Feeding Birds in Winter

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Methodological Guide

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Preface



For the Russian Taiga, birds hold immense significance for two reasons. First, these tiny birds act as the forest's immune system. Like white blood cells, they destroy harmful insects. Only they can do this! No one else can handle it! Second, they plant new forests. By eating some tree seeds, they hide and even bury a huge number of them in the ground. In other words, they spread new trees throughout the forest. Squirrels and chipmunks help them in this task. But more than half of

these forestry activities for effective tree planting are still carried out by these same little birds! Just a note: how many trees has the average person in our society planted? Now imagine how many trees one small bird plants! This is why birds are our allies in the difficult fight for Russia's forests.



In natural, wild forests, the number of birds is balanced. In logged areas and planted forests, for many reasons, the number of birds sharply decreases. Without birds, the forest becomes sick. It happens that harmful insects, like a forest fire, can completely destroy hectares of forest. We, as humans, can help in two ways: by hanging artificial nests (birdhouses and titmouse houses) and by

feeding birds in winter so they can survive until spring.

In our country today, this is especially important. After many years when the state forestry system was dismantled, it is just beginning to recover. Inevitably, in a few years, it will return to the methods used before. There will be planned patrols and feeding of birds by foresters in forest areas. Such activities will also be promoted among children, and school bird feeders will be hung. Until this is restored, the severity of the problem for our forests could be reduced by the initiative of ordinary people helping birds.

This is relevant both for remote taiga regions and for city dwellers. Mainly, we have tits wintering here. They are non-migratory, accordingly. They do not fly to warm Africa for the winter. But they do not stay in one place either: they move around during cold weather, sometimes over significant distances. The birds that survive thanks to your care this winter will be protecting the Russian Taiga a hundred kilometers from your city in the spring.

Help them! Prove to yourself and your children that you are human! Helping birds, preserving the natural environment, protecting forests—this is self-respect. This is human dignity. For me, at least, it is so. And it was so for our distant ancestors who lived in the taiga.

The more I learn about history, the more evidence I find that people did all this even in pre-Christian times. They fed birds, kept those freezing until spring in their homes, and hung up nest boxes. Such actions, including helping birds, were traditional. A ritual, a custom, even with mystical justification. It's just somewhat forgotten now. It's no sin to remember these good traditions!

Part one: Practical feeding

Chapter one. How will we feed them?

We need to supplement the diet of wild birds living freely in the forests. Support them during the cold season, when more food is needed for the body's energy expenditures due to the cold. Meanwhile, because of the snow and the winter dormancy of insects, there is little food, it's hard to find, and the available food is low in calories.

Note the difference! Not feeding, but supplementing! We feed domestic birds by providing all their nutrition completely. Such a bird loses its skills to find food in natural conditions.

Our task is only to help a free creature during a difficult period. Only to support. And to do it in such a way that the bird does not lose its skills to find food independently.

There are two options for how we can do this

First method: constant feeding throughout the winter

In this case, we supplement constantly throughout the cold and snowy period. Around the place where you put the feeder, birds will live constantly—up to several dozen, and they will all survive until spring. If possible, do this daily, closer to the evening. Suppose you return from work through a park or square. You walk with your child every day. Special attention! With constant feeding, particularly important rules:

— Feed constantly, from the onset of cold until spring.

— Feed in the evenings, so the birds get used to this schedule. In the evening, before the night, which is usually colder, they receive additional food. And all day they search for food independently in the surroundings.

— In severe frosts and snowstorms, increase the amount of food. More high-calorie.

— If possible, in the adjacent forest area, within a radius of a kilometer, for example, place a dozen nest boxes. Birds will warm up there in the frost, and in the spring,

they will build nests.

If you can't commit to this responsibility for the entire winter, then it's better not to start at all! Birds quickly, within a few days to a week, get used to finding food in one place. If you train them and then stop feeding them, they'll keep coming to the same spot and wait there instead of looking for food. If this coincides with frosts and snowfalls, they'll simply starve to death at the empty feeder instead of actively searching for food or moving to another location. Don't start feeding birds regularly in one place during, for example, a winter vacation in the countryside or New Year's holidays with a child in the village. You'll leave, and the birds accustomed to one spot, to the feeder, will most likely just die.

