Why the focus on biodiversity? | The living world all around us – our lands, waters, and the diversity of life they support – are directly responsible for daily life: air, water, soil, and food. These biodiverse lands and waters are nature's infrastructure, responsible for cleaning and cooling our air, feeding us, protecting our watersheds, preventing floods, serving as wildlife habitat, enabling healthy, active, outdoor lifestyles, and beautifying our communities beyond measure. In truth, biodiversity makes possible every aspect of our lives. The healthier and more connected these ecological systems are, the greater diversity of life they enable. The greater diversity of life = greater functionality and resilience. Biodiverse communities = strong, sustainable communities. Today, changes to our living lands and waters are being driven by metropolitan regions, often characterized by high-intensity land use and high degrees of fragmentation. Opportunities exist, however, to embrace and accelerate biodiversity-friendly strategies in cities and their surrounding regions.

Ways to participate

- 1. **Document biodiversity all around you.** | Join the iNaturalist citizen science community, take photos of nearby plants, animals, and other life forms, and upload them as observations. As long as your observations are within the combined statistical area of St. Louis, your data will be part of the growing BiomeSTL biodiversity inventory that lives on iNaturalist.org.
- 2. Pick a local landscape to love. | Whether it's your own yard or a local park, a little patch of woods, a nearby creek, wetland, or other greenspace, each of us likely knows a place that could benefit from extra care, like clean-ups, removing invasives, or planting projects. Find yours, get more involved, tell us about it, and your local gem could help populate the inventory of such places within the BiomeSTL regional biodiversity atlas. Email: biodiversecitySTL@mobot.org with the subject line: Local Landscapes I Love.
- 3. **Plant natives.** | Native plants from trees and shrubs to wildflowers, grasses, and other groundcovers enable a greater diversity of life to survive and thrive in our urban, suburban, and rural communities. Many resources are available online, but among our favorite places to start: Check out Easy Landscape Plans at <u>www.grownative.org</u>
- 4. Join a working group. | At its core, BiomeSTL is participatory, powered by people, organizations, and agencies who envision a region connected by nature, one that fully values its natural assets and centers its planning, policies, and practices around those assets. In 2019, four specific working groups will convene, each currently recruiting members:
 - ✓ Action Projects Team | individuals from multiple sectors (non-profit, business, government, schools/universities) currently leading projects designed to increase biodiversity
 - Citizen Science Team | community-based educators, naturalists, and outreach professionals from across the bi-state region
 - ✓ Science Advisory Group | scientists who can help develop, coordinate, and pursue a multi-disciplinary research agenda that advances biodiversity outcomes
 - City/County Advisory Group | urban planners, developers, and city/county leaders involved with land use strategies and directions

If you are interested in learning more about and possibly joining and/or leading any of these working teams, email: biodiversecitySTL@mobot.org with the subject line: BiomeSTL Working Groups

5. **Stay connected and in-the-know.** | Each month, BiodiverseCity St. Louis publishes a newsletter curated with biodiversity news across the region; upcoming events, talks, and workshops; volunteer stewardship opportunities; reading recommendations; plus the popular *Species Spotlight* and *Let's Map It* features, both aimed to shine a deserving spotlight on local wildlife and wild places. Stay connected to this growing network of biodiversity advocates and stewards by signing up for the monthly E-news at <u>www.biodiversecitystl.org</u>



BiomeSTL: Biodiversity of Metropolitan St. Louis is the region's still-evolving biodiversity vision, atlas, and action plan. Part ecological data directory, species inventory, best practices guide, and aspirational plan for a bi-state region connected by nature, BiomeSTL is also, at its core, a citizen science and stewardship project. It not only is designed to aid urban planners, municipalities, counties, and developers in maximizing the benefits of biodiversity for their respective communities, it's also designed to equip citizens with a greater understanding and appreciation of local biodiversity in ways that strengthen place-based connections, promote healthy, active, nature-rich living, and advance a culture of community-driven land stewardship.

BiomeSTL calls upon everyone everywhere to put healthy, vibrant lands and waters at the center of how we connect with, design, plan, and sustain our communities.

biodiverse (

A nature-driven network of organizations and individuals working together to transform landscapes and lives.

www.biodiversecitystl.org

A project of

BíomeSTL Biodiversity of metropolitan St. Louis

A regional vision, atlas, and action plan

✓ Inspired by our region's natural assets

- Informed by science and data
- Powered by a network of organizations
- \checkmark Activated by citizens and communities

BIOMESTL A regional vision, atlas, and action plan Biodiversity of metