



Meguro City Regional Biodiversity Strategy

A Cycle of Lives Supporting One Another: Plan for Developing A Town Wild Birds Can Inhabit



March 2014



Meguro City



Our town

Towards Meguro, the city where close nature is conserved and handed down to the future

Our lives are supported by the benefits of nature that are brought about by the biological diversity, and yet recently the degradation of biodiversity has been progressing on a global scale.

In Meguro City, as exemplified by the fact that some living organisms have never been observed as before during the last 20 years or so, nature has been constantly changing. While at the same time, researches on wildlife in the city conducted by citizens and experts show that to my surprise, as many as nearly three thousand species live in our surroundings. What's more, it is reported that a new species of insect has been found lately in Komaba Campus of the University of Tokyo. As this discovery indicates, even in urbanized Meguro City, there remains the environment where living things can live in our close neighborhood.

This plan, "A Cycle of Lives Supporting One Another; Plan for Developing A Town Wild Birds Can Inhabit", has just been formulated after serious discussions for two years with participation by many local residents of all ages. In 2012, a popularity poll by the citizens named "Our Choice of 80 Creatures of Meguro" was conducted in commemoration of Meguro City's 80th anniversary. Thanks to the poll with 4,433 votes, we can grasp the present situation of familiar wildlife living close by us. Besides, in the process of formulating this plan, we received many opinions from local residents through the related opportunities such as the nature watching events in the parks, "Meguro School on Living Things", an event for inviting public comments on the plan, etc.

In these events for nature watching, after I observed personally that children with their eyes wide-open, were excitedly chasing after grasshoppers and butterflies, and gingerly tried to touch bugs, once again I became to be truly confident of the importance of coming in touch with nearby nature. It is my view that so-called "formative experience" and "primal scene" of the childhood of each of us all will make our minds richer, and will nurture the minds to respect life and nature. For the children of the future, we have to conserve nearby nature, and hand down affluent biodiversity to the future generations.

This plan is, as it were, a can for the future packed with useful hints that are available for us to do for the benefits of the future of all living things, humankind, and the Earth. It would give me great pleasure if you would open this can, and cooperate with us for the future of Meguro City, by starting to try to conserve the small nature around you.

Lastly, I would like to extend my sincerest gratitude to all those concerned who have dedicatedly cooperated in formulating this plan.

March, 2014

While listening to the song of a great tit,
Eiji Aoki
Mayor of Meguro City



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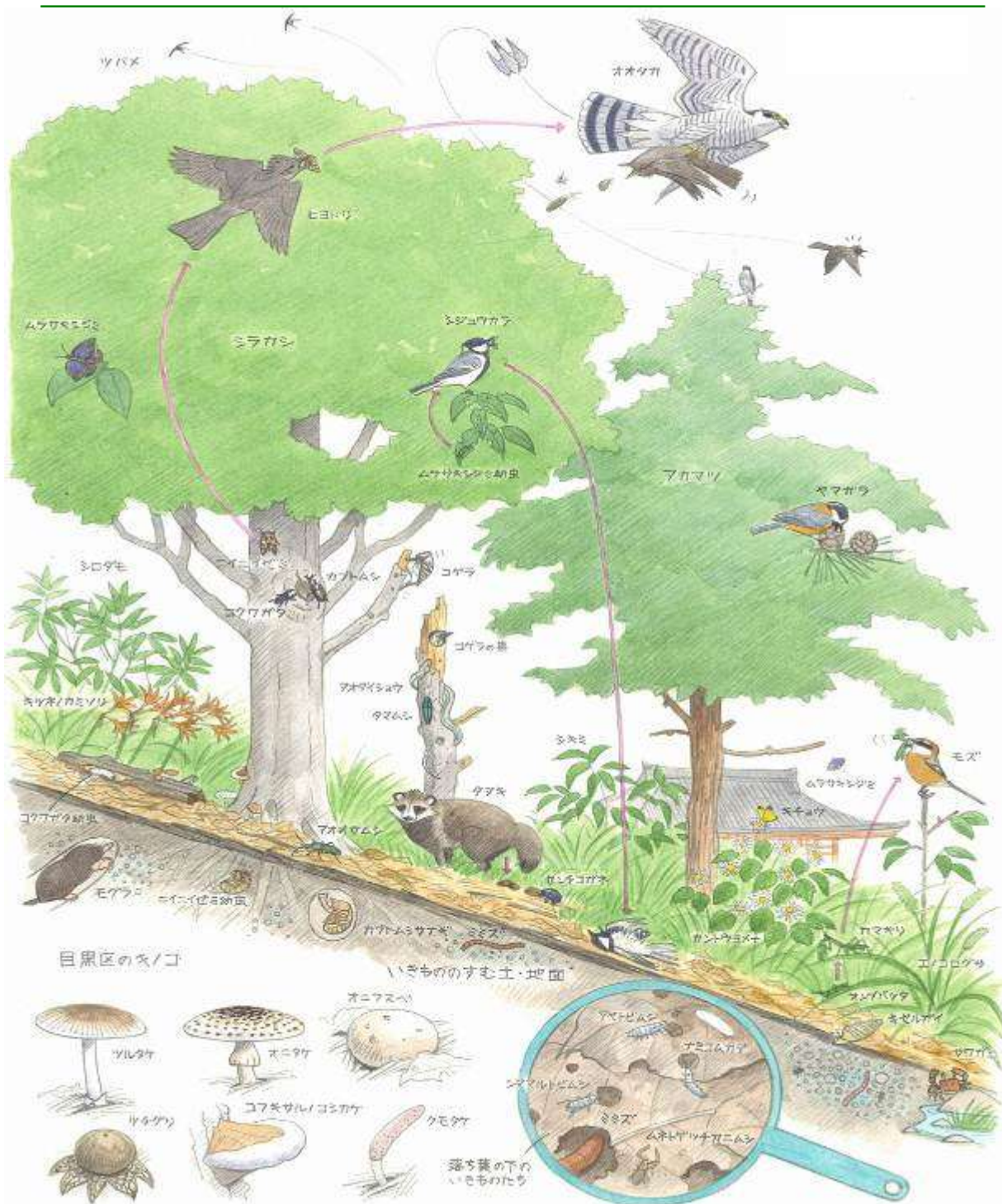
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Notes: This English version of the biodiversity strategy is basically a translation of Japanese version, but some of photos, figures, tables, illustrations, etc. are omitted due to lack of space and other reasons.



How nature works (in soil and ground various living organisms inhabit)

In the soil where living things, such as wood lice and earthworms, can live by decomposing fallen leaves, predacious creatures, such as ground beetles and moles, also can live. Since the ground plowed by these animals contains massive amount of porous soil, roots of trees in this ground can breathe in the soil and consequently form rich and healthy forests. In addition, moles create many holes in the ground, allowing additional rain water to be stored, helping prevent flooding, and at the same time, helping form the source of spring.

Chapter 1 Background and status of the plan

In this plan, “all living things” include animals such as human beings, birds, fish and insects, and the various plants that include not only trees and roadside weeds, but fungi such as mushrooms, and microorganism decomposing fallen leaves in the soil.

1-1 What is biodiversity?

Biodiversity or biological diversity means that there are various and different types of "nature" on earth, and in each nature, there are many living things that have unique character. All the lives of these living things are closely connected and interrelated. “The blessing of nature” or so-called “ecosystem service” that is conducive to stabilization of food, water, temperature, etc., water purification, and providing people with affluence and comfort, is dependent on the balance of biodiversity. However, recently there has been concern that stresses from people’s consumption and other activities might result in biodiversity loss and serious, irredeemable changes in the global ecosystem.



A field of grass in the park

With the backgrounds of the contemporary situations of, as it were, “Crisis of Biodiversity”, Japan, in response to its ratification of Convention on Biological Diversity in 1993, enacted Basic Act on Biodiversity in 2008, which stipulates the mandatory efforts by the local governments to formulate "Regional Biodiversity Strategy ". Furthermore, 10th Conference of the Parties to the Convention on Biological Diversity (CBD-COP10) was held in Nagoya, Aichi Prefecture, in October 2010, in which “Aichi Biodiversity Targets” was adopted.

While more than half of the world's population is concentrated in urban areas where people’s consumption activities are very active, people of these areas receive much benefits from the blessings of biodiversity. Therefore, people living there have begun to recognize the importance of conserving biodiversity and communication, education and public awareness campaign concerning biodiversity, and also to perceive that in order to achieve these objectives, developing towns in harmony with nature, and practicing lifestyle that does not burden the ecosystem are very important.

In Meguro City, while deterioration of natural environment, such as decrease of the number of trees, has been in progress, the biological surveys conducted with citizen’s participation, indicate that various living things are

living in the environment right under our noses, mainly thanks to the development of parks paying close attention to living things, residents' activities in the maintenance of parks, and development of biotope spaces, including ponds, in municipal primary schools.