In this case, use the second method: irregular feeding in different places

This is also useful and effective. It's applicable if you at least occasionally visit the forest in winter. On snow-free days, you can simply scatter food in different places during your walk. A little at a time and not on loose snow. If there's no crust on the surface after a thaw, you should first stomp down a small area with your feet, and only then pour a handful of food on it.

But much more effective are food balls with a string. In two chapters, I will specifically explain in detail how to make them.

Through many years of work in protecting the Russian Taiga, I have used various methods of feeding wintering birds until the most convenient and effective one was developed. These are grain balls, which can provide birds with the necessary energy and are completely safe for the environment.

This is important! There's enough trash in the Russian Taiga. Our food-ball feeders are completely safe, made from natural materials.



Snow is not a threat to those little balls of seeds hanging on the branches. As they fly around the forest, birds will find food. If not today, then tomorrow. This occasional method of feeding, of course, doesn’t let you see tangible results yourself. With regular feeding of “your” birds, you start to recognize them. You worry if one of them doesn’t show up. What if something happened to it? But the real effectiveness of such random feeding is no less, especially if there is a mass distribution of food during cold spells or snowstorms.

Chapter two. Bird-feeding devices

People often use feeders made from trash: plastic bottles, boxes. I don't recommend doing this! The thing is, many will simply forget them hanging on branches, leaving trash scattered on the trees. Somewhere, a feeder will be blown away by the wind and carried through the forest.

Besides, there's an ethical side: today, we are trying to engage people in protecting the Russian Taiga. With our efforts and those of our numerous allies across Russia, we go into the forest and collect the trash left there. We set an example for our children, explaining that trash and wild nature are incompatible.

But if we ourselves bring trash into the Russian Taiga, even with good intentions, we break those very unbreakable ethical walls, boundaries. We break our own laws, showing that they can be violated. We demonstrate this to ourselves, our children, and those around us.

The overwhelming majority of people who do not participate in protecting the Russian Taiga will take trash hanging on branches as a call to direct action. You've probably seen how people start dumping trash where trash already lies? They walk through the forest, see trash, and add their own, saying "there's already trash here anyway."

So, in our expeditions, we often see piles of trash right under hanging feeders made from plastic bottles and boxes.

Therefore, if you want to feed birds in one place continuously, I recommend either buying a ready-made wooden bird feeder or making one yourself from planks and other natural materials.

And the best technical device for feeding wild birds is our feeder balls!



Chapter three. What should we feed them?

People often make mistakes when choosing bird feed. You can easily turn from a 'feeder' into a 'poisoner.'

Not allowed!

— Salt and salted seeds and grains. Chips, salted nuts, and similar snacks are for beer, not bird feed!

— Sugar and sweets.

— Dark bread. I still prefer not to risk giving it to small woodland birds. If you offer white bread, make sure it is dried first.

— Spoiled products, cereals, grains. It's common to see people dumping moldy, rancid cereals or bread for the 'birds' and considering it a good deed. Idiots: this is not a good deed but the spread of dangerous infections! Have you seen city pigeons with rotting feet, sick? It's a consequence of eating garbage. Look at the flocks of 'rock doves' living near grain elevators: that's how a

pigeon should look. Don't spread infections in the forests by bringing spoiled products there!

— Ready-made feed for agricultural birds is unsuitable. Pigeons or crows might survive on it without problems, but tits might not.

— Canned food and 'dry food' for dogs and cats. They are for dogs and cats, not suitable for birds! It seems obvious, but I've seen people feed birds with them more than once.

— Potatoes. Not suitable either raw or cooked.

— Rice. Peas, beans, and other legumes are also not very suitable.

— Millet is not recommended. Only millet with husks. I'm not entirely sure about this because old manuals used millet. But it's better to be safe and choose other grains.

— Seeds for planting. I've come across descriptions of bird poisoning when fed with lawn grass seeds. It's quite possible because some seeds are treated with pesticides against agricultural pests.

