

*p. 162*

The wolf that wants to find the meat must trot all day on his own feet. The popular saying is right. The more you trot, the more you find.

The grey wolf is a very strong animal. It is able to move at a speed up to 60 km/h and travels freely for tens of kilometers during a day. Two or three wolves may handle a moose quite easily. Wild boars, roe deer and hares also suffer from these predators... But how often do wolves get such a catch?

*p. 164*

The white stork is one of the favourite birds in Belarus. It's no wonder because the birds settle near human dwellings and selflessly fight agriculture pests. Times of arrivals and departures of storks coincide with important periods in the life of nature and man

*p. 165*

The white stork is a symbol of friendliness and order in a flock, diligence at nest construction, upbringing of the offspring and long-distance flying to South Africa.

You may also envy their calm and dignity with which the birds protect nests with eggs and chicks not only from enemies but also from scorching heat or cold rain

*p. 166*

Of all the rarest birds of Pushcha the great grey owl is the most trusting and aggressive owl. The bird constructs nests on forest islands and flies to hunt at open swamps. All owl species are very useful for people. They catch an enormous number of mice. Only one great grey owl eats around 700 mice and voles in six summer months.

The great grey owl is one of 13 owl species in Belarus. In Russian and Belarusian these owls are known as 'bearded' because of dark feathers under the beak. Bright-yellow colour of the eyes gives a particular intensity to the birds' stare

*p. 167*

Great grey owls are not very keen on traveling. The birds live sedentary life. If people don't bother them, great grey owls spend winter at the same place, where they were nesting in spring and summer

*p. 168*

The great grey owl is one of the largest night birds of prey. However, the large size is deceptive. Feathers hide a light body. With the wingspan of 1.35—1.6 m the male weighs around only 845 g and the female — 1140 g

*p. 169*

Great grey owls form couples for a long time. The birds place a clutch openly, for example, in an old nest of a predatory bird. A family of great grey owls usually has up to 5 chicks

*p. 172*

Amphibians are the favourite food of the white stork. The stork shows an unsurpassed skill in frog hunting. However, there are record-breakers for resourcefulness among frogs. Those, having avoided a stork beak, continue the frog family

*p. 173*

There is a possibility in Pushcha to come across the northernmost of orchids — lady's slipper orchid

Flowering of orchids is a very remarkable event. After all, they can bloom for a year or two, and then they are not observed at all for 8—10 years as if there are no there

*p. 174*

The sundew is a predator. Such small insects as flies and gnats are its catch

Paper wasps are called so because of their 'invention' of paper million years before man invented writing systems

Bear tracks are found in a swamp in 2004 for the first time in many years

*p. 176*

A real fortune of Pushcha is the untouched riverbed of the Narew River

*p. 177*

Each nature protection area in the world is a separate cell of the system of saving the biological diversity of the planet. However the contribution of each such cell is unequal. Belovezhskaya Pushcha is on a special account. This territory is unique for Planet Earth!

*p. 178*

A small but very famous bird species of the aquatic warbler lives at the Dikoye Swamp. A considerable number of more than 1000 male sing here in spring

Male aquatic warblers are by no means ideal spouses. They distribute their attentions for several female at once. The entire burden of rearing the offspring of this species lies on females, beginning with the construction of a nest and ending with the feeding of chicks and fledglings. To tell the truth, males do perform some role in caring for the offspring. It comes down to warning the female on the nest about an approaching predator

*p. 179*

Male aquatic warblers sing all season (May — July) with equal intensity. Each of them has his own territory (1—5 ha), but an owner is not overzealous about defending his area and territories of some males often overlap.

Male aquatic warblers sing in the time unique for birds: the activity peak is in the evening (during two

hours before sunset). Males of other five warbler species sing intensively only in the morning or in the morning and evening simultaneously (Blyth's reed warblers are another exception: they sing mostly in the night. The species needs it for obscure reasons

*p. 181*

Here are the less famous relatives of the aquatic warbler: great reed warbler and marsh warbler

*p. 186*

May air is ringing and wavering with bird voices. Participants of the most fascinating performance of the black grouse courtship ritual are on the marsh stage. It has everything belonging to a heroic performance: proud poses, meetings and confrontations of rivals, leaping in the air and music...

It is possible to hear individual males singing already in March. However, black grouse are active to the full at mating grounds in late April — early May.

Every male black grouse is lekking on a strictly defined area, while the most experienced and strong fighters take places closer to the center of the mating ground. And woe to those who break the border...

