

BOTANICAL GARDENS IN CONSERVATION:

*Investing
in Nature*

A Partnership for Plants in Canada

INTRODUCTION

Plant research and educational programs at botanical gardens advance conservation science and promote public awareness of the importance of plants and the need for their conservation. Furthermore, through medicinal plant displays or programs about ethnobotany and traditional knowledge, botanical gardens and arboreta present the importance of plants for health care, and the need for conserving plant populations and overall biodiversity.

Why

To adequately protect plants and their habitats, conservation efforts and public awareness of these efforts must improve. With over 200 million visitors per year, botanical gardens are important science and educational facilities, providing leadership in plant conservation and public education.

What

The global *Investing in Nature* project endeavours to protect 20,000 threatened plant species from extinction.

How

Investing in Nature is funding education programs in Canada, China, Japan, the UK and the US; revitalising conservation in 16 botanical gardens in Argentina, Brazil, India, Indonesia, and the Middle East; and creating living gene banks in botanical gardens worldwide.

Who

The global *Investing in Nature* project is sponsored by HSBC Holdings plc and directed by Botanic Gardens Conservation International. *Investing in Nature—Partnership for Plants in Canada*, was developed in co-operation with Canadian Botanical Conservation Network and Royal Botanical Gardens with additional support from Montréal Botanical Garden and the Canadian Heritage Museums Assistance Program.

CONSERVATION ROLES OF BOTANICAL GARDENS:

- Grow large collections of endangered plants, holding them safely in cultivation or seed banks in case wild populations are destroyed.
- Reintroduce plants back to the wild as part of species recovery projects.
- Undertake botanical research to document and record the plants of the world and their characteristics.
- Promote environmental awareness to the public through educational programs.
- Provide training centres for horticulture and the development of cultivation and propagation expertise
- Maintain nature reserves and work with others to study, monitor and protect natural plant populations and habitats.

ETHNOBOTANICAL RESEARCH AT SELECTED CANADIAN BOTANICAL GARDENS:



Pat Hess, a Cayuga from Six Nations of Grand River Reserve, is leading the ethnobotany project at Royal Botanical Gardens.

1. Royal Botanical Gardens, Hamilton, Ontario: working with McMaster University's Indigenous Studies Program and Six Nations Polytechnic in an effort to preserve the botanical legacy of the Six Nations People.
2. Montréal Botanical Garden, Québec: working with Cree and Inuit communities in northern Québec to document and preserve traditional botanical knowledge.
3. Devonian Botanic Garden: University of Alberta, Edmonton: working with the Enoch Cree Nation reserve to preserve traditional knowledge by collecting, identifying and cataloguing plants and their uses.

EXAMPLES OF ETHNOBOTANY EDUCATION AT CANADIAN BOTANICAL GARDENS:



Personal interpretive programs: A team of animators offer guided tours, dance and craft demonstrations throughout the summer at Montréal Botanical Garden's First Nations Garden.



Theme gardens: The Physic Garden at University of British Columbia features ancient European healing plants.



Interpretive exhibits: Exhibits interpret local ethnobotany at Memorial University of Newfoundland Botanical Garden.



Interactive exhibits: Visitors are invited to use a traditional prayer circle in the Canadian Heritage Garden at VanDusen Botanical Garden.

BOTANICAL GARDENS AND MEDICINAL PLANTS:

- Many botanical gardens play an active role in medicinal plant study and research, cultivation and conservation.
- Extensive collections are easily accessed and available to support local initiatives in primary health care using medicinal plants and their sustainable use, particularly in developing countries.
- Collections also available as a resource for screening programs for pharmaceutical companies and to provide material for those assessing the value and safety of particular herbal medicines.
- Botanical gardens can provide the expertise to improve the agronomy of cultivated medicinal plants and bring into cultivation those species needed in medicine that have not been previously cultivated.
- Botanical gardens have an important role in the development of a gene pool of wild stock plants, which can contribute to breeding programs.



CASE STUDY: Conserving and cultivating medicinal plants in Ghana



In collaboration with the Aburi Botanic Gardens, BGCI recently completed a three-year project to conserve and cultivate medicinal plants in Ghana. Experts from three communities established a medicinal plant display garden, a trail and interpretation at the Aburi Botanic Gardens to promote interest in the conservation and sustainable harvesting of these species. Gardens were also established in local villages for cultivating medicinal plants to relieve pressure on wild populations. To further assist local residents in managing these home gardens, an illustrated handbook for the harvesting, preparation and storage of medicinal plants was also produced.



BGCI

Botanic Gardens Conservation International

BGCI encourages and supports botanic gardens to take a leading role in plant conservation, and become responsible for their own national plant collections. BGCI provides technical guidance, data, educational resources and support for botanical gardens around the world. The Global Strategy for Plant Conservation and the International Agenda for Botanic Gardens in Conservation provide gardens with a framework and objectives to work towards achieving common aims.

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In partnership with Canadian Botanical Conservation Network, BGCI has expanded their efforts to Canadian botanical gardens and arboreta through *Investing in Nature—A Partnership for Plants in Canada*.

This four-year program will develop educational resources, and link Canadian botanical gardens and international conservation and environmental education efforts.

Canadian botanical gardens and arboreta will be working co-operatively to increase public awareness of the importance of plants, the threats they face, and the action needed to protect them.



Canadian Botanical Conservation Network
le réseau canadien pour la conservation de la flore



Canadian Heritage
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SUPPORT BOTANICAL GARDEN CONSERVATION EFFORTS:

Consider partnering with your local botanical garden or arboretum on biodiversity and education projects!

To participate or for more information, contact:

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