So what should you feed them, you ask, if nothing is allowed?! Indeed, there aren't many suitable feeds. I won't mention what can be harvested from wild plants in the forest. I'll try to discuss feeds and accessible sources.

Feeds suitable for feeding wild birds

— In regular grocery stores, you can buy unsalted, unroasted seeds and grains. It's best to choose the smallest seeds. Slightly crush the seeds with a rolling pin or bottle on the table so they crack: this makes it easier for tits to get them. Use whole grains, not crushed ones. This includes pearl barley (barley) and oat groats. Rolled oats ("Hercules," oat flakes) are also suitable, but not the quick-cooking kind—just the cheapest, plain ones without additives.

— Markets and stores with agricultural feeds offer grain feeds. Wheat, oats, millet. Corn is available coarsely crushed, not like the cornmeal found in stores.

— Raw pork fat. Internal fat can be either pork or beef. It is used as an ideal base for grain balls.

— Boiled eggs are also a good addition to the feed.

— Just recently, we started adding grated carrots to some batches of feed balls as an additional source of vitamins for birds. We've noticed that this attracts large predatory birds more often! Carrots are a great addition to the overall diet, withstand frost, and are rich in carotene, fiber, and vitamins A, B, C, and E.

Chapter four. Seed balls

I focus on them separately because not many people know about this method. For me, these balls turned out to be the perfect solution. I often visit forests, but they are all quite different. As much as I can, I take artificial nest boxes (“titmouse houses”) and these balls with me each time.

As part of our ecological expeditions, we opened a workshop each year to make large batches of feeders—at least a thousand for each expedition to the Russian Taiga. We then placed these feeders in areas affected by logging, forest fires, and ecological degradation—in other words, where our help was needed most.



One large ball feeder can save up to 50 forest birds. In turn, each bird heals up to 10 trees in a season! And all the trees clean the air and fill it with oxygen for you and me, and all the inhabitants of the wild!

Thus, by saving birds, we are primarily saving ourselves!

They are easy to make. Here is a short instruction with photos.

Preparing materials



You need a cord, preferably made of plant fiber. It will completely decompose later, causing no harm to nature. Available in any hardware store. A roll of 100 meters, prices range from 50 to 100 rubles approximately. It lasts a very long time, enough for 200 to 300 balls.

The only tools needed are scissors, not counting a pot or basin where the feed components are mixed.

At the bottom of the feed ball, I tie two small sticks crosswise. I highly recommend doing this, although I have seen such balls without sticks. They are simply

stems of dry grass, “weeds” that have dried. They prevent the feed ball from slipping off the string and help the bird sit right on the ball.

Making the “cross” with the prepared string



First, small sticks about 10 cm long are cut from the grass with scissors. And a string, about 30 to 50 cm. The sticks are tied into a “cross” by folding the string in half. A knot is tied at the remaining end of the folded string. That's it, the base of the ball is ready.

Feed selection



I used a mix of small seeds and pearl barley (barley). You can use other grains; the more variety, the better.

The simplest binder is soaked bread with a drop of flour. Attention! This is a binder, not food! The less, the better. Just enough to make the balls stick together. Although it takes quite a bit: it turns out to be from a fifth to a quarter.

Small seeds cost about 50 rubles. Grains about 25 rubles. Everything is very cheap.

I am adding this information to the updated guide for the 2026 season. There is a persistent myth that bread is dangerous for birds. That is not quite true, and I have even published a detailed article on the subject.

Please read it on my website: https://pavel-pashkov.com/articles/en/bread

I will just add that the myth originally came from the Royal Society for the Protection of Birds (RSPB) in the United Kingdom, but people misunderstood its statements. As that misinterpretation spread, the society later had to publish further clarification.

