

A vertical strip on the left side of the slide shows a lush green forest scene. A monarch butterfly is perched on a tree trunk in the upper left. At the bottom of this strip, a green frog is visible on a rock.

Understanding Biodiversity: Making the Link with Business

Steve Hounsell



Outline

- State of Biodiversity and Imperative for Action
- Response - What is being done
- Mainstreaming Biodiversity into Business – business case and benefits

What is Biodiversity ?

- **“Biodiversity is life”**

- The variety of life through genes, species, and ecosystems that is shaped by ecological and evolutionary processes



- **“Biodiversity is our life”**

- The variety of life on Earth is essential to sustaining the living systems we depend on for health, wealth, food, and other vital goods and services



Ecosystem Goods & Services

- **Provisioning Services** – food (agriculture and fisheries), timber, biofuels, etc.
- **Social and Cultural Services** – outdoor recreation.
- **Supporting Services** – nutrient cycling, soil formation, pollination.
- **Regulating Services** – local climate, water flow, air and water quality and flood attenuation.

Sustaining Ecosystem Services – The Role of Business

- “Scale up, speed up and put the sound up (*on progressive actions*)”.
 - World Business Council for Sustainable Development

business solutions for a sustainable world



Biodiversity and ecosystem services
scaling up business solutions

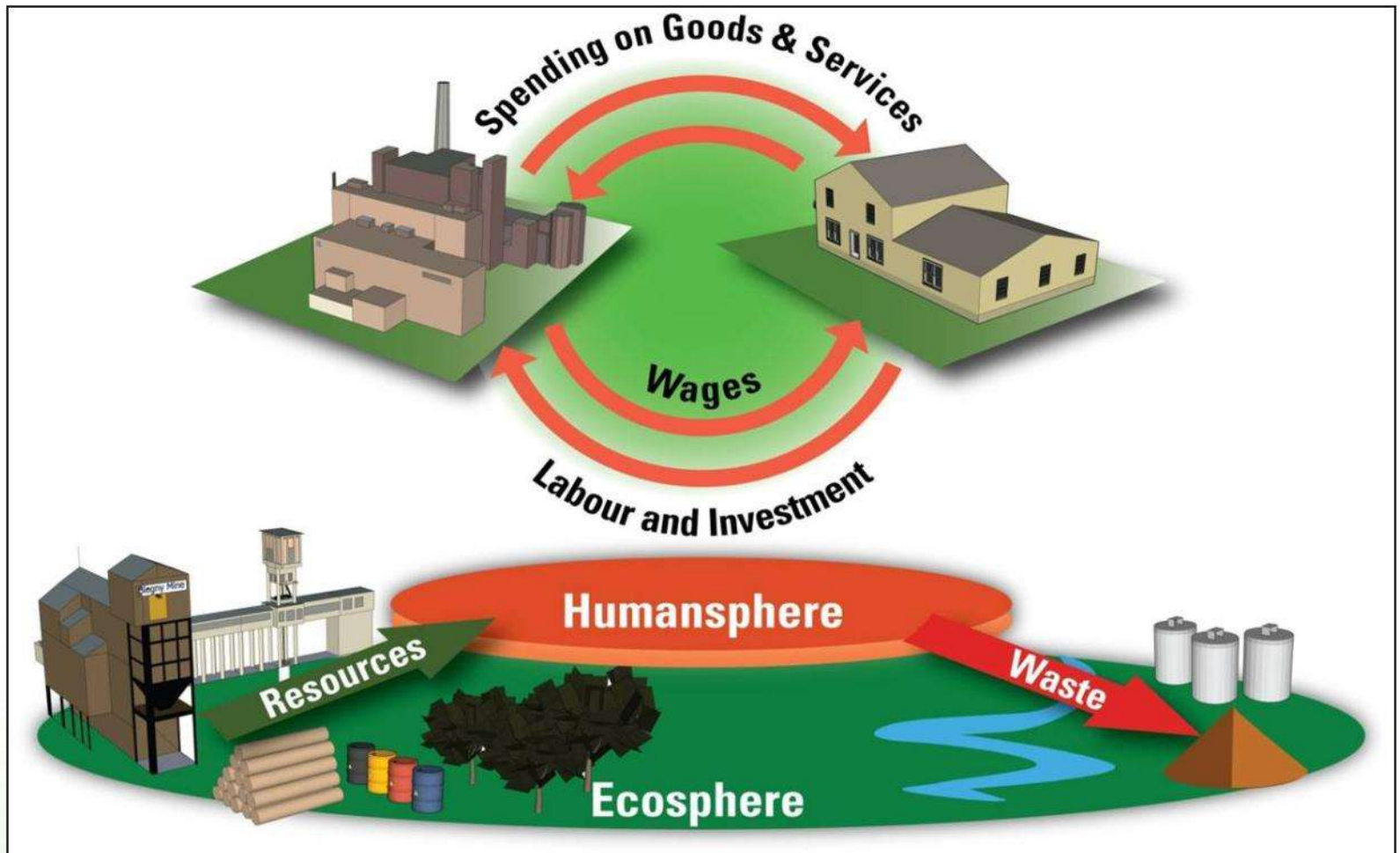
Company case studies that help achieve global biodiversity targets



Biodiversity: making the link with Sustainable Development

- *“Meeting the needs of the present without compromising the ability of future generations to meet their own needs”..... Gro Brundtand – Our Common Future*
- Biodiversity is the “natural capital” base upon which our lives, our society and our economy depends
- Biodiversity is a core component and the ***foundation*** for sustainable development

Humansphere dependent upon the Ecosphere



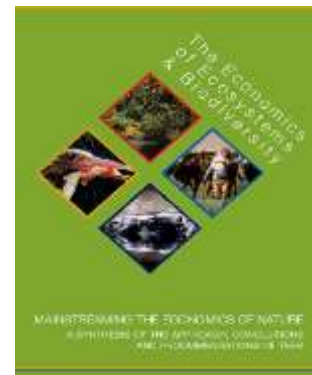
State of the Ecosphere

- Consider the Earth as our “living bank account”.
- We’re in the “red”.
- Natural capital is being drawn down faster than it is being replenished.
- Earth Overshoot Day – Aug. 22, 2012

The Economics of Ecosystems and Biodiversity

- Nature is a form of infrastructure requiring investment and protection just like built infrastructure.
- However, exactly the reverse is happening. Nature's infrastructure is being destroyed by human activities representing a stunning estimated loss of 2.5 to 4.5 trillion dollars a year for each of the last 25 years.

- Pavan Sukhdev, TEEB Report Nov. 2009



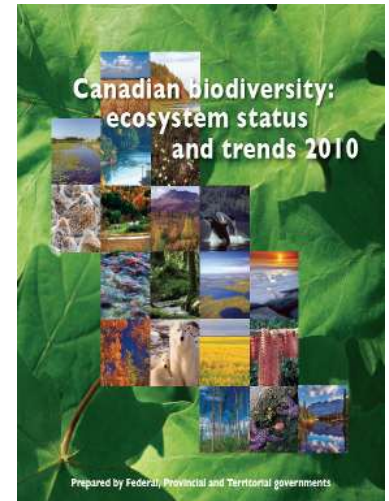
Global Biodiversity Outlook 3 Report 2010

- Global pressures on biodiversity are increasing.
- Rates of decline for most species groups continue or are intensifying.
- Stewardship activity increasing but not keeping pace with pressures.
- **Bottom Line:** internationally we have failed to achieve a significant reduction in the rate of biodiversity loss.



State of Biodiversity in Canada

- Canadian Biodiversity: Ecosystem Status and Trends 2010 Report released in Oct. 2010.
 - Mixed results, but clearly all is not well.



Canada's 4th National Report
to the United Nations Convention
on Biological Diversity

Threats to Biodiversity

- H – Habitat loss
- I – Invasive species
- P – Pollution
- P – Population growth
- O – Over-harvesting
- C - Climate Change



Invasive Species



22 May 2007
International Day for Biological Diversity



Biodiversity and Climate Change



Ontario's Ecological Footprint

Our Ecological Footprints
Are we living within Nature's Capacity?

