

WHAT IS RESTORING NATURE?

Restoring Nature means bringing natural ecosystems back into our built-environment. It means designing for and with nature, rather than against and in control of nature, even when that forces us to redesign our habits of comfort and convenience. Ultimately, it means healing our home, Earth.

UNDERLYING PATTERNS AND ELEMENTS

- Geologic Formation: Place-functions and intrinsic qualities
- Climatic Conditions: Local context, identity, parameters
- Watershed and Bioregion: Geopolitical realities and opportunities
- Vegetative Cover: Health of forests, fields, soils, waters
- Human Endeavors: Sustainability practices and closing the loop

WHY RESTORE NATURE?

The practice of Restoring Nature in our communities addresses physical and environmental concerns affecting the security of our future. Coming to grips with the impact of our individual and collective lives means developing responsible practices, 'closing the loop' on consumption of energy and natural resources, and thinking long-term and across boundaries. The world has the capacity to house and feed its populations only if we become aware of our own colonization of Earth's resources and begin to act with stewardship and compassion.

COMMUNITY EXAMPLE

The main village in the Town of Charlotte is defined by ridge views of the Adirondacks to the west, close up hills with distant views of the Green Mountains to the east, wetlands bounded by a steep hill to the north, and to the south wetlands, clay plain forest, headwaters for Thorpe Brook, and open fields.

The villagers, proud of this mix of beauty and nature, undertook a planning study to determine community uses for a 50-acre property known as the Burns Parcel and located in the heart of the village. This study included a survey of vegetation and wildlife habitats, trails usage, soil deposits, and community needs.

The process included community design workshops; interviews with adjacent neighborhoods, community organizations and town commissions; review of the watershed analysis and affordable housing reports.

The outcome was a land use plan which took into account the centrality of the views and open space needs. It included protection of gravel deposits, wetlands, and headwaters; provided for community trails; and established criteria for affordable village housing.



Stormwater retention ponds as living ecosystems-based treatment.



Living machines as graywater treatment systems.



Urban run-off treatment as opportunity for art, ecosystem functions, and places for people.

HOW DO WE RESTORE NATURE?

Restoring Nature depends on grass-roots decision-making and leadership. It encompasses the protection of open space, regeneration of native vegetation in and around urban areas, natural resource protection, stormwater impact mitigation, and increased green space at various scales. By Restoring Nature we are more fully engaged in the beauty of place-making from building healthy soils and sharing in food production to life-long education and creation of art.

RECOMMENDED IDEAS AND PRACTICES

AIR - Harness wind for passive ventilation and cooling; use mini-wind turbines for residential systems and district systems for community applications; protect sites from winter winds; use windrows in agriculture.

WATER - Know your watershed, including your forests, wetlands, urban parks and backyards. Use grey water recycling within households and buildings; catch rainwater for irrigation; implement stormwater runoff mitigation; protect drinking water sources; do streambank restoration and daylight streams and rivers which have been covered over in urban areas.

SUN - Design with climate and sun using both high-tech or low-tech solutions as appropriate. Use passive solar strategies for site and building orientation by working with the lay of the land; use active solar hot water systems and electrical generating systems when available; use absorptive/reflective materials in appropriate climates.

EARTH - "Close the loop" on energy, waste, water, food, and transportation. Develop community gardens, compost projects, and local food markets. Use permeable paving to allow soil percolation and rebuild impaired soils. Plant trees and gardens appropriate to the region. Use healthy building materials and methods including innovative practices in heating and cooling. Design for smaller footprints in buildings, household size, vehicular use, and consumption.

ECOLOGICAL SYSTEMS - Wildlife habitats and corridors enhance community viability. Protect open space and allow for wildness within urban areas. Develop ecological treatment practices of municipal and small-scale wastewater systems; reduce water consumption across all users; build in rainwater collection and protect groundwater; mitigate stormwater through raingardens and vegetative swales. Create water parks, river access, and fountains which clean lakes and streams.



FIVE PRINCIPLES OF COMMUNITY DESIGN

The Vermont Design Institute has developed Five Principles of Community Design based on spatial forms, patterns, and design concepts observed and used over the course of their work.

PREMISES:

- * Community design is a collaborative planning process with the immediate goal of improving the quality of life for all community members of the ecosystem—from the smallest insects to us humans, and from, the waterways to the skies above.
- * Effective community design creates economic opportunities for local residents at different scales of interest—from global connections to bioregional needs and immediate solutions.
- * Sustainable communities depend on alternative forms of energy and transportation.
- * Sustainable lifestyles include changing our daily patterns, consumption habits, and production technologies to accommodate "closing the loop" and living with a no-waste policy.
- * Sustainable community landscapes allow for protection of open space, regeneration of native vegetation, stormwater mitigation, increased green space, local food production at various scales, and sensitivity to public-private zones.
- * Successful community design increases community knowledge of local history, cultural landscape, and sacred ground.

ASSUMPTIONS:

- * We need to be re-constructing our patterns of habitation, transportation, energy, water, waste, and food systems.
- * We believe individual empowerment and reconnection to place leads to transformation and healing for Earth.
- * People do care and have an amazing strength of vision if given the chance to be heard.