To quote:

> *“Birds can digest all types of bread, but ideally it should be only one part of a varied diet. Bread does not contain the proteins and fats birds need, so it can fill their stomachs without providing much nutrition. Although bread is not harmful to birds, try not to give it in large quantities, since its nutritional value is relatively low.”*

Russian experts confirm this as well. Here is a comment from Ilgizar Rakhimov, head of the Department of Bioecology at Kazan Federal University’s Institute of

Fundamental Medicine and Biology:

> “We do not know of a single case of a bird dying because it ate bread. What an absurd idea, that birds cannot be fed bread! Bread is a grain product. For seed- and grain-eating birds, such as sparrows and pigeons, bread is ordinary food. They peck at it and do just fine. Not a single duck fed bread on the Bulak or Kaban has died from choking on it. Where did this myth come from? It is better to give birds bread crumbs so they do not die from cold and hunger than to give them nothing.”

Please read the full article at the link on my website, where I discuss this in detail.

In our feeder balls, we add only a small amount of white bread, specifically as a binder.

Fat is the ideal binder



I've come across descriptions of such balls made with starch, gelatin, and bread. But fat is ideal. It (raw and unsalted!) is cut into pieces and rendered in a pan. The cooling, thickening fat is mixed with the grain mixture. Balls are formed by hand on a string and hung (or laid out, it doesn’t matter) in the cold to harden.

Using white bread (loaf) as a base, you need to add a little flour. A couple of tablespoons per pot is enough. Everything is mixed, and balls are formed the same way. I've seen descriptions that they even dry them (not fry!) in an oven or stove.



Mix the ingredients into a single mass.

But I didn’t see the need to dry them in the oven. Especially since with my large quantity at once, a very large oven is needed. I found it most convenient to hang the balls on a home clothes dryer, and place some underneath on a newspaper. They dried perfectly, both hung and laid out.



For the fat-based balls, I laid them out on sheets and took them out into the frost. But you can also hang them. Whatever is more convenient.

That's the whole process! Simple. I'll add that I transport the balls in a box so they don’t break. Hang them on branches, and that’s it. Snow isn’t a problem: if the birds don’t find them right away, it’s no big deal. They’ll find them later.











Part two. Why help birds at all?

Why birds are important for the forest

What is the exceptional significance of birds for the forest? And why do birds in a disturbed forest ecosystem require special support measures from humans?

I write, knowing there are few forest dwellers among the readers. So, I start with simple things. An experienced taiga dweller can skip them. A completely virgin taiga, untouched by human foot, can now be said to not exist. All forests are divided by clearings into a grid. In the south, these are squares of 500 m by 500 m. In the central regions, 1 km by 1 km. The Russian North and Siberia are mainly 1 km by 2 km, although in completely uninhabited places, there are 4-kilometer distances between clearings.

Probably, the entire center of our country, and even beyond the Urals up to Tomsk, was divided into forest plots even before the revolution. There, the side is not 1 km, but 1 verst, 1067 m. Everywhere, I don't know, but

out of curiosity, I measured several times. Indeed, it's a little more than a kilometer. But this is an insignificant difference in size, 67 meters. The average "square" of a forest plot, visually visible because it is bounded by clearings, is 1 by 1 or 2 km. 1 or 2 square km. 1 hectare is 100 by 100 meters. In 1 square km, there are 100 hectares. The grid of forest plots in our country divides forests into pieces of 100 and 200 hectares.

And now let's move on to the birds. In the manuals and scientific works that I have read in abundance, quantitative data is provided on how many birds inhabit a hectare of forest under normal conditions. In the Moscow region, for example, there are about 25 nesting pairs of approximately 15 species of birds. Data from different years, from the 19th century to the mid-20th, are roughly the same among all researchers. In the broad-leaved forests further south, even more. That is, on one forest plot, there should be from 2,500 to 5,000 different birds in a living forest! This is a colossal number!

The constant screeching, chirping, and birds flitting around you from place to place as soon as you enter the forest. None of that is there. I visit forests very often. In different regions. On the edges, near human settlements, and in remote, secluded areas. The number

of birds I see and hear is one of the first indicators I use to judge the condition of a forest area. Very rarely, in the most secluded places, do you feel an abundance of birds. In winter, you often enter a 'dead' forest: silence, not a sound around. You don’t hear birds flitting or woodpeckers tapping.

