supply cease, but the milk no longer came from his mother's breast. At first, the cubs whimpered and cried, but for the most part they slept. It was not long before they were reduced to a coma of hunger ...”



IV.3.a) Briefly describe what you learnt about the grey cub in each paragraph.

IV.3.b) On the basis of the extract, describe:

1. What most fascinates the young wolf and why?

.....
.....

2. Describe the characteristics and relationships of the mother, young wolf and father

.....
.....
.....

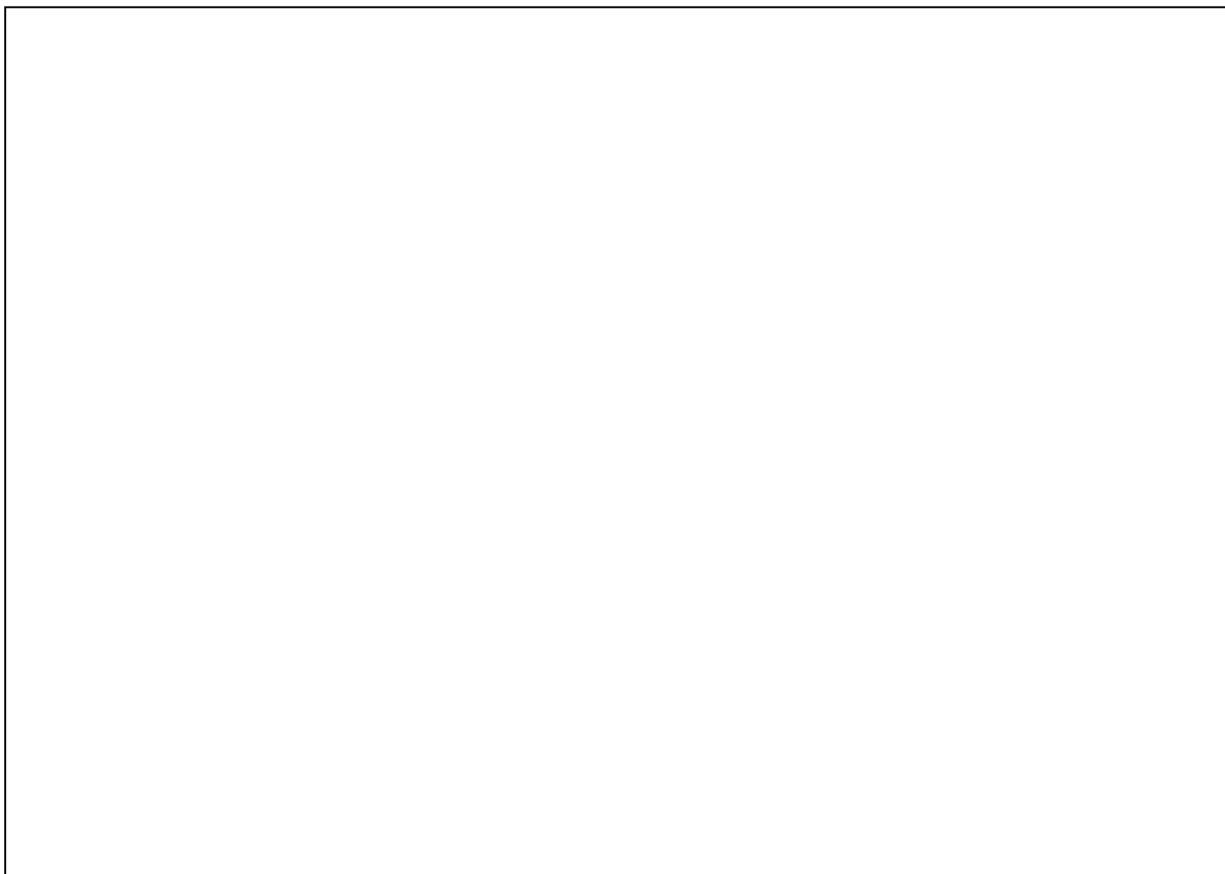
3. How would you describe life in a wolf family?

.....
.....
.....

IV.4. In what ways are wolves' lives, attributes and behaviour like people's?

.....
.....
.....

IV.5. Choose the situation from the extract that interested you most and draw it.

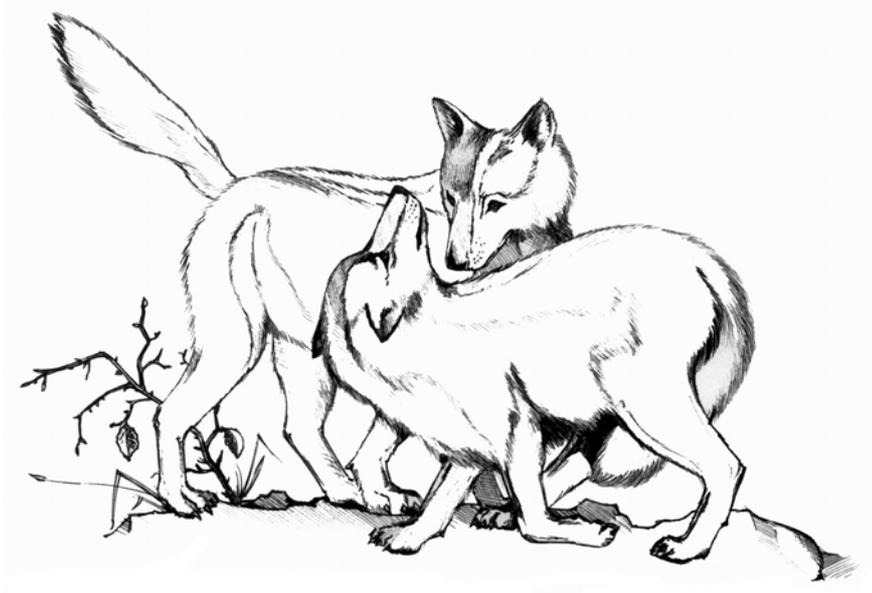


V. Communication

Wolves communicate among themselves and with other packs in three ways: with sounds, body language and scent marks. The most well-known form is howling, which probably serves to assemble the pack, mainly as motivation before a hunt or in order to relocate each other, or to warn other packs that the territory is occupied. When wolves howl, they use harmonised tones and it can seem as if there are more animals than there are in reality. They are heard more often in the early morning and evening as well as during the breeding season in winter, but it has not been proven that wolves howl at the moon.



Wolves convey a lot of information with other sounds, such as growling and barking. Like with dogs, they are connected with rivalry for food, expressing threat behaviour and demanding rights; increasing growling can precede an attack. Whining and squeaking are associated with the play of young, with greeting, feeding and feelings of anxiety or curiosity as well as begging.

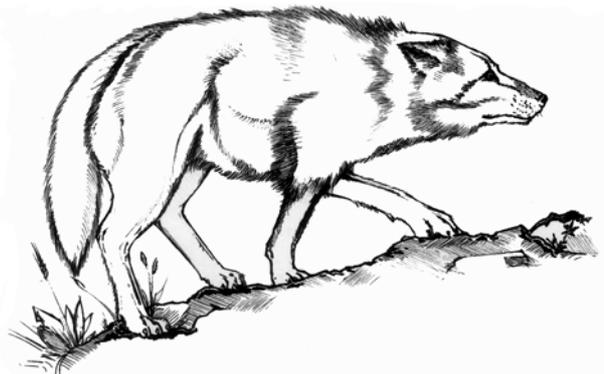


Body language includes various facial expressions, such as wrinkling the nose and showing the teeth as a threat, or a direct stare with the ears erect as dominance. Posture as well as how the tail is held reveal which is a dominant individual (it has its

tail up) versus a submissive wolf (it has its tail down or curled under). Among other signs belongs bristling of the fur, which signals threat or aggression.

The third type of communication, the least well-known to us humans, is made up of scent marking by urine, faeces and scent glands. The wolf, like the fox, has a scent gland on the upper side of its tail that dogs do not have. They can transport smells by rolling in them.

