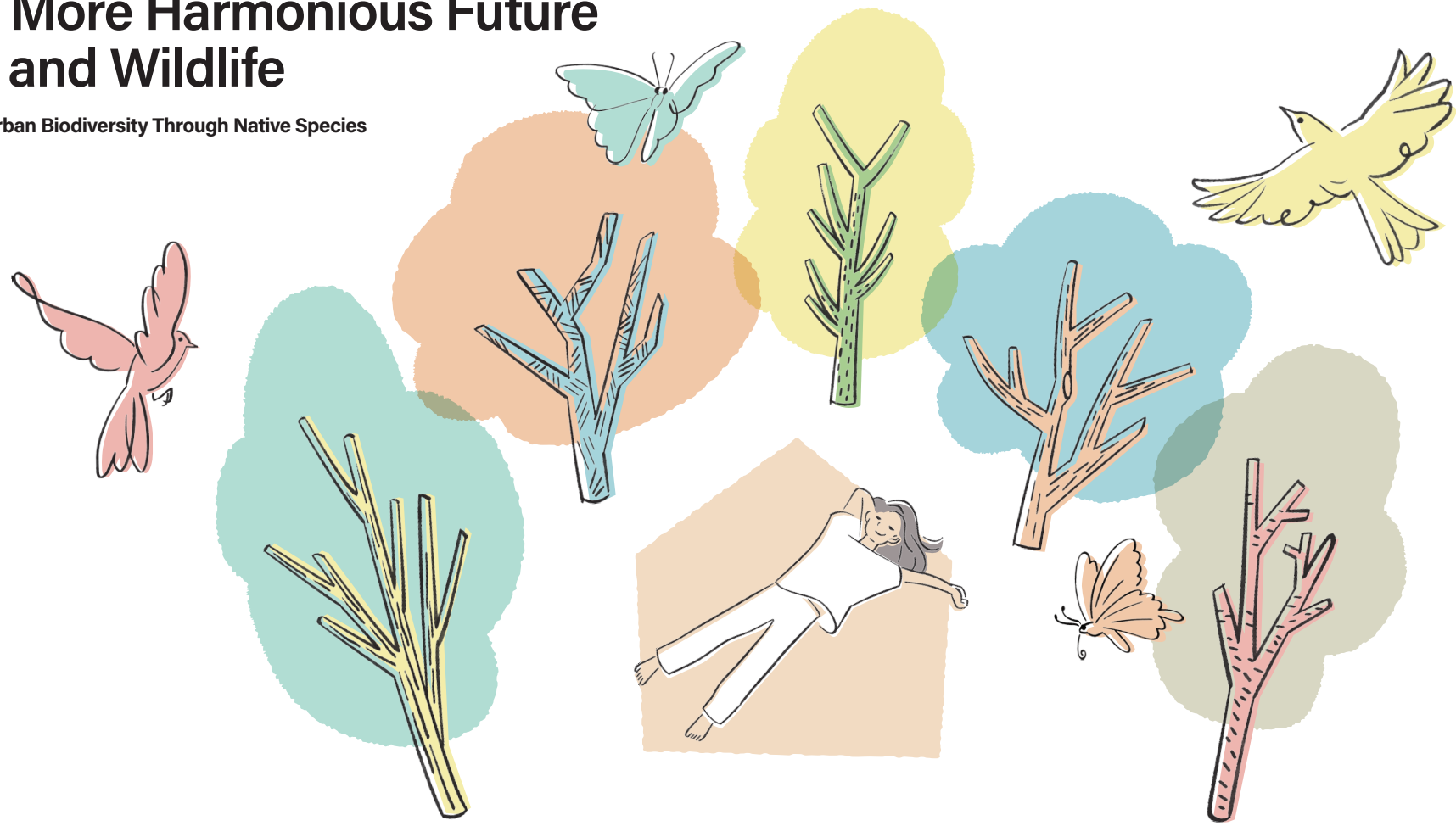
The *Gohon no Ki* Project: Creating a More Harmonious Future for People and Wildlife

— Initiatives to Restore Urban Biodiversity Through Native Species



SEKISUI HOUSE

Where Nature Meets Happiness
「5本の樹」計画

Guided by its philosophy of "Love of Humanity," Sekisui House has long sought to foster a connection between people and nature through homebuilding. As part of this effort, the company has been implementing the *Gohon no Ki* project since 2001.

Overview of The *Gohon no Ki* Project

The *Gohon no Ki* project was born from the idea of "planting native tree species for birds and butterflies." It is an initiative that aims to create an environment where wildlife, such as birds and butterflies, can thrive by focusing on planting trees native to the local area. This approach is modeled after Japan's traditional *satoyama*—areas where people and nature coexist. Today, this approach is being incorporated not only into the gardens of single-family homes but also into apartment complexes and urban planning, leading to initiatives that increase greenery and wildlife throughout Japan.

Background

With urbanization accelerating worldwide, natural habitats are dwindling. As a result, many species are finding it increasingly difficult to survive, making biodiversity loss a major global issue. At the same time, concepts like "Nature-based Solutions (NbS)"—which seek to solve societal challenges by harnessing the power of nature—and "Nature Positive," which aims to halt and reverse biodiversity loss, are gaining traction.