Just as a doctor can assess a patient's condition through a blood test by the number of immune bodies, the condition of a forest can be judged by the number of birds. And the conclusions are not encouraging. In cases of illness or infection, the number of immune bodies increases. The same is true in the forest. An increase in the number of insect pests means more food for birds, so the food supply has increased. There are more birds. An ordinary tit can raise chicks twice a year, and more chicks survive in broods when there is plenty of food. In one year, the number of birds can increase 4 to 5 times. They will peck all the pests, and the forest will recover.

But sometimes, with chronic, long-term illnesses, the number of immune bodies, after an initial surge, begins to decrease. The exhausted organism cannot cope. It is still fighting the infection, but it can no longer endure; resources are running out. The same thing is happening with the Russian Taiga everywhere, according to my observations. Even at a superficial glance, without

precise quantitative accounting, it is clearly visible. In all regions, both in Central Russia and Siberia. The number of birds described by researchers up to the mid-20th century is no longer there.

In those forests that I perceive as more "alive," where the bird chatter is noticeable, it's at least half as much. There are many forests where encountering a bird is rare, even in summer. The diversity of bird species is similar. Many you don't encounter at all. Or you do, but infrequently. Yet specialists and nature enthusiasts wrote about 70 years ago: "found in abundance," "large flocks."

Why is this happening? First, let's articulate what birds do in our forests, what their functions are in the integral living organism of the Russian Taiga.

— The main beneficial property of birds is, of course, the destruction of forest insect pests. Both insectivorous birds and those considered granivorous do this. This is a conditional classification. It takes into account the type of predominant diet. When there are many insects, during the period of feeding chicks, even granivorous birds actively peck at bugs and worms.

Moreover, according to averaged estimates by ornithologists, 80% of what they peck at is harmful. Birds don't choose; they gather all the insects available to them. They are simply an element of a system harmonized over millennia, with an established function of regulating the number of insects. Thanks to high metabolic rates and very dynamic regulation of the birds' own numbers, this "avian immunity" of the forest is also amazingly adaptive. A sharp increase in the number of forest pests causes an equally rapid increase in the number of birds.

Let me provide a quantitative example. In a day, a bird pecks at insects approximately equal to its own weight. A pair of common flycatchers, in feeding their chicks over a couple of weeks, gathers a kilogram to a kilogram and a half of insects from the surrounding trees. Average quantitative estimates by ornithologists suggest that one bird flies to the nest about 20 times an hour. A pair—that's 40 insects an hour, 600 insects during a notional 15-hour "workday."

— Ornithologists estimate (in the forests of Central Russia) that birds living on 1 hectare consume about 5 thousand insects per day. At the same time, they return about 3 kg of droppings to the forest daily. That's 1 to 2 centners (!) of organic fertilizer per hectare of forest per

season! 100 to 200 kilograms per hectare, which is quite a lot. Without birds, forest soils become depleted.

— A huge number of forest plant seeds are designed to germinate after passing through a bird's gastrointestinal tract. A bird eats a berry, the droppings fall a few kilometers away, and a new plant grows. Some birds hide nuts in the ground like squirrels. Later, they don't find them: essentially, they are deliberately planting them.

The importance of birds in the forest is hard to overestimate. Birds are the "forest immunity," a defense against the spread of pests. They also contribute to the formation of the soil layer in the forest and the distribution and planting of seeds over vast areas.

The reduction in the number and diversity of bird species across our forests, in my opinion, is currently underestimated by scientists. There's little research, and the public is completely unaware of this. While people have talked about mass deforestation before me, and at least someone knew about it, the mass degradation of seemingly "prosperous" forests has only been noticed by a few narrow specialists. I myself only started paying attention to this recently. As I became familiar with specialized literature, I began to understand that the

number of birds I observe is half (or more!) less than the data from ornithologists of the past century. And this is a symptom of the depletion of the entire Russian Taiga as a whole. Why is this happening?