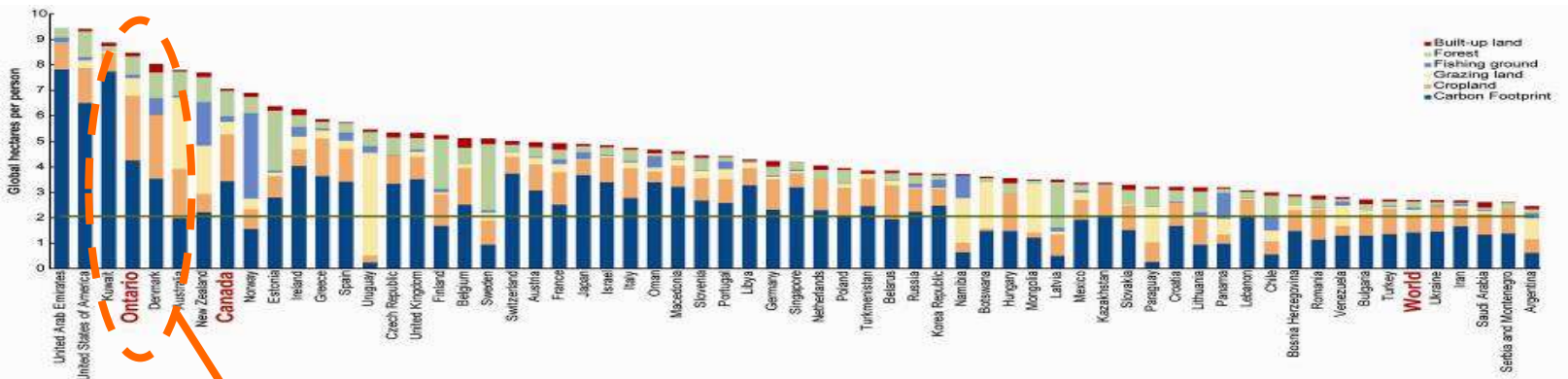


In Ontario we use 8.5 global hectares per person!

Globally there is only 2.1 global ha per person.

Ontario's Ecological Footprint

- Ecological Footprint compares human demands on nature with the available Biocapacity to provide products and assimilate wastes - indicator of overarching human pressures causing biodiversity loss.
- Ontario's Ecological Footprint is equivalent to its available Biocapacity, but exceeds the world average by more than four times.



If everyone in the world lived comparable lifestyles to Ontarians, it would require the resources of four planets to support humanity.

Sustainability – The Role of Business

- **WBCSD Vision 2050:**
“In 2050, some 9 billion people live well and within the limits of the planet”.
- World Business Council for Sustainable Development

DEDICATED TO MAKING A DIFFERENCE



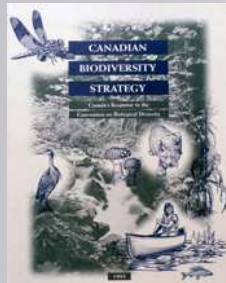
Biodiversity Conservation: Actions at Global and National Scale



UN Convention on Biological Diversity Strategic Plan 2011-2020

International Activities

- COP 10 Strategic Plan 2011-2020 (Aichi Target), Nagoya Japan
- Signatories to convention reporting on progress using global indicator framework
- Major Reports: *Millennium Ecosystem Assessment*, *Global Biodiversity Outlook 3*; *The Economics of Ecosystems and Biodiversity*
- 2011-2020 – United Nations Decade on Biodiversity