*p. 189*

First autumn frost

*p. 192*

Candidate of Biological Sciences Eduard Mongin has been conducting observations of the number of the great snipe in Belovezhskaya Pushcha for more than two decades

*p. 193*

Dusk at the swamp is the time of unusual vocal exercises of wolf packs and the great snipe — one of the most vulnerable waders in Europe

*p. 194*

Predators, large eagles in the first place, are the apex of the food pyramid in any natural ecosystem and the indicator of its sustainable and harmonious existence

*p. 195*

The fox is active in any time of day

*p. 196*

In ancient time, when Pushcha was inseparable with wide border swamps, moose were comfortable there. Amelioration of wetlands has had bad influence on these animals

*p. 197*

The giant white-tailed eagle, the middle sized magpie and the tine meadow pipit — all find the places to live on the wildest of swamps, the Dikoye ('wild' in Russian) Swamp

*p. 198*

People's attitude to swamps is changing. Even small wetlands are declared national resource in the countries of Western Europe. Belarusian wetlands with unique flora and fauna have become an example of the preserved natural ecological system for Europe

Belarusian wetlands are included in the international environmental conventions and agreements

*p. 199*

Our Dikoye takes not the last place in the study and protection of wetlands. People try to correct their faults in respect to nature. And they mostly manage to do it...

*p. 202*

Bears attacking travellers. Engraving of the early sixteenth century

Boiko, a local of the village of Podolyany, with a tarpan in a nursery. 1939

*p. 203*

Polish forest guard

Director of the Belovezhskaya Pushcha National Park V. P. Zhukov (left), Head of the Department of Protected Areas and Forest Hunting Establishment A. I. Luchkov (in the center) with the newly awarded Diploma of the Council of Europe. 1997

*p. 204*

Researchers leaving for field work

Members of the film crew which shot the first documentary about Belovezhskaya Pushcha. The late 1940s

*p. 205*

Scientists have made a lot of effort to study the composition of bison food. Laboratory treatment of collected samples is a small touch of laborious work

Nowadays, a gun on the shoulder of famous Soviet scientist S. S. Turov looks strange. However, in the 1950s, a gun was a usual attribute of every zoologist like a stethoscope for a doctor

*p. 206*

Postgraduate student of Moscow Pedagogical Institute L. Lebedeva and laboratory assistant of the Administration of the State Reserve 'Belovezhskaya Pushcha' V. A. Datskevich conduct scientific observation

Bison food is being laid out

*p. 207*

Poet Ye. Yevtushenko at the excursion in the Nature Museum in Belovezhskaya Pushcha

Director of the Nature Museum P. K. Mikhalevich gives classes to pupils of ecological school



*p. 208*

Nature is reluctant to reveal its secrets. Only passionate people can detect and uncover them

*p. 210*

Leading researcher L. N. Korochkina, Head of the Nature Museum V. Datskevich and game manager V. A. Vakula dedicated to Pushcha all their lives

Participants of the Belarusian-Polish session on the European bison. Kamenyuki, 1986

*p. 211*

A game keeper's house in the bison breeding ground. It is difficult to say how many sleepless nights scientists and the forest guard spent here. People returned the largest European animal to nature at the cost of incredible effort

*p. 217*

A bird's eye view on the Nature Museum

Directors of Belovezhskaya Pushcha who worked from 1957 to 2000 at the meeting with the representative of the Council of Europe in 1997. From left to right: S. B. Kochanovsky, S. S. Balyuk, V. P. Romanovsky, Jean-Jacques Michel (France), V. P. Zhukov, V. S. Romanov

*p. 218*

Biodiversity in Pushcha is unprecedented at least for Europe

*p. 220*

There live 59 species of mammals, 258 species of birds, 28 species of fish, 18 species of amphibian and reptiles in Pushcha and more than 15,000 species of invertebrate animals have already been classified. Also, more than 3,000 fungal species, 308 moss species, 330 lichen species, 1,000 higher plant species grow there. In Pushcha grow 26 tree species alone

*p. 222*

The European tree frog and the common moorhen move with equal ease in water and in the branches of willow thickets along water bodies

*p. 223*

The floodplain of the largest river in Pushcha — the Narew — is rich in oxbow lakes and canals with its own diverse and numerous populations of animals and plants

*p. 227*

A sounder of wild boars includes, as a rule, parents and children, brothers and sisters of parents with their children and an occasional relation from the side maybe. Such a group is headed by an experienced female. By the way, all family ties go on the maternal line. Piglets feel superb in such an 'extended' family!

