

Biodiversity

What is biodiversity?

How does it concern me?

Why does
it matter?

What
can
I do?

An introduction to
biological diversity

Brought to you by the
Chemainus Biodiversity Education Project

A pilot collaboration between the community and the POLIS
Project on Ecological Governance (University of Victoria)

Biodiversity means the variety of life on Earth.

Biodiversity forms the web of life of which we are an integral part and upon which we depend.

We still know little about the diverse species and interactions between plants, animals, insects, microbes and other life forms. About 1.8 million species have been identified which might be just 10 per cent of life on the planet.



Biodiversity helps to sustain life on earth and human health. Yet the planet's biodiversity is at risk due to human activities such as pollution, erosion, desertification and deforestation.



We have yet to see how the broader impacts of extinction and climate change will affect biodiversity and vice versa. As we affect the Earth, so it affects us.

But the problem of biodiversity loss is BIG, so what can a single person or community do?

We can start with learning what biodiversity means right in our own backyards, why it is important, and what is threatening the diversity of life at a local level.

Equipped with knowledge and insights, we can strive to make more informed decisions as individuals and communities, whether on how to live well, encourage our youth in choices for their future, or make land use decisions that ultimately support human and ecosystem well-being.



DISAPPEARING SONGBIRDS: An example of what's happening

 The Baltimore oriole. The bobolink. The wood thrush. The veery. The rose-breasted grosbeak. The Canada warbler. The Kentucky warbler. The Cerulean warbler. The western wood-peewee. The olive-sided flycatcher. The indigo bunting. Bell's vireo. Swainson's thrush. Bullock's oriole. The barn swallow. 

Songbird species in decline according to Dr Bridget Stutchbury, York University's Canada Research Chair in Ecology and Conservation

At the Rio Earth Summit in 1992, 150 countries from around the world (including Canada) signed the Convention of Biological Diversity, an international agreement to conserve the world's biological resources.

International Biodiversity Day on May 22 helps us to remember our commitment. This year's theme is *Biodiversity and Climate Change*.



Biodiversity and Climate Change

Climate change is on the minds of people the world over.

The links between biodiversity and climate change run both ways: biodiversity is threatened by human-induced climate change but conserving biodiversity can reduce the impacts of climate change felt by people. How?

- Conserving natural habitats reduces the amount of CO₂ released into the atmosphere. Deforestation is responsible for about 20% of man-made CO₂ emissions
- Some plant species reduce the disastrous impacts of flooding and famine.
- Maintaining genetic biodiversity is essential in food production and crop pollination
- Healthy native flora and fauna help keep invasive species in check
- Biodiversity is closely connected with spiritual and recreational benefits.
- Biodiversity is integrally linked with sustaining Indigenous cultures and traditional societies. For example, an estimated 80% of people in the world rely on biological diversity in the form of traditional medicines to meet basic health needs.



BIODIVERSITY IN OUR BACKYARDS

What does biodiversity mean to you?

The Chemainus Biodiversity Education Project wants to know!

GOALS OF THE PROJECT

- ✓ to foster an awareness of biological diversity, and connections between community and ecosystem health
- ✓ to build understanding of the links between biological diversity and climate change
- ✓ to create experiential learning opportunities
- ✓ to identify local needs and develop educational materials for schools and citizens

A variety of easily accessible field sites will showcase local biodiversity and stimulate discussions on key issues affecting biodiversity.

Fun and educational field activities will bring together a diversity of people to learn about local flora and fauna and their importance to human well-being.

Educational materials will be produced, such as handbooks, posters, and sample learning-units for school curricula. Your ideas are welcome!

How You Can Help

The Chemainus Biodiversity Education Project is a volunteer initiative.

Individuals, businesses, organizations and schools are donating ideas, money, materials, and expertise to meet project goals.

People are offering to lead fieldtrips, speak to small groups, help at special events, distribute publicity materials, take photographs, and make other contributions.

If you would like to get involved, please contact one of the following:

- Kelly Bannister (POLIS), project facilitator 250-472-5016 or kel@uvic.ca
- Kathy Wachs, community coordinator, 416-0382
- Karla Ryan, schools liaison and education support, 245-9135
- Mark Kiemele, publicity, 246-3438
- Chris Weicht, fund raising events, 246-1203

For current information

www.polisproject.org/projects/biodiversityeducation
or email bio-variety@shaw.ca