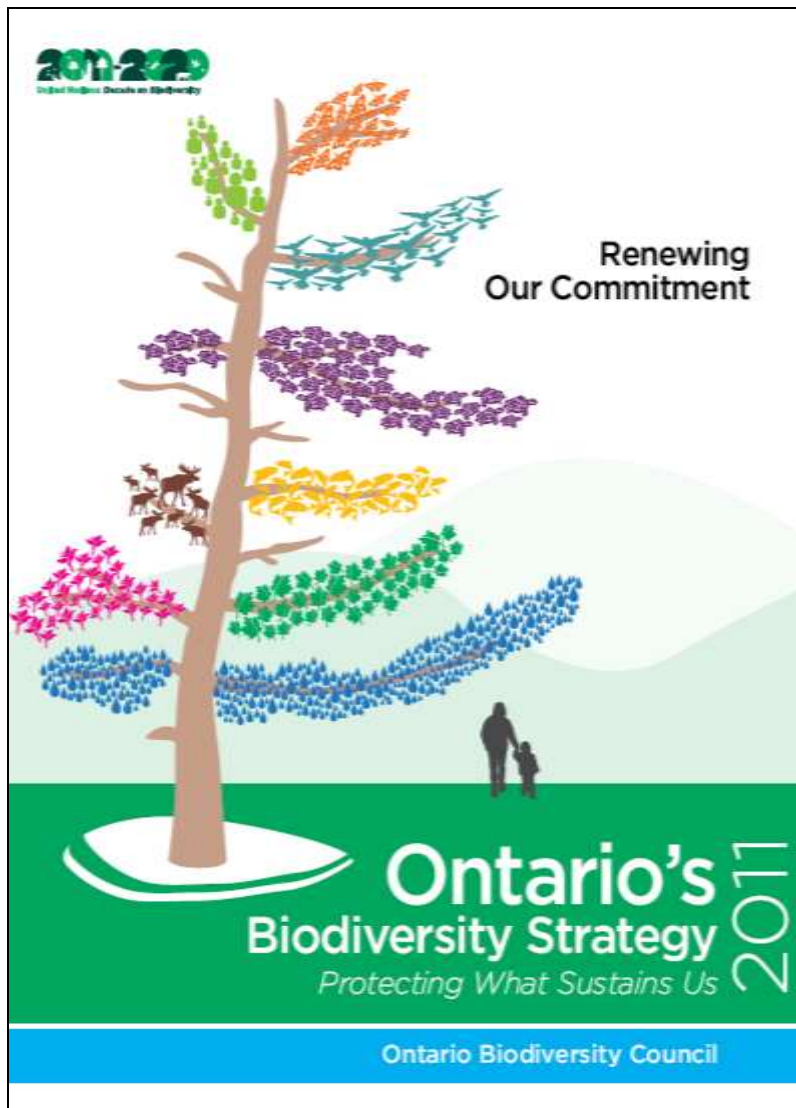


Canadian Biodiversity Strategy

National Activities

- National Strategy (1995) and Biodiversity Outcomes Framework
- Reporting to Canadians – *Ecosystem Status and Trends Report (ESTR)*
- Policy on Access and Benefit Sharing of Genetic Resources
- Survey on Value of Nature to Canadians (2011?)
- Revision of national framework to address new global Strategic Plan

Ontario's Biodiversity Strategy, 2011



- Builds on OBS, 2005
- Elevates tenet that “*protecting the diversity of life requires broad societal consensus and participation*” through a mainstreaming goal
- Establishes a guiding framework for conserving biodiversity over the next decade
- Outcome-based biodiversity conservation framework including key actions and responsibilities
- Four strategic directions:
 - Engage People
 - Reduce Threats
 - Enhance Resilience
 - Improve Knowledge



Mainstreaming Biodiversity

- Mainstreaming biodiversity across all sectors is Goal #1 of:
 - COP10 Strategic Plan 2011 – 2020 (Aichi targets)
 - Ontario's Biodiversity Strategy
- **Why?** Government and ENGOs cannot accomplish goals and targets alone. **Business and industry must be involved.**
- Growing pressures and expectations that **business** be a key participant in conservation efforts.

The background of the slide is a composite image of a lush forest. On the left side, there is a vertical strip showing a tree trunk and a butterfly with orange and black wings. At the bottom, a green frog is visible on a rock. The rest of the background is a soft-focus forest scene with green foliage and a stream.

Mainstreaming – the Biodiversity Challenge

- To co-exist with nature without contributing to the impairment of ecosystem functions and services, or contributing to the loss of species and the habitats upon which they depend.
- Can we learn to live within the regenerative and waste assimilation capacities of our ecosystems?
- Invokes stretch targets of no net loss (or net gain) and zero emissions



Minimize Business Risks

- **Minimize Risks** – ignoring biodiversity poses considerable risks to business, including:
 - Increased economic costs;
 - reputational cost (loss) with local communities, regulators, ENGOs and shareholders;
 - compromised “community license to operate”.
 - Just try opening a new facility or expanding an existing one without the support of your local community.
- It takes time to earn and build trust. It takes little time to lose it!



Maximize Business Opportunities

- **Opportunities** – proactive and progressive biodiversity programs can:
 - reduce costs (more efficient use of resources);
 - respond to investor demands;
 - respond to consumer demands (*green* products);
 - facilitate regulatory approval and mitigate operational risks;
 - build positive relations with local communities, regulator, ENGOs and investors;
 - build staff morale and attract “best in class” employees.

Biodiversity Policy

- To plan and manage business activities in a manner that encourages, within a regional context, the continued existence of native species and the ecosystems upon which they depend, and by extension, the ecosystem goods and services they provide.
- 4 Rs – A Conservation Hierarchy:
 - Retain (protect) what is significant;
 - Restore what has been degraded;
 - Replace what has been lost; and
 - Recover species at risk.



