RCEs and biodiversity

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Regional Centres of Expertise on ESD (RCE) networks collaborate on issues that are of common interest to them. Working on specific themes helps deal with challenges in the context of ESD and aids in engaging regional partners who are active in a particular thematic area.

One such theme is biodiversity, where RCEs foster education that helps balance the well-being of both ecosystems and communities.

A few examples of RCE actions for biodiversity follow.

Photo courtesy of USDA Natural Resources Conservation Service

Swift Fox, one of the species that benefits from the Prairie SAR Beneficial Agricultural Practices project

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Students learn about mangroves in Cha-am.

© RCE Greater Sudbury

Vegetation salvage plots help increase biodiversity in developing stands of planted trees.

© RCE Greater Sendai

Students learn about the biodiversity in rice paddies

A Biodiversity Action Plan for the community

A Biodiversity Action Plan was developed by RCE Greater Sudbury, Canada, with the participation of community members over several months. Stakeholders provided input and feedback to the plan in Biodiversity Stakeholder Involvement Sessions, 'Have Your Say' Workshops, and a telephone survey.

The Greater Sudbury Biodiversity Action Plan provides a comprehensive way to address the risks to plant communities and wildlife habitat identified by the Ecological Risk Assessment (ERA) portion of the Sudbury Soils Study. The ERA, one of the most comprehensive studies of its kind ever undertaken in North America, evaluated the ecological risks associated with seven Chemicals of Concern (COCs): arsenic, cadmium, cobalt, copper, lead, nickel, and selenium. While COCs occur naturally in the area, their levels in the soil have increased over the years through particle deposition from smelter emissions. The two primary, local mining companies, Vale Inco and Xstrata Nickel, accepted to work with the Greater Sudbury community to manage the risks identified by the Sudbury Soils Study's ERA.

The Greater Sudbury Biodiversity Action Plan can be downloaded from www.greatersudbury.ca/biodiversity.

Project for species at risk in Prairie Canada

Launched in 2005, the Prairie Species at Risk (SAR) Beneficial Agricultural Practices project has conducted a detailed review of scientific literature about ten prairie species, including the Swift Fox, Burrowing Owl and Long-Billed Curlew, which are at risk. This local ESD project aims at educating agricultural producers on implementing practices that support at-risk species, which are found mainly in native rangelands and agricultural areas.

The Prairie SAR project provides farmers and extension agencies clear and regionally-specific recommendations on the management of habitat, and helps accelerate the adoption of beneficial agricultural practices by land managers.

The project, funded jointly and directed by the federal government and the governments of the three Prairie Provinces, falls under RCE Saskatchewan's thematic Working Group on Reconnecting to Natural Prairie Ecosystems.

Conservation in the Ramsar wetlands of the Greater Sendai region

RCE Greater Sendai in Japan has been facilitating collaboration and partnerships to maintain the integrity of the region's ecosystems. The Ramsar wetlands in Osaki-Tajiri support rich biodiversity. Conservation efforts include social learning and action to equip local citizens with knowledge, understanding and skills for conservation in rice paddies and wetlands.

Osaki-Tajiri is known for rice production, and most wetlands in the area have been transformed into rice paddies in the past century. The winter-flooding of rice paddies in Osaki-Tajiri (then Tajiri Town) was initiated in the late 1990's to meet the twin goals of providing habitat for migratory birds and experimenting with organic farming. Today, about 95 per cent of white-fronted geese that migrate to Japan rest in the area, which has come to be known for rice production that supports biodiversity. Annual festivals in Osaki city promote biodiversity research and knowledge among school students.

Environmental education in Cha-am, Thailand

The cultivated mangroves at the Sirindhorn International Environmental Park (SIEP), an initiative of HRH Princess Maha Chakri Sirindhorn, started in 1994, in Cha-am, Thailand, are a natural classroom for the 60,000 annual visitors to the park. An Education for Sustainable Development Centre (ESDC) for biodiversity education was opened in the park in 2009, in cooperation with WWF Thailand and Toyota Motors, Thailand.

The ESDC provides environmental education facilities to teachers and students of primary and secondary schools in particular.

The Secretariat of RCE Cha-am is located at SIEP.

Revitalising home gardens in Penang

Revitalising home gardens in Penang, Malaysia

This project of RCE Penang involves two Malay villages in Balik Pulau in the southwest of Penang Island, and aims at promoting home gardens as a source of income.

Home gardens have helped in the preservation of indigenous knowledge on herbal medicines, and act as open, informal classrooms for the younger generation. Home gardens are also important places for ritual and socio-cultural activities.

RCE Penang has conducted workshops to train the community on producing and marketing herbs from their gardens. The project has also brought the community closer and created a forum for social networking, and is promoting Balik Pulau as an agro-tourism destination.

Conservation of urban ecosystems in Montreal, Canada

The city of Montreal, founding partner of RCE Montreal, coordinates a wide range of measures to protect biodiversity. Among its aims are the preservation of urban ecosystems, safeguarding of rare plants, shoreline stablisation and eradication of invasive species.

Two major initiatives reflect the RCE's collective efforts.

- The 2010-2015 Plan for Sustainable Development includes the objective of improving the protection of biodiversity, natural environments and green spaces.
- A Declaration of the Island of Montreal Community in favour of biodiversity and greening was proclaimed by the City of Montreal and the Regional Council on Environment during the Montreal 's Biodiversity and Greening Summit held in April 2010. The signatories agreed to undertake significant actions to protect biodiversity and preserve wildlife habitat in parks and green spaces as well as to educate and raise public awareness.

Moreover, Environment Canada's Biosphère, a member of RCE Montreal's network, has produced a series of BioKits aimed at encouraging families to go outside and explore natural areas and urban landscapes. Through a variety of interactive outdoor activities, simple tips and a dynamic web site, families learn about the state of surrounding biodiversity and what they can do to help preserve it.

For more information

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