Scents serve first and foremost to mark a pack's territory, which is why they are usually left in raised places. Neighbouring packs usually respect each other's boundaries and try to avoid conflicts, so they only occasionally hunt along their borders. In this way a zone arises where prey animals are safer than in the middle of a territory. According to some experts, the function of scent marks is much wider. Marks serve to orientate wolves in their own or other lands and they can read from them how old the mark is, which individual passed, with whom and whether they hunted there recently.



V.1.a) Colour in the pictures with the text and say what behaviour they show.

V.1.b) Write down the three basic forms of communication that wolves use.

.....
.....
V.1.c) Try to determine what these wolf signals mean (they are similar in dogs):

1. Rolling on the back.

2. Folding the ears back, tail down, averted gaze, mouth closed.
.....

3. Licking the chops and face, rubbing cheeks.

4. Fixed gaze, unmoving stance, tail held straight out or up.
.....

5. Exposed teeth, wrinkled skin on the nose and forehead, ears directed forward.
.....

V.2.a) In what ways do we as people communicate among ourselves?
.....
.....

V.2.b) What non-verbal ways of communication are there among people?
.....
.....
.....

V.2.c) How do the following animals communicate among themselves?

1. Dogs

2. Cats:

3. Birds:

4. Dolphins:

V.3.a) How does the wolf express the following in body language?

1. "Hello":

2. "Let's play":

3. "I am the leader":

4. "This is my territory":

5. "Be careful of me":

V.3.b) With what sounds does:

1. the leader assemble the pack?

2. one pack member tell another not to touch his food?

3. a mother call her young?

VI. Hunter and hunted

Although the diet of wolves can also include mice, fruit and even refuse, the most important component is ungulates. In Slovakia these are red deer, wild boar and roe deer. Predators have evolved to be able to catch prey. Their adaptations include sharp teeth and claws, keen senses and strong limbs. Likewise, animals that are their prey have inherited strategies to avoid predators. They can hide, are fast, wary, keep in groups and they also have weapons such as strong hooves and antlers. Scientific research has shown that wolves hunt mostly weak individuals: the sick, injured, very young or old. In this way they “clean” the prey population, helping to keep it healthy. Wolves are nomadic in winter; they travel more than 20 km per day and search for vulnerable prey. They may go for days without food, many hunts ending unsuccessfully. This might be one reason why wolves sometimes, if they have the chance, kill more than necessary at the time: they return to the “store” later, when needed.

VI.1. Answer these questions:

1. What makes the wolf a good hunter?

.....
.....

2. And what helps the red deer escape the wolf?

.....
.....

VI.2. Read the line backwards and write the hidden names of animals that are food for wolves around the world. Would you know where these animals live?

esoomuobiracerahpeehsepoletnnanosibseirrebstcesnistnedorsdribreedeorraabdliwreedder

.....
.....

VI.3. What do the following pictures show?

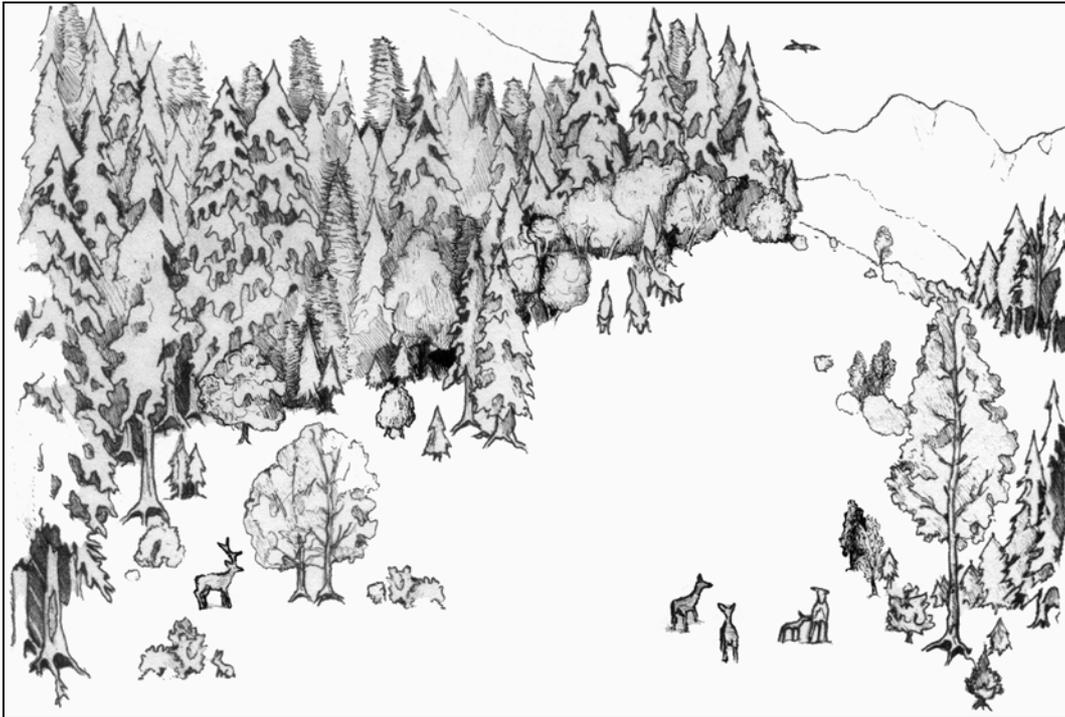
What role do they have in nature and what is the relationship between them called?



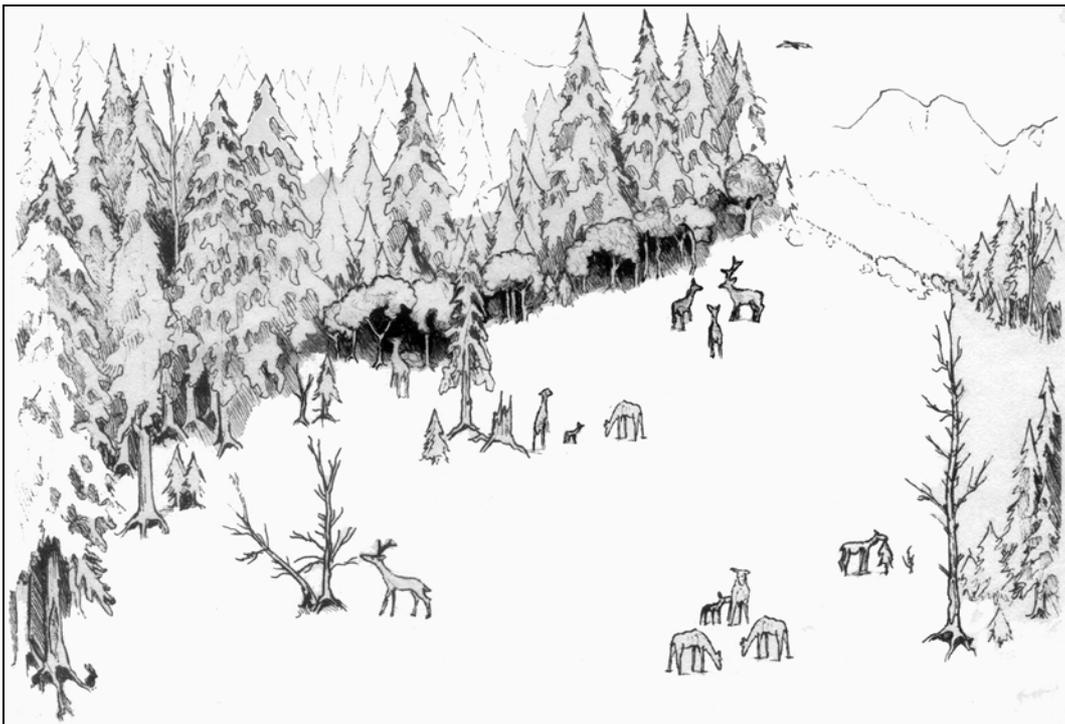
VI.4. Study the two pictures carefully and in the table write six differences:

A:	B:

A.



