

■ Removal of the root-system (December 2012)



■ Reinstallation (March 2013)



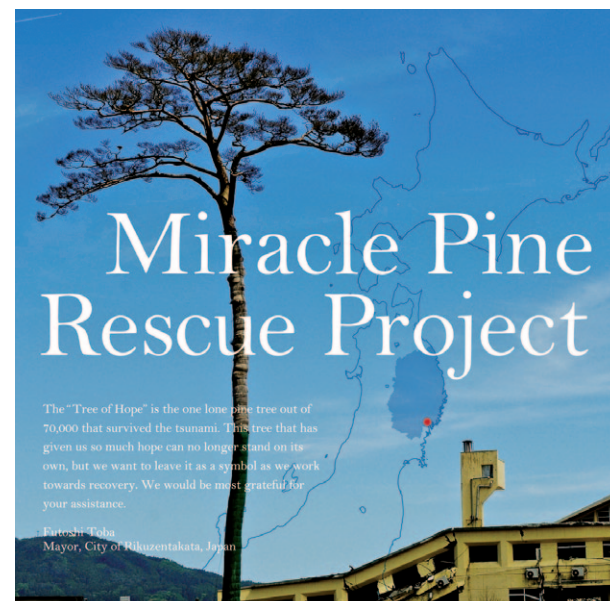
■ "The Miracle Pine Tree" Preservation Project Completed (July 3, 2013)



THE MIRACLE PINE TREE

奇跡の一本松

The City of Rikuzentakata decided to preserve the Miracle Pine Tree as a monument for future generations as a symbol of recovery by using artificial processing methods. Significant funding was needed to make this happen. The city chose to prioritize and focus upon the return to normalcy for the citizens affected by the disaster. As such, the decision was made to use city and relief funds for our residents. We chose to create a separate fund for the preservation project. The Miracle Pine Preservation project which began in July 2012 received donations from many throughout the world. We are grateful for your support and cooperation.



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TAKATA MATSUBARA and THE MIRACLE PINE TREE

Takata Matsubara, the white sand beach surrounded by pine trees, was a location loved by residents and people near and far throughout the four seasons. Ancestors began planting pine trees approximately 350 years ago and the following generations of citizens cared for this grove. Poets wrote about its beauty. In 1940 it was designated a national place of beauty, and in 1964 it was designated a national park. People came to enjoy the beach, swimming in the bay. The walking paths in the pine grove were spots where locals would gather. The rich animal and plant life here also made the location unique. Takata Matsubara set Rikuzentakata apart.



Takata Matsubara behind the white sand beach



Ishikawa Takuboku's poem



Enjoying the beach and bay

On March 11, 2011 a giant tsunami swept through Rikuzentakata. The loss of life including those missing reached almost 2,000 people. The coastal area and downtown were obliterated. Takata Matsubara, the grove of approximately 70,000 pine trees that had protected the city from tsunamis in the past was almost completely wiped out. The one tree that remained was the Miracle Pine which stood 27.5 meters tall with a 90 cm diameter trunk planted approximately 170 years ago.

It withstood the tsunami but was damaged severely by the salt water and in May 2012 was officially declared dead. Because it had been a symbol of recovery post-disaster for those in Rikuzentakata as well as many around the world, the city chose to preserve this pine tree as a monument for future generations.



The Miracle Pine Tree (photo from Geospatial Information Authority of Japan)



The Miracle Pine Tree and the Takata Matsubara pine grove

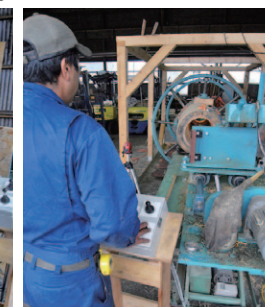
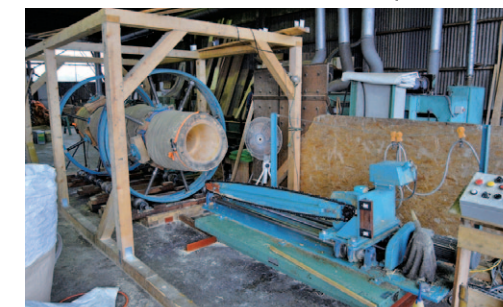
THE MIRACLE PINE TREE PRESERVATION PROJECT

Contractor	NOMURA Co.,Ltd.	
Preservation Methods	(1) Keep as much of the original Miracle Pine as possible and preserve in a way that will withstand the elements. Cut the top branches and pine needles and replace with a replica. (2) Use CFRP (Carbon Fiber Reinforced Plastics) for the main structure to make it a free-standing monument. (3) Remove the root-system and preserve for the future. Use concrete for the new root-system.	
Work Processes	September 12-13, 2012 Mid-September 2012 Early December 2012 Early March 2013 May ~ June 2013 Late June 2013 July 3, 2013	Cut down and remove tree Antisepsis and preservation process Cut and remove root-system Begin reinstallation process Modifications to reinstallation (change angles of branches) Reinstallation completed Miracle Pine Reinstallation Ceremony

■ Cutting down the lone surviving pine tree (September 12-13, 2012)



■ Removal of the core of the pine : City of Yatomi, Aichi Prefecture (September ~ November 2012)



■ Taking a mold of the branches : City of Sagami-hara, Kanagawa Prefecture (October ~ December 2012)



OUTLINE

WORK IN PROGRESS

TAKATA MATSUBARA

THE MIRACLE PINE TREE