## Frontenac Arch Biosphere: A Regional Sustainability Initiative



(FABN, 2011)

"Biosphere reserves help to bridge the gap between ecology and economy by bringing together organizations and people in our communities in a dialogue on achieving a sustainable way of life"

(Ruttan, 2004, p. 108)

The Frontenac Arch Biosphere Reserve (FABR) represents over 2,700 square kilometers of significant natural and ecological features (FABR, 2012). The Frontenac Arch is the iconic granite ridge connecting the Adirondack Mountains to the Canadian Shield. Running through the region is the St. Lawrence River Valley, connecting the Great Lakes and central North America, to the Atlantic Coast. This scenic area contains five forest regions and has been claimed as arguably one of the most bio-diverse regions in Canada due to the unique habitats it provides for a variety of plants, fish, birds and animals who are classified as "species at risk" (FABN, 2011).

The FABR was designated as an UNESCO World Biosphere Reserve in November 2002. This designation acknowledged the important environmental, historical and cultural values of the region. Furthermore, this UNESCO designation acknowledges the need to sustain the area's economic and recreational activities that are dependent on the biosphere, while also balancing economic needs with the ecological needs of environmental integrity (Parks Canada, 2012). The UNESCO Biosphere Reserves were established in the 1970's as a response to environmental concerns (Ruttan, 2004). The environmental concerns specific to the FABR include: loss of habitat and critical wetlands; competition for species at risk due to exotic species; unknown impacts due to climate change; and industrial point source and non-point source pollution in the St. Lawrence River. There are now over 600 Biosphere Reserves worldwide, with 16 Biosphere Reserves located in Canada (FABN, 2012). According to Parks Canada, a biosphere reserve is intended to be a form of sustainable community development, where local conservation organizations can work together on projects that link conservation with economic development in their region (Parks Canada, 2012).

The Frontenac Arch Biosphere Network (FABN) is a non-regulatory partnership that includes over 80 regional organizations, including representatives from key sectors such as tourism, business, conservation, agriculture, historic preservation, scientific research and education (FABN, 2012; FABR, 2012). The FABN, does not have authority over land or water use in the region however it does complement local and regional conservation initiatives, coordinating efforts, in order to increase efficiency and effectiveness. The FABN acts as a 'one stop shop' for conservation and sustainability efforts, providing a unified voice for conservation and sustainability organizations in the region (Ruttan, 2004).

The following are the Biosphere's strategic priorities (FABN, 2011):

- **Local Flavours:** The FABN includes over 100 local food producers, retailers, and food services.
- **Explore the Arch:** This is a resource for the community which consolidates information on the trails, natural history, built and cultural heritage, land use, artists and artisans, 'Local Flavours' members, stories, illustrations and activities available within the Biosphere.
- **Biosphere Trails Council:** This council joins over 30 regional trail organizations in the FABR and is a member of the Ontario Trails Council.
- **FAB Arts:** This network is made up of hundreds of artists and artisans, working towards more creative economies in the region.
- **Educators Network:** This network links school boards and other natural and cultural history educators, in raising awareness and education on the concept of sustainable communities.
- **Sustainable Tourism:** The FABR is a world leader for sustainable tourism and currently follows the "Sustainable Tourism Charter"<sup>1</sup>.
- Conservation Partnerships: This partnership connects government and nongovernment conservation actors, promoting the sharing of ecological studies and databases, as well as consolidating efforts for the conversion of conservation land into parks.
- **State of the Biosphere Report:** A collaborative effort with Queen's University, this report comes out every five years, and measures the regions cultural, social, environmental and economic conditions. Needs for sustainability in the region are also identified in this report.

In relation to regional development, the biosphere network approach to sustainable development embodies principles of New Regionalism. The very nature of a governance network based on an eco-region, is a form of place based regional development. Furthermore, the ideology behind the biosphere reserves is to share power within a multilevel governance structure. This governance structure is aimed at creating community-provincial-federal-international partnerships. This approach has been praised for providing the upper level framework and objectives that a central government (Parks Canada) can provide, while also engaging key players at the local level (Ruttan, 2004). However, basing governance networks on ecological boundaries rather than political boundaries, can pose significant challenges concerning political support and coordination of the implementation of conservation efforts. This rings true for the FABR, which roughly spans a triangular territory encompassing Brockville, Gananoque, and Westport, Ontario covering the major part of the United Counties of Leeds Grenville and some of Frontenac County (Canadian Thousand Islands Heritage Conservancy, 2002).

<sup>&</sup>lt;sup>1</sup> Please see the Charter for Sustainable Tourism for more information: http://www.gdrc.org/uem/ecotour/charter.html

The Biosphere Reserves, as defined by UNESCO, have also taken on a very integrated approach to development. The reserves are intended to bring planning measures related to the environment, culture, society and the economy together (FABR, 2012). The FABN is committed to reconnect a fragmented landscape into a regional network of governance, where sustainability efforts take on a more holistic and inter-connected approach. According to key informants the FABN is making significant positive steps in Eastern Ontario in regards to regional collaboration and the breaking down of sector based barriers.

Visit the Frontenac Arch Biosphere Reserve's website for further information and resources: http://www.explorethearch.ca/

## References

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May 2013



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This vignette was created as part of a multi-year research initiative focused on regional development in Canada. For more information about the project visit:

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