

The management of Fushan Botanic Garden (FBG)

Tse-Tung Lin

Fushan Research Center, Taiwan Forestry Research Institute,
Yilan, Taiwan

Email: tung@tfri.gov.tw

The Fushan Botanic Garden (FBG) is located in northeastern Taiwan (24°46'N, 121°35'E). It occupies 1097 ha, covering 85% of natural forest and ranging from 400-1400m in elevation. The climate is strongly influenced by northeastern monsoon in the winter and typhoon in the summer. It is cool and rainy in the winter but warm and humid in the summer, with an average temperature of 18.5°C and a mean annual precipitation of 4125mm. The FBG was founded in 1990 and has become a very popular sightseeing point and an important conservation center of biodiversity.

Mission Statement

"To develop and maintain a diverse living collection of plants, especially indigenous plants of Taiwan, to support research and teaching in plant biology, further the conservation of plant diversity, and promote understanding and appreciation of plants and the natural environment to the public."



Exhibition

There are 15 ha exhibition area, which has been divided into different sections based on the system of plant taxonomy, growing native plants of Taiwan. Divisions of Gymnosperm, Polypetalae, Sympetalae, Rhododendron, Bamboos, Ferns, Herbaceous plants, Shade-tolerant plants, Aquatic plants, and Ethnobotany have been set. More than 3000 plants belonging to 700 species of vascular plants have been planted to the display areas.



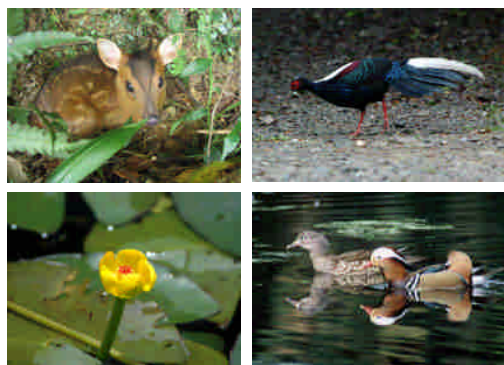
Education

To enhance visitors' awareness, narrators would introduce FBG to every visitor at entrance, programs about FBG are displayed at the nature center, interpretation boards of every division have been erected, and several introduction brochures have been issued. FBG also train volunteers, travel agency guides, and school teachers to promote environmental education.

Conservation

The surrounding forest is in good natural condition with abundant flora and fauna. Wild animals always wander in the garden and become the best resources of ecological observation. To protect the natural resources, visitor number of FBG has been limited to 500 in each week day and 600 in each weekend day.

In addition to the whole ecosystem, the conservation mainly targets rare plants like *Keteleeria davidiana* var. *formosana*, *Amentotaxus formosana*, *Nuphar shimadai*, and economy-potential plants, such as *Ficus pumila* var. *awkeotsang*, *Cinnamomum osmophloeum*, *Camellia sinensis* f. *formosensis*, etc.



Research

FBG has been a site of long-term ecological research (LTER) in Taiwan since 1992. The aim of these studies is to understand the composition and functions of this ecosystem. Disturbance factors, such as typhoon and pollution, are emphasized in order to recognize their impacts on the ecosystem. Other research programs include studies of hydro-meteorology, soil erosion, subsurface flow, nutrient cycling, biomass, photosynthesis and transpiration, regeneration, forest community, animal community ecology, etc. Studies on animal-plant interaction of decomposer and herbivore are also being conducted.

A 25 ha permanent plot has been set in Fushan subtropical rainforest since 2004. FBG is collaborated with Smithsonian Institute, Department of Life science of National Taiwan University, and Taiwan Forest Bureau to study the long term forest dynamic. This plot has been a part of Center for Tropical Forest Science (CTFS) network and shared research results internationally.