Tokyo Biodiversity Strategy for 2030 [Summary]

The strategy for the conservation and sustainable use of Tokyo's biodiversity based on the Basic Act on Biodiversity.
Areas covered: Tokyo metropolitan area, including portions of neighboring prefectures, related areas, etc., as needed.
Plan period: FY2022 - FY2030

The Blessing of Biodiversity

Biodiversity refers to the way that living organisms with distinctive characteristics connect directly and indirectly while thriving in different environments. Biodiversity is essential for supporting human life. The benefits of biodiversity are called "ecosystem services", and are classified into four categories.

Provisioning Services

Supply the resources needed for our daily lives, such as food, wood, water, and medicine

Regulating Services

Bring about a safe environment by adjusting the climate, reducing heavy rain damage, and purifying water

Cultural Services

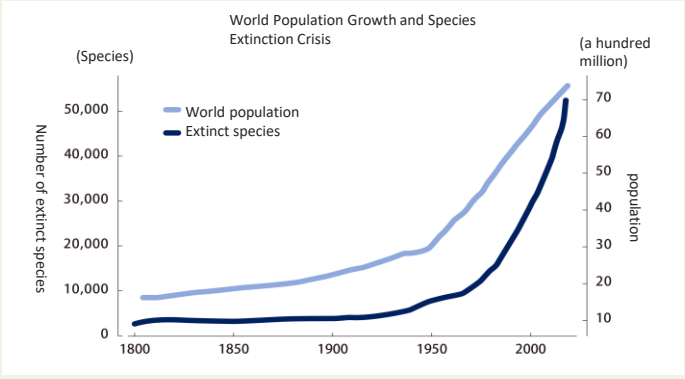
Provide artistic and cultural inspiration, educational effects, and peace of mind through contact with nature

Supporting Services

Serve as the basis for the survival of life, which provides oxygen generation by photosynthesis, soil formation, and nutrient cycling

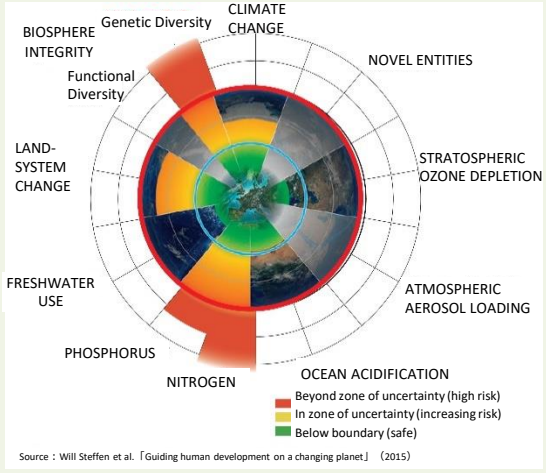
Rapid Loss of Global Biodiversity

The extinction rate is deviating from the natural baseline rate due to the impact of human activities.



Planetary Boundaries

The diagram on the planetary boundaries an example method for assessing the impact of human activity on the Earth's system.
Of the various items related to global changes, the genetic diversity is considered to be at a critical level.



If this situation continues, **we are in danger of losing the services provided by biodiversity that are essential for human life**

The Domestic and International State of Biodiversity

Corporate activities changed by the flow of money

- The biodiversity crisis is beginning to be recognized, and **momentum for biodiversity conservation is growing among corporations and financial institutions around the world**.
- Global trend towards recognizing ESG investment, TNFD, SBT4N, CDP, and other corporate initiatives that consider and contribute to biodiversity.

Post-COVID-19 Society and Biodiversity

- Severe environmental destruction is creating more opportunity for contact with wild animals carrying unknown pathogens according to UN report
- Must **rethink the relationship between people and nature** for a post-COVID-19 society (Example: One Health Approach).

Aichi Targets Progress

- In the 5th edition of the Global Biodiversity Outlook (2020), the COP10 Aichi Targets (2010) were harshly evaluated, stating that **none of the 20 individual targets had been fully achieved**.

COP15 and National Trends

- October 2021: COP15 Part I convened (Kunming, China)
  ⇒**Kunming Declaration "Putting Biodiversity on the Path to Recovery"**
- December 2022, COP15 Part 2 was held (Montreal, Canada)
  ⇒**"Kunming-Montreal Biodiversity Framework"** was adopted.
- March 2023, **National Biodiversity Strategy 2023-2030** was formulated.

Tokyo's Biodiversity Challenges

First Crisis: Human activity

- Deforestation due to development, decrease of farmland, tidal flats, shallow areas, etc.
- Impact on global forest and fishery resources through consumption and procurement in Tokyo

Second Crisis: Reduced care afforded to the natural environment

- Deterioration of ecological balance due to abandonment of forest and agricultural land management
- Crop damage caused by an increase in wildlife such as deer due to a decrease in the number of hunters, etc.