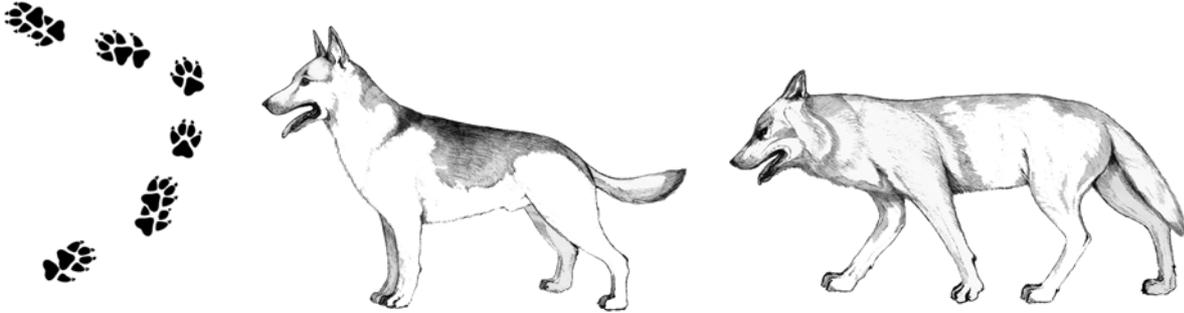
B.



VII. The wolf – ancestor of the dog

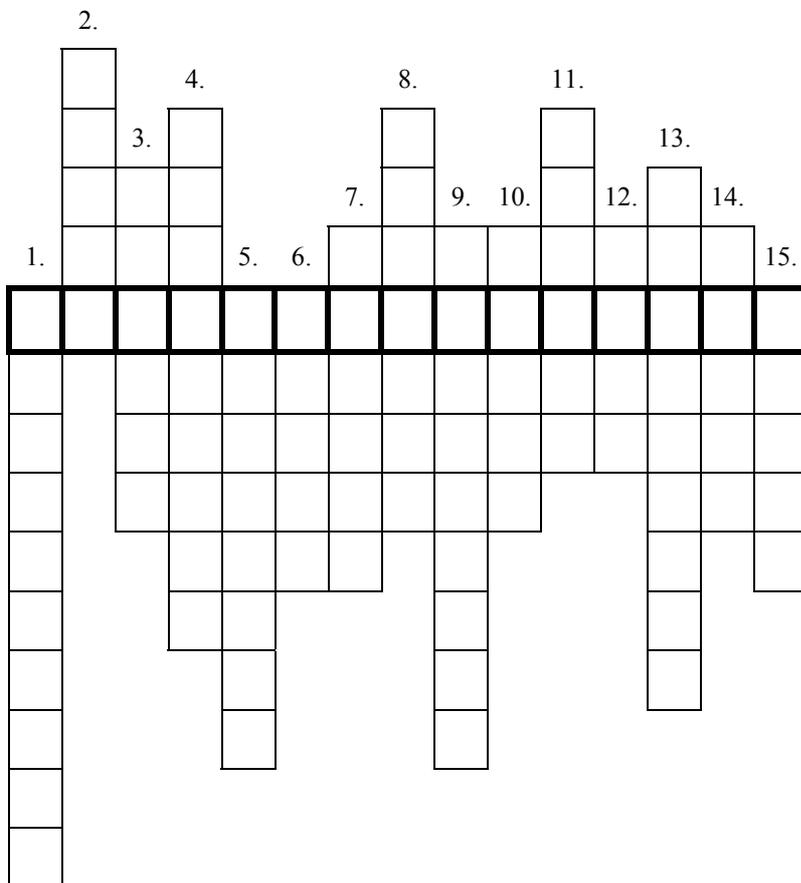
Genetic research has confirmed that the wolf is the ancient ancestor of the dog, which gradually became domesticated about 14,000 years ago. All domestic dogs belong to the same species; some scientists think it is a subspecies of wolf. Some dogs are hard to distinguish from wolves. Distinguishing marks are e.g. head shape and size, tail position and movement.

VII.1. Using the pictures, write differences between dog and wolf in the table.



Feature	Dog	Wolf
Tail		
Legs		
Paws		
Track		

VII.2. Do you know the Latin name for the dog? Find the answer in the puzzle.



- Another word for meat-eaters.
- Scientific name of the wolf with lowest status in a pack.
- An enemy of wolves, when there isn't enough food.
- Superior behaviour of one wolf to another (scientific).
- Way of thinking that helps in hunting.
- Common word for canines.
- Smaller relation of wolves, from SE Europe and Africa.
- Animals that produce milk for their young.
- Social structure within a pack (scientific).
- Scientific name for the parental pair.
- _____ Americans: learned from and respected wolves.
- Wolf social group.
- The land that a pack uses and defends.
- Australian wolf relation.
- _____ gland, found on the tails of wolves and foxes.

“The Wolf and the Dog”

Jean de la Fontaine

A prowling wolf, whose shaggy skin
(So strict the watch of dogs had been)

Hid little but his bones,
Once met a mastiff dog astray.
A prouder, fatter, sleeker Tray,
No human mortal owns.
Sir Wolf in famished plight,
Would fain have made a ration
On his fat relation;
But then he first must fight;
And well the dog seemed able
To save from wolfish table
His carcass snug and tight.
So, then, in civil conversation
The wolf expressed his admiration
Of Tray's fine case.

Said Tray, politely,
“Yourself, good sir, may be as sightly;
Quit but the woods, advised by me.
For all your fellows here, I see,
Are shabby wretches, lean and gaunt,
Belike to die of haggard want.
With such a pack, of course it follows,
One fights for every bit he swallows.

Come, then, with me, and share
On equal terms our princely fare.”

“But what with you
Has one to do?”
Inquires the wolf. “Light work indeed,”
Replies the dog; “you only need
To bark a little now and then,
To chase off duns and beggar men,
To fawn on friends that come or go forth,
Your master please, and so forth;
For which you have to eat
All sorts of well-cooked meat—
Cold pullets, pigeons, savoury messes—
Besides unnumbered fond caresses.”
The wolf, by force of appetite,
Accepts the terms outright,
Tears glistening in his eyes.
But faring on, he spies
A galled spot on the mastiff's neck.
“What's that?” he cries.
“O, nothing but a speck.” “A speck?”
“Ay, ay; It's not enough to pain me;
Perhaps the collar's mark by which they
chain me.”

VII.3.a) In pairs, read the extract, think of an ending and act it out.

VII.3.b) Answer these questions:

1. How are the wolf and the dog described in the poem? (Appearance and character.)

Dog:

Wolf:

2. What is the main idea of the poem? What is most important for the wolf and the dog?

.....
.....
.....

3. Compare the lives of a wolf and a dog. What are their advantages and disadvantages?

.....
.....
.....

4. Write down which you would rather be, a dog or a wolf, and explain why.

.....
.....
.....

VIII. Is the wolf a danger to people?

We often see wolves as ferocious predators that threaten our lives. Many people say this happens especially when they are hungry or in a pack. Is it really like that, or is this the influence of fairy tales, films and legends? Scientists have found that the wolf attacks people, rarely, in three cases: when it is rabid, if it feels threatened (attacks in self-defence) or if it considers us as prey (a predatory attack).

Until the early 20th century, when a treatment was developed, rabies was usually a fatal disease. Although not its primary host, the wolf can be infected by other animals. Today, outbreaks are restricted using preventive measures and rabies occurs only rarely in Europe.



When researching recorded cases of defensive attacks by wolves, scientists found that wolves that felt threatened or were sick or injured sometimes did not attack and, if they did bite a human, it was so that they could escape. There have been such cases, for example, when shepherds defended their sheep and chased wolves with sticks. No case has been documented of a wolf killing a person in self-defence.