— Mass industrial logging leads to the destruction of the entire biome as a whole. Formally, let's say 100 square kilometers of forest have been logged, and some cubic meters of timber have been harvested. But the entire biosystem in this area is damaged. The soil is even churned up by heavy tracked machinery. Like in the cartoon: "... stumps are only good for grandmothers..." But where are the birds supposed to go?!

— Even actual reforestation later, with the planting of seedlings, results in a forest of the same age. And, in the overwhelming majority, it's a monoculture. That is, for example, only spruce is planted, or only pine. In a living, natural forest, how is it? The trees are different: there are spruce, cedar, and birch. They are of different ages. There are old, rotting ones with hollows. And there are young shoots and shrubs in the lower tier. Birds have places to build nests. In planted forests, birds have nowhere to live. Only the areas along streams and rivers remain, which haven't been cut down.

— The growing number of landfills, which are encroaching further into the forests, leads to the poisoning of birds and the spread of infections. Birds don't follow hygiene rules. They peck at everything they find. They find garbage, they peck at it too. And they die, and carry the infection deeper into the forest. The forest area wasn't cut down, just a landfill nearby. There are fewer birds, caterpillars multiplied, and the forest was simply devoured. That's the process that happens.

— The very high mobility of birds was an adaptation to the planet's biosphere on a global scale. Migratory birds fly from continent to continent, but they stop somewhere along the way. The birds that winter with us move, flying from place to place for hundreds of kilometers. A flock flew many kilometers from their nesting place to a landfill, pecked at some moldy bread, and stayed there. There's no one left to return to their native Russian Taiga.

And in recent years, other global problems have started to "come to the surface," which inevitably lead to a colossal reduction in the number of birds in the Russian Taiga.

Let me tell you about them in chronological order:

1. Starting in spring, large-scale forest fires occur, and birds lose their offspring. Their young burn alive, and many adult birds also perish in the fires! Scientific data confirms that birds die en masse not only in the flames but also from the toxic gases of burning forests. Every year, millions of hectares of the Russian Taiga burn, but there is no record of the animals that die in the fires. The authorities say nothing about the birds at all.

2. After forest fires in recent years, a phenomenon called "false autumn" has been observed, where due to abnormal heat, forest harvests of mushrooms, berries, and nuts do not mature. The forest is dry, and water levels in rivers drop! Birds cannot stock up for the winter. The food supply is insufficient.

3. Some birds (migratory) fly south! Hungry, they land to rest on agricultural fields and die from thousands of tons of deadly poisons with which producers "fertilize" the fields. In the fall of 2022, tens of thousands of birds and other animals died in the fields, and we raised public awareness. Authorities urged not to punish businesses, claiming it wouldn't solve the problem! By the fall of 2023, the fields were again littered with animal carcasses.

4. Wintering (non-migratory) birds begin to prepare for winter. They have lost their offspring, lost part of their population, and have chronic illnesses from toxic gases. Some will fly to the fields to seek food and will die along with the migratory birds. Another part — forest birds — will search for food in the Russian Taiga. But the food supply is meager, and there is not enough sustenance. Many birds will perish.

I have described global processes. Are they solvable? Yes, they are solvable. First, we need to notice them and raise these issues. So that appropriate legislation is adopted, at the state level thereafter. Only then. Meanwhile, society is barely aware of this.

Am I exaggerating the scale of the problem? You can judge for yourself; it's noticeable with just a superficial observation. Look through books and research by specialists from the early to mid-last century, descriptions, and quantitative assessments of forest birds. Compare it with what you see when you go out into the forest.

Is this really important for a specific individual? For a Human — it is important. For 'economic animals,' obviously, it doesn't apply at all. We, humans, are persistently evaluated as 'workforce.' The Russian Taiga

is seen as a 'resource base' and 'exploitation forests.' Everyone wants to exploit something! This is the business approach, and it's an oversimplification. A person and society as a whole, like the forest, are not mechanisms but organisms. With such a technological approach, reducing the complex functions of a living organism to the primitive 'Henry Ford conveyor,' we fail to understand the essence of what's happening at all!

