

## 4 Collaborating with Communities



### Kuju Bogatsuru Marshland Environmental Preservation Activities

The Kuju Bogatsuru Marshlands are located in western Oita Prefecture and contain approximately 53 hectares (131 acres) of high-altitude marshlands surrounded by the Kuju Mountains.

In order to protect the Kuju Bogatsuru Marshlands and the rare plants found in and around it, Kyushu Electric Power joined with the Ministry of the Environment, the Taketa city government, the Kuju Nature Preservation Society and other members of local communities in 2000 to recommence long-neglected controlled burning activities. At present, our activities are primarily administered by the Kyuden Mirai Foundation (established in May 2016), which oversees not only the controlled burning activities but various other environmental preservation activities, such as invasive species eradication and Kyushu azalea conservation on adjacent Mt. Hijiidake (on land owned by the Kyushu Electric Power).

The ecosystem was registered in 2005 through the Ramsar Convention, an agreement which seeks to protect globally important wetlands.

Kyuden Mirai Foundation website (Japanese only)  
([www.kyuden-mirai.or.jp](http://www.kyuden-mirai.or.jp))

### Controlled Burning Activities

We carry out controlled burning which maintains the marshland environment by removing shrub and weed overgrowth and promoting new budding plants.

Every year between August and September, we perform perimeter clearing and burning around the main controlled burning area in order to prevent the controlled burn from spreading beyond its intended area, and then in March of the following year, we carry out the main controlled burn within the marshlands.

In FY2017, a group of 345 volunteers made up of people from the local community, Kyuden Group employees, their families and others, took part in the controlled burning activities.



Cutting grass to prepare a fire protection zone



Controlled burning—the entire wetland is covered in flames

### Activity Expansion Efforts

In anticipation of a potential shortage of controlled burning leaders in the future, the Kyuden Mirai Foundation began a controlled burning leadership training course in FY2016 which is aimed at Kyuden Group employees. This course is comprised of practical training in such skills as grass cutter operation and classroom lectures about the activity history, safety instruction and the like. In FY2017, approximately 20 Kyuden Group employees took the course.



Practical instruction in the use of a grass cutter



Safety instruction to raise awareness of safety

### Kyushu Azalea Conservation and Mountain Trail Improvement Activities

We clear away trees and plants (such as panicked hydrangea) which hinder the growth of the Kyushu azalea (a species classified as Near-Threatened in Oita Prefecture) and perform other activities aimed at protecting biodiversity.

We also maintain and improve mountain trails so that mountain wildflowers do not get trampled underfoot.

The activities held in April and November of 2017 were carried out with the help of 184 volunteers, including current and former Kyuden Group employees.



Clearing obstructing trees



Mountain trail improvement

## Bogatsuru Leaflet Production and Distribution

In addition to ongoing activities in the Kuju Bogatsuru Marshlands, to follow the “conservation and utilization” principles of the Ramsar Convention, we laid down mats with brush bristles at trailheads that hikers are requested to wipe the bottom of their shoes on before hiking to prevent the seeds of non-native plant species from entering the area. We also produce and distribute rules for protecting the marshland, an area guide map, and leaflets about seasonal flowers.



Bristled mat to remove non-native plant seeds from hikers' shoes



Leaflet

## Preserving Biodiversity

To continue preserving the abundant nature of Kyushu with due consideration for biodiversity, we manage company-owned forest land and green belts at our power stations. We also engage in efforts to protect the familiar plants and animals of Kyushu that are threatened with extinction.

## Proper Management of Company-Owned Forests and Land

To ensure stable supplies of water for hydroelectricity generation, Kyushu Electric Power manages 4,447 hectares (10,988 acres) of company-owned forest land, mainly in the Aso–Kuju National Park area. Through headwater conservation, CO<sub>2</sub> absorption, and other means, we are working to maintain and enhance the public functions of our forest holdings. In March 2005, we acquired forest management certification\* from the Forest Stewardship Council (FSC), confirming that appropriate forest management is being conducted. This was a first for an electric power company in Japan.

We are supplying some of the corporate forest's Japanese cedar wood as material for a large wooden roof to cover the stands at the New National Stadium (which will host the 2020 Summer Olympics).

