



## Tree Planting with Communities and Children: Fostering Responsibility for Fire Protection and Environmental Stewardship

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Tree planting initiatives with communities and children not only contribute to environmental conservation but also nurture a sense of ownership and responsibility towards nature. However, to ensure the success and longevity of such projects, several considerations must be taken into account.

This note has been prepared within the framework of the project Pyranakampsi-Alevlerden Gelecege which focused on fire-affected communities (2022-24). The note is divided in two sections:

- A. Preparation before planting, biodiversity and other considerations to be taken into account.
- B. Community and School Engagement.

### **A. Preparation before planting, biodiversity and other considerations to be taken into account.**

This includes:

1. **Soil Assessment:** Evaluate the condition of the soil to determine its fertility, pH levels, and nutrient content. Soil testing can help identify any deficiencies that need to be addressed before planting.
2. **Erosion Risk Assessment:** Assess the risk of soil erosion in the burned area, especially on slopes or areas with loose soil. Implement erosion control measures such as mulching, contour plowing, or installing erosion control blankets to stabilize the soil.
3. **Debris Clearance:** Remove any debris, such as fallen trees, branches, and charred vegetation, from the planting site. Clearing debris creates space for new vegetation to establish and reduces the risk of fire recurrence.

**Biodiversity:** Promoting biodiversity is essential for restoring the ecological balance and resilience of the ecosystem.

Here are some ways to enhance biodiversity during reforestation:

1. **Native Species Selection:** Choose a diverse range of native tree species adapted to the local climate and soil conditions. Native trees support indigenous wildlife and contribute to ecosystem stability.
2. **Habitat Diversity:** Create a mosaic of habitats by planting trees of different sizes, ages, and species composition. This provides diverse niches for various plant and animal species to thrive.
3. **Understory Planting:** Include understory vegetation such as shrubs, herbs, and grasses in addition to trees.
4. **Understory plants enhance habitat complexity and provide food and shelter for wildlife.**
5. **During Planting:** Proper planting techniques are essential for the successful establishment of new vegetation.



Consider the following factors during planting:

- **Tree Species Selection:** Tree species that are well-suited to the site conditions, are Aleppo Pine, Turkish Pine, Carob Tree, Kermes Oak, Strawberry Tree, Olive Tree and Cypress.
- including soil type, moisture levels, and sunlight exposure. Select a mix of fast-growing pioneer species and long-lived climax species for optimal forest regeneration.
- **Planting Method:** Use appropriate planting methods such as containerized seedlings, bare-root seedlings, or direct seeding, depending on site conditions and project goals.
- **Spacing and Density:** Plant trees at appropriate spacing to optimize growth and canopy development. Consider the mature size of the trees and their competitive interactions when determining planting density.

**After Planting:** Ongoing monitoring and maintenance are essential to ensure the long-term success of reforestation efforts. Here are some post planting activities to consider:

1. **Irrigation:** Provide supplemental watering during dry periods to support tree establishment and root development. Irrigation may be necessary, especially during the first few years after planting.
2. **Weed Control:** Implement weed management strategies to minimize competition for water, nutrients, and sunlight. Mulching, mowing, or herbicide application can help control weed growth and promote tree growth.
3. **Pest and Disease Management:** Monitor trees for signs of pests and diseases and take appropriate measures to control outbreaks. Pruning infected branches, using biological control methods can help manage pest and disease pressures.

By implementing these measures, we can ensure the successful restoration of burned areas and contribute to the conservation of biodiversity and ecosystem resilience.

## **B. Community and School Engagement**

1. **Education and Engagement:** Before the planting event, educate participants, especially children, about the significance of trees, their role in ecosystems, and the importance of long-term care. Engage them in discussions about environmental stewardship and the impact of their actions on the planet.
2. **Choosing the Right Time for Planting:** Particularly when plants cannot be watered, it is advisable to plant them after the first rains in autumn. The soil should not be excessively wet nor too dry. This optimal window for planting extends until the end of February to ensure that the plants receive sufficient rainfall.
3. **Proper Species Selection:** Choose native tree species that are well-suited to the local climate and soil conditions. Consider the ecosystem's needs and the trees' resilience to thrive in the area. Involving the community in selecting species fosters a sense of ownership and ensures the trees' sustainability. Some fire-resistant species native to Cyprus include Aleppo Pine, Turkish Pine, Carob Tree, Kermes Oak, Strawberry Tree, Olive Tree, and Cypress (see more detail at A above).
4. **Site Preparation:** Ensure proper site preparation, including soil testing and amendment if necessary. Clearing invasive species and preparing planting holes in advance can significantly enhance the trees' chances of survival.

5. **Supervision and Guidance:** Assign trained supervisors to oversee the planting process, especially when involving children. Provide guidance on proper planting techniques, including depth, spacing, and watering.
6. **Collaborative Efforts:** Encourage collaboration between community members, children, local organizations, and authorities. Establish partnerships with local schools, youth groups, and environmental clubs to ensure ongoing support and engagement.
7. **Long-term Maintenance Plan:** Develop a comprehensive maintenance plan outlining responsibilities for watering, weeding, mulching, and monitoring tree growth. Engage volunteers from the community, including children and their families, in regular maintenance activities.
8. **Monitoring and Evaluation:** Implement a system for monitoring the planted trees' health and growth. Involve participants in tracking the progress of the trees over time, fostering a sense of pride and responsibility for their contribution to the environment.
9. **Celebrate Achievements:** Organize periodic gatherings or ceremonies to celebrate milestones and achievements in the tree planting project. Recognize the contributions of participants, highlight the positive impact on the environment, and inspire continued engagement.
10. **Sustainable Funding:** Explore sustainable funding sources to support ongoing maintenance and expansion of tree planting initiatives. Seek grants, sponsorships, or partnerships with businesses and organizations committed to environmental conservation.
11. **Community Empowerment:** Empower the community, including children, to take ownership of the planted trees and the surrounding environment. Encourage them to become advocates for tree conservation and environmental sustainability in their neighborhoods.

In conclusion, tree planting with communities and children offers a valuable opportunity to instill a sense of responsibility and environmental stewardship. By incorporating education, collaboration, and long-term planning, these initiatives can not only enhance local ecosystems but also empower individuals to become active participants in preserving our planet for future generations, while also contributing to fire protection efforts in fire-prone areas like Cyprus.