A wild boar that has come down to a human village

Third Crisis: Things brought in by humans

- Predation of native species and negative impacts on ecosystems by invasive alien species
- Marine plastic waste and chemicals negatively impacting both wildlife and the environment

Fourth Crisis: Changes in the global environment

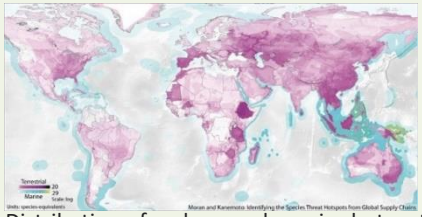
- Species are redistributing and extinction risks are increasing due to rising temperatures

Drought causing decreased crop production

Indirect Factors

- Social changes related to demographics, industrial structure, institutions, etc.
- Changes in people's values and behaviors

Studies show that agricultural products and timber consumption in Japan is tropical rainforests shrinking by 2,158㎢ (≒ the size of Tokyo) per year.



Distribution of endangered species hotspots threatened by consumption in Japan

Biodiversity is irreplaceable, created over long spans of time, but nature can also be a threat to humans.
Tokyo's role as a metropolis is to take into account global biodiversity in order to continue receiving biodiversity's services

Tokyo in 2050

Basic Philosophy

Respect nature, consider sustainability on a global scale, and aim for an environmentally symbiotic, prosperous society that will continue to benefit from biodiversity

The Future of Tokyo by Ecosystem Service

Supporting Services

A city full of luxuriant nature and living in harmony with creatures

Provisioning Services

A city that uses natural resources inside and outside it in a sustainable manner

Ecologically friendly green spaces will fill the city with living things brought back. Realize symbiotic living spaces and work environments environmentally with nature.

Products made in Tokyo will be sustainably consumed. The natural environment of Tokyo will be accessed in a sustainable manner. Sustainable economic activities with a low environmental load will be ensured when purchasing products from other regions.

The natural environment of Tokyo will be used as resources in a sustainable manner. The value of Tokyo's natural environment will be reassessed to take into account how it enriches people's lives by serving as a conduit of history and culture based on nature.

Resilient urban development will be in progress by making full use of the functions of nature, such as mitigation of the heat island effect through green spaces and alleviation of flood damage through rainwater infiltration and storage.

Cultural Services

A city that enriches life with the blessings of nature

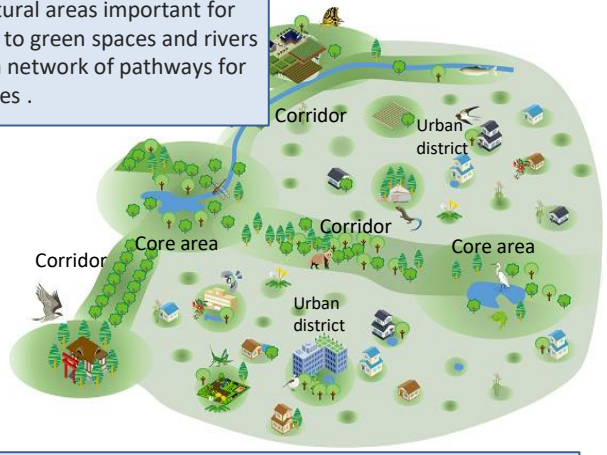
Regulating Services

A resilient city with the functions of nature

Tokyo's Unique Goals ①

[Conservation and sustainable use of biodiversity established throughout Tokyo]

Create an ecological network
Connect natural areas important for biodiversity to green spaces and rivers to provide a network of pathways for native species .



Improve urban green spaces
Improve the quality of small, urban green spaces such as parks, urban forests, farmland, private green spaces, and home gardens, and improve urban biodiversity.

Tokyo's Unique Goals ②

[Behavior changes in place taking account of biodiversity not only in Tokyo but also across Japan and on a global scale]

Behavioral changes on the metropolitan, national, and global level will lead to changes in consumption patterns, etc. which help promote the conservation and sustainable use of biodiversity and will result in Tokyo becoming a sustainable society.

2030 Targets for Realizing Tokyo's Vision for the Future

2030 Targets

Biodiversity will be put on a path to recovery by all entities that aim for an environmentally symbiotic, prosperous society, working together to promote the conservation and sustainable use of biodiversity. = Achieving a nature-positive framework