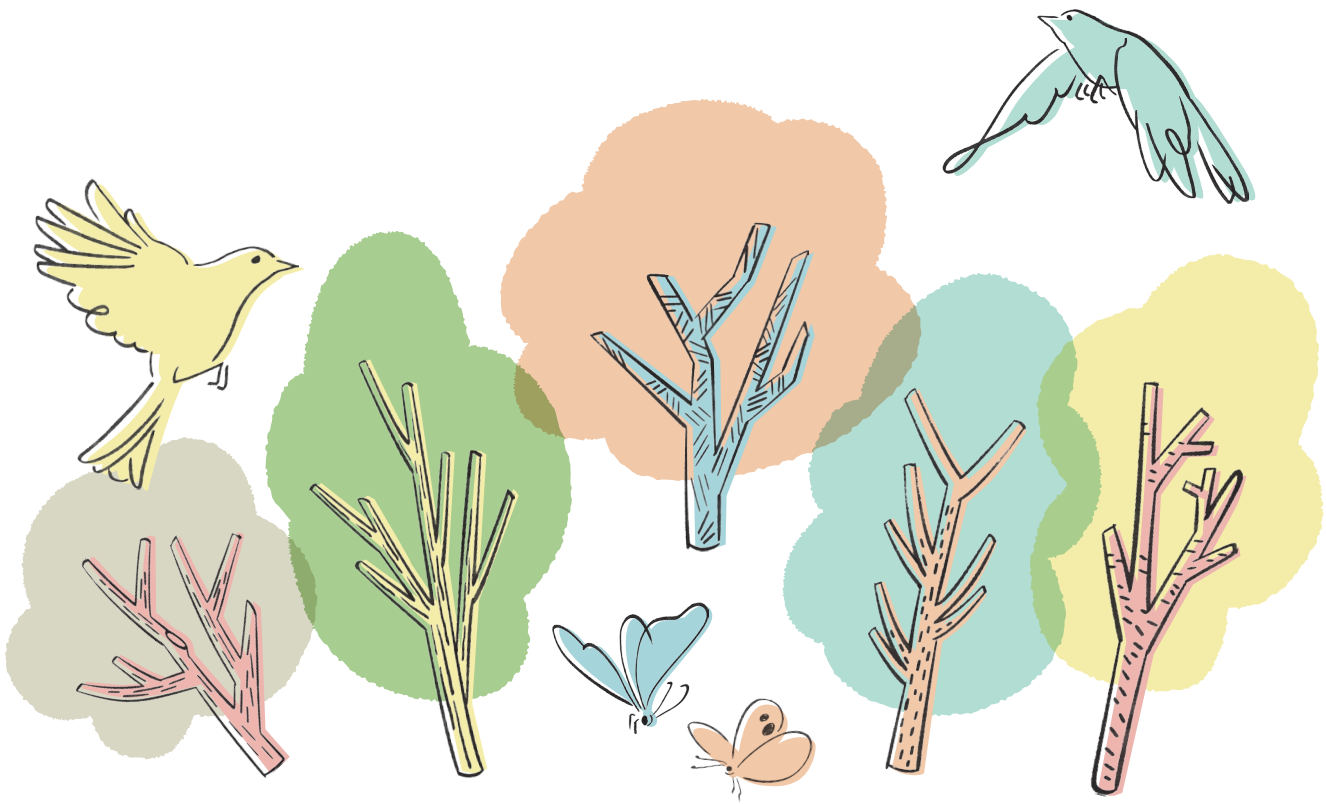
Purpose

Even before these concepts became widespread, the *Gohon no Ki* project has been working to bring nature back into our immediate living environments. It aims to revive the connections between native tree species and the diverse wildlife that depends on them within urban areas. Furthermore, this initiative emphasizes not only the "quantity of greenery" but also its "quality"—specifically, selecting the right plant species to maximize benefits for local fauna. By doing so, it seeks to balance biodiversity protection with a comfortable living environment for residents. Additionally, these small-scale efforts, rooted in the *Gohon no Ki* project gardens, are envisioned as a catalyst for a nature-positive society.

The Purpose of This Book

In this white paper, produced in collaboration with Think Nature, we scientifically examine the impact of the *Gohon no Ki* project while highlighting the societal benefits of bringing nature back into urban areas. We hope these insights inspire future efforts to create communities that truly coexist with nature.

Planting Native Tree Species for Birds and Butterflies



Sekisui House's *Gohon no Ki* project is a deeply valued initiative. It goes beyond simply building houses and planting greenery; it aims to create a "green network" that connects to the future.

The *Gohon no Ki* project is a garden- and community-building initiative that involves planting trees suited to the local climate and environment, based on the concept of "planting native tree species for birds and butterflies." By planting native species tailored to the region in our gardens, we create "a pocket of nature at home" that welcomes a variety of wildlife, such as birds and butterflies. Eventually, these private gardens will become an integral part of the local ecosystem, contributing to the creation of a rich and vibrant environment.

The greatest appeal of this initiative is its commitment to using *native Japanese tree species* that have long thrived in the wild. Japan stretches far from north to south, meaning that flora and fauna vary greatly by region. To address this, we divide the country into five climate zones and select trees best suited to each local environment. While visually striking non-native plants are certainly lovely, native species—perfectly adapted to the local climate—are more resistant to disease. More importantly, they provide a rich feast and a safe haven for local birds and butterflies. There is a unique joy in knowing that your gardens contribute to the region's "local ecosystem." This gently reminds us of the innate respect for nature we all possess.