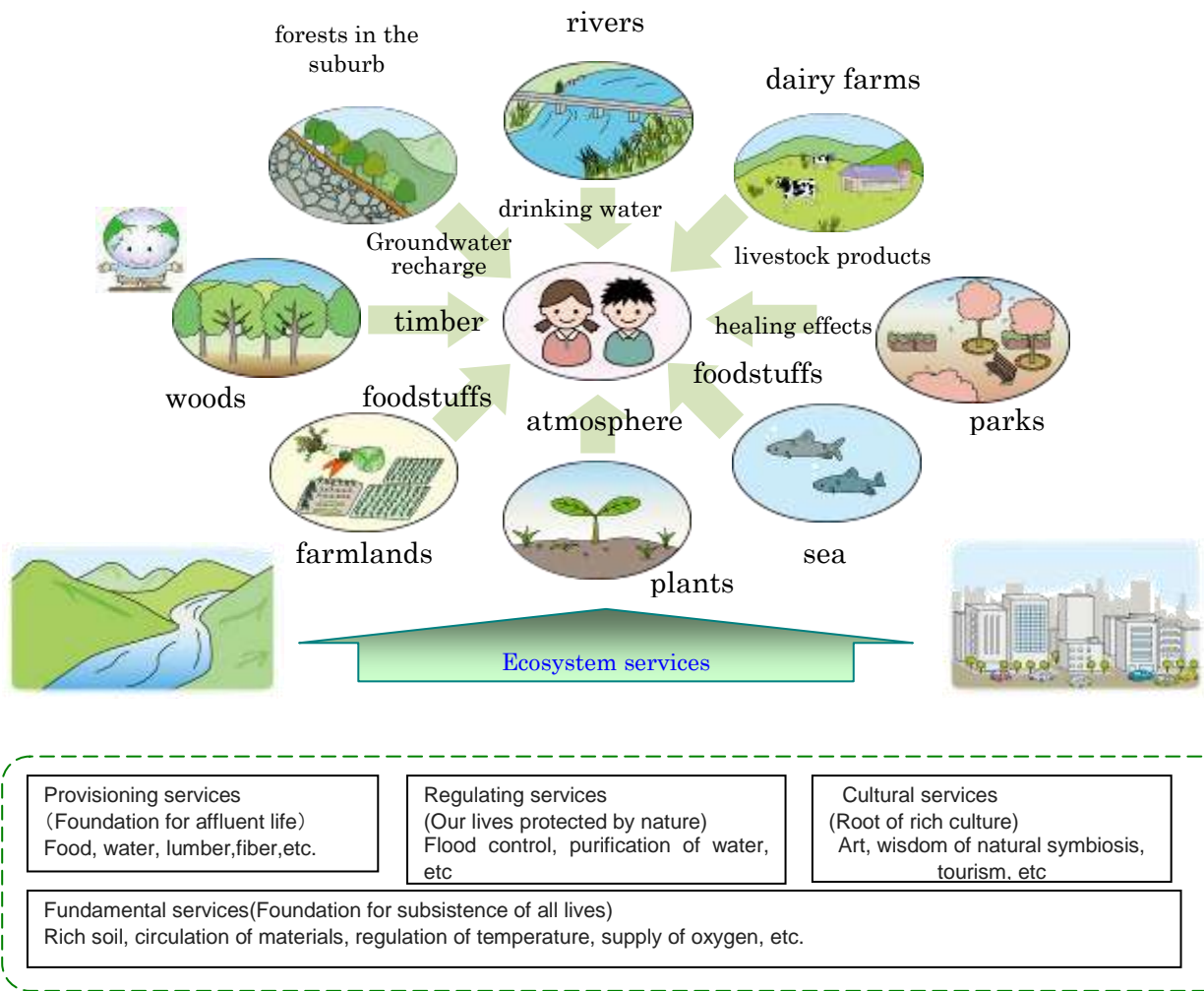


Fig.1-1 Our lives are supported by the blessings of nature.

1-2 Status of the plan

(1) International

Convention:

Convention on

Biological Diversity

(CBD), an international

treaty that Japan

ratified in 1993, is also

known as the Twin

Treaties along with the

United Nations

Framework Convention

on Climate Change. As of

February 2012, 192

countries and EU have ratified.

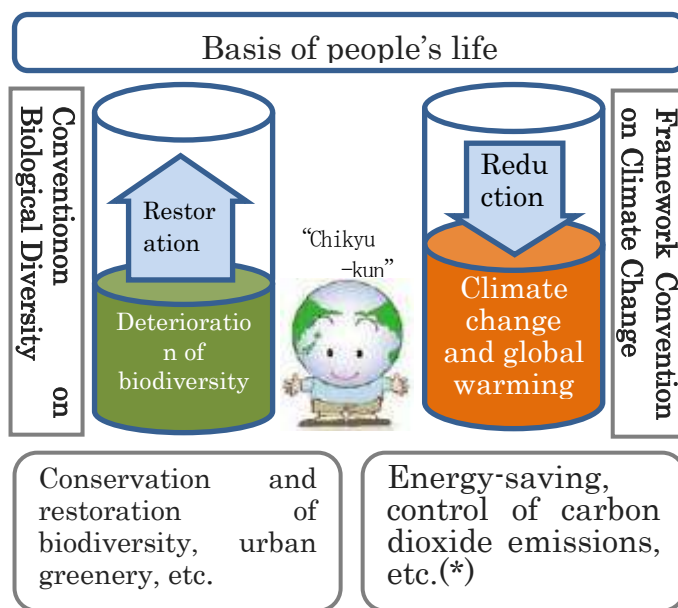


Fig.1-2 Twin conventions

(*) Meguro City is addressing these issues through Meguro City Regional Plan for Promotion of Global Warming Countermeasures.

(2) Relationship with other plans

In Japan, in response to the ratification of Convention on Biological Diversity, National Biodiversity Strategy, Basic Act on Biodiversity, etc., were enacted. This plan, stipulated by Article 13 of Basic Act on Biodiversity, is the basic plan of Meguro City with regard to conservation and sustainable use of biodiversity in the city.

In Meguro City, the plan is a separate supplementary plan of the city's Basic Concept, Basic Plan and Implementation Plan. At the same time, the plan is to be coordinated with the city's other related plans such as Environmental Basic Plan, Ordinance on Greenery, Urban Planning Master Plan, Basic Plan on Greenery, Landscape Plan, Regional Plan for Promotion of Global Warming Countermeasures, etc., and to be consistent with New Development Plan for Greenery Policy (by Tokyo Metropolitan Government).

1-3 Area and time horizon subject to the plan

(1) Target Area: Whole area of Meguro City

(2) Target Period: 2032 (the year of the 100th anniversary of the municipal organization of Meguro City)

Short-term target year: 2020 (Target year of Aichi Target)

Chapter 2 Natural and cultural features of Meguro City (Status quo and challenges to be addressed)

Knowing about the present circumstances of our town:

Chapter 2 introduces how our lives are closely connected with various living things, such as enjoying seasonal greenery and delicacies, and at the same time, shows an image of the archetypal landscape of Meguro that has been nurtured over the long period of time, as well as new landscape. Besides, this chapter



Cherry blossom viewing in spring (Meguro River)

also introduces an overview of Meguro City and residents' activities concerning biodiversity, and shows the challenges to be addressed in conserving biodiversity as well.

2-1 Our lives blessed with nature

(1) Enjoying green

We, Japanese, have customs to enjoy seasonal flowers all the year round, such as cherry blossoms, Japanese wisteria, Japanese hydrangea, sweet flags, Japanese bush clove, and in late autumn we cherish colorful leaves.

In addition to enjoying viewing various flowers, we can refresh ourselves by going into the nature. We also enjoy surrounding nature on various occasions, and learn a lot about our local history and culture by visiting old shrines and temples. In parks and schools, many citizens participate in the activities to make compost, maintain thick coppice (miscellaneous trees), thus utilizing the natural resources of the area, and learning a lot about our environment.

Besides, all the year round, various festivals and events are held in Meguro. In spring, events of cherry-blossom viewing are held along Meguro River and in many parks. In September, a time of harvest, we enjoy many festivals at shrines, temples and Meguro Sun Festival (Meguro Citizen's

Festival) where we enjoy the delicacies of Pacific saury with the cooperation of Kesen-numa City of Miyagi Prefecture in Tohoku Region.

In a week of cultural assets of Meguro, various events such as a walking tour are held, in which people visit cultural assets in Meguro, including an old main residence of an old, established Maeda family in Komaba park.

If you look out over from Meguro Tohgo-tei Garden on the rooftop of Meguro City Office and Meguro Sky Garden on the rooftop of the highway junction, you will be able to get a view of townscape of Meguro that integrates wide sky and green spaces.,

(2) Enjoying seasonal delicacies:

Our lives cannot be separated from four seasons. In the past, we used to eat foods in season, such as bamboo shoots and sweet potatoes, both of which are products of local specialty of Meguro.

Traditional farming used the old lunar calendar, with its 24 divisions , making the most of natural phenomena, the year round.



Meguro Sky Garden, a park on the rooftop of the junction of highway



A festival in autumn



A Japanese-style house in Komaba Park



Meguro-tohgo-tei, rooftop garden of the Meguro City Hall, in winter

(3) Meeting living things of Meguro:

Residents report the news on various living things in their neighborhood, to the city office that, for the first time of the season, they have heard chirping of Bush Warbler, *Cettia diphone*, or Hatsune in Japanese, or have observed migration of Barn Swallow, *Hirundo rustica*. In Meguro where there are large residential areas, people can see and come in contact with living things in daily life.

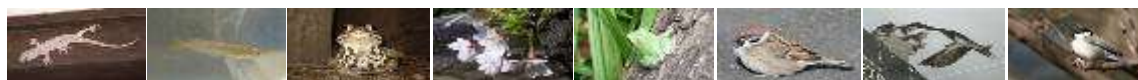
Although since 80 years ago when Meguro was first incorporated as a city, the environment of the city has changed greatly, living things that you can see and come into contact with on a daily life, are still living close to us. A popularity poll named “Our choice of 80 creatures of Meguro”, conducted as an 80th anniversary event of Meguro City in 2012, selected 80 species of

creatures living near our neighborhood, which we want to protect, conserve, and restore for the benefits of the future of our children.

Fig.2-1 Top 8 species of living things in a popularity vote by residents (2012)

Name of species in the ranking:

Ranking	Name of species	Reasons of selection by residents
1 st	Japanese gecko	As we see them in our houses, we'd like them handed down to the future generations.
2 nd	Killifish	As we want them to be everywhere in our neighborhood, we'd like to see them in Meguro in the future.
3 rd	Japanese common toad	As they inhabit our houses, we'd like them to continue to live where they are.
4 th	Yoshino cherry	Sakura, or Yoshino cherry blossoms along Meguro River are the treasures we can be proud of .
5 th	Japanese tree frog	Although we could often see them when we were children, , nowadays we can hardly see them.
6 th	Tree sparrow	Ordinary birds such as tree sparrows that are thought to be seen everywhere, are said to have decreased in numbers. So it is important to preserve such familiar birds.
7 th	Barn swallow	Since our hearts have been comforted for so long to see them, we'd like our children to see them also.
8 th	Great tit	As this is the bird of Meguro City, we'd like to continue to watch over.