<Kunming-Montreal Biodiversity Framework>

2030 Mission

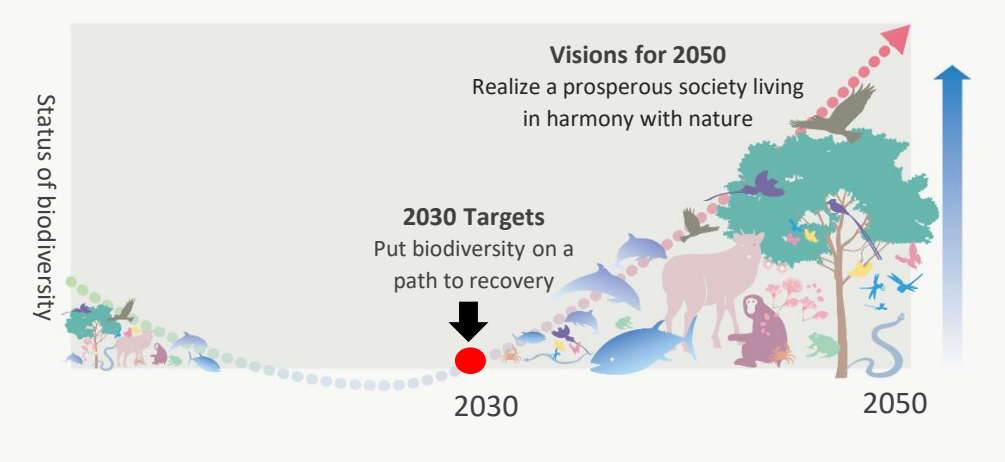
Urgent action to halt and reverse biodiversity loss to put nature on a path to recovery

Main Elements of the Global Goals

○ **Conservation goals**
- Conserve 30 per cent of land and 30 per cent of oceans by 2030
- Rehabilitate 30% of degraded natural areas
- Halve the abundance of invasive alien species

○ **Mainstreaming of biodiversity into businesses**
Enable businesses to submit impact assessments and information disclosures

○ **Nature-based solution (NbS) goals**
Utilize nature's regulating powers to mitigate disasters, etc.



<Image of achieving a nature-positive framework>

- ✓ Contributions to the Global Goal for Nature and behavioral changes that help address global issues are both necessary to continue benefitting from biodiversity
- ✓ Collaboration among not only government agencies but from a variety of actors including citizens, businesses, private organizations, educational and research institutions, etc. is essential

Three Basic Strategies to Achieve the 2030 Targets

Ⅰ Promoting the conservation and recovery of biodiversity, handing down the luxuriant nature of Tokyo to future generations

Ⅱ Using the blessings of biodiversity in a sustainable manner, utilizing the functions of nature to improve the lives of Tokyo residents

Ⅲ Recognizing the value of biodiversity, changing that idea into actions that address global issues as well as those in Tokyo

Policies for Each Basic Strategy

Basic Strategy I Policies

Biodiversity upgrade areas 10,000+

We aim to designate 10,000+ ha of land as biodiversity conservation areas (“Biodiversity upgrade areas”) where we will maintain and improve the habitats of living creatures and ecosystem services by conserving and managing natural areas, increasing the amount of greenery, and opening new parks and urban green spaces. We consider private sector engagement a plus (+), and will be looking to work with a variety of actors.

Dense artificial forests that don’t receive sunlight

Properly managed forests

Zero wild extinction action

By 2030, efforts will have been made in collaboration with a variety of actors to conserve and restore declining wildlife so that no species will become extinct in the wild.

Basic Strategy II Policies

Promotion of Tokyo-NbS Action
～Tokyo as a city supported by nature～

A variety of entities, such as the administration, businesses, and private organizations, will promote efforts that will lead to nature-based solutions (NbS). Entities have until 2030 to implement NbS initiatives.

■ Nature-based Solutions (NbS)

Solutions that work with nature to address societal challenges, providing benefits for both human well-being and biodiversity.

Example: Natural disaster risk

NbS Strengthen disaster mitigation with green infrastructure

Increase groundwater retention and reduce storm water runoff by adding green space, harvesting rainwater, using infiltration facilities, etc.

Help reduce the risk of natural disasters

Basic Strategy III Policies

Biodiversity Actions Taken by All Tokyo Residents
～Individual’s Actions Change Society～

All Tokyo residents will consider and contribute to biodiversity by participating in conservation activities and modifying their consumption patterns. Businesses, private organizations, and all other entities will also be expected to promote initiatives that contribute to the preservation of biodiversity.

■ Metropolitan Government Survey (2020)

Q: “What do you do on a daily basis for the environment or wildlife?"

10.7% answered “Nothing in particular”

We aim to get this number to zero

Participate in conservation activities

Select environmentally friendly products

10 Action Policies

- Conservation of local ecosystems and habitats for a variety of fauna
- Conservation of rare wild fauna and flora, and measures for alien species
- Building appropriate relationships between humans and wild animals
- Collection, storage, analysis and dissemination of information on the natural environment
- Use of Tokyo’s natural bounty (provisioning services)
- Use of functions of nature to encourage disaster preparedness and mitigation(regulating services)
- Use of nature to ensure a comfortable and enjoyable life (cultural services)
- Promotion of understanding of biodiversity
- Development of human resources to support biodiversity
- Behavior change which will consider and contribute to not only the environment of Tokyo but also the global environment