*p. 228*

Winter in Pushcha is the shortest and warmest in Belarus, it has the longest vegetation period and the greatest provision of warmth with humidity deficit. All this provides an amazing variety of plants. It is possible to admire blooming globeflowers on humid forest glades, meadows and margins in late May

*p. 229*

According to calculations, 1 ha of meadows contains more than 100 mln insects. How many of them are on the whole planet in that case?

*p. 230*

A battle between young wolves and an adult white-tailed eagle for a freshly caught pike is a unique situation even for the reserved area

*p. 233*

Lichens are the most amazing formation of the realm of nature. It is a special type of symbiosis or mutually beneficial coexistence: fungus plus alga. It is not an easy sum. It has its own way of life and reproduction method. Around 20 thousand lichen species occupy the most barren and wretched places of the planet

*p. 234*

Butterflies are the real treasure of nature. Even small and plain species reveal themselves as true pieces of art on closer examination: inimitable harmony of colours, patterns and motifs. Scales on butterfly wings have great importance. Surely, they are necessary to fly. Their colour is important for disguising, scaring enemies away and breeding

*p. 235*

Colouring of butterfly wings is a kind of signal lights for partners. Butterflies recognize each other by wings. Scales on the wings repeat the scheme of shingle laid in regular rows with the bases of one row covered by the ends of the previous one. Also they are coloured differently, they may refract light and seem iridescent

*p. 237*

Ivy as all lianas is a southern plant, it is very rare in our country and reminds of warmer ancient times.

Martagon lily is a land flower. It grows in broad-leaved and mixed coniferous forests, rarely in pine and birch forests but necessarily among the abundance of other grasses. However, the martagon lily would not pale into insignificance amidst any number of grasses. Its stalk rises above all grasses reaching 120 cm in some places

*p. 238*

There are 150 bellflower species in the midland. The peach-leaved bellflower is a real beauty among them

*p. 239*

There are also absolutely white bellflowers — albinos. Their colour only highlights the unusual beauty of surrounding flora and fauna

*p. 241*

Insects live in places where hunters of them live, too. They are spiders first of all. A majority of spiders use web to catch their prey, but these silky dragnets are as varied as the spiders themselves

*p. 242*

Agitated squirrels make a characteristic clattering sound and twitch their tails. And how they jump, indeed! They habitually jump for 6—7 m. Squirrels use their tail not just as a decoration but also as a steering wheel while jumping and running

A taste of wild strawberry, restless calls of a common sandpiper, whistling of the spotted flycatcher chicks and buzzing of an all-business bumble bee on a flower of the Eastern pasqueflower are manifestations of life

A kingfisher with a tiny fish, a female of the European pied flycatcher with the set of green grasshoppers, a three-toed woodpecker with larvae of woodworms and a Eurasian wryneck with ant eggs — one would catch anything to feed chicks!

*p. 243*

The tarpan type horse is just a reminder of the Eurasian wild horse which became extinct in European forests due to man

*p. 245*

The gray wolf is a fine family 'man'! As a rule, gray wolves live in couples. A once created match is preserved for years if not for a whole life. A once chosen lair is abandoned only if a man finds it. There are 5 — 6 pups in a litter and this number is rarely exceeded. A custom to keep a pack also originates from a family way of life. A pack consists of 10—12 animals: a leader, a female, yearlings, juveniles of last-year litter and unmated males who for some reason have not been lucky enough to start a family

*p. 246*

The European beaver is a vegetarian. In autumn, beavers start to store up provisions for winter: fell trees, cut them into pieces and clear too uncomfortable trunks from branches. Beavers float to a dam all logs they feel equal to and fix them to a reservoir bed with a technique known only to them. Thus, they have a stock of food when the ice cover water surface. Beavers have right on carpenter tools — splendid yellow cutting teeth about 4 cm long which can fell down an ash tree of 5—7 cm in diameter in some two minutes. A beaver's mouth has such a structure that an animal may use its chiseling teeth even under water without spluttering. A real champion among builders!