Natural trees blend into the landscape and become beautiful over time. At Sekisui House, we call this "the beauty of aging." Just as children grow up, homes and gardens also mature alongside family memories. "The *Gohon no Ki*" is more than just a catchphrase—you can start with a single symbolic tree. A single tree planted in your garden will connect with the greenery of your neighbor's gardens and local parks, eventually growing into a vast "green network" where wild birds and butterflies come and go. Feel the changing seasons firsthand from the comfort of your home, and let the presence of living creatures soothe your soul. Why not embrace this harmonious way of life today?

A small yet significant step that brings rewarding changes to both our daily lives and nature

Why Focus on Birds and Butterflies? Three Key Reasons

1 It serves as a measure of nature's richness

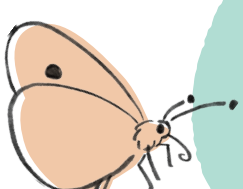
Birds and butterflies are very delicate creatures; if their surroundings change, they can no longer live there. For them to thrive, they need a steady supply of plants, insects, and places to build nests. Birds, in particular, feed not only on plant seeds but also on the insects that gather there. When many birds and butterflies gather in a garden, it's proof that the plants and tiny insects supporting them are thriving right at your feet —and that everything is interconnected.

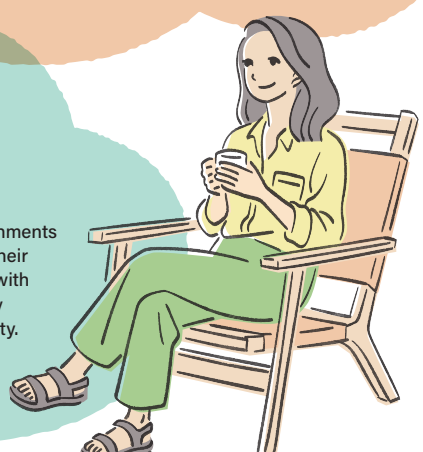
2 It makes the effects of natural restoration easy to understand

When it comes to increasing nature in urban areas, there is the difficult problem of "limited land." Even when new green spaces are created, it usually takes a long time for wildlife to gather there. However, since birds and butterflies have wings and can fly long distances, they can quickly find and make their way to even small patches of greenery created in the corners of the city. When it comes to determining whether new green spaces are truly benefiting wildlife, birds and butterflies are arguably "the creatures for which the effects are most visible."

3 It has benefits for mental well-being

Recent studies have shown that the more people live in environments where they see birds and butterflies every day, the better their mental health tends to be. Because birds and butterflies—with their flight and sound of birdsong—are easily noticed by everyone, they serve as a powerful bridge to the community. When launching green initiatives, focusing on these creatures makes it much easier to gain the support and cooperation of local residents, helping them recognize the value of nature in their daily lives.





Birds and butterflies are familiar to us all. In the scientific community, they are also recognized as *important barometers* for measuring the richness of the natural environment.

What are Proxy Indicators, Nature's Barometers?

Even with modern science, it is nearly impossible to observe every aspect of vast natural environments. Consequently, monitoring specific groups of organisms to estimate a region's overall biodiversity is known as using a proxy indicator. By observing birds and butterflies together—each playing distinct roles in nature—we can detect environmental changes with much greater detail and accuracy.

The Bird's-Eye View and the Butterfly's Focus: Broad vs. Microscopic Perspectives

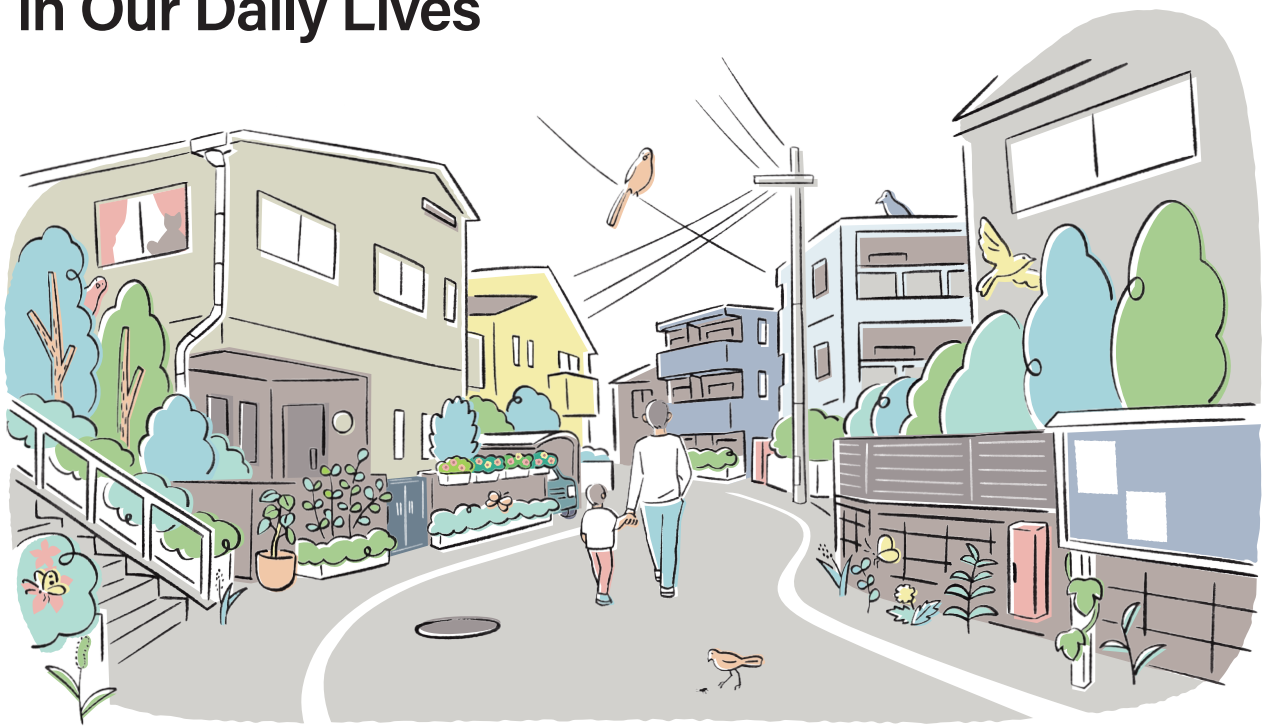
While both creatures fly, they respond differently to environmental changes. Birds can travel long distances; their population and diversity fluctuate based on the volume of greenery across a wide area (from 1 km to 10 km), meaning they reflect regional ecosystem health. Conversely, butterflies have a limited range. They reflect environmental quality in a much more localized, pinpoint manner, down to the specific plant species in a single garden. By observing both, we gain a comprehensive view—capturing everything from the large-scale balance of nature to the subtle changes right at our feet.