Photos of 8 species, from left(1st rank) to right(8th)

2-2 An overview of Meguro City

(1) Location and population

Meguro City is located in the southwest of Tokyo, and is topographically at the eastern edge of Musashino plateau. The city is connected with the green tract of the outskirts of Tokyo, such as naturally rich and lush Okutama region, through the remaining green on the cliff lines of Tama River and Meguro River.

Meguro City is one of the so-called 23 wards in central Tokyo, and is located in the southwestern part of the 23 ward district.

The city is contiguous to Shibuya City to the north, Setagaya City to the west, and Ota City to the south. The city hall of Meguro is located just where latitude 35.38 N meets longitude 139.41 E. As of January 1, 2014, the area of the city is 14.70 km^2 and has the population of 267,379. The per-square-kilometer population density of the city is 18,189, but the population of the city is expected to begin to decline after peaking in 2015.

One of the topographical features of Meguro is that rivers such as Meguro River and Tachiai River run through the plateau, resulting in many slopes therein. Almost all the rivers of the city are now maintained as main lines of the sewers, the tops of which are used as pedestrian paths, except Meguro River and Nomigawa River, etc., which flow into Tokyo Bay. But parts of Meguro River and Nomigawa River are still open rivers, and are connected with the ecosystem of Tokyo Bay. Besides, almost all the springs in the city have dried up, but some ponds which were irrigation ponds used for agriculture of surrounding farmlands, still remain as the ponds in the parks, as well as other ponds in the campuses of the University of Tokyo, and Tokyo Institute of Technology.

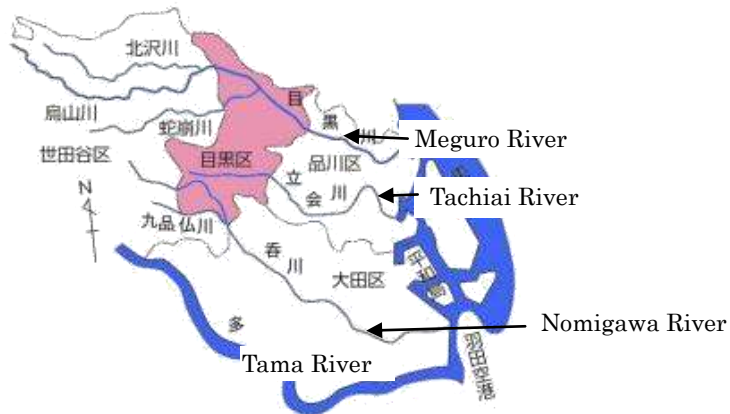
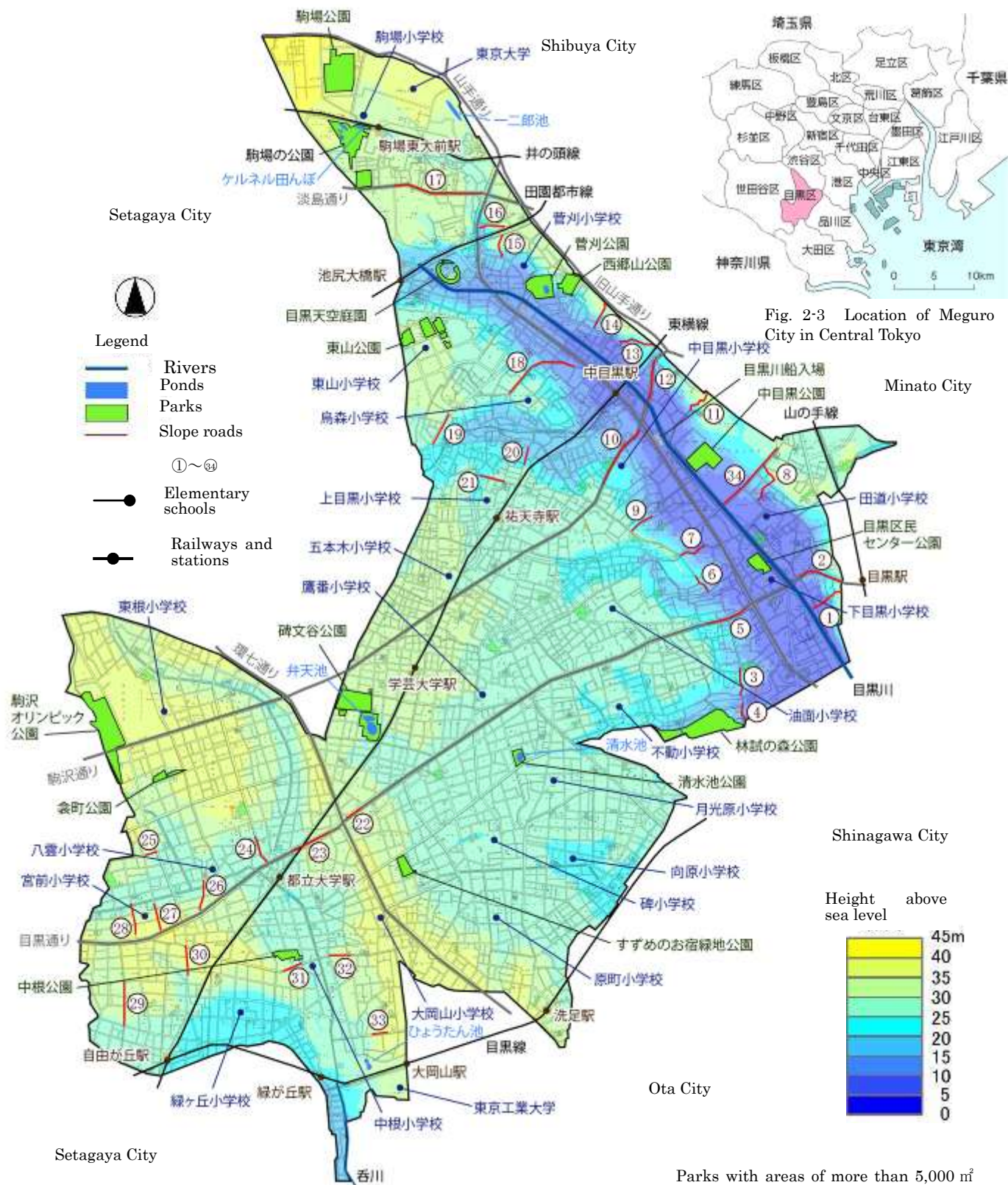


Fig. 2-2 Rivers in and around Meguro



(2) History

It is said that from the Old Stone Age, people inhabited the area of today's Meguro City, and according to the archeological investigations of the remains, it has been confirmed that there were large settlements in the Jomon period (circa 10,000-400 B.C.). From Edo period (1603-1867) on, Meguro developed into the suburban village in the outskirts of Edo, supplying Edo with fresh vegetables.

Vegetable cultivation in Meguro was thriving even after the Meiji era (1868-1912), and Meguro became a producing district of various specialty products including famous "Bamboo shoots of Meguro".

But after 1926, the rapid urbanization of central Tokyo caused change to the bamboo

groves and cultivated areas of Meguro, especially those around the railway stations, transforming them into residential areas. In 1932, Meguro City was incorporated through the merger of two towns. Today, in Meguro, there are many ancient shrines, temples and educational facilities such as the University of Tokyo and Tokyo Institute of Technology. Meguro has become a city of history and culture. As for commercial activities, there are many unique shopping areas in Meguro, such as Jiyugaoka, with the largest number of affiliated stores in Japan, and other shopping areas as well. The city is very popular as a livable residential area in Tokyo.

In addition, in Meguro where there are vast residential areas, as there are also interactions with nature in neighboring places in daily life, people have been providing the city office with much information on nature and living things of Meguro since 1977.



Fig.2-5 Imaginary picture of the site near Higashiyama remains (By the courtesy of Meguro History Museum)



Photo: An aerial view of Meguro River and Meguro Sky Garden on the rooftop of the junction of highway (Municipal park opened in April, 2013)

2-3 Climate and landscape of Meguro

(1) Living things seen in the old times

A survey on various living things conducted in 1997 revealed the facts that in the old days, in Meguro there were various wild creatures such as crabs in Meguro River, and rabbits in the fields, thus you can imagine an old landscape of Meguro rich with nature.

(2) Archetypal scene of ours

In order to recover the environment where many living things can live, it is important for us to know the old landscape and the living things in it, and also the original scenery of Meguro. Ukiyoe, an old Japanese style wood printing, made from Edo period to Showa period, depicted the scenery of rural fields and farm land. Furthermore, after 1932, many photos of the old landscape are remained, taken from Showa period on. These old scenery in old prints, paintings and photos are, so to speak, our archetypal landscape.



Rural landscape near Yakumo (circa 1912)



Landscape near Himonya Pond (circa 1925)



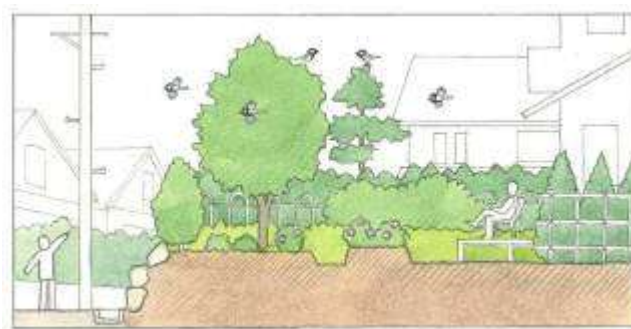
Mt. Fuji viewed from the planned site for Metropolitan High School (of old-education system, later Tokyo Metropolitan University)
Circa 1930

(3)Landscape transmitted from old days and new landscape

Today, we can see many gardens in residential areas, woods and forests of shrines and temples transmitted from old days, and also rivers and ponds, all of which are landscape reminiscent of old day's Meguro. But, on the other hand, there are also landscape newly born by urbanization of Meguro. So, based on the news and information on nature and living things provided by residents, we here present "Landscape of Meguro" classified into 8 characteristic landscape inhabited by living things, as follows:

○Landscape with gardens of residential areas

Residential areas with varied and extended green such as trees in the gardens, potted plants on the verandas, hedges and flower beds along the roads, etc. A wide variety of plants and a mosaic of dotted green spaces create diversified places rich with soil where diversified creatures are observed. [Specific example] All over the whole area of Meguro

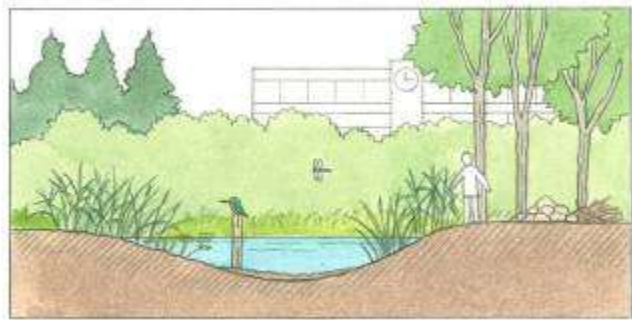


○Landscape with small waterside

In the parks, schoolyards, and private gardens, small ponds have been made, where small creatures live.