Predatory attacks on humans are very rare, because wolves do not usually regard us as their prey. Cases of wolves preying on humans were recorded mainly in the 18th and 19th Centuries in France, Estonia and northern Italy. Some of these “wolves” may have been hybrids, crossed with large shepherd dogs. Experts have found that in

the last 50 years there are only four probable cases in the whole of Europe of non-rabid wolves killing people. Not one of them was in Slovakia. In 1995-96 there were several attacks in India. Because local people had practically eradicated natural prey, wolves had to look for other food. Mostly this was cattle, but victims also included children, many of whom often wandered about unaccompanied. Probably just one bold wolf was responsible.

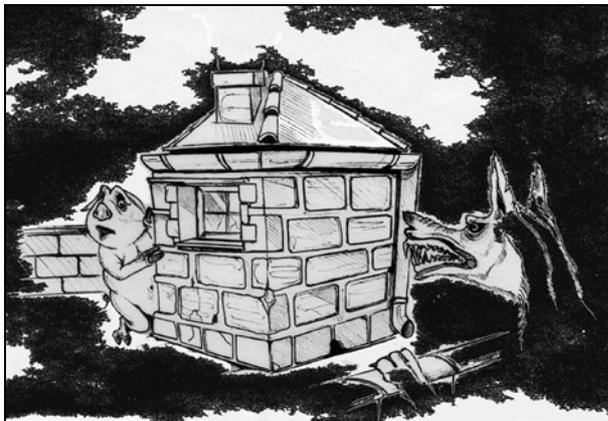
Since the late 20th century there have been several cases in Canada in which wolves behaved threateningly toward humans. This probably happened because they had got used to receiving food from people (for example refuse at campsites) and had lost their wariness. The same happens with bears or with dingoes in Australia. The best advice is to keep campsites clean and not feed wild animals. Every display of aggression toward humans is monitored and predators that lose their wariness must be removed.

Well-known wolf expert, Robert Lyle, who studied the behaviour of wolves in captivity for more than 12 years, wrote: “In all the years during which I have entered enclosures, large and small, containing one or more (up to twelve) wolves, in some cases habituated to humans, in others essentially ‘wild’, and including entries to accompany visitors, I have only once witnessed an attack, only once been threatened and only once been warned.” In the first case he described, a wolf reacted aggressively on being given an injection, but only towards the man that caused the pain and not to those who were helping him. In another case, a wolf that had paralysed back legs and so could not run away snapped at anyone who approached. The third case happened during the mating season, when the alpha male warned him not to approach the female by growling softly and then gently gripping his arm, not releasing him until he was by the exit gate of the enclosure.

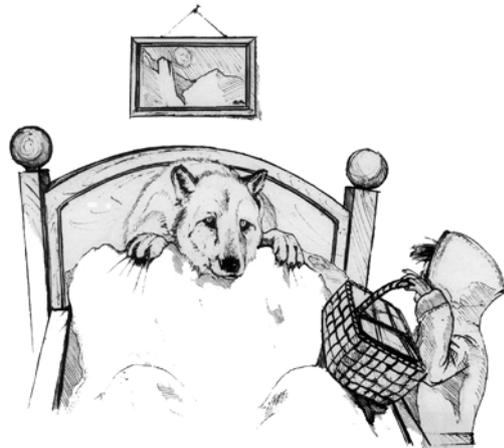
VIII.1. Answer these questions:

1. Describe defensive and predatory attacks by wolves on people.
.....
.....
2. Why do wolves attack people less often now than in the past?
3. Do you know how rabies outbreaks are prevented?

VIII.2.a) Which well-known fairy tales (and a poem) are shown in the pictures?
Do you know the stories? What role does the wolf play?



1.



2.



3.



VIII.2.b) Think up a short fairy tale in which the wolf plays a positive role and draw a picture to go with it.

.....
.....
.....
.....
.....

IX. Shepherd and wolf

Sometimes wolves hunt domestic animals, especially sheep. They have caused problems for shepherds for millennia. The main cause of high losses is poorly protected livestock,



whether due to inattentive people or dogs being chained up. According to Slovak law, the state pays compensation to farmers for damage shown to have been caused by wolves. Sometimes the “culprits” are stray dogs. Livestock must be protected in some way by preventive measures. Two methods have proven effective. The first is the old tradition of using livestock guarding dogs. The Slovenský čuvač is an example of such a dog, which has fulfilled this role since long ago, bonded to sheep, not disturbing them and acting as a brave and reliable protector. Electric fences have also proven themselves and can be moved from place to place along with the sheep-pen.

IX.1.a) Complete the sentences correctly and match them to the right themes (write the number in the space).

1. Which conditions increase the risk that wolves will attack livestock?
2. What can shepherds do to protect their flocks from wolves?
3. How are livestock guarding dogs trained?

..... A sheepfold	tethered on chains, but freely moving within the flock.
..... Sheep grazing	to following people.
..... In the forest there are few	by livestock guarding dogs tethered on chains.
..... Sheep protected	brave and reliable, don't chase sheep.
..... Sheep guarded	deer, wild boar and other prey animals.
..... Use	without a shepherd or guarding dog.
..... Set up	near the forest without supervision and protection.
..... Don't leave sheep	they grow up among sheep (beginning at 6-8 weeks old).
..... From when they are pups	electric fencing.
..... They mustn't get used	trained livestock guarding dogs.
..... Must be	located near the edge of the forest.
..... Must not be	by a type of sheep dog meant for herding but not guarding sheep.

IX.1.b) Play the roles of a shepherd and a conservationist who must persuade him to protect his flock better.

The shepherd is old and indifferent, he doesn't want to change his familiar ways.



“The shepherd had a dog called Bodrik, who for many years had kept guard over the sheep by day and by night, so that no wolf could get near the sheepfold. ‘What do you want here?’ ‘Well, what do I want, I want a sheep!’ says the wolf. ‘Go away you scoundrel, I’ll not give you a sheep!’ growls Bodrik. ‘Oh go on, give me one, we’ll be in it together, no doubt your owner doesn’t keep you well.’ ‘In company with wolves, the devil take the sheep and oxen!’ old Bodrik replies.”