\*Certification issued by the Forest Stewardship Council (FSC, headquartered in Germany) for environmentally conscious forest management

## CO<sub>2</sub> Absorption and Fixation by Company-Owned Forests

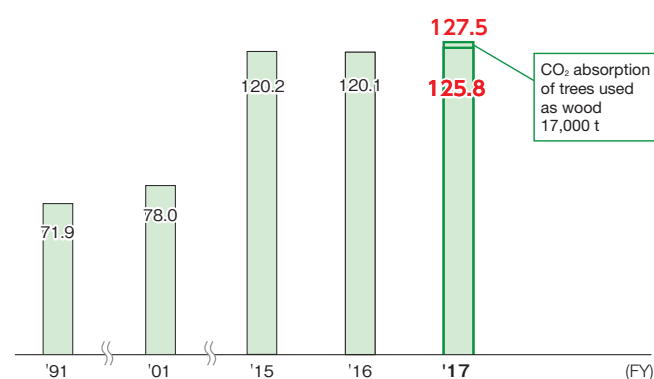
The CO<sub>2</sub> absorbed and fixed by company-owned forests is calculated to be 1,258 thousand metric tons for company-owned forest land as a whole, even if we subtract 17,000 metric tons of CO<sub>2</sub> absorbed by trees harvested for use as timber.



Company-owned forest (Lake Yamashita in Yufu City, Oita Prefecture)

### CO<sub>2</sub> Absorption and Fixation by Company-Owned Forests

Unit: 10,000 t-CO<sub>2</sub> t = metric ton (tonne)



Note 1: Calculated based on measured values from forest survey according to Japan's national greenhouse gas inventory calculation method

Note 2: The amount of CO<sub>2</sub> absorption until FY'01 does not include trees younger than 15 years

## Biodiversity Survey on Diversity at the Kuju Kyuden Forest (Kyushu Rinsan Co., Inc.)

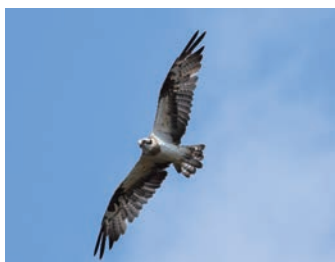
Kuju Kyuden Forest\* is the name of our company-owned forest in Yufu City, Oita Prefecture (by Lake Yamashita). This is where the Kyuden Mirai Foundation conducts environmental education activities, aiming to ensure an environment filled with biodiversity. Here, our group company Kyushu Rinsan Co., Inc. began a field survey to help in this effort. (\*More details on p. 42)

For the field survey, we brought in experts to give advice on creating an environment where diverse species of creatures can thrive. In addition, we have confirmed a wide range of species, including species classified as Near-Threatened such as the spotless grass yellow\*<sup>1</sup> butterfly and the osprey\*<sup>2</sup> in Oita Prefecture.

We will conduct the biodiversity survey throughout the four seasons and use the results as indicators to visualize the results of our efforts.



Spotless grass yellow butterfly



Osprey



Surveying the area

\*1 **Spotless grass yellow**: a small butterfly of the family Pieridae that lives in riverbeds and on grassy embankments. Although it was considered to be commonplace in the past, its numbers have declined sharply due to work on riverbanks, and extinction is a nationwide concern.

\*2 **Osprey**: A bird in the hawk family native to coastlines, estuaries, lakes and the like; it nests atop big trees and rocks, and on cliffs. Due to chemical contamination of the fish it feeds on, osprey numbers are declining worldwide.

## Biodiversity Survey at Facilities Administered by Our Group (Kyushu Rinsan Co., Inc.)

Kyushu Rinsan Co., Inc., a group company, has been designated by the city of Fukuoka as the administrator of Kanatake-no-Sato Park in the Nishi-ku district, and is working with the Wild Bird Society of Japan's Fukuoka branch to conduct surveys in the park, primarily to monitor wild birds.

Surveys are also being conducted on flowering plants, animals, insects, and other organisms. In FY2017, 12 surveys were conducted, confirming the existence of 136 types of flowering plants and 62 species of wild birds, including two species found for the first time on the park grounds, including the dark-sided flycatcher, a small passerine bird.