Water bugs such as dragonflies are flying in search of such watersides that have been rare in the urbanized cities. Biotope pond is a new landscape of Meguro that has never been seen before.

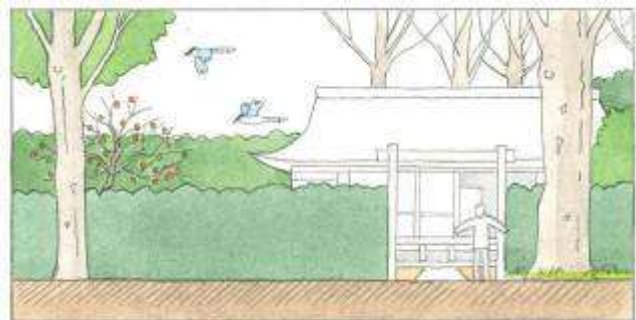
[Specific example] Biotope ponds in the parks, schoolyards, and ponds in private gardens



○Landscape of forest of shrines, temples, schools and trees around residence

Forests that are scattered in residential areas, including age-old grove of trees around a residence, forests of shrines and temples, and trees in the parks and schools, all of which are the habitats for local living things.

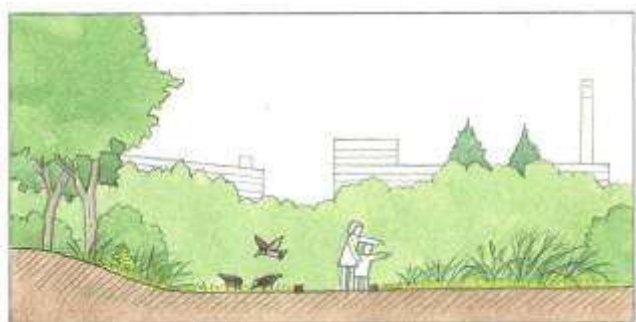
[Specific example] Komaba Park, Himonya Park, Nakane Park, Suzume-no Oyado Ryokuchi Park, Miyano Kominka Gardens, forests of schools, shrines and temples, etc.



○ Landscape of grass

Fields of grass along the paths of large parks, around school grounds, along the embankment of railways, school's garden of wild grass and weed, and lawn ground of schools, etc.

[Specific example]



Nakameguro Park, Komaba I Campus of the University of Tokyo, Ookayama Campus of Tokyo Institute of Technology, Himonya Park, the banks of the railways, etc.

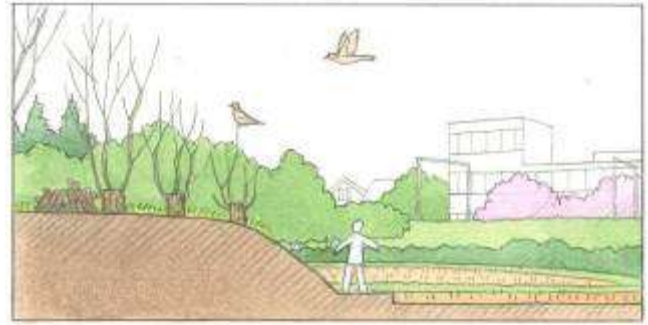
○ Landscape of thick coppice, cultivated fields and paddy fields

Landscape of woods, paddy rice fields, and cultivated fields that are kept and handed down to the future

by the hands of men. Thick coppice is trees of sawthooth oak, *Quercus acutissima*, and konara oak, *Quercus serrata*, and while repeating regeneration by sprout, wildflowers such as violet, *Viola mandschurica*, will grow. There

remain few cultivated fields, and paddy rice fields are classified into this landscape as an element of Satoyama.

[Specific example] Komabano Park, Sugekari Park, Meguro Kumin Campus Park, local production green lands, etc.



○ Landscape of the city

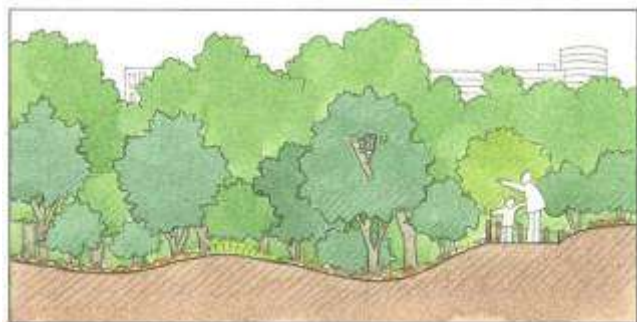
Areas with large green spaces such as remaining large trees in universities and research institutes, continuous trees on the cliff along the Meguro River. These areas are footholds of green in the city. In Rinshi-no-mori Park, a former site of

Forestry Research Institute, there are a wide variety of trees, forming characteristic landscape different from other parks.

[Specific example]

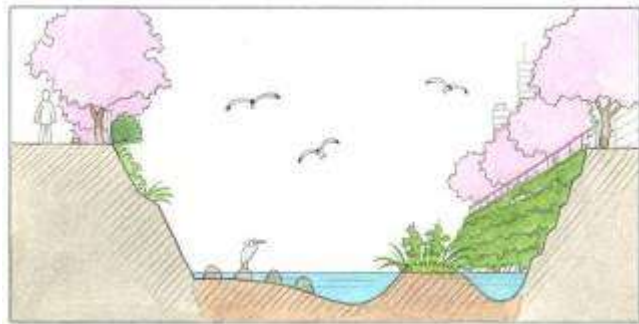
Metropolitan Rinshi-no-mori

Park, Metropolitan Komazawa Olympic Park, Komaba I Campus of the University of Tokyo, Ookayama Campus of Tokyo Institute of Technology, etc.



○Landscape with open waterside

Landscape of Benten-ike pond of Himonya Park and Shimizu-ike pond that were once used for agriculture, the lower Meguro River and Nomikawa River that connect with Tokyo Bay.



Flathead mullet, *Mugil cephalus*, Ayu fish, *Plecoglossus altivelis*, Goby, and so on, go upstream from Tokyo Bay through the Meguro River.

[Specific example] Benten-ike pond of Himonya Park, Shimizu-ike pond, the Meguro River, the Nomikawa (the lower reached from Midorigaoka 3-chome)

○ Landscape of green of new era

New landscape of Meguro such as rooftop gardens, greening on verandas, greening on the building wall, flower pots on the streets of shopping malls. Insects such as butterflies and grasshoppers, and wild birds



have become to fly to the green of the rooftop.

[Specific example] Meguro Tohgo-tei on the rooftop of Meguro City Hall, Meguro Sky Garden on the rooftop of the junction of the highway.

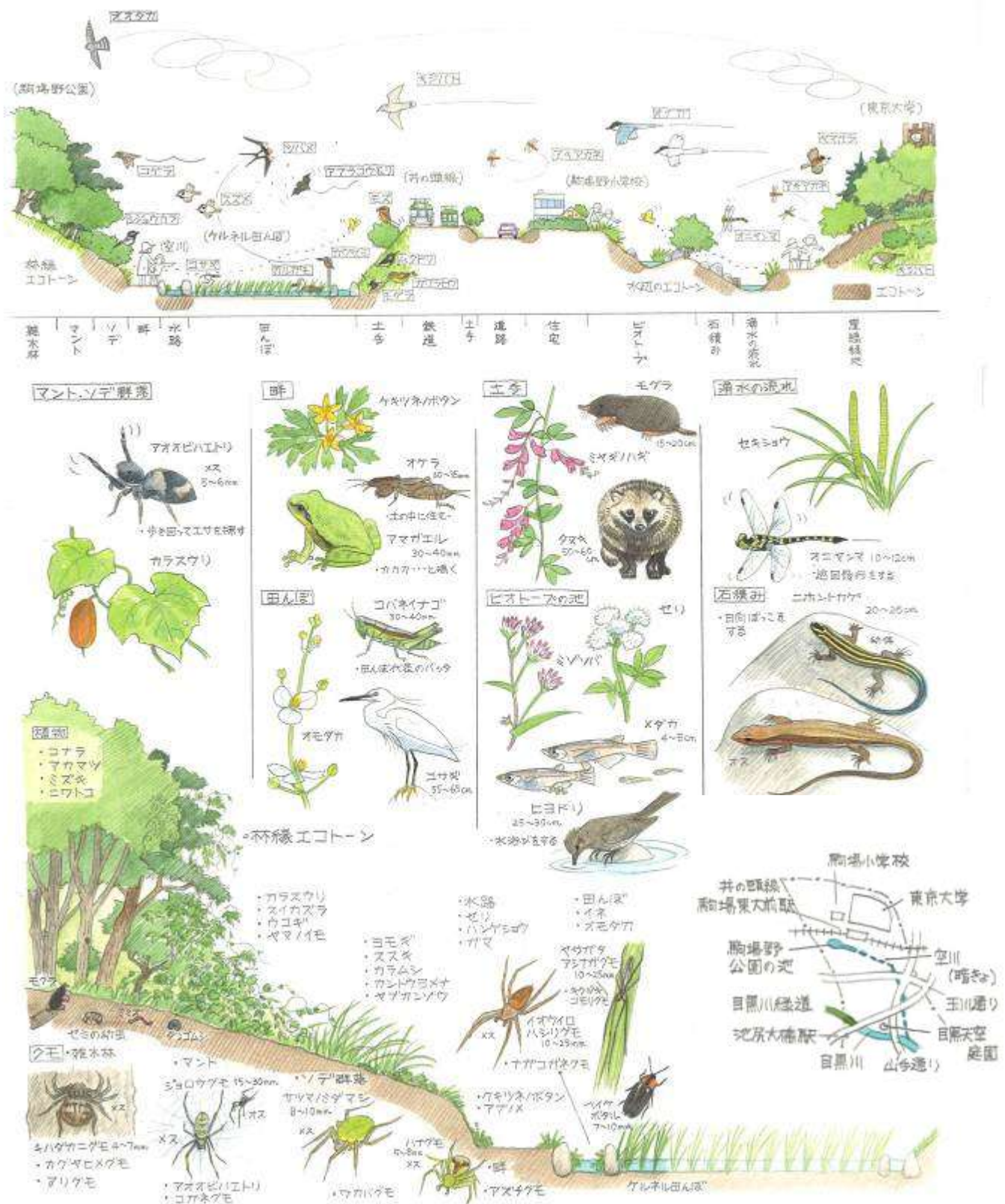


Fig 2-6 "Places for living things"

Figure depicts a cross section of "Yato", a small valley, and various living things found there. This yato is located between Komabano Park and the University of Tokyo (Komaba Campus), and near the headstream of Sora River in watershed area of Meguro River in northern Meguro. In Meguro, even today, there remain these places abundant in such nature.