The Science Behind the Healing Power of Living Things

Many people have likely experienced a sense of calm upon seeing lively creatures. Among these, organisms that are easily observed in daily life—such as birds and butterflies—are believed to play an important role. For example, studies of urban residents have reported that seeing birds or hearing their songs increases positive emotions in the moment and reduces anxiety and stress.[3] In other words, biodiversity has the potential to immediately enhance people's well-being in their daily lives. Furthermore, in recent years, evidence has begun to emerge that the accumulation of these momentary psychological effects is also linked to longer-term mental health. For example, a study conducted by Sekisui House and the University of Tokyo found that residents whose gardens were planted primarily with native tree species observed birds and butterflies more frequently, correlating with a reduction in depressive symptoms.[4] These results suggest that biodiversity not only has a temporary impact on people's moods and emotions but may also contribute to the maintenance of long-term mental health. Therefore, the maintenance and creation of urban ecosystems starting with garden plantings holds significant importance not only for biodiversity conservation but also from the perspective of promoting people's health.

1. Hunter et al. (2016). Two roles for ecological surrogacy: Indicator surrogates and management surrogates. Ecological Indicators, 63, 121–125.
2. Blair (1999). Birds and Butterflies Along an Urban Gradient: Surrogate Taxa for Assessing Biodiversity? Ecological Applications, 9, 164–170.
3. Hammoud et al. (2022). Smartphone-based ecological momentary assessment reveals mental health benefits of birdlife. Scientific Reports, 12, 17589.
4. Soga et al. (2025). Noticing nearby wildlife at home is associated with enhanced mental health and pro-conservation attitudes. Biological Conservation, 311, 111436.

The Importance of Urban Green Spaces and the Value of Engaging with Green Spaces in Our Daily Lives



Cities are full of buildings and roads, and they may seem like places where it's hard for living things to thrive. However, that land was originally rich in water and nature, making it a place where living things could thrive. Although nature diminishes as cities expand, *green spaces close to home*—such as parks and trees in gardens—remain important habitats for living creatures even today. Green spaces are also beneficial to people. They help alleviate the heat, help manage heavy rainfall, and calm our minds. Therefore, increasing the number of small green spaces within the city is very important for both living creatures and people to live comfortably together.

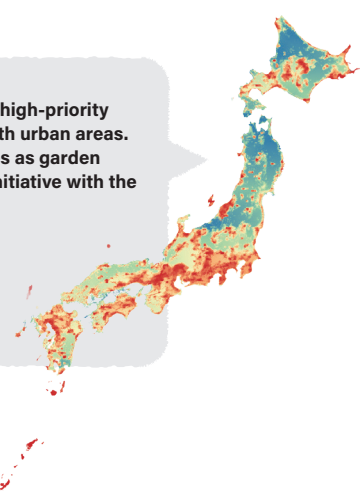
Do People and Wildlife Prefer the Same Prime Locations?

Throughout history, humans have established cities in lowland areas with mild climates and an abundance of water. In fact, these same areas are ideal habitats where plants thrive and where wildlife—such as birds and butterflies—would naturally find the richest resources and the most comfortable living conditions. When we analyze Japan's original natural environment using empirical data, we find that major urban centers substantially overlap with the areas that should be prioritized for wildlife conservation.[1]

Put another way, this reflects a harsh reality: the very places most critical to our ecosystems have been covered in concrete due to urban development, robbing wildlife of their homes.

When we think of nature conservation, we often imagine protecting remote, untouched wilderness. However, for the sake of wildlife, the places where we can restore the most nature—the places with the greatest potential to truly enrich nature—are not deep in the mountains, but right here in the cities where we live.

Many of the areas designated as high-priority for conservation (red) overlap with urban areas. Therefore, Planting native species as garden trees in our communities is the initiative with the greatest impact



1.Lehtomäki et al. (2019). Spatial conservation prioritization for the East Asian islands: A balanced representation of multitaxon biogeography in a protected area network. Diversity and Distributions, 25, 414–429.

Through Moving Wildlife, Small Patches of Greenery Weave a Vast Natural Landscape

One area isn't enough

A single small patch of greenery isn't enough to provide birds and butterflies with the food and habitat they need to survive, which causes them trouble.

Building a home for nature in our garden

We can't restore all of nature to the vast expanses it once was. However, if we can create many small green spaces (such as gardens and parks) within the city and "connect" them—forming a network—they will become a vast home for many living creatures.

With more gardens, they can move freely

If there were many gardens throughout the cities, living creatures would be able to move from garden to garden and live in various places.

The Total Area and Connectivity of Small Urban Green Spaces Are Key

A city can be defined as an environment in which the original natural landscape has been modified to make it more convenient for human habitation. In cities, habitats suitable for living organisms are either largely lost or fragmented into small, isolated patches. However, even in such environments, numerous organisms inhabit urban parks, street trees, and plantings.

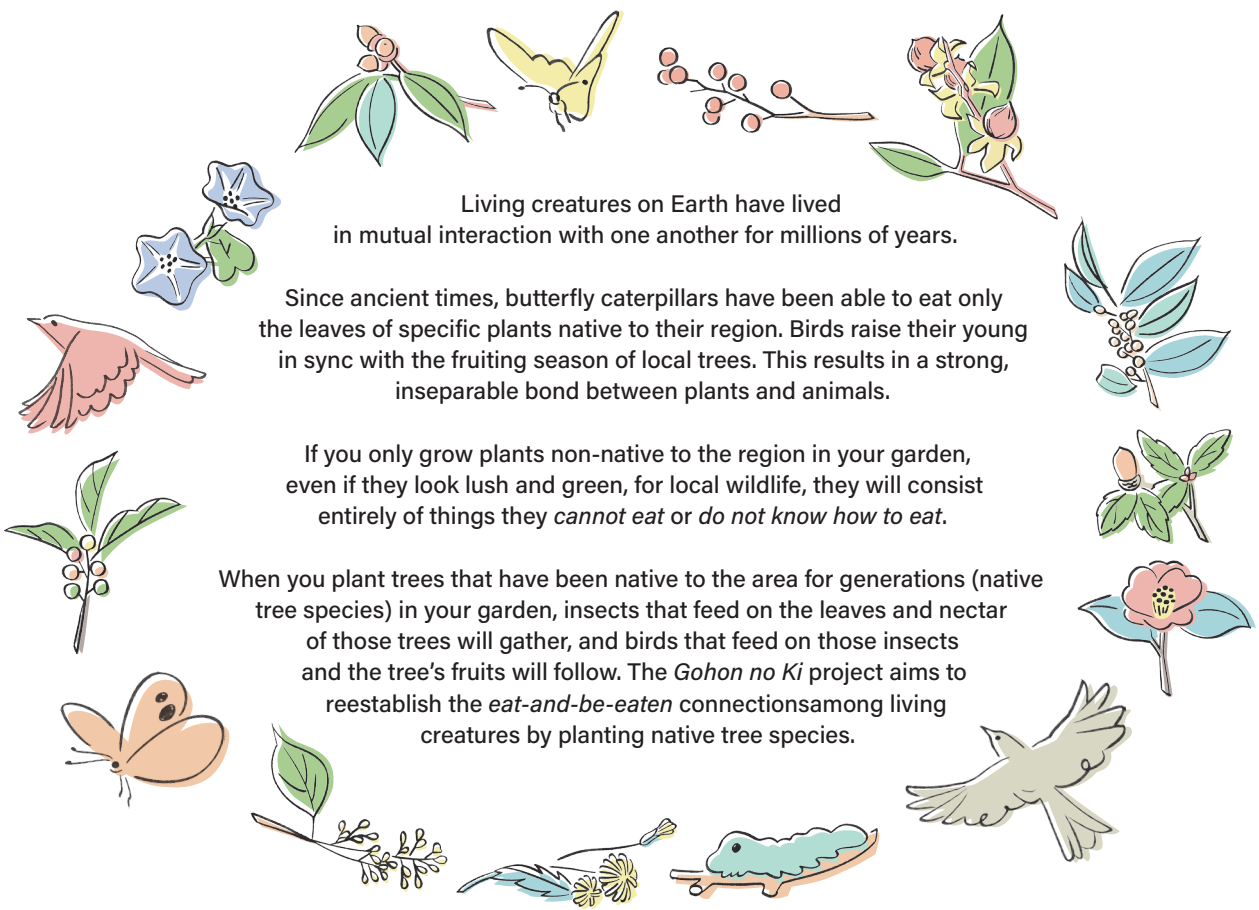
One of the most important relationships for quantitatively assessing biodiversity is the *species-area relationship*. This theory was developed based on biological survey data collected from various locations and dates back as far as a 1921 study.[1] The theory regarding area and species richness was formulated as a fundamental principle for understanding island biodiversity—namely, that *larger islands support more species*—and has since been applied to *island-like* environments such as fragmented green spaces within cities.