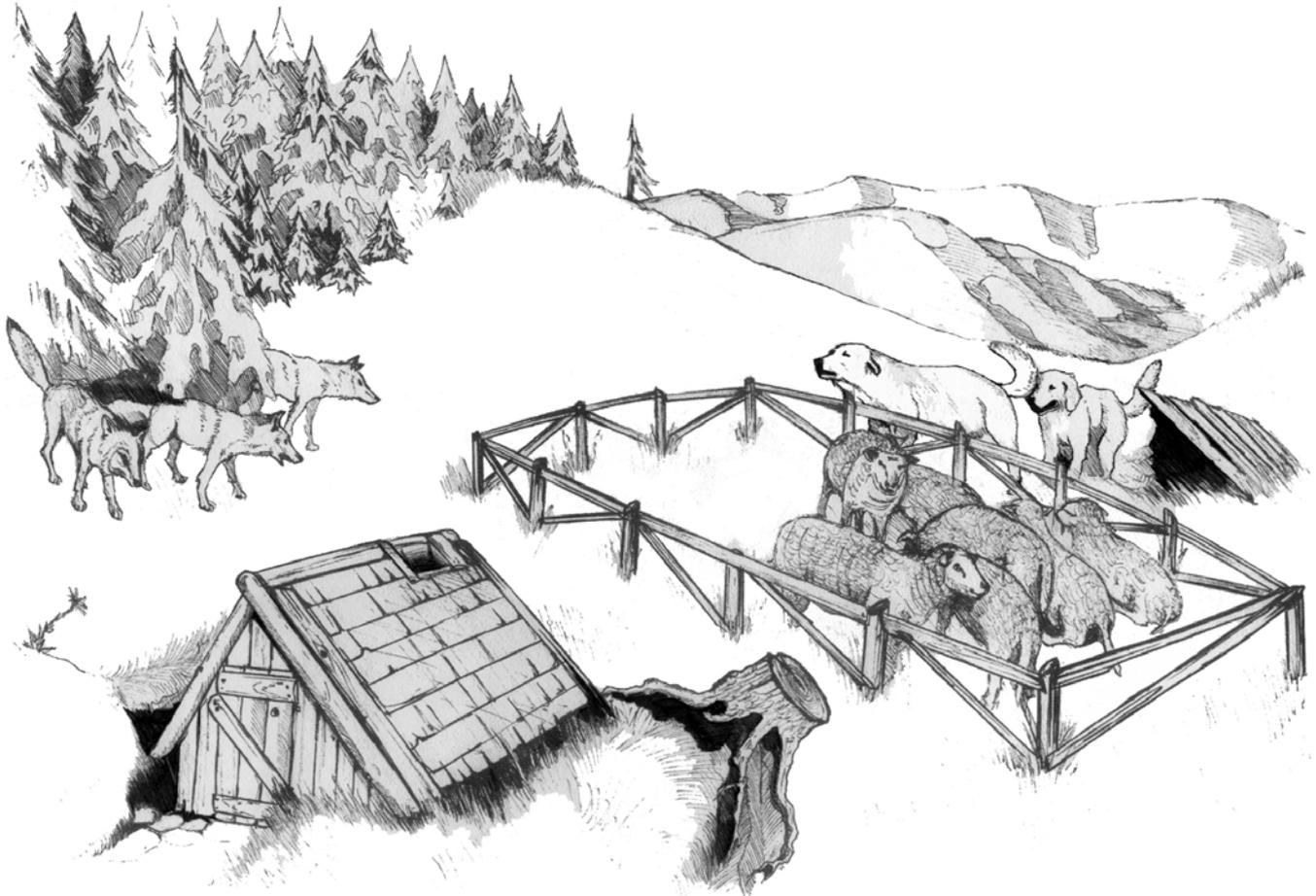
IX.2.a) Do you know the Slovak fairy tale that this extract comes from?

How does it finish for the wolf?

.....
.....

IX.2.b) How would you describe the dog, Bodrik?

.....
.....



X. Native Americans and wolves

Native tribes are much closer to nature, to animals like wolves, than most of us are. They understand predators as part of everything that the “Great Spirit” created. They often ascribe human qualities to animals and animal qualities to themselves; they observe them, learn from them and have respect for them.

Some tribes of Native Americans named themselves after wolves. The Skidi Pawnee were among the best spies on the plains and the wolf is most strongly represented in their myths at the creation of people. That’s why in sign language the same hand gesture was used for the wolf as for them: the index and middle fingers of the right hand in a V-shape while pointing to the ear with the hand and jabbing it forwards. Waving with this signal meant “spy”. Other tribes called them the wolf people, because they knew how to roam relentlessly, silently and without effort but also purposefully, like wolves.



They respected the wolf for his bravery as a hunter. Native Americans used hunting strategies learned from wolves. For example, they masked themselves with a wolf pelt and attracted game by waving the tail in the grass, they crept up to game or got prey into a place from which it could not escape, such as a frozen river.

In unfamiliar land, Native Americans behaved like wolves. They travelled in

small groups at twilight or in the night, using the advantages of the terrain to observe but also to stay hidden. Like wolves, they defended their land and food.

The wolf’s way of life was an example to Native Americans. They admired not only his ability to move quietly, unnoticed, and to travel long distances when hungry in winter, but mainly the cohesion of wolf packs. Both wolves and Native Americans had to comply with the law of the pack or tribe if they wanted to survive. Pack members take care of raising young. Wolves obtain food not just for themselves and their pack, but the remains they leave are eaten by the fox, raven or bear.

The wolf was also a shamanic animal for Native Americans. In ritual songs and dances they asked to have the wolf’s capabilities, such as his stamina or the ability to track game. Shamans used various attributes, such as a wolf’s pelt for healing, and when they danced to the rhythm of drums, they imitated the wolf’s behaviour and asked his spirit for help.

They only killed wolves rarely, if they stole their meat stores or nets of fish or chased their horses. If they killed a wolf, they conducted rituals to atone for the death, in which they expressed their sorrow and respect. They used everything. The pelt served to wrap commemorative objects in a “wolf package”, as a cover or with the teeth and claws for decorative or religious purposes, as a mask when dancing or in healing ceremonies or as a symbol of the wolf spirit.

The Oglala Sioux believed that wolves are omniscient, because they were always constant wanderers. If a person prays to them with a clear heart he gains knowledge, such as how to find prey.

According to the legends of a tribe in the Canadian Rocky Mountains, their snow shoes are wider and so more effective thanks to wolves. To this day they call them wolf snow shoes.



“Raven creates Wolf”

Pacific Northwest Athabaskan myth.

(excerpts from “*Wolfsong, a fabulous and natural history of wolves*”,
by Catherine Feher-Elston)

Long ago, at
the beginning of all
things, Raven,
Creator of the
World, was making
new beings ...

... One day, Raven decided to make a creature to be teacher for human beings. He made this creature a furry, four-footed being, with intelligence, humour, strength, courage and compassion. He gave it a long snout, sharp teeth and long, strong legs for running great distances. He made the creature’s ears beautiful, pointed and sensitive to even the faintest noises. The first one’s colour was dazzling white. Raven decided to teach it to fly. He put feathers on its front legs and taught it to flap them up and down, then he threw his creation high into the sky. The beautiful white one tried to imitate Raven. He flapped his front legs; the feathers moved, but they did not support him. He started falling back to the earth. He fell faster and faster. He fell so fast that his feathers were singed. His beautiful white coat turned to grey, with black tips from the burning. Raven realised it was better if his latest creation stayed on land and walked on four feet. But to this day, some of the descendants of this animal have fur with many colours on each hair, tipped with black at the very ends.

Raven made an entire family of these creatures, in many different colours. Their coats were grey, and black, and red, and brown, and white. Some had eyes of amber, some had eyes of brown, some had eyes of grey. Raven made the father and mother the rulers of the family. He made four children, two boys and two girls. He called them wolves.

“I cannot always be everywhere to teach others how to behave and how to hunt, so I want you to be models,” Raven told the first wolves. “I have made you beautiful and intelligent. I have taught you to live as a family and be leaders and teachers for the other creatures. Because you have a sense of humour

like me, you may be tempted to tease and trick people and other animals. I know how that is. But if other beings ask you in the right way, with politeness and respect, you must help them, as I do.”

Raven taught the wolves many things; how to hunt, how to make healing medicines, how to sing. He showed them delicious things to eat like blueberries and huckleberries and honey. He loved hearing the wolves sing at moonrise and sunrise.

Wolves love the moon and the sun. They are full of joy when they see them at the beginning and ending of every day, so they sing to thank the sun and the moon for sharing light and beauty.

Raven taught the wolves to pray for help when hunting, and how to call in game. He taught them the prayers for thanking animals willing to share life with them. He taught them to love and respect the game animals and all other life. He taught them to watch for other ravens and for crows, who would show the wolves to game so all could eat.

Raven loved to play with the wolves, teasing them by grabbing their tails and stealing their food. Raven taught the crows and magpies how to tease the wolves, and the wolves learned the teasing game and played along – snapping their jaws at the birds when they came to share their meat and pretending to be annoyed.

The first wolf family was blessed and happy. Their children and grandchildren were born and roamed in lands all over the world. The descendants of these first wolves survive today, and they share the world with human beings and all other creatures. Wolf obeyed Raven’s instructions and still serves as teacher to human beings. Today it is as it always was: wolves are willing to share life with human beings and others. As it goes with wolves, so it goes with the entire living world made by Raven.