A living organism, a biological system, does not obey the laws of linear logic or mechanical rules. If a machine produces 10 parts in an hour, then in 24 hours it will produce 240 parts. But you can't apply this to a person! If a person produces 10 parts in an hour, then in 24 hours... they will simply 'shut down' because they need to eat and sleep.

My opponents write to me: the problems of deforestation are exaggerated. Suppose a million conditional units of taiga are cut down per year. We have tens of millions, enough for a hundred years and more will remain. A blunt transfer of a mechanical approach to an organism! Fundamentally wrong! Ecological pressure affects the entire system, the entire Russian Taiga. And by adding factors. Large-scale deforestation is just one of the important ones. We don't know at what point we'll be left with only crows among bird species. And then some

bark beetle will start destroying more forests than fires combined with logging do now. Moreover, there have long been precise mathematical models of such processes. Specialists know about them. Worse still, there are few such specialists, and those who make decisions in power and business are not biologist scientists, but specialists in squeezing money and artistic lying.

Biological processes actually occur catastrophically, not like a smooth elevator ride, but in steps. For a long time, nothing seems to happen with a chrysalis, and then suddenly, a butterfly emerges. But the internal processes in the chrysalis, though slow, are ongoing. They are noticeable if you know what to look for. The birds of the Russian Taiga, among others, are indicators of such processes now. This is not always clear to those unfamiliar with biological systems, especially since many people are not well-acquainted with the forest, being mostly city dwellers. But it can explode at any moment. This is reality, not an exaggeration. A whole range of signs indicates this, and these signs are increasing.

So what can one individual do? This is the second question my opponents constantly "troll" me with. "Well, fine," they say, "let's say the problem is real. But what can one person do about it?!" Again, the same mistake.

We are talking about the individual and society as a whole. It is not a mechanism, but an organism. What was the numerical ratio of forces between the 300 Spartans and the enemy army?! Yet they defended their homeland!

I have a guide on helping birds, so I will outline what any person can do:

— Pay attention to the small birds yourself first. And draw the attention of those around you to them. Whether it's my articles or others on the topic, reprint them. Let as many people as possible learn about the Russian Taiga and the small birds. I repeat, society is a living organism. There are even mathematical models of how such living systems work. When changes occur in them. We don't need 100% of people to know about this. Changes happen when the attitude towards the issue changes, say, among 10%. And the speed of spreading ideas in the modern world is higher. If once a messenger had to be sent from city to city, now everyone on Runet knows the news the moment it is published.

— Feeding birds and artificial nesting sites. If you can, do what you are able to. When I explained the global nature of the problem as a whole, it becomes easier to understand the importance of such actions, even if they

are individual. On one hand, if 100 people each make 1 birdhouse, that's already 100 broods of chicks. That's at least 500 new birds in the new year. (And 1000 birdhouses mean 5000 young starlings, that's correct! And even if the birdhouse isn't cleaned, that's still 5000 starlings annually for at least three years!) Something else is even more important.

I didn't understand this myself when I first started studying the issue! It seems that many common, widespread bird species are under threat, if not of extinction as a species, then certainly as a species in a specific area! These aren't "red-listed" species: even the most common types of tits, for example, are so few in number that they could completely disappear from a particular area. Preserving these last ones gives the entire population a chance to quickly recover when conditions improve.

From the author

Today, we are joining the work of the UNITED IMMUNITY OF THE RUSSIAN TAIGA. Our projects have been around for many years, and throughout these long years, we have been bringing people together and trying to stop large-scale ecological degradation. To influence global processes! To protect wildlife from destruction.

The more people participate, the faster changes will come. At the very least, we can slow down the process of exterminating living species, save those who need our help!



So let's do it! Gather, prepare the seed feeders, and it's time to protect the last inhabitants of the Russian Taiga. They have no one but us.



While millions of people sit and wait for changes, a few stand up and change the world with their own hands! And I am sincerely proud to have the honor of fighting for the Russian Taiga shoulder to shoulder with you: defenders of wildlife.

Always yours, Russian writer, researcher, MISSIONARY OF THE RUSSIAN TAIGA — Pavel Pashkov.

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