

30) Why is Mt. Černá hora (Black Mountain) above the Krkonoše Tree Top Trail called Black Mountain?

- A. There is always a dark cloud hanging over it and the weather is terrible there – 1
- B. Its bedrock is built of darker rocks – 25
- C. It used to be covered with darker fir trees – 15

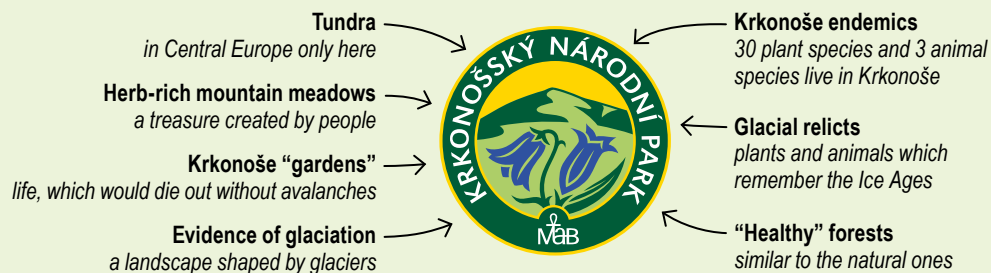
Mystery quote: black out the numbers beside the correct answers and the remaining letters will reveal the mystery quote.

Number	15	1	17	19	23	2	24	17	16	3
Letter	Z	D	C	K	X	E	M	C	L	A
Number	1	18	20	21	4	15	17	5	22	21
Letter	D	I	N	V	W	Z	C	O	Q	V
Number	16	5	21	1	21	17	6	19	17	7
Letter	L	O	V	D	V	C	–	K	C	"
Number	15	19	8	15	20	9	16	22	2	17
Letter	Z	K	P	Z	N	R	L	Q	E	C
Number	11	16	22	11	21	20	12	15	7	13
Letter	T	L	Q	T	V	N	Y	Z	"	F
Number	17	5	23	9	24	2	23	14	20	11
Letter	C	O	X	R	M	E	X	S	N	T

Mystery quote:

You can download the correct answers by using the QR code at the checkout in the souvenir shop by the exit from the Krkonoše Tree Top Trail.

Perhaps the soil and the forest that grows on is more interesting for you now. However, there are more reasons why Krkonoše is a national park.



Why does a dwarf have a pointed hat, how bitter is a gentian, 60 red deer in 6 metres, the dark in Krkonoše and the tundra, which you cannot see anywhere else, can all be experienced on the Krkonoše National Park Administration's programmes for schools and the general public.



Published by Krkonoše National Park Administration in cooperation with the Krkonoše Tree Top Trail in 2018 • Text: Michal Skalka • Pictures: Barbora Zachovalová • © 2018, Krkonoše National Park Administration, Dobrovského 3, 543 01 Vrchlabí • Supported by: DBU



QUEST ON THE KRKONOŠE TREE TOP TRAIL

Name and surname

You can find the answers to these tricky questions in this quest on the information panels on the Tree Top Trail. Be careful, some of the questions may have several correct answers, and the wrong ones are not easy to google! Each answer has a number beside it. The same numbers are in the table with the quote below. Find the correct answer and black it out in the table of numbers. The remaining letters will reveal the mystery quote.

What should I do with this paper?

1. Go to the Krkonoše Tree Top Trail.
2. Look for information boards on the railings, vantage points, underground and on the tower.
3. Correct answers to the tricky questions in this quest can be found on the information signs.
4. Find them.
5. In the table below black out the same numbers as those beside the correct answers.
6. It does not matter what order you answer the questions in.
7. The remaining letters will reveal the mystery quote.
8. Read it.
9. Remember what you liked most on the Tree Top Trail.
10. Tell your friends who have not visited the Tree Top Trail yet ;-)

1) How many legs does the endemic Krkonoše door snail have?

- A. One, because it is a tiny snail – 23
- B. Six, because it is a little forest butterfly – 27
- C. None, because it is a small forest moss – 8



2) What happens when an “ugly” spruce forest is attacked by spruce bark beetles?

- A. Only the spruces are killed, but as nothing else grows there, it kills the whole forest – 24
- B. The young trees are able to defend themselves – 5
- C. Before the bark beetles are able to overpopulate, winter comes and they freeze to death – 25

3) What prevented the spread of fir trees in Krkonoše?

- A. Fir seedlings require shade and there was no shade on clearcut areas – 23
- B. Long winters during the Little Ice Age in the 16th and 17th centuries – 7
- C. Firs grow slowly, so the foresters did not plant them – 20

4) What does a “healthy forest” look like?

- A. It contains more tree species, as well as more other organisms – 17
- B. It contains various generations of trees – 15
- C. It contains a lot of dead wood – 20

5) Why do the foresters in Krkonoše like rowans?

- A. Game animals do not like it too and eat the other trees so much – 3
- B. Its wood and leaves decompose quickly and enrich the soil – 21
- C. Foresters do not really like this tree – 14

6) What is dead wood in the forest good for?

- A. It is a source of nutrients – 22
- B. It is the habitat of many organisms – 16
- C. It retains a lot of water – 17

7) What advantages does a “healthy” forest have?

