

Environmental Education in Daegu Arboretum, Korea

KIM Yong-Shik,

Yeungnam University, Gyeongsan Republic of KOREA

Co-authors: Byung-Do KIM, Researcher, Sung-Tae YOO, Shin-Koo KANG,

Deagu Arboretum, Daegu, Republic of KOREA

Daegu City, home of Korea's textile and apple industries, is located in the southeast corner of the inner Korean Peninsula. Daegu has a population of 2.6 million per 885 km² with a population density of 885 people, representing the third largest city in Korea. Daegu has very mild climate with very few snows in winter. The Daegu Arboretum, which is managed by the Daegu Metropolitan City, is located in the outskirts of the residential areas in the west sector of the city. Amidst growing concern for the environment and biodiversity conservation, the city government has devised a plan to establish an environmentally friendly botanical park. The Arboretum was opened to the public on 3 May 2002 after 5 years of preparation in and around abandoned waste disposal sites. The construction of the arboretum was the first such endeavour in Korea to convert a waste disposal site into an environmental friendly botanical facility for the conservation of plant diversity, citizen's welfare and environmental education.

The mission of the Daegu Arboretum is to operate as a nature-learning space for citizens by way of conserving plant diversity and providing environmental education to the public. The twenty-one gardens, including Herbal Garden, Medicinal Plant Garden, Fragrant Garden, and Dye Plant Garden, are arranged in the valley. Approximately 1,750 living collections, including 1,300 herbaceous species and 450 woody species, are documented in the arboretum. To manage the arboretum, 35 staff members, including 13 for administration, 19 for garden management and 4 for research, are deployed. The City Government is expecting to recruit more staff for the garden management in the coming season. The arboretum exchanges seeds for scientific purposes, with 153 botanical institutions in 35 countries. A two-story forest museum will be open to the public at the end of this year. The museum will focus on culture and people, exploration to the plant world and ecological restoration of nature. This facility is expected to be a vital place for environmental education, and operate as a visitor center for the arboretum.

The arboretum is open with free admission all year long from 09:00 a.m. to 6:00 p.m., with June, July and August being open from 9:00 a.m. to 7:00 p.m. Because it is considered a unique arboretum, the number of visitors to the garden is rapidly increasing, even reaching a level of 20 thousand a day and 1.2 million a year. The Arboretum also received a prize in 2002 from the Ministry of Environment for its contribution to the importance of environmental awareness and biodiversity conservation.

In 2003, the first and main educational program for the public was started. The main educational activities in the arboretum were grouped into five; Nature Interpretation and Landscape Woody Plant Management in an Apartment House Complex for adults, Green School for the youth, Summer School for Nature for children, and Nature Experience Class for parents and children. All of these educational programmes are categorized into four groups; primary, secondary, high school and adults (including parents and teachers).

Nature Interpreter Course: This programme was prepared in 2003 for the benefit of adults, namely the elderly or retired civilians. It serves as a guide to understanding nature, and provides an opportunity to tour the arboretum. As a prerequisite for certification, a nine week training course must be undertaken to study plant identification, plant taxonomy, management of herbarium specimens, soil, ecology, plant physiology, introduction to natural monuments, and local herbal plants. The course runs for 18 days, every Tuesday and Thursday, from April to June. Approximately 60 people are hired as trained guides for visitors to the arboretum. And 9 volunteers deliver lectures for the course.

Green School Course: This course was created in 2003 for primary and secondary school students. It was designed to teach environmental education, focusing on man and nature. Themes include the importance of the woods, wood artifacts, ecology, puzzling of plants, and bonsai. Approximately 200 primary students are actively participating in this programme.

Nature Experience Course: Since the Korean government implemented a 5-day work policy, parents have rediscovered the importance of spending quality time with their children, and to experience nature together. In addition, parents expect their children to develop personalities which are more compatible with nature. The course is opened on the fourth Saturday of every month for both parents and children to learn about plant identification, nature education, swamp plants and fragrant plants. Approximately 60 students are enrolled in this course. The main activities of the course focus on the history of man and plants, the environment, plant identification, understanding swamp and medicinal plants, and observing nature.

Summer School for Children: This course is offered to 400 primary students during the summer vacation. The students learn how to draw and dye plants for six hours, from 10:00 a.m. to 4:00 pm. Lunch is provided in the arboretum.

Landscape Woody Plant Management Course: Apartment houses have recently been a popular type of housing in urban areas in Korea. As a result, garden management around these houses has become more important. Two one-day courses run in the spring and autumn for 100 participants to learn about garden management. Themes include tree physiology and tree management, namely transplanting of trees and pest and disease control.

The education programmes in the arboretum are extended to the training programs for secondary and high school teachers on an irregular basis. The ongoing display of orchids, fragrant herbals and chrysanthemum is another event available to the public. Visitors are given opportunities to enhance their experiences with nature and plants while in the arboretum. Improvements will also be made as displays of ecology, history and

culture for plants and people, including specimens for plants and insects, will be open to the public this summer.