(Drawn from the materials of Komabano Park Nature Club)

(4) Forms of nature

"Circumstances of today's green "

In Meguro City, small green spaces spread like a mosaic, in the gardens in residential areas, and other massive green spaces such as parks, shrines and temples are interspersed all over the city. In the survey of 2003, green coverage rate was 17.1%, and 87% of these green spaces are covered by trees, and 60% of green spaces are in privately owned lands.

"Registration of living things as residents of Meguro (Flora and fauna list of Meguro) "

With the participation of residents, the city has conducted various biological surveys on the habitat status of creatures of Meguro, and we compiled these results as "Residents Ledger of Living things".

Although Meguro is an urbanized city, it has been found that a quite number of living things inhabit it. This might be partly attributed to

the greens in parks, etc. and to the environment of waterside of Meguro River, etc. and partly to the accumulated recordings of the results observed and reported by "Nature Correspondents". Currently about 1,100 households have registered as Nature Correspondents.

Both National and Metropolitan Governments have compiled Red List for the endangered species, and have published the results. Also in Meguro, there are these endangered and precious species. On the contrary, introduced species (alien species) such as Red-necked parakeet (*Psittacula krameri manillensis*), red-eared slider (*Trachemys scripta elegans*), and Akaboshigomadara (redring skirt, butterfly) are in the city.

Number of speceis confirmed and identified in the city is 2,956 species. 774 of which are alien, cultivated and breeding species. And there are other speceis having a risk of extinction identified by National and Metropolitan governments.

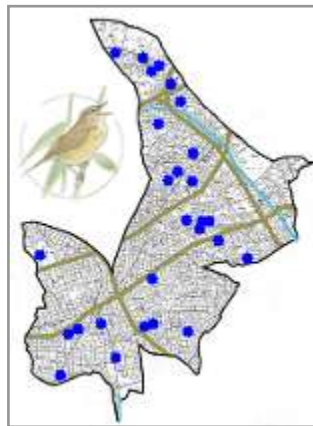


Fig.2-7 Places where "Hatsune", or the first song of bush warbler, is heard for the first time of the year. (From the survey of 2013)

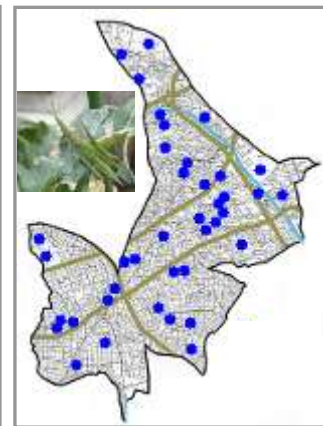


Fig.2-8 Places where "Onbu-batta", smaller longheaded locusts were seen. (From the survey of 2010)

(5) Activities by the residents

Residents are engaging in the activities with respect to a variety of living things and natural resources in the city, schools, parks, and in the companies.

○Examples of activities in the park, etc.

In the municipal parks such as Komabano, Sugekari, Nakameguro, Himonya, and Meguro Sky Garden, 17 “Registered residents’ groups for the activities in the parks” are currently engaged in gardening, health promotion, conservation of habitats for living creatures, etc. Furthermore, 89 Green Clubs, residents’ volunteer groups, are playing active roles in maintaining flower beds in the parks and nature paths. In Komabano Park, management of Satoyama (managed woodlands or grasslands near human settlements) including copse is being carried out with the help of Komabano Nature Club and other local residents’ groups.

○Examples of activities in the communities

Komaba Recycle Group based in Komabano Park, has been engaged in the activities in making compost by recycling garbage and fallen leaves since 2003. Members of PTA of the schools nearby are also participating in the activities, and they are also working on raising vegetables in the “Kitchen Garden” in the park by using these recycled compost.

In Jiyugaoka, shopping district promotion association has been making an effort to promote “Jiyugaoka Forestation Plan” in order to increase greenery in the district. In this plan, the association, in cooperation with private corporations and shop owners, has been promoting rooftop greening, greening top of vending machines in the district. The association are also promoting “(Jiyuga)Oka Bee Project”, in which it keeps bees on the rooftop of the building, and for the bees, has been planting “nectar plants” in the planters in the shopping district. They sell original sweets using honey gathered from this beekeeping. Aside from these things, beekeeping in Jiyugaoka is conducive to fruition of the plants through pollination by the bees, and at the same time, contributes to the comprehensive greening of the district, and to expanding the network of living things all over the town.

○Examples of activities in the schools

In elementary and junior high schools, various environment-related activities are promoted, such as, a class for experiencing lodging in nature, environmental education, dietary education, learning traditional cultural performing arts, etc., “Eco-schools”, and so on. Eco-schools include such activities as rooftop greening, Green Curtain, making reservoir of fallen leaves, activities at biotope, introducing solar power plants, developing facilities for environment education, etc. Besides, the schools are promoting “Meguro Green Action Program in Schools”, aiming at environmental loading reduction with the activities based at local communities.

Now, 21 biotopes are established in municipal schools and kindergartens, and used as teaching materials to learn the importance of nature and contact with living things.

○Examples of activities by the private corporations

Example 1: A company (of construction industry) is carrying out research of the habitat of birds on rooftop greens of buildings in central Tokyo, including roof garden of Meguro City Hall. So far, in the rooftop garden of Meguro City Hall, Brown-eared Bulbul (*Hypsipetes amaurotis*), Japanese White-eye (*Zosterops japonicus*), Black-backed Wagtail (*Motacila alba*), Dusky Thrush (*Turdus naumanni*), Daurian Redstart (*Phoenicurus aureus*), Oriental Greenfinch (*Chloris sinica*), etc. have been observed.

Example 2: A company (information technology equipment leasing industry) has been providing children with the opportunities for environmental education, as one of its Corporate Social Responsibility activities. The company has been working on promoting “Waku-waku Children’s Pond Project”, which teaches the importance of nature and living things to children. In Meguro City, the company helped restoring biotope pond in Shimo-meguro Elementary School in cooperation with the school and children.

Example 3 : Another company (of construction industry) is carrying out research on wild life in the parks. The research in some municipal parks has confirmed the existence Abunome (Horsefly’s eye, *Dopatrium junceum*), Bull-headed Shrike (bird, *Lanis bucephalus*), Varied Tit (bird, *Parus*

varius), Himeakane (dragonfly, *Sympetrum parvulum*), all of which are designates as endangered species.

Example 4 : A company (construction and management of urban expressway industry) has recently developed “Ohashi Satonomori” on the rooftop of the highway junction, a habitat for various wild life, consisting of rice paddy field, stream and surrounding greens. The company developed this space on the rooftop in order to restore native environment and species, and is conducting a chronological survey on flora and fauna there,

○ Current state of consciousness of residents

Although citizens feel their areas are rich with green, they feel that the opportunities and the places to have contact with green are few.



Activities of “Organic Club” of Nakameguro Park, making organic soil for gardening, etc



Shimomeguro elementary school : carrying soil in the activities in the biotope of the school,



Planters on the roadsides

Activities of “Komabano Firefly Club” →



Photos: People’s activities in the parks and communities

2-4 Challenges to be addressed

(1) Warming in the urban areas

It is believed that by the data provided by Japan Meteorological Agency, an increase in annual mean temperature, especially in winter, is observed, and this reduction in the number of “winter days” during which the temperature falls below 0 degree Celsius, will have a big influence on the wintering of the living organism. In addition, in Tokyo metropolitan area, especially in the central area, the phenomenon of so-called heat island has become tangible, due to mainly the waste heat generated by human activities.

Given the circumstances mentioned above, it is imperative that we tackle these problems through the comprehensive countermeasures against global warming, such as energy conservation and urban greening. Global warming is said to be one of the crises of biodiversity.