Today, the simple relationship—that more species are recorded in larger areas—is recognized as robust scientific evidence. For example, it is known that in parks around the world, the larger the green space, the greater the number of bird species inhabiting it.[2] This can be understood as a universal rule: increasing the amount of green space creates an environment capable of supporting more species.

When considering urban nature, the role of small gardens is crucial. While it is difficult to create new, large parks capable of supporting a large number of living organisms, increasing the number of residential gardens and small parks can boost the total area of urban green space. Furthermore, scattered green spaces serve as corridors that facilitate the movement of organisms. The effect that the total amount of green space across an entire city and its connectivity have on the restoration of biodiversity has also been scientifically confirmed.[3,4]

1. Arrhenius (1921). Species and Area. The Journal of Ecology, 9, 95.
2. Leveau et al. (2019). A global consistent positive effect of urban green area size on bird richness. Avian Research, 10, 30.
3. Beninde et al. (2015). Biodiversity in cities needs space: A meta analysis of factors determining intra urban biodiversity variation. Ecology Letters, 18(6), 581–592.
4. Ohlmann et al. (2024). Assessing mutualistic metacommunity capacity by integrating spatial and interaction networks. Theoretical Population Biology, 156, 22–39.

Passing on the Connection of Native Species to the Future



Living creatures on Earth have lived
in mutual interaction with one another for millions of years.

Since ancient times, butterfly caterpillars have been able to eat only the leaves of specific plants native to their region. Birds raise their young in sync with the fruiting season of local trees. This results in a strong, inseparable bond between plants and animals.

If you only grow plants non-native to the region in your garden, even if they look lush and green, for local wildlife, they will consist entirely of things they *cannot eat* or *do not know how to eat*.

When you plant trees that have been native to the area for generations (native tree species) in your garden, insects that feed on the leaves and nectar of those trees will gather, and birds that feed on those insects and the tree's fruits will follow. The *Gohon no Ki* project aims to reestablish the *eat-and-be-eaten* connectionsamong living creatures by planting native tree species.

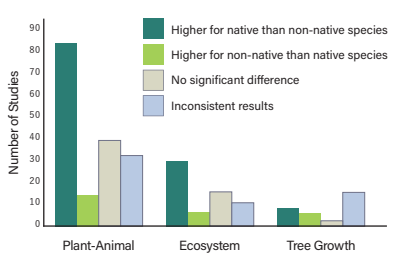
The Importance of the Connection to Native Species

When it comes to urban greening, simply increasing the number of trees or planting visually appealing non-native species will not bring back a rich natural environment. The key to restoring ecosystems lies in the *interconnections among living organisms* facilitated by *native tree species* (plants that are indigenous to the area). Over tens of millions of years of evolution and dispersal, the organisms inhabiting any given region develop close interdependencies with the local environment and other living beings.[1] For example, butterfly caterpillars can only feed on the leaves of specific plants that have long been native to the region, and birds raise their young in sync with the fruiting season of local trees. As a result, there is a strong, inseparable bond between plants and animals.

The *Gohon no Ki* project is an initiative to reestablish these natural feeding relationships among living creatures by planting native tree species. Using diverse environmental data—such as local climate, topography, and observational data—we select native tree species that will most effectively benefit the birds and butterflies native to that area. Furthermore, by offering residents a choice their preferred native tree species from a list, we prevent the entire town from ending up with uniform plantings.