*p. 247*

Fieldfares cannot be called real migratory birds. Even leaving the north of the republic, they just move southwards a bit — flocks of vagabonds looking for food

*p. 249*

Fungal fruit we usually call mushrooms. They are known to everyone and consist of a cap and a stem. However, the most important and largest part of a mushroom is not seen. It is situated underground. It is called a mycelium consisting of fungal filaments — hyphae. The mycelium serves for collecting nutrients. They come through fungal filaments and the stem to the cap

*p. 250*

The process of fungal colonization often starts long before a tree falling, for even a dead tree may stand in the forest up to 50 years before falling. The fungi that destroy dead wood may be surely called wood medicals. They grind dead trees into dust fertilizing soil and clearing the place for new green plants

*p. 253*

Each sunny day in autumn is as a jolly gift

*p. 255*

All deciduous trees are with leaves of different colours. They will rapidly fall in any moment due to even a weak wind. Together with the leaves the trees shed unnecessary and even harmful substances accumulated during spring and summer

Animals are preparing to winter, too. Edible dormice are already ready to go in hibernation, red deer and lynxes are waiting for snow and European honey buzzards are in preparation to the long way south

*p. 257*

All grey partridges suffer in winter. Overcoming their fear before man because of hunger, flocks of grey partridges press closer to our yards, roads and farms in competition with pigeons, sparrows and yellowhammers... By the end of winter, only one in ten birds from an autumn flock stays alive. Only the highest breeding power among birds saves the species from extinction

*p. 260*

Bohemian waxwings always appear suddenly in flocks of 15—30 birds. Having taken their seats on trees they seem to look around for some time while chirping melodically

The greenfinch is often called the wood canary or the 'greenie'. It is one of our common species

*p. 262*

Winter is a dark period for inhabitants of our waters. The ice grows thicker, the snow becomes more mas-



sive. It is cold and stifling underwater. Fish search for the air of fresh currents from brooks and springs

*p. 263*

Here is April and the sun has taken care about water habitants in its hands. Streams of light like solar waterfalls pour into ice-holes. Blue water ripples dance in a merry wind. Small silver fish backs dance in blue water. This is already real spring, the spring of water and the sun!

*p. 264*

Look, how beautiful it is by a spring river! Water drops rose in the air yesterday and cooled during the night. By the morning, they came down on river-side grasses in millions of dew drops. Caltha flowers shine with yellow light. Bird cherry aroma turns head. Thrush nightingales break into a song above morning expanses and a northern goshawk fly to its regular hunt

*p. 267*

Spring is in a hurry and every week now is equal to some month. A couple of wood pigeons build a nest, a raccoon dog bridges the last meters of a water obstacle, a wolf searches for food under an uprooted tree, a beaver emerges on a spring river surface not waiting for evening twilight...

*p. 268*

May days in the wild have one regularity: the closer is summer, the richer are events. Thousands of stories happen each minute in the forest, on the river, in the swamp. Of course, it is necessary to manage to breed, raise and educate the offspring...

*p. 269*

Spring is the time of blooming. In this time every living being whether a wolf, an American mink or a black stork loses its head even if a little

*p. 270*

When the anemone and other representatives of the primrose family bloom, wood trees and shrubs barely start to send out leaves. There is a lot of light in the forest in this time which is appealing to anemones. Also, it is easier for insects to notice flowers

*p. 271*

The common morel is the mushroom species from the Helvellaceae family. The mushrooms have a cone-shaped or egg-shaped cap with regular transverse and longitudinal folds forming cells or some kind of mushroom combs. Common morels are edible mushrooms

A record holder in the number of spores is found in the Lycoperdon genus. There are about 7.7 milliard spores in one sample on the average. According to calculations, if all spores had been used, the Lycoperdon mass would have exceed the Earth size in 800 times already in the second generation

*p. 273*

May flowers... The May lily is the most tender, fragile and miniature flower. By the way, it belongs to the lily family, that is, the flower is a relative to the lily-of-the-valley, the tulip, the lily

*p. 274*

Many habits of the young contributing to survival are laid from birth or, as scientists say, they are instinctive. However, the young of the fox, the stork and the common snipe have much to learn from their parents

*p. 276*

Many scientists rightly think that only a tenth part of all living animal and plant species has been described yet

The problem is that people eliminate thousands of animal and plant species together with the destruction of forests and other ecosystems of the planet

*p. 279*

The world of fungi is very numerous and diverse

*p. 280*

Giant trees are silent witnesses of history

*p. 281*

The forest is a unique system, in which something constantly changes and the process of transformation of all living things take place along with the death of old trees and growth of new ones. Remains of dead wood are very important elements in the forest. Decaying wood is the place of habitation of numerous plants, fungi and animals





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**MIRACLE OF BELOVEZHA**

Фотоальбом

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