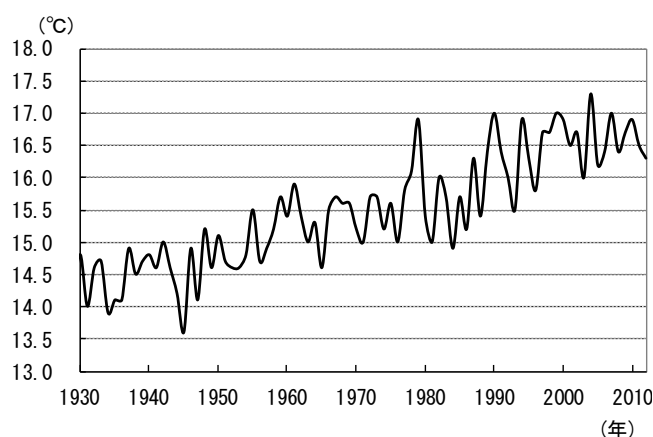


Fig.2-9 Rise of average temperature of Tokyo

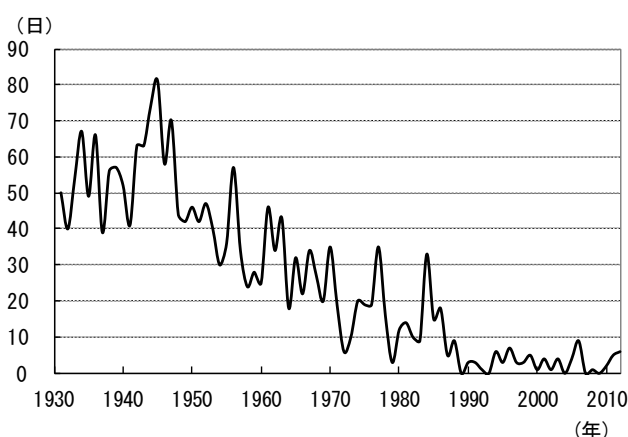


Fig.2-10 Decrease of the number of the winter days during which the temperature falls below 0 degrees Celsius

(2) Reduction of trees

Reduction of trees in the city has been observed by the segmentation of sites, etc. The number of trees in the city was 24,024, by the survey conducted in 2003, and this number had decreased by 2,279 (8.7%) compared to the number obtained in the survey in 1992.

In Meguro City, the area of green space on the rooftops and walls has been on the increase, but the overall ratio of green coverage of the city falls short of the target of the green coverage ratio indicated by Basic Plan of the Green of the city.

As for the parks, the total area has been on the increase, even though little by little. But the area of all parks has not reached the target number set by the same plan.

Besides, since the places with waterside and springs have been declining, it has become an issue that we conserve and create green, in order to improve the environment within our city, which many living things can inhabit.

(3) Change of living things

Taking the example of butterflies, Daimyososeri (*Daimio Tethys*) that had been observed in large green spaces and gardens, has not been observed since 1995. On the other hand, Great mormon (*Papilio memnon*) and Red ring skirt (*Hestina assimilis*) were observed for the first time in 2004 and 2007, respectively, and these two species have been observed every year since then.



Red ring skirt
(foreign species)

As for birds, observations on Japanese pygmy woodpecker (*Dendrocopos kizuki*) have been increasing since 1980s, and those on Kingfisher (*Alcedo atthis*) have been increasing since 1990s. In addition, since the 1980s, heronry such as great heron (*Ardea cinerea*), great egret (*Aldea alba*) and little egret (*Egretta garzetta*) have been observed even in small ponds in private gardens and the parks. Wild ducks such as tufted ducks (*Aythya fuligula*) and dunbirds (*Aythya ferina*) coming over from the northern countries in winter, have been observed in Meguro River, etc. since the 1990s. With regard to the population survey of birds, in comparison to the 1999 and 1986 surveys, Japanese pygmy woodpecker (*Dendropocos kizuki*), Japanese white-eye (*Zosterops japonica*), white-cheeked starling (*Sturnus cineraeus*), great tit (*Parus minor*), brown-eared bulbul (*Hypsipetes amaurotis*), and jungle crow (*Corvus macrorhynchos*) have been on the increase, and the other hand, grebe, shrike, redstar, nightingale, narcissus flycatcher (*Ficedula narcissina*), thrush (*Turdus naumanni*), black-faced bunting (*Emberiza spodocephala* Pallas), and azure-winged magpie (*Cyanopica cyana*) have been decreasing (from Basic Survey on Natural Environment in 1999).

Phenological survey records the first date of the year when the cherry

blossoms bloom and a Japanese bush warbler chirps. In Meguro, from 1990 on, the first buzz of robust cicada (min-minzemi, *Hyalessa maculaticollis*) is heard earlier than large brown cicada(aburazemi, *Graptopsaltria nigrofuscata*).

Besides, artificially paved or beaten ground surfaces are spreading due to reduction of trees, lack of undergrowth in a forest, etc., where the environment is unfriendly for animals and plants to live. Living things move along trees and grounds with natural surface, but if trees, ponds, and natural grounds decrease, these paths for creatures to move will be divided. In addition, since an increase in alien species has been observed, it is feared that they will have the impact on the lives of human beings and ecosystem.

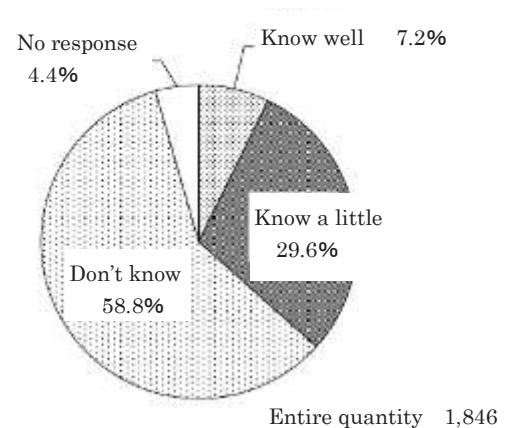


Fig.2-11 Survey of awareness of biodiversity (Total)

(4) Life and awareness of citizens

Consumption activities of the residents of Meguro are very vigorous and prosperous, thus having a great indirect influence on biodiversity of not only Japan, but also of the world. For example, we, Japanese, are producing a large amount of food loss. Therefore, it is requested that we change our lifestyle of the “abundance of the things” to the “richness of the heart”. According to the public-opinion poll conducted in 2011, nearly 60% of people surveyed did not know the word “biodiversity”, which exceeded the ratio of 40% of answer, including the people who answered “know well” and “know a little”.

As for the activities by the residents, the number of the citizen’s volunteer groups in the parks, and the “green club” that engage in making flowers at streets and parks, are on the increase.

For example, in Komabano Park, many residents participate in the management of the thick coppice of the park, and other activities concerning the nature and living things. Now, taking these things into consideration, it is necessary that, in order to make these citizen’s activities be continued, we arrange the human resources training for volunteer activities, provide with the venues and opportunities to share the information.



Japanese pygmy woodpecker (*Dendrocopos kizuki*) raising its chicks

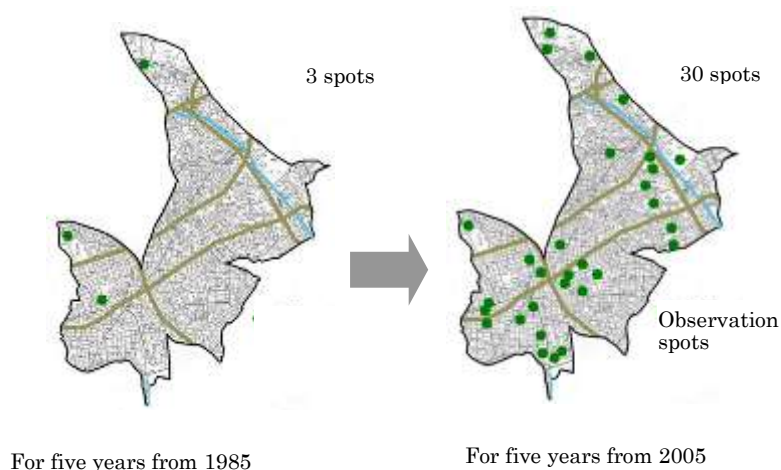


Fig.2-12 Change of the number of observation spots of Japanese pygmy woodpecker

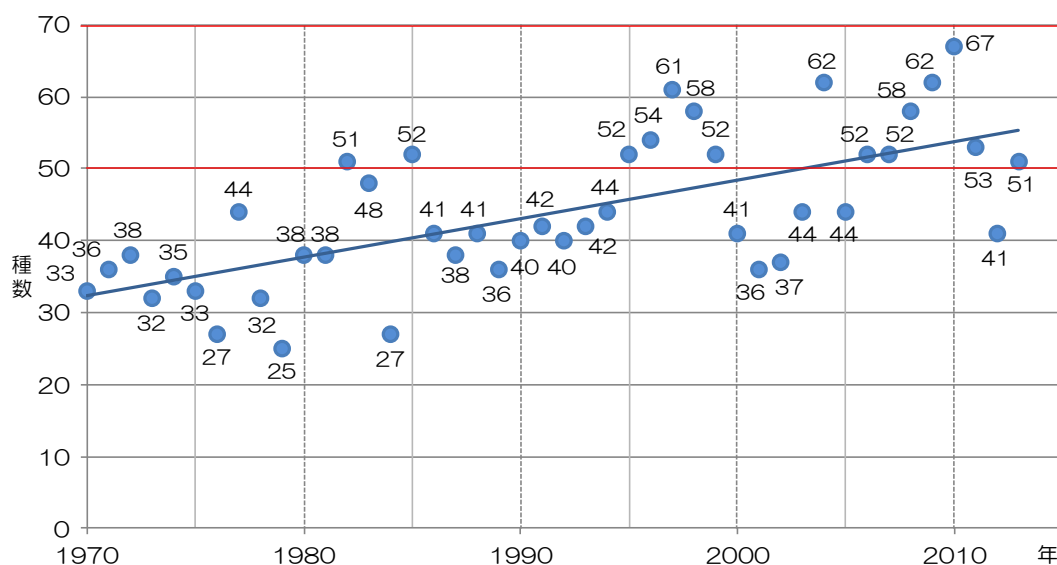


Fig. 2-13 Change of the number of species of wild birds observed annually in Meguro City (excluding foreign species)

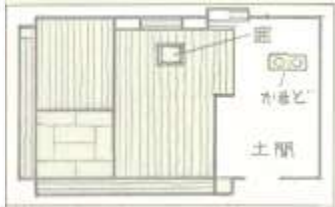
Compiled from “Ledger of Registered Creatures as Residents of Meguro” that is an inventory of animals and plants observed here. When compared with the unit of a decade, number of the species of observed wild birds has increased. This is partly due to the fact that number of observed species of migratory birds flying through Meguro in spring and autumn, and winter birds which winter over here has increased, and also partly due to the fact that from 1990s, number of observed species such as wild ducks which winter over in Meguro River and the pond of Himonya Park has increased. As for wild birds that breed in Meguro, number of the species has hardly changed ; they include Spotbill duck, Eastern turtle dove, Ring-necked parakeet, House swallow (summer bird), Brown-eared bulbul, Japanese white-eye, Great tit, Azure-winged magpie, Jungle crow, Carrion crow, Grey starling, House sparrow, Oriental Greenfinch, etc. Except for House swallow, all are resident birds that can be seen in Meguro City all year round. Lower red line of the graph, 50, indicates the present number of the species of wild birds observed in Meguro. Upper red line, 70, indicates its target number in the year of 2020.

