

## Biodiversity

### Hometown Forestation Program

In 2004, in order to protect biodiversity and contribute to a sustainable society, while cherishing our sense of gratitude to nature, we began the Hometown Forestation Programs to plant trees native to each region and revitalize the forests.

We undertook these programs with the cooperation of Fukushima Prefecture from 2004 to 2009 and with the cooperation of Niigata Prefecture, the town of Tsunanmachi and Tokamachi and Ojiya Cities in the prefecture from 2010 to 2014. In addition, in other areas served by JR East, we are planting trees that are native to the areas and we shall continue to do the same in the future.



Shinanogawa River Hometown Forestation Program in September 2014

### Forest development along railway lines<sup>☆</sup>

Beginning in 1992, we have been organizing tree planting activities along JR East railway lines. By FY2015 a total of approximately 49 thousand people had participated in planting about 331 thousand trees. Today, planting has gone beyond the trackside and is done in cooperation with local communities.

### Development of railway trees

Along some JR East railway lines, we have planted railway trees to shield the tracks from blowing snow and wind. The first railway trees were created in 1893 for disaster prevention. As living disaster prevention facilities, railway forests are playing their roles.

JR East now owns approximately 5.8 million railway trees on a total of about 3,900 hectares along our lines at approximately 1,080 locations. The trees absorb 15 thousand tons of CO<sub>2</sub>, equivalent to 0.7% of the CO<sub>2</sub> that JR East emits (this is the actual amount in FY2015). In this way, they also contribute to preserving the environment. In 2008, after fundamentally reviewing the role of railway trees from the viewpoints of both disaster prevention and environmental preservation, we launched a new project to plant trees to replace those that will require replacement over the coming 20 years.



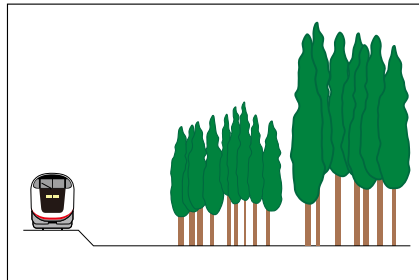
Jinguji No. 2 railway forest on the Ou Line (forest to protect against blizzards)



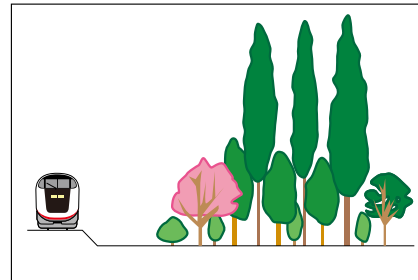
Tenoko No. 6 railway forest on the Yonesaka Line (forest to protect against snow slides)

### Railway trees—From single to multi-variety forests

Traditionally, railway trees were of a single variety, primarily cedar trees, because another function, in addition to protecting against natural disasters, was to generate profits through the production of timber. This has recently been less successful, however, as the demand for domestic timber has declined. In future tree replacement, we will plant several varieties suitable for the local climate and develop them to be more sustainable and ecologically resilient.



Conventional railway trees  
(single variety such as cedar trees)



New railway trees  
(mixture of different varieties of trees)

### Planting new railway trees

Ceremonies for the planting of new railway trees were held in the Kakizaki No. 1 railway forest between Kakizaki and Yoneyama on the Shin-etsu Main Line on September 27, 2008, in the Oitama No. 2 forest on the Ou Main Line between Oitama and Takahata on July 26, 2009, in the Jinguji No. 2 railway forest on the Ou Main Line between Jinguji and Kariwano on May 22, 2010, and in the Okama No.1 railway forest on the Tazawako Line on September 29, 2012, in the Sekine No. 1 railway forest on the Ou Main Line between Sekine and Yonezawa on September 28, 2013, and in the Hirakida No. 3 forest on the Uetsu Main Line between Hirakida and Sakamachi on September 20, 2014. With kind advice and guidance from ecologist and Professor Emeritus Akira Miyawaki of Yokohama National University, several varieties of native trees (potential natural vegetation, or PNV) were selected and planted. Many local residents and participants from organized tours took part in the ceremonies, and discovered how the trees they planted would grow to become useful as living railway disaster prevention facilities.



Ceremony for planting Hirakida No.3 railway forest on the Uetsu Main Line (September 20, 2014)