Integrate into Project Life Cycle

- Biodiversity conservation should be integrated into all phases of project life cycle, including the **supply chain**:
 - Planning
 - Construction
 - Operations
 - Decommissioning
 - Site reclamation

Management System





Ontario's Biodiversity Strategy Framework

- OBS Framework has direct relevance to Business:
 - **Engage People** – transparent communications
 - **Reduce Threats** - caused by damaging activities
 - **Enhance Resilience** (4 R's: Retain; Restore; Replace; Recover)
 - **Improve Knowledge** (continual improvement and adaptive management)



Certification Programs: Driving Progressive Behaviours

- Forest Stewardship Council (FSC)
- Marine Stewardship Council (MSC)
- Wildlife Habitat Council (Lands for Life and Corporate Lands for Learning)
- Cornerstones Standards Council (in development)
- Leadership Declaration (CBBC)

Benefits of Biodiversity Programs

- Proactively contributes to biodiversity conservation, as well as climate change mitigation and adaptation
- Enhances and secures “license to operate” for existing facilities, proposed expansions and new build
 - ❖ builds public support
 - ❖ builds governmental support
- External recognition and multiple awards can help build positive brand for your company



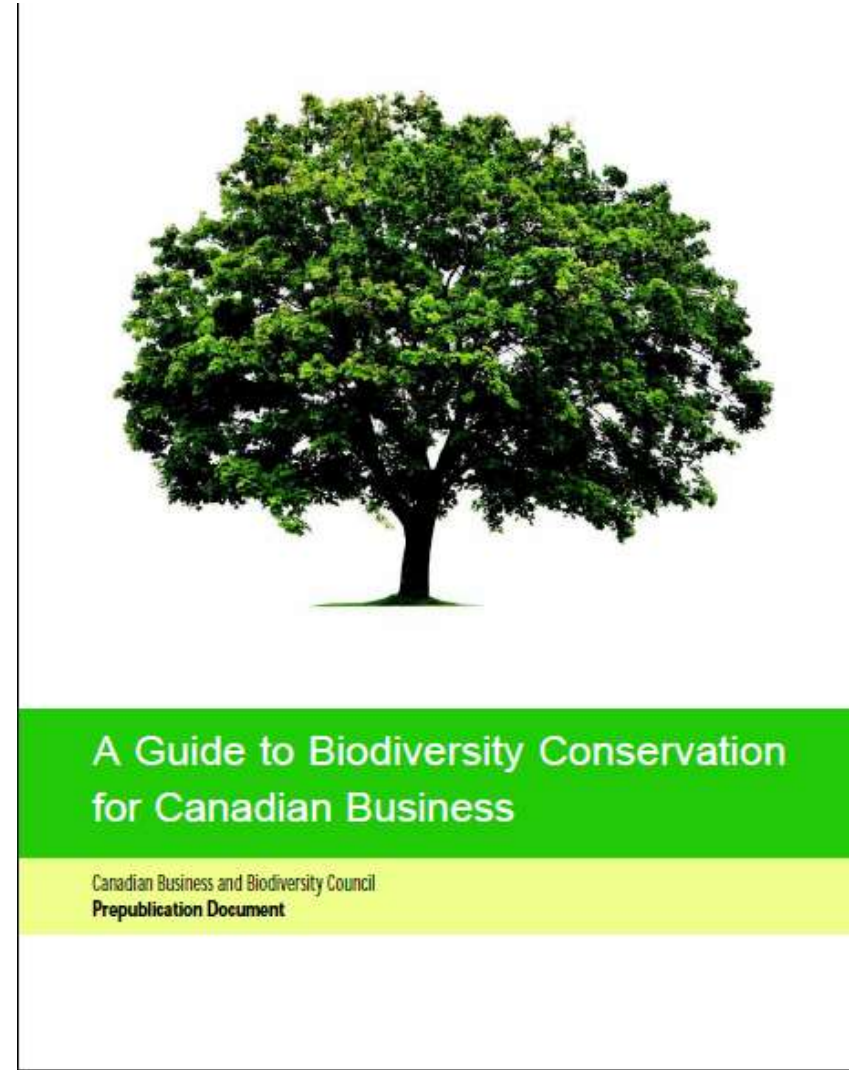
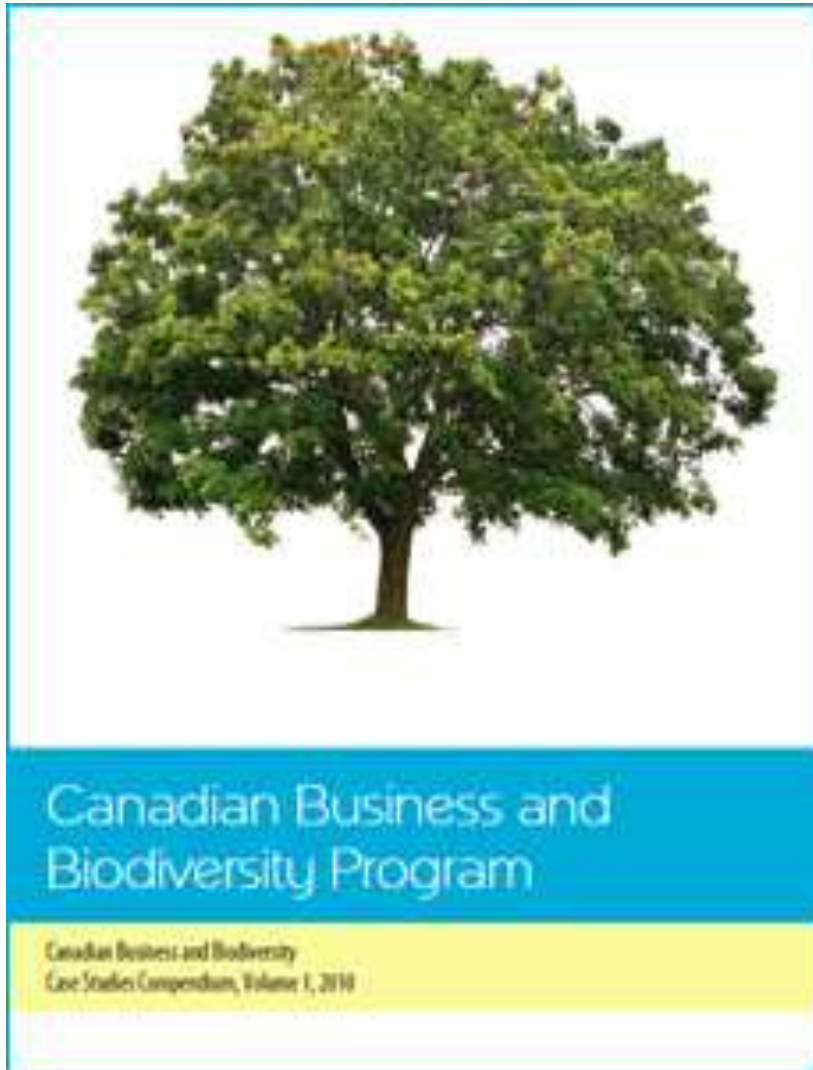
Benefits of Biodiversity Programs