X.1.a) Answer these questions:

1. What qualities do Wolf and Raven symbolise in the myth?

Raven:

Wolf:

2. How did Native Americans illustrate the equality of their lives with those of animals?

.....

3. What is the main message of the myth?

4. Try to work out what qualities Native Americans valued these animals for:

Puma: Eagle: Bear: Wolf:

X.1.b) Play a Native American and write on a piece of paper what qualities you would ask the Wolf Spirit for.



X.2.a) Form into groups and use your requests to the Wolf Spirit to create a short celebration song.

X.2.b) To the rhythm of drums (or imitating them with different instruments) dance your wolf dance.

X.2.c) Native Americans created sacred totems, in which they portrayed the animals that they valued and which were important in their lives. In groups, draw your own totem, which illustrates balance in the nature that is important for the whole world.

X.3. Cross out letters that occur more than five times in this sequence and find out what the wolf represented to Native American tribes of British Columbia:

Tghewjopglfsykpmbgolkijsgesfapmkjilydkpevgotjiopnganjdkenduprgancek

X.4. What qualities and abilities did Native Americans value in wolves?

* The word search contains 20 hidden items.

(Look forwards and backwards, up and down; letters can be common to two or more words.)

R	W	A	R	I	N	E	S	S	Y	E	D
U	B	Y	T	I	S	O	I	R	U	C	A
O	R	I	E	N	T	A	T	I	O	N	R
M	A	Y	G	E	T	A	R	T	S	E	I
U	V	O	B	E	A	U	T	Y	A	G	N
H	E	D	I	C	D	E	E	P	S	I	G
T	R	H	U	N	T	I	N	G	S	L	E
E	Y	N	T	E	U	B	N	P	O	L	N
C	O	E	X	I	S	T	E	N	C	E	D
N	O	G	E	D	T	O	G	N	I	T	U
E	S	T	R	E	N	G	T	H	A	N	R
L	U	N	A	B	E	A	U	T	L	I	A
I	D	E	V	O	T	I	O	N	I	R	N
S	S	E	N	M	L	A	C	E	T	U	C
T	R	U	N	N	I	N	G	M	Y	D	E

XI. The wolf in mythology

XI.1. Put the parts of the story in the right order.

“Gift of the River”

A. One day the woodpecker came to her, wings flapping in fright. The she-wolf went to the den cautiously. In front of the entrance she saw a shepherd yelling excitedly. The man then squeezed into the den and when he came out he held both little children. The she-wolf knew she shouldn't intervene and allowed him to take the two little people.

B. The she-wolf fed the little humans all summer. Every day a woodpecker flew to the den, not only warning its occupants of danger, but also bringing sweet berries, on which the children feasted well. The wolves didn't chase away the little bird, which after all was also merely fulfilling mysterious higher orders. In time the young wolves became more independent. They hunted alone, while the children still couldn't climb out of cover.

C. The she-wolf usually went to drink at a part of the riverbank that was overgrown, where she could hide. But that morning some kind of mysterious calling led her to go a little further, where the river widened and the current flowed more slowly. The bank was sandy there and a small beach had formed in the bend of the river, where during the day women rinsed linen and children played with junk carried along by the water. Mindless of the danger, the she-wolf came to the place and with senses heightened began to drink. Suddenly the wind brought an unknown smell. She raised her head curiously and noticed an object carried towards her on the water. It was a large basket, like washer-women use.

D. The she-wolf instantly stopped noticing her growing hunger. The new-born humans awoke in her a maternal instinct, which compelled her to take the human babies to safety. Gently she took one of the children between her teeth and quickly carried it to her den, where she usually carried food for her own young. She immediately ran back to the river for the second child and carried that one to her pups, too. Then she lay down on her side and let the youngsters snuggling up to her, wolves and humans alike, drink from her teats.

E. The she-wolf didn't run. The same force that had brought her there made her go to the basket, which had stopped on the sandy bank. From within came a tearful whimper that reminded her of the calls of her own young. Something moved under a white cloth. The she-wolf held the sheet between her teeth and pulled. In the basket, transformed into a cradle, lay two little human beings side by side, two toddlers with chaste pink bodies.

Many centuries passed. On the slopes of the hill and on the banks of the river grew a beautiful big city. It is named after one of the brothers that founded it.

XI.2.a) Do you know the brothers' names?

Their names are hidden in the anagrams:

MUROLUS and MURES

.....

XI.2.b) Working out the name of the city will surely be easy for you:



The wolf in the traditions of various nations

Japan

Ainu, the original inhabitants, highly valued bears and wolves. When they hunted the wolf with traps, they knew how hard it is to catch him and so they believed that the wolf understood their traps. A dream about the wolf, or his howling, had the power to heal. They revered the wolf for his speed and bravery. They believed in a wolf god who left Paradise to live on earth, is dressed in white and lives with the bear god on the east side of mountains.

Christian myths and legends

According to the Old Testament, God created all predators on earth to punish people for their disobedience. He sent a “desert wolf” against the inhabitants of Jerusalem, who didn’t want to turn to the faith, to destroy them. In the Middle Ages they considered the wolf an envoy of the devil, perhaps because of his shining eyes or because he hunted lambs during the night. A stray sheep falls prey to the wolf as a disobedient Christian becomes the devil’s prey.

China



The ancient Chinese believed that solar eclipses are caused by a large, celestial wolf that eats the sun. That’s why they shot arrows towards the sun and beat on drums, to drive the wolf away.

Egypt

Residents of the ancient Egyptian town of Asyut worshipped the wolf-god Wepwawet, whose name meant “Opener of the Ways”. The Ancient Greeks called the town Lycopolis: “Town of the Wolf”. Wepwawet was a war god and led the rulers of Upper Egypt to victory. During celebrations they carried his likeness at the head of processions.



Turkey and Mongolia

These two nations, eternal enemies, drew their origins from wolves. A she-wolf saved a young Turkish warrior from marauding Mongols and led him to an underground paradise in the mountains. From their union was born a nation that left under the leadership of a grey wolf to the area of present day Turkey. The famous Mongol ruler, Genghis Khan, proclaimed himself to be the son of a wolf.

Europe

In the past, wolves were often associated with catastrophes such as wars, epidemics and the plague, which is why they are linked to many legends and superstitions. There were myths about fierce beasts killing people (18th century France), about werewolves or men who changed into wolves at full moon and about witches who knew how to impose their will using wolves. Wolves also transmitted a deadly disease, rabies, for which there was no known cure until 1885. Like other animals, during harsh winters wolves came closer to villages looking for food. To protect themselves from them, people resorted to various charms and witchcraft: for example, they nailed wolf's paws on stables and sheepfolds to drive away wolves. Wolf's teeth were kept as protective amulets and hung around children's necks to ward off nightmares.

Ancient Greeks and Romans

Greeks considered wolves animals of the sun god, Apollo, to whom they made sacrifices. They believed that this god met wolves in winter, when he lived in the far north. The epithets "light" and "wolf" were the same. The Greeks also revered Artemis, goddess of hunting, whom they also called the "Wolf Goddess". For ancient Romans, to see a wolf was a lucky omen. The wolf was sacred to Mars, protector of Rome and god of war.

Georgia

For people living in the mountains, wolves were the same society as people. St. George was the patron saint of wolves. Wolves lived in nature, they were nomadic and people did not consider them wild animals. If a wolf was killed during a hunt, the hunters grieved as if a person had died.

XI.3.a) What does the wolf symbolise to different people?

Fill in the table with the positive or negative traditions that the symbol of the wolf has had.

Country / nation	Symbol	Positive / negative meaning

XI.3.b) What does the wolf symbolise in our culture?

Why do you think a mostly negative image has developed in our perception of the wolf?

XII. The past, present and future of wolves in Slovakia

In the past, wolves lived throughout Slovakia. Local surnames, names of places or villages and symbols on coats of arms attest to the broad distribution of wolves. By gradually settling and cultivating the countryside, people increasingly pushed wolves out. They were caught in nets or pits, into which whole packs were chased. This is how it was done, for example, in Smrečany village in the Tatra Mountains. Snares were also used, tied to flexible trees. Other widespread methods of capture were trapping and poisoning by strychnine, which was put into bait. In Russia and the USA, the upper classes also used various methods as entertainment, such as coursing on horseback using special “borzoi” dogs, or on reindeer or sledges. Snow scooters and aeroplanes are still used for hunting in Alaska, Canada, Russia and Norway.

While at the end of the 19th century up to about 30 wolves were hunted per year in Slovakia, in the 1930s this number fell to four, which shows that the population had decreased. After the Second World War wolves began to disperse from the east and their numbers again increased. In the 1960s there were around 100 wolves in eastern Slovakia. Damage caused by rabid wolves, including attacks on people, was recorded during this period. Intensive hunting again eradicated wolves from central Slovakia.

In 1975 for the first time the wolf was granted partial legal protection, the reward for killing a wolf was reduced and some methods of hunting were banned: trapping, poisoning and removing pups from dens. Nevertheless from the 1990s until today more than 100 wolves were killed by hunters per year. Despite this, wolves have spread throughout eastern and central Slovakia and as far as Orava in the north.

The wolf has been included among threatened species since 1999 and there is a fine for killing it illegally of about €800. Presently the wolf is protected by law. It is not permitted to hunt it from 16th January to 31st October. The official open season

for hunting is two and a half months long. Hunting can only be done using certain methods: stalking, waiting (at prey), by luring or imitating animal calls, but not wolf howling. Chasing is also used, in which wolves are contained in an area by surrounding them with ropes that have pieces of cloth tied to them; a group of beaters then drives them towards shooters. Wolves are often shot during group hunts for wild boar or by illegal hunting in summer, outside the open season.

According to the Council of Europe’s actions plan, in the future the illegal killing of wolves should be stopped and the influences of wolves and hunters on prey populations should be investigated scientifically. In studies of predator-prey relations, the main components of wolf diet are determined, including the percentages formed by domestic animals. Studying wolves by fitting them with collars that contain radio transmitters helps obtain data on pack movements and home range size. Genetic research can determine the diversity and relationships of individuals. Both methods are also used to estimate a population’s size and if it is fragmented.

The wolf has a high rate of mortality, mainly among young individuals, the causes of which, besides humans, are disease, starvation, injury, cold and parasites. Nowadays loss of habitat, places where wolves live, is a big threat. People have the greatest influence on this factor.

The experience described on page 2 by an ecotourist is proof that if we can overcome our prejudices, wolves may inspire and enrich us, as they did Native Americans and as they have thousands of tourists who have had a chance to see them in Yellowstone. The wolf’s future depends on us. Will we hold prejudices, believe myths and the media, allow fear and hate to form false perceptions? Or will we present correct scientific information about its way of life and significance as an important component of the ecosystem?

XII.1. Answer these questions:

1. Which old method of wolf hunting is shown on the sign?

.....

2. What other ways of hunting do you know? Compare them with the hunting methods of Native Americans.

.....

.....

3. Think about which method is fairest and explain why.

.....

.....

4. Why were wolves hunted by Native Americans and why by people from Europe?

.....

.....

5. How do views of animals (wolves) differ between tribal and civilised societies?

.....

.....

6. Which causes of death, mainly of young individuals, most threaten wolves?

.....

.....

7. What are scientists trying to find out about wolves and how?

.....

.....

8. In which period is the wolf protected in Slovakia? Do you know why?

.....

XII.2. Find examples from your surroundings of names originating from “wolf”.

Some place names and surnames show that the wolf had an important place in our past. (You might get some help from a map, road atlas or telephone directory.)

.....

.....

.....

.....

XII.3. Write down what you would tell people if you were a wolf.

.....

.....

.....



XIII. Quiz – How much do you know about wolves?

1. By which one of these methods do the members of a pack communicate together?
a) with body language b) by tracks c) with their teeth
2. In which part of the world do most wolves live?
a) Canada b) Europe c) Russia
3. In expert terminology, what is the pack leader called?
a) omega b) alpha c) leader
4. What is one of the reasons that wolves howl?
a) because the moon is out b) they are hungry c) they are congregating
5. Why do wolves live in packs?
a) to sustain themselves b) to be more threatening c) so as not to be sad
6. What are scent marks for?
a) to find the den b) communication c) to find animals
7. How are a dog's and a wolf's tracks distinguished?
a) a dog's has fewer claws b) a wolf's is mostly straight c) a dog's is straight
8. How do red deer protect themselves from wolves?
a) they bite b) with hooves and running c) they climb a tree
9. What is the typical weight of an adult male wolf in Slovakia?
a) 30-50 kg b) 50-80 kg c) 15-30 kg
10. Who most looks after the young in a pack?
a) the female b) the male c) the grandmother
11. Where in Slovakia can you most likely see a wolf or its tracks?
a) Záhorie b) Podunajská lowland c) Poľana
12. Can a wolf be a good pet?
a) certainly, if I tame it b) if I save its life c) probably not
13. How can farmers protect sheep and cows from wolves?
a) hide them in the forest b) electric fences, dogs c) nothing helps
14. Which description of the wolf is accurate?
a) unwanted vermin b) intelligent and social c) bloodthirsty beast
15. Do wolves attack people?
a) only very rarely b) never c) if they are in packs
16. When are young wolves born?
a) anytime b) September-October c) April-May
17. What does the wolf feed on most in Slovakia?
a) wild boar and deer b) hares and mice c) sheep and cattle
18. During which period can wolves be hunted in Slovakia?
a) all year b) from 1.11. to 15.1. c) never
19. Which of the following is a subspecies, not a species?
a) red wolf b) Arctic wolf c) grey wolf
20. How does a pack travel in deep snow?
a) side by side b) one behind the other c) spread out

Answers

I.1.a) 1. weight, 2. length, 3. years, 4. predators, 5. prey, 6. teeth, 7. canines, 8. carnassials, 9. digestive system, 10. resting, 11. eyes, 12. eyesight, 13. hearing, 14. smell, 15. paws, 16. gait, 17. fur, 18. tail, 19. packs, 20. hunting, 21. run, 22. jaws, 23. carnivores, 24. stalk, 25. intelligent.

I.2.c) 1. very hungry; 2. don't give false alarms; 3. a malicious person who looks harmless; 4. to ward off hard times; 5. to eat very quickly and greedily; 6. he prefers to be alone; 7. to be in a desperate situation; 8. to sacrifice something without regret; 9. a whistle made by a man to express admiration of a woman's appearance; 10. wolves have to travel a long way to find food, sometimes people in certain jobs have to, too.

II.1.a) 1. three, grey, red, Ethiopian; 2. genetics; 3. Arctic wolf, white; 4. species, Texas, Louisiana; 5. Iberian, stripes; 6. Ethiopian; 7. reintroduced; 8. Tasmanian, kangaroos; 9. alone, howl; 10. fox, stilts.

II.2.a) Carpathians total: 3,200 - 3,500, Balkans total: 3,250 - 3,700, "Italian" wolves total: 430 - 570, North-east total: 6,500 - 8,250, Scandinavia total: 65 - 100, Iberian wolf total: 2,200 - 2,300, Europe (not Russia) total: 15,000 - 19,000, Middle East total: 1,900 - 2,200, Asia (with Russia) total: 88,000 - 103,000, North America total: 61,000 - 70,000, Global estimate: 165,000 - 195,000.

II.2.b) 1. Asia (including Russia), 2. Belgium, Denmark, Great Britain, Holland, Ireland, Luxembourg, 3. North-eastern, 4. Scandinavian.

II.3.a) Six populations according to the table – Carpathian, Balkan, Italian-French, North-eastern, Scandinavian, Iberian. Subspecies: *Canis lupus signatus* (Iberian wolf) in Spain and Portugal, *Canis lupus italicus* in Italy and France, *Canis lupus lupus* everywhere else. Arrows showing spread from Italy to France and Switzerland, from Poland to Germany, from Slovakia to the Czech Republic and Hungary.

II.3.b) To the Czech Republic from near Čadca (north of Žilina), to Hungary through Slovenský kras (west of Košice) and Slanské vrchy (south-east of Košice).

III.1.a)

	alpha male	alpha female
	beta	
	yearlings	
	omega	

III.1.b) 1. alpha male, 2. beta, 3. omega, 4. yearlings, 5. alpha female.

III.2. 1. Better chance of survival, obtaining food, division of labour, care for young; 2.a) hierarchy, 2.b) dominance, 2.c) submission; 3. cohesion, obedience, loyalty, division of labour; 4. life together, care for young, father obtains food, mother raises, relatives help.

IV.1. 1G, 2A, 3F, 4B, 5C, 6E, 7D

IV.2. April-May: young born; first week: start to hear; second week: start to see; second month: play in front of the den; first year: learn to hunt, become independent; second year: reach sexual maturity, can start a family.

V.1.a) howling; dominance and submission; submission.

V.1.b) sounds, body language and scent marking.

V.1.c) 1. playful, confidence; 2. submission; 3. friendly gesture; 4. dominance; 5. threat.

V.3.a) 1. tail wagging, joyful bounding; 2. playful posture with front legs bowed, haunches raised and tail wagging; 3. has tail raised and ears forward, unmoving stance; 4. marking the area with urine and scent; 5. bristles fur, wrinkles nose and exposes teeth.

V.3.b) 1. howling; 2. growling; 3. whining.

VI.1. 1. Senses – hearing, smell, sight; physical attributes – teeth, strong jaws, long legs; abilities – run fast, follow, track prey; qualities – endurance, life in a pack. 2. Keen senses – hearing, smell, sight; physical attributes – hooves and antlers; abilities – warily observe surroundings, hide, run fast; behaviour – keep together in groups.

VI.2. red deer, wild boar, roe deer, rodents, birds, insects, berries, bison, antelope, sheep, hare, caribou, moose

VI.3. wolf – predator, hare – prey, dandelion – plant food = food chain.

VI.4.

A: <i>an area where large carnivores (wolves) live</i>	B: <i>an area where there are no large carnivores</i>
<i>the number of prey animals is kept in check</i>	<i>there are too many deer and other animals</i>
<i>there is enough vegetation – food for herbivores</i>	<i>small trees are eaten, vegetation is damaged</i>
<i>there are lots of species of trees</i>	<i>some trees that deer like, e.g. fir, are missing</i>
<i>trees are less damaged</i>	<i>low branches of deciduous trees have been eaten</i>
<i>prey animals are wary</i>	<i>prey animals are less cautious, lose their wariness</i>

VII.1.

Feature	Dog	Wolf
Tail	<i>curled or rolled up</i>	<i>sloping down or held straight</i>
Legs	<i>relatively short</i>	<i>long and thin</i>
Paws	<i>smaller</i>	<i>larger</i>
Track	<i>meandering</i>	<i>straight, rear paws placed in prints of front ones</i>

VII.2. 1. carnivores, 2. omega, 3. hunger, 4. dominance, 5. strategy, 6. fangs, 7. jackal, 8. mammals, 9. hierarchy, 10. alpha, 11. Native, 12. pack, 13. territory, 14. dingo, 15. scent. Latin name of the dog: *Canis familiaris*.

VII.3.a) The poem’s end according to the author:

“Chain! chain you! What! run you not, then,
Just where you please, and when?”
“Not always, sir; but what of that?”
“Enough for me, to spoil your fat!
It ought to be a precious price
Which could to servile chains entice;
For me, I’ll shun them while I have wit.”
So ran Sir Wolf, and runs yet.

VIII.1. 1. A defensive attack is when it feels threatened, wants to escape and defends itself. A predatory attack is when it considers a person its prey. 2. Due to less danger of rabies. 3. Vaccinating animals.

VIII.2.a) 1. Three Little Pigs. 2. Little Red Riding Hood. 3. Poem: The Wolf and the Dog.

IX.1.a)

1. Which conditions increase the risk that wolves will attack livestock?

A sheepfold located near the edge of the forest

Sheep grazing near the forest without supervision and protection.

In the forest there are few deer, wild boar and other prey animals.

Sheep protected by livestock guarding dogs tethered on chains.

Sheep guarded by a type of sheep dog meant for herding but not guarding sheep.

2. What can shepherds do to protect their flocks from wolves?

Use trained livestock guarding dogs.

Set up electric fencing.

Don't leave sheep without a shepherd or guarding dog.

3. How are livestock guarding dogs trained?

From when they are pups they grow up among sheep (beginning at 6-8 weeks old).

They mustn't get used to following people.

Must be brave and reliable, don't chase sheep.

Must not be tethered on chains, but freely moving within the flock.

IX.2.a) "Old Bodrik and the Wolf". Pavol Dobšinský. Bodrik and his friends, a tom cat and a pig, outwit the wolf and teach him and his helpers, the fox and the bear, a lesson.

X.1.a) 4. Puma: silence; Eagle: eyesight; Bear: strength; Wolf: endurance.

X.3. Remove letters g, j, k, p. "The wolf symbolises family, devotion and endurance".

X.4.

R	W	A	R	I	N	E	S	S	Y	E	D	wariness
U	B	Y	T	I	S	O	I	R	U	C	A	curiosity
O	R	I	E	N	T	A	T	I	O	N	R	orientation
M	A	Y	G	E	T	A	R	T	S	E	I	strategy
U	V		B	E	A	U	T	Y		G	N	beauty
H	E			C	D	E	E	P	S	I	G	speed
	R	H	U	N	T	I	N	G	S	L	E	hunting
E	Y			E					O	L	N	coexistence
C	O	E	X	I	S	T	E	N	C	E	D	strength
N				D					I	T	U	devotion
E	S	T	R	E	N	G	T	H	A	N	R	calmness
L				B					L	I	A	running
I	D	E	V	O	T	I	O	N	I		N	humour
S	S	E	N	M	L	A	C		T		C	silence
	R	U	N	N	I	N	G		Y		E	bravery

XI.1. C, E, D, B, A

XI.2.a) Romulus and Remus

XI.2.b) Rome

XII.1. 1. Trapping in nets.

XII.2. Villages: Vlčany, Vlčí Vrch, Vlčia Dolina, Vlčince, Vlčkovce, Vlčkovci, Vlčkov, Vlčovo, Vlkanová, Vlkanovo, Vlkas, Vlkolíneč, Vlkov, Vlková, Vlkovce, Vlkovo, Vlky, Vlkyňa; Localities: Vlčia dolina, Vlčia skala, Vlčie bralá, Vlčie diery, Vlčie jamy; Names: Farkaš, Vlčan, Vlčej, Vlček, Vlčko, Vlk, Vlkolínsky, Wolf.

XIII. 1. a) 2. a) 3. b) 4. c) 5. a) 6. b) 7. b) 8. b) 9. a) 10. a)
11. c) 12. c) 13. b) 14. b) 15. a) 16. c) 17. a) 18. b) 19. b) 20. b)

SWS - Slovak Wildlife Society is a not-for-profit Anglo-Slovak conservation organisation founded in 1998. Our goal is to help ensure the long-term survival of endangered species and protection of their habitats in Slovakia. We aim to mitigate problems of human-wildlife coexistence. We use a variety of methods including scientific research, artistic expression, environmental education and publication of information materials. Voluntary work, cooperation with local residents, exchange of information, experience and ideas among different nationalities are integral to our activities.

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The Wolves and Humans Foundation is a registered UK charity dedicated to working with people and communities to find solutions to conflicts with wolves, bears and lynx, and develop a more positive and sustainable relationship with the natural environment.

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 **WOLVES AND HUMANS**
F O U N D A T I O N