Also, egg-laying by the Japanese brown frog was confirmed in the marshy areas and waterways of the park. The frog is a species designated as Vulnerable in Fukuoka Prefecture. A survey of egg masses is being carried out, along with conservation. In FY2017, 349 egg masses were confirmed in the park.



Brown hawk-owl  
(Helped to get untangled from string in a field.)



Egg mass of the Japanese brown frog



## Energy and Environmental Education for the Next Generation



We are carrying out activities throughout Kyushu aimed at the next generation to foster interest in energy and the environment.

### Environmental Education at Kuju Kyuden Forest in Yufu City, Oita Prefecture

We manage a headwater conservation forest to ensure stable supplies of water for hydroelectricity generation. The rich natural environment of Lake Yamashita (Yufu City, Oita Prefecture) located in this vast forest is the location for an experiential environmental education program run by the Kyuden Mirai Foundation together with our group company, Kyushu Rinsan Co., Inc. A total of 24 sessions with a total of 1,280 participants were conducted in FY2017.

Through this type of environmental education, we aim to raise environmental conservation awareness among children and teach them through classroom lectures about the current global warming situation and the role of forests. The program's objective is to protect the environment in Kyushu into the future. The hands-on program combines a look into the fun of the forestry profession, observing the forest, and working with wood.



Learning how to cut down a tree



Observing the forest, in the midst of nature



Woodworking—the struggle of working with hard wood

### Environmental Education for the Next Generation

We offer visiting school talks on energy and environmental issues throughout Kyushu for fun learning.

In FY2017, 529 classes were conducted in elementary and junior high schools, reaching 16,000 children and getting them to think about energy and the environment.



Children fully engaged in a class



Awe-inspiring tour of the Sendai Nuclear Power Station

## “Eco-Mother” Activities Support Environmental Education

We carry out “Eco-mother” activities to support environmental education for children and to provide environmental information to their parents and guardians.

These activities involve mothers in various parts of Kyushu visiting nursery schools and others as “Eco-mothers” to read picture books with environmental themes, instilling in young children the importance of valuing the environment.

In FY2017, 200 sessions were held, with the participation of approximately 16,000 children, parents and guardians.

In addition, over the past 15 years, we have conducted more than 3,600 sessions in total, reaching about 250,000 kids and adults.



“Eco-mother” activities communicate the importance of the environment

## Kyuden Play Forest Activities Across Kyushu

To foster a love of forests in children, we have been conducting hands-on environmental events we call Kyuden Play Forest in various places around Kyushu since FY2016. In FY2017 we increased the frequency of the events, expanding them to other parts of Kyushu.

At such an event, in collaboration with environmental groups, employees from various companies set up booths in the forest for kids and their families to have fun with things like making their own chopsticks, playing nature games, cutting logs, and more.



Making chopsticks from thinned hinoki cypress



A nature game to generate excitement about contact with plants and forest creatures



Cutting a log with a handsaw

## Environment Month Initiatives

June has been designated “Environmental Month,” and every year a variety of environmental activities are carried out in different parts of Kyushu. Based on the Kyuden Group’s brand message of each employee working to “make a brighter future for generations to come,” we pursue environmental activities that increase communication with local citizens at each business site.

In FY2017, we enhanced and expanded collaborative efforts with local communities, holding such events as releasing sweetfish fry (juvenile fish) into the Mimikawa river system and harvesting sweet potatoes (and planting them) on power station premises.

### Joining in with Local Citizens

At 103 of our business sites, the Kyuden Group joined together with citizens in cleanup activities or flower planting run by local authorities, as well as exhibiting at environmental events.



Planting flowers with daycare children (Kumamoto Higashi Power Distribution Business Sites)



Cleaning the beach with local citizens (Sendai Power Station)

### Environmental Education for the Next Generation

We carried out a range of next generation-focused environmental education activities at 21 business sites aimed at local daycare and elementary school children. Among the various activities were environmental and energy-related school talks, sweet potato harvesting (and planting) and sweetfish fry river releases.



Children getting dirty planting sweet potatoes (Karita Power Station)



Releasing fry and hoping they grow (Mimikawa Hydropower Development Office)



Green curtains of goya (bitter melon) and morning glory plants (Asahi Kindergarten, affiliated with Nakamura Gakuen University)