陽春
4月

・リバメが飛来するころ — みどりのオアシス「屋敷林」

みどりの島のように市街地の中に残る「屋敷林」。古くから、防風や自然の恵みを得るために、家の周りに育てられた林です。今、大きく育った木々は、いさもたちのいのちを支える貴重なみどりの森です。

・すすめのお宿緑地公園 昭和の昔のころ、この竹林は、たくさんのスズメがねぐらとして集まるので「すすめのお宿」と呼ばれた。夕方には数千羽のスズメで空が暗くなるほどだったとか...



・古民家 公園内に移築された古民家。1970年代まで八雲の乗山教母家だった。4月中旬ごろから庭のぼんが泳ぐ。

・この時期、新緑の葉がけには遊びの途中の夏鳥が見られる。
・こんな出会いも...「オオムシ」4月下旬の早期、若い木の梢でさえずるオオムシを目撃！美しく歌う。(原稿・自然通信員)



・「オオムシ」スズメ目、ヒタキ科 全国の山地で巣を作り冬は割国に渡る。春先の飛りの時期に区内でも見られる。



・屋敷林に残された武蔵野の野草(碑文谷)

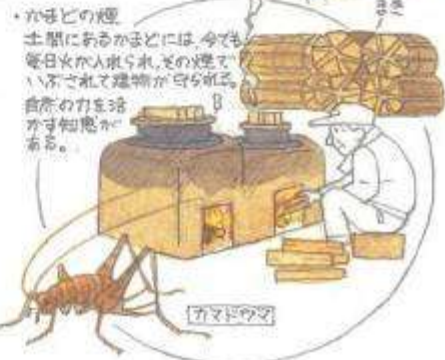


Fig.2-14 Landscape of grove of trees and bamboos surrounding a residence (Suzumeno-oyado Ryokuchi Park)

Chapter 3 For the future of Meguro (Future visions and targets)

Toward the aim of developing "A town where songs of wild birds are heard"

It is our duty that, in consideration of the current situations and challenges of biodiversity of Meguro City and the surrounding areas, we have to maintain the biological diversity of the current situation and conserve biodiversity for the better over the future.



In this plan, we set the future image of Meguro as “A town where songs of wild birds are heard”. Therefore, so that our descendants in the future live in a town where birds can be heard, this chapter deals with the aim of our future visions and targets.

3-1 Name of the plan

A Cycle Of Lives Supporting One Another Plan For Developing A Town Wild Birds Can Inhabit

In this Meguro City Regional Biodiversity Strategy, we regard “wild birds” as a symbol of conserving biodiversity in urban areas, and set the theme of "Developing a Town Wild Birds Can Inhabit" aiming to establish a society in harmony with nature.

In addition, "A Cycle Of Lives Supporting One Another" is a phrase that paraphrases biodiversity. "A Cycle" represents the images of a circulation of materials, mutual relationship and interaction among all living things, bonds between individuals, ecosystems, and a cross-section of the biosphere of earth. This phrase also expresses peace and harmony of nature, and even “Wa”, a symbol of Japanese culture. In addition,



the phrase "Support One Another" expresses the image of “the world woven by all living things” that has been nurtured through the relationship and interaction of the long history of earth and a chain of life, such as diversity of ecosystems, diversity of species, and genetic diversity, etc. We, human beings, are a member of this cycle of living things.

○ Wild birds as a symbol

"Symbol of connection of greens"

In Meguro City where both large and small green spaces are scattered all over the urbanized area, it has become an important task to form the network that organically connects separate green spaces, and to coordinate the function of each green space.

Given these circumstances, we adopt wild birds that migrate between these interspersed greens, and whose lives are based on these green spaces, as a symbol of the formation of ecological network. Furthermore, some migratory birds that migrate between faraway countries across the ocean, provide us with the hint that the global standpoint is important to conserve biodiversity.

“Symbol of the transformation to the greens wild life can inhabit”

Bird occupies the upper echelon of the ecological pyramid, which means that the more the variety and the amount of the bird's prey, i.e. plants and small creatures such as insects, the more the variety and the number of wild birds in the more suitable habitat.

For this reason, in order to achieve a town where people feel a sense of the season and of the affluence, and live in harmony with nature, we evaluate

wild birds as a symbol of the transformation of the green, not only in terms of the amount, but also of the quality, into the green wild life can inhabit.



Fig. 3-1 Conceptual illustration of ecological pyramid

"A symbol of urban development familiar to residents"

As people enjoy Hatsune, or the year's first warbling by bush warbler, and

feel alternately optimistic and pessimistic about child-rearing of great tit and barn swallow, wild birds that visit our gardens and other familiar places, are a symbol of our life filled with serenity and affluence. In addition, it might fairly be said that the environment in which diversified wild birds can live, is also a good place to live in for human beings, one of the creatures on earth. Thus, in this plan, we adopt wild birds that are familiar to local residents, and could be a harbinger of the movement towards the society of living in harmony with nature, as a symbol for community development and related activities.



Fig. 3-2 Of wild birds, on one hand, there are some kinds of birds that stay in one place all year round, on the other there are some kinds of migratory birds that travel a long distance by way of many countries and districts. Grey-streaked flycatcher, a kind of flycatcher just like narcissus flycatcher, is a migratory wild bird usually found in autumn in Japan, breeds in the vicinity of Russia, and travel to the districts near Indonesia, by way of Japan. In autumn, they save enough energy by eating nuts, to prepare for the long flight of over thousands of kilometers. Here, as an example, let us take a cornel in the park in Meguro. On the one hand, this tree gives us shade, comfort and peace, but on the other hand, each nut of this tree gives grey-streaked flycatchers enough nutrition to support their long journey. A cornel tree in the park of Meguro is connected to the wider and faraway world through grey-streaked flycatchers.

3-2 Future visions of Meguro

(1) Our town

“A town where songs of wild birds are heard”

In "Forest of Meguro" where the archetypal landscape of Musashino remains, narcissus flycatcher (*Ficedula narcissina*), a bird of forests, is singing, oniyanma (golden-ringed dragonfly, *Anotogaster sieboldii*) is flying over Meguro River in which ayu (sweetfish, *Plecoglossus altivelis*) called the queen of the clear streams is born.

On the other hand, barn swallows (*Hirundo rustica*) build nests every year in the shopping streets, various butterflies are dancing in the air in the parks and the green spaces, water beetles (*Dytiscidae*) are elegantly swimming in the watersides and we walk in the green spaces, enjoy the flowers in season, and various familiar lives are born in our town.



By using "birds in the fields and woods" rather than "wild birds", here we aim at conjuring up the erstwhile landscape of Musashino. With this, we make it clear that this plan aims at developing community of living in harmony with nature, with due consideration for “the relation between man and nature” of 80 years ago when Meguro City was officially born in early Showa era(1932), and there remained much vestiges of former Musashino.

(2) The direction to our goals

We intend to create the society in which everyone can enjoy interacting with living things, and everyone can enjoy living in harmony with nature, through creating the environment filled with green, with the aim of the realization of the future visions of Meguro.



(3) Images of a town and life there

- You can see lush and affluent green in residential areas and on the rooftops of buildings, and also plentiful trees in the streets. There you come upon various wild birds from season to season, including great tit (*Parus major*), a bird of the city.
- On holidays, many people enjoy walking on the “Green Paths for Walking”, visiting familiar scenic places and places of historic interest, and walking on the sloping roads.
- Green axis is formed from Okutama, which is at the western end of Tokyo and rich in nature and wildlife, to the city, connecting preserved greens on the cliff line at the edge of Musashino Plateau, and various core greens such as woods of shrines, temples, and parks, forests and biotope of schools. Moving along this green axis, many living things visit Meguro. Some of narcissus flycatcher (*Ficedura narcissina*) and brown hawk owl (*Ninox scutulata*) that usually breed in the forests of Musashino, have been observed to breed in the city’s forests where the native species of trees have grown.
- Unpaved ground lets rainwater permeate underground soil, cultivating groundwater recharge, and water quality of the rivers including Meguro River, is improved due to the resurrection of springs, consequently much fish including sweetfish (*Plecoglossus altivelis*) and common goby (*Acanthogobius flavimanus*), are running upstream from Tokyo Bay. They are riding on the rising tide from the bay, and travelling along the riverside plants. In the shallows where golden-ringed dragonflies are flying, children are playing and enjoying nature of the river.
- We are enjoying ever-changing nearby nature around us, such as flowers in spring, the colored leaves of autumn, and local festivals from season to season, and are also enjoying food of the season.
- Successors to the traditional culture of Meguro, including traditional Japanese flower arrangement and tea ceremony, have been raised. Besides,

the art of traditional musical accompaniment and sword dancing of Meguro is being handed down to local residents of all ages.

- Children are playing in rich and lush green of nearby parks, and so on, chasing after butterflies, and in summer playing in the midst of cicada chirpings, in autumn, listening to the chorus of insects in the fields of grass.
- All over the city, there are parks within walking distance from home, and in each park under the blue sky, little children are experiencing contact with nature, which could be their “formative experience” in the future.
- In the parks, local residents are actively engaged in the management of flower beds, and “Satoyama” (managed woodlands and grasslands near human settlement) , in which fallen leaves and pruned branches are recycled. As a result, the parks has become a center for the activities to have contact with nature and living creatures, and for various recreation, while residents of younger generations are actively participating in the volunteer activities, and are playing the leading role to form the cooperation among local residents.
- People are enjoying flower and vegetable gardening, and also enjoying a harvest of crop even in the urbanized areas. In the family gardens, and on the rooftops and in the parks, people are harvesting vegetables.
- Since the concept of “locally produced and consumed” is prevailing, people, taking into consideration conserving ecosystem, usually buy Edo Vegetables produced in Tokyo paying close attention of sustainable use.
- ,As shopping malls in the city mingle with places of production, vegetables in season from these places are sold at the shops in the city. Citizens of Meguro have an experience of farming in the places of production.
- Businesses and universities in the city actively grow trees in their own sites, and contribute to developing the environment in which living things can live, thus making the places for on-site learning of environment.
- Citizens, community groups, businesses, schools, NPOs, etc. are working in close cooperation and collaboration with one another, and share information among them.