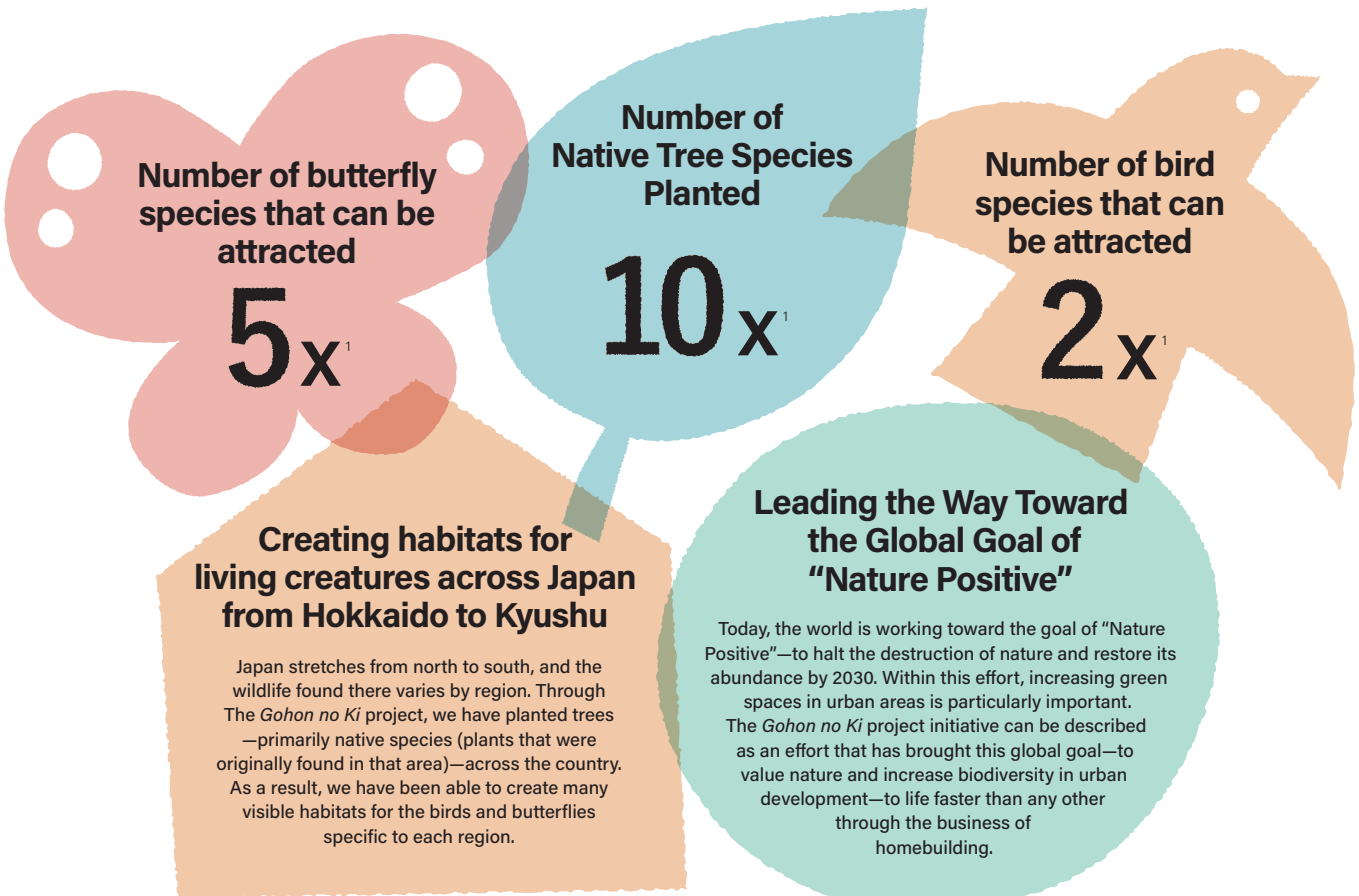
Planting various native tree species in everyone's gardens creates habitats for a diverse range of living creatures. As these connections link together throughout the town, a vast "network of life" is formed across the entire city.

The more native tree species there are, the easier it is for a diverse range of living things to thrive, and the more we benefit from a truly flourishing environment.



1. Cornell & Harrison (2014). What are species pools and when are they important?. Annual Review of Ecology, Evolution, and Systematics, 45, 45-67.

Planting 21.43 Million Trees: Our 25-Year Journey Since 2001



The *Gohon no Ki* Project's Proven Impact on Biodiversity Restoration

Evaluation Methods

Since field surveys are subject to time lags in species establishment and are easily influenced by chance factors, we conducted this evaluation using a *prediction model* based on reliable data. We selected *birds* and *butterflies*—species that are sensitive to environmental changes and familiar to people—as indicators. First, we used a statistical method called *species distribution modeling* to predict the species that could naturally inhabit each 1-kilometer-square grid across the country. We then integrated this with planting data for each property (tree species, number of trees, and mature canopy area) and data on how birds and butterflies utilize those trees (e.g., for foraging) to calculate the change in the "habitat area" available to wildlife.

