

Transplantation of large trees

This is green.

Climate protection Nature conservation Deutsche Bahn.

Experiences of the Stuttgart-Ulm project

In 2011/12, 84 large trees (mainly plane trees, maple, beech, linden, chestnuts) were transplanted by using the circular spade technique. This was a result of conciliatory proceedings from 30th of November 2010. In the meantime, 81 trees have been given to the city of Stuttgart after three years of intensive nurturing.

Preparation

- selection and examination of the condition of trees eligible for transplantation and development of recommendations for action and implementation
- selection of sites for transplantation
- planning of transplantation time and preparatory measures, taking into account relevant regulations
- selection of suitable companies with sufficient experience

Execution

- preparation at removal site: e.g. removal of large branches, crown fixation
- transplantation using suitable equipment
- new locations: creation of rehabilitation zones for the roots, tensioning of the trees, making crown cuts (to minimize the evaporation area)







- regular watering of the trees (1-2 times a week)
- fertilization twice per growing season
- regular control of the tree anchorages and regarding pests and dead wood
- intensive aftercare required for at least two years

Conclusion

Transplantation of large trees is a serious alternative to felling, especially when it comes to trees that shape the cityscape. The trees must be vital and technically feasible. The market value of a tree is often higher than the cost of transplantation and maintenance. From a nature conservation point of view, it is a great advantage, when trees with trained crowns are already available at the new habitat. In the case of a new planting of young trees, it takes 15-30 years until a corresponding cityscape-forming impression is created and the ecological functions are given.

Transplantation techniques

Circular spade technology

- trunk diameter from approx. 120-140 cm on
- this technology is preferably used (less complex, longer transport distances possible)

Platform technology

- trunk diameter from approx. 140 cm on
- platform below the root space horizontally through the ground space \rightarrow tree stands on an oversized "cake plate", which is moved by a crane or a winch