3-3 Goals

When Meguro City was born in the early Showa period (1932), nature of Musashino Plateau still remained here and there in the city, and people at that time were taking advantage of living in the wisdom of life as the way people relate to nature. They made good use of nature while thanking to the blessings of nature, and utilized recycling system to return the leftovers to nature. In this plan, based on the way people had the relation to nature then, we set goals to the realization of "the features of the future", to promote measures by the "direction of the effort."

Efforts by various entities such as citizens, businesses, administrative branches, etc. to implement the plan are described by a word (verb) that is easy to understand as a "basic action". This "basic action" is expressed as an image to be realized in cooperation with all the parties concerned including individual resident.

Target1. Preserving green landscape of the city, and providing with the environment friendly to all the living things

Although Meguro is a city with advanced urbanization, but within the city there is diversity among the areas, concerning many aspects such as local history and origins of the areas, cultures each area has nurtured, terrain, land-use pattern, distributions of green space and activities by residents vary regionally in the city. For this reason, we can find the difference between the regions with regard to the features of living things. When we see nature and living things close to us, we have to have a recognition that even one tree, one flower pot, one insect and one bird is very important, and have closely connected to make nature.

And while protecting the green landscape consisting of a familiar nature, we will restore and create green, and will establish the environment that is friendly to animals and plants to live. We intend to form the network of living things by developing the parks as the bases of green, and by connecting other interspersed green bases such as shrines and temples.

- We will make efforts to create an environment taking into account habitat of living things
- We will create the networks of wind, green, and living things paying close attention to the topography and terrain of Meguro

-
- Through the signs and notices in the parks, we will appeal the importance of the bonds among living things, and will establish the places where people and nature can interact.
 - We will cherish the soil and natural grounds for creatures to live

Target 2 We will transmit the way of eco-friendly life in Meguro to the future generations by which people value the interaction with living things

We will be familiar with the life in Meguro, when we enjoy interaction with nature and learn the city of our own. At the same time, we should be aware of the importance of biodiversity, and should voluntarily change our life style into the one paying close attention to biodiversity.

It is necessary that we, as citizens of Meguro, continue to have awareness of biodiversity and transmit better life style to the future generation.

- We will cherish the archetypal experience for children to interact with nature
- We will value the experience to "walk, know and cultivate", that is, as the first step to try to walk in the city where we live now, so that we will harvest a lot of "fun"
- We cherish the calendar based on the seasonal cycle of the year
- We will enhance the understanding of biodiversity, and will change our life style and consumption behavior to the ones more aware of biodiversity

Target 3 We promote cooperation and collaboration among all the entities and stakeholders including individual to preserve the theme of this plan, "A cycle of lives supporting one another"

Parks have various functions such as the places for recreation and relaxation for residents, the places for providing green scenery and the habitat for living things. Many residents of all ages are enjoying and participating in the events held in the parks, especially those events for the development of local communication activities and for the protection of natural environment in particular.

Division	Landscape with gardens of residential areas	Landscape with small waterside	Landscape of forest of shrines, temples, and trees around residence	Landscape of grass
An approach to creating diversified and examples of creatures that are o environment where creatures can live, bserved now	<p>To avoid excessive pavement, we conserve soil surface as much as possible, expand green by connecting flower beds, cultivated fields, green hedges, trees of the season, rooftop gardens, etc.</p> <ul style="list-style-type: none"> ●Common Grass Yellow (<i>Eurema mandarina</i>) ●Blue-banded Graphium (<i>Graphium sarpedon</i>) ●Great Tit (<i>Parus minor</i>) 	<p>We intend to form a habitat for various aquatic plants by making gentle slopes that run from the shore into the water. If the water plants cover the surface of water excessively, we control growth of the plants. Conserving water surface without water plants will contribute to purification of water quality</p> <ul style="list-style-type: none"> ●Bog Gulrush (plant, <i>Scirpus triangulates</i>) ●White-legged Damselfly (<i>Copera annulata</i>) ●Grey Wagtail (<i>Motacilla cinerea</i>) ●Spotbill Duck (<i>Anas zonorhyncha</i>) 	<p>While working on preserving existing trees, we conserve massive forests of evergreen and deciduous trees that have stratum structure, for the protection of forest edge and regeneration of trees in the future. Also we nurture forest floor as a base for a variety of creatures, by protecting roots and making deposition of the fallen leaves.</p> <ul style="list-style-type: none"> ●Snake Gourd (<i>Trichosanthes cucumeroides</i>) ●Japanese Pygmy Woodpecker (<i>Dendrocopos kizuki</i>) 	<p>We divide an open field of the park into several patches with different height of grass growing, so that small creatures such as insects can select their suitable habitat. areas, grassland It is divided into several grass, to change the mowing height for each category plant height that is different as seen in patch-like ※, small animals such as insects will continue to be able to choose the habitat.</p> <ul style="list-style-type: none"> ●Daylily (<i>Hemerocallis fulva</i>) ●Japanese Orange Tip (<i>Anthocharis scolymus</i>) ●Japanese Grass Lizard (<i>Takydromus tachydromoides</i>)
Entities of activities	citizens businesses	citizens schools groups or organizations Meguro City	citizens schools groups or organizations Meguro City	schools groups or organizations Meguro City
Target indicator species for environmental restoration	<ul style="list-style-type: none"> ●Violet (<i>Viola grypoceras</i>) ●Japanese Common Toad (<i>Bufo japonicus formosus</i>) ●Japanese Bush Warbler (<i>Cettia diphone</i>) 	<ul style="list-style-type: none"> ●Predaceous Diving Beetle (<i>Hydaticus grammicus</i>) ●Medaka (Killifish) (<i>Oryzias latipes</i>) 	<ul style="list-style-type: none"> ●Spotted Bellflower (<i>Campanula punctata</i>) ●Beetle (<i>Trypoxylus dichotomus</i>) ●Brown Hawk Owl (breeding) (<i>Ninox scutulata</i>) 	<ul style="list-style-type: none"> ●Migratory Locust (<i>Locusta migratoria</i>) ●Bull-headed Shrike (breeding) (<i>Lanius bucephalus</i>)

Table 3-1 "Setting target indicator species for environmental formation"

In this plan, we set "target indicator species" (guide species) for the environmental formation of each type of landscape in the "Landscape of Meguro". Target indicator species are selected from materials of the past researches on plants and animals, and the records of research on familiar wildlife conducted by the citizens.



Landscape of thick coppice, cultivated fields and paddy fields	Landscape of urban forest	Landscape with open waterside	Landscape of green of new era
<p>In the management of wooded areas (copse), we set the cycle of coppice generation of sawtooth oak, konara oak, etc. to create various environments in the ecological succession from grass to trees, and conserve the variety of living things</p> <ul style="list-style-type: none"> ● Violet (<i>Viola grypoceras</i>) ● Stag Beetle (<i>Dorcus rectus</i>) 	<p>For the creature to live in, we create the base habitat that has the core forest with stratum structure, and integrate characteristic natural features of the ground, grassland, waterside, etc. into local environment. In addition, we conserve and restore spring water by making water source forests that have a function as recharge of rainwater.</p> <ul style="list-style-type: none"> ● Japanese dandelion (<i>Taraxacum Cass</i>) ● Beetle (<i>Trypoxylus dichotomus</i>) 	<p>We develop water conservation forests to conserve the spring, and secure the stable amount of water and its quality. Besides, we conserve diverse environment and various habitats such as little stream, shallows, the wand (fluvial lagoon), etc. for aquatic plants and animals to live in.</p> <ul style="list-style-type: none"> ● Reedmace (Common Cattail) (<i>Typha latifolia</i>) ● Lesser Emperor (<i>Anax parthenope</i>) 	<p>We create the environment in which living things can live by promoting greening of the rooftops, walls, and verandas of the building, including grass roofing where blown seeds of cogon grass can grow, and wall greening by climbing plants such as grapes. In the shopping malls, we promote greening by planting nectar sucking plants by utilizing the planter, etc., thus recovering the creatures such as butterflies and bees that carry pollen.</p> <ul style="list-style-type: none"> ● Japanese Swallowtail (<i>Papilio machaon</i>) ● House Swallow (<i>Hirundo rustica</i>)
schools groups or organizations Meguro City	groups or organizations universities Tokyo Metropolitan Government	groups or organizations Meguro City	citizens businesses schools groups or organizations Meguro City shopping malls
<ul style="list-style-type: none"> ● Japanese firefly (<i>Lucida lateralis</i>) ● Varied tit (breeding, <i>Parus varius</i>) ● Japanese tree frog (<i>Hyla japonica</i>) 	<ul style="list-style-type: none"> ● Narcissus flycatcher (breeding, <i>Ficedula narcissina</i>) ● Raccoon-dog (<i>Nycterus procyonoides</i>) 	<ul style="list-style-type: none"> ● Gold-ringed dragonfly (<i>Anotogaster sieboldi selys</i>) ● Kingfisher (breeding) (<i>Alcedo atthis</i>) 	<ul style="list-style-type: none"> ● Japanese gecko (<i>Gekko japonica</i>) ● Common kestrel (<i>Falco tinnunculus</i>)

(Examples of classification) ● plant ● mushroom (fungus) ● spider ● insect ● fish
 ● amphibian ● reptile ● bird ● mammal

In old Japan, Satoyama(managed woodlands or grasslands near human settlements) played an important role to bring natural blessing to the region, we now have a view that the park is, as it were, Satoyama of the city which brings various graces and blessings to the volunteer activities of the communities,

- We will promote the regional community development through activities aiming at the interaction between residents and nature
- We will promote the activities by the businesses with due consideration to the connection with living things
- We will expand the cycle of lives in which residents, businesses, schools and local governments mutually support each other