Visible Results

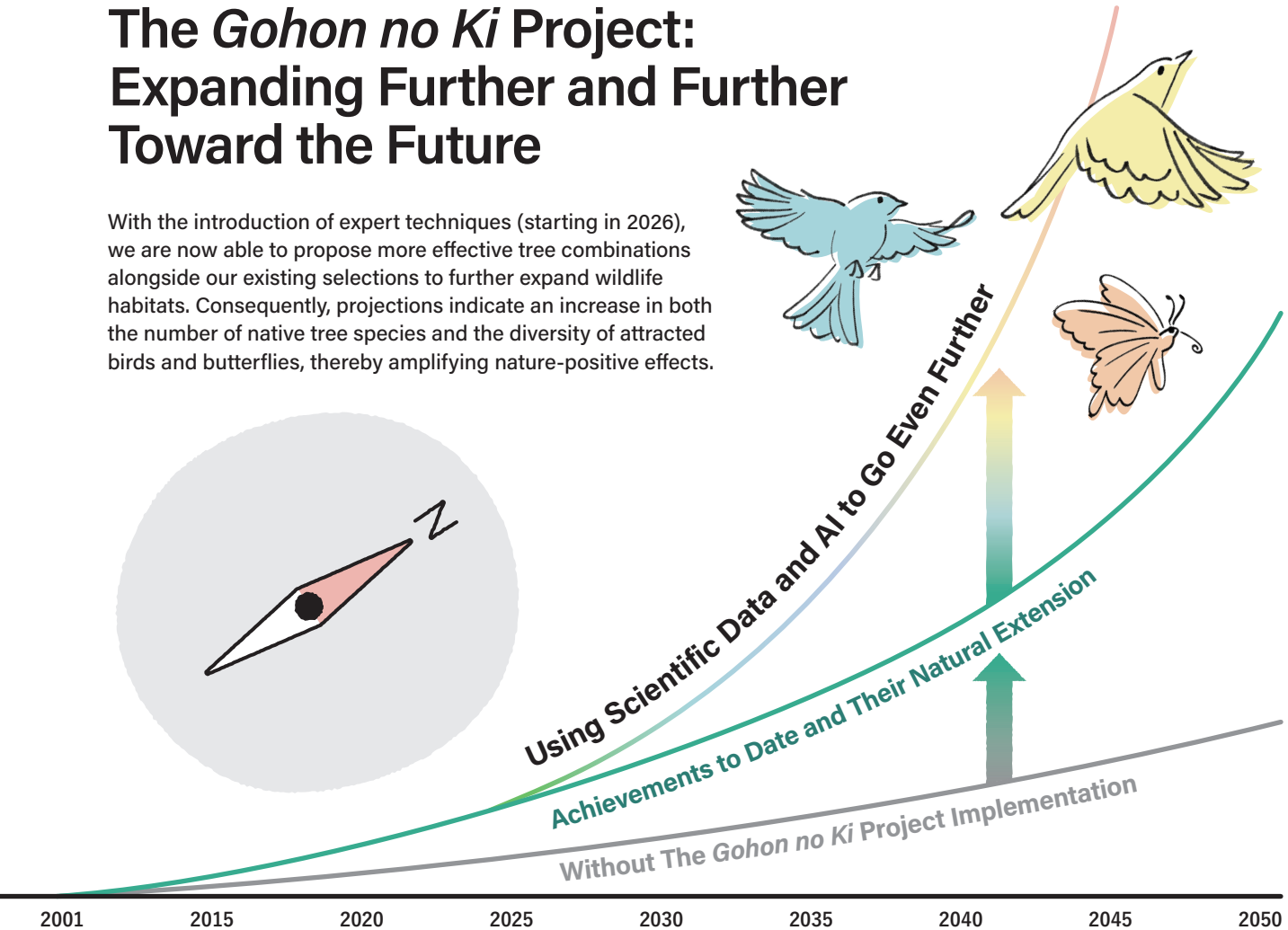
On March 1, 2026, the *Gohon no Ki* project celebrated its 25th anniversary. Thanks to the support of customers nationwide, the cumulative number of trees planted has reached 21.43 million[2]. We have found that the initiative continuously restores biodiversity in urban areas where green spaces are declining. Furthermore, a comparison of actual properties[3] before and after construction revealed that while the total green space area within the site decreased by an average of 17% due to construction, the functional habitat area for birds and butterflies achieved a net increase of approximately 20%. This success is the direct result of carefully selecting native tree species designed to attract local wildlife.

This assessment scientifically proves that the reduction in the absolute amount (area) of green space resulting from development is fully offset—from a biodiversity perspective—by planting high-quality, native tree species that attract birds and butterflies.
Consequently, this approach makes a significant contribution to creating urban wildlife habitats, achieving a measurable net-positive impact.

1. This calculation estimates the difference as of 2025, based on the assumption that only classic garden trees commonly used before The *Gohon no ki* project began were planted, and that the number of trees planted per property was low.
2. As of January 2026
3. 282 units of our properties, selected at random by location and time period

The *Gohon no Ki* Project: Expanding Further and Further Toward the Future

With the introduction of expert techniques (starting in 2026), we are now able to propose more effective tree combinations alongside our existing selections to further expand wildlife habitats. Consequently, projections indicate an increase in both the number of native tree species and the diversity of attracted birds and butterflies, thereby amplifying nature-positive effects.



The Potential of The *Gohon no Ki* Project

As the global population grows and as populations concentrate in cities, urban green spaces continue to decline.[1] Consequently, extreme heat—such as the urban heat island effect—and biodiversity loss are becoming increasingly severe. This crisis is not limited to Japan; it is shared worldwide. Against this backdrop, the trees planted in cities through the *Gohon no Ki* Project do more than just bring wildlife back; they provide significant benefits to our daily lives. For example, the lush shade of native tree species and the moisture released by their leaves play a major role in mitigating urban heat and protecting people's health.[2] Furthermore, it has been shown that the sound of birdsong and the presence of wildlife soothe residents' minds, enhancing their overall happiness and well-being.[3]

To further enhance and ensure these natural benefits, Sekisui House has developed a new digital tool called *The Gohon no Ki Compass*. This system combines wildlife food resource data with native species distribution maps to determine the exact combination of trees that will maximize benefits for local wildlife. By adopting this technology, we will further enhance the quality of our The *Gohon no Ki* project, which has been designed with the ecosystem in mind, and accelerate our nature-positive efforts.

Planting native tree species with the limited space of a residential garden to revive nature ultimately protects the people who live in the city. This approach is a universal principle that can be implemented anywhere in the world, simply by selecting trees native to each specific region. What if this concept of reconnecting cities with their original natural environments were to spread across the globe? Global environmental challenges would be alleviated, and cities worldwide would be transformed into vibrant spaces where both people and wildlife can thrive together. This idea, born in Japan, holds immense potential to support the future of our planet.

1. United Nations (2025). World Urbanization Prospects 2025: Summary of Results. UN DESA/POP/2025/TR/NO.12. New York: United Nations.
2. Iungman et al. (2023). Cooling cities through urban green infrastructure: a health impact assessment of European cities. The Lancet, 401(10376), 577-589.
3. Hammoud et al. (2022). Smartphone-based ecological momentary assessment reveals mental health benefits of birdlife. Scientific reports, 12, 17589.