- A. It is not easily destroyed by any dangers – 22
- B. It produces a lot of quality timber quickly – 10
- C. It is good for walking and collecting mushrooms in – 27



8) Where can we find the most creatures in the soil?

- A. Around large rocks – 14
- B. Just under the surface – 16
- C. Around roots – 20



9) What would happen if there were no soil creatures in the soil around the Tree Top Trail?

- A. The soil would dry out very quickly – 6
- B. The endemic Krkonoše door snail would die out, because it is in symbiosis with them – 9
- C. In 50 years time we would wade up to our waist in fallen leaves – 15

10) Why can soil creatures not see?

- A. They can see, as well as a cat, even though there is little light – 4
- B. They are evolutionarily simple and their eyes have not developed yet – 2
- C. What would their eyes be useful for, when it is dark in the soil? – 19

11) How many times are the living parts of the soil heavier than the dead, organic parts?

- A. The living parts of the soil weigh 2x as much as the dead parts – 28
- B. The living parts of the soil weigh as much as the dead parts – 36
- C. The living parts of the soil weigh 1/5 as much as the dead parts – 15

12) On average, how thick is the layer of soil which develops during the life of one teenager?

- A. 1.7 mm – 17
- B. 1.7 cm – 25
- C. 1.7 inches (= c. 4.12 cm) – 27

13) How can you recognize that the soil is poor?

- A. According to what grows there – 19
- B. Big animals do not live on it to fertilize it with their excrement – 3
- C. It is always dark in colour – 34



14) What happens to the forest when you take a lot of timber from it?

- A. It will regenerate more quickly – 25
- B. It will become a meadow – 5
- C. It will grow badly – 17

15) Why are there puddles in the ruts left behind by a tractor?

- A. The ruts are lower than the surrounding terrain – 35
- B. Its wheels break up the larger clumps of soil into smaller ones, which block the pores – 13
- C. Its wheels compact the soil so that there are no cavities in the soil and water does not sink in – 21

16) How much water soaks into uncompressed soil?

- A. As much as the soil itself weighs – 11
- B. About 1/10 of what the soil itself weighs – 10
- C. On average, 40 % of how much the soil itself weighs – 21



17) How many kilos of nutrients are in 1 kg of soil creatures?

- A. 0.5 kg – 14
- B. 1 kg – 16
- C. 0.2 kg – 34

18) What breaks down even the hardest rock into tiny particles that are the basis for the creation of soil?

- A. Soft water – 21
- B. Visitors – 3
- C. Sunshine – 7

19) What happens when the soil creatures consume all the dead organisms?

- A. The forest will die and dry out – 7
- B. The soil creatures adapt to new conditions – 6
- C. Before they consume everything, they die and become nutrients themselves – 22

20) Why are earthworms living deeper in the soil lighter than those living just below the surface?

- A. It is nonsense, earthworms are the same colour, regardless of where they slither – 5
- B. Because deeper down it is dark, but the surroundings are lighter – 13
- C. Because the darker colour of the earthworms peeking at the surface protects them from the sun – 17

21) Why are the smallest pieces of rock important?

- A. There are a lot of them, they have a large surface area, so a lot of nutrients are bound to them – 15
- B. They fill the cavities in the soil and prevent it becoming waterlogged – 12
- C. They allow the smallest soil creatures to move around – 27

22) Why do some springtails not jump?

- A. They all jump, for they are springtails (and therefore live on the surface of the soil) – 7
- B. Because they gained wings and flying is more convenient than jumping – 6
- C. Because it is not possible in the small cavities in the soil – 21

23) Why is the spruce thirstier in a drought than most of our trees?

- A. It has shallow roots and cannot reach the groundwater – 20
- B. As a forest tree it is more demanding on water – 6
- C. It is as thirsty as other trees – 14



24) Why did the foresters plant spruces too often in Krkonoše?

- A. They grow quickly – 18
- B. They make a lot of timber and little waste – 16
- C. They were planted as often as beech and fir trees – 12

25) What does a healthy spruce do if the spruce bark beetle gets “under its skin”?

- A. Nothing and silently dries out – 5
- B. It sheds part of the infected bark, lets it fall to the ground and this will kill the beetle – 2
- C. It drowns the beetle in resin – 17

26) Why does a spruce capture more water than a beech of the same size?

- A. It is nonsense, beech has deeper roots and can draw more water from waterlogged soil – 34
- B. Because it has scaly bark and water runs off of it slowly – 36
- C. Because it has needles and not leaves – 24

27) Why are the trees in the forest taller than other forest plants?

- A. They are fighting for access to the sun – 23
- B. The foresters have bred them so that they provide more timber – 27
- C. They have deeper roots and therefore better access to nutrients – 28



28) What advantages can a spruce monoculture have?

- A. None, it is a relict of the communist period – 36
- B. It is more stable in the climatic conditions – 7
- C. If it reaches maturity in good health, it can provide a lot of timber at once – 19

29) Why are the foresters not worried about the exclusively spruce forest on the summit of Mt. Černá hora?

- A. They are very worried about it! They are gradually turning it into a “healthy” mixed forest – 2
- B. Because it is colder there, and therefore it grows naturally – 17
- C. It is not a pure spruce forest, but a mixed forest, after all it is in the national park – 31