- Enhances employee morale
- Attracts and retains a productive workforce
- Address media and activist pressures
- Builds due diligence protection
- Minimizes regulatory burden
- Secures the confidence of investors
- Contributes to long term business value creation (not charity)

Help is Available

- Canadian Business and Biodiversity Council - <http://www.businessbiodiversity.ca>
- Wildlife Habitat Council - <http://www.wildlifehc.org/about-whc/>
- Partnerships with ENGOS: e.g. Trees Ontario - <http://www.treesontario.ca/>

Canadian Business and Biodiversity Council Publications



Summary Remarks

- We're at a crossroads re ecological sustainability
- Current global trajectory will further drive biodiversity losses and hence degrade ecosystem services with significant adverse socioeconomic consequences
- Mainstreaming biodiversity into business planning and operations is an imperative
- CBBC can help business get on the path to conserving biodiversity and building business value.

Conclusions

1. All business affects biodiversity. Those impacts need to be internalized and managed for the benefits of all, including the sustainability of business.
2. Business and indeed society is dependent upon biodiversity for our economic prosperity, our health and survivorship. Conserving biodiversity is an imperative.

Bottom Line:

“Healthy ecosystems sustain healthy people and a healthy economy”.

Conclusions

3. Business needs to step up to the plate to “protect what sustains us”, meaning biodiversity. This is a societal responsibility – we must work together for the common good.
4. Conserving biodiversity is all about “**protecting what sustains us**” and accordingly, is a foundation for the pursuit of sustainable development.
5. Imagine the possibilities if all business gets on board with conserving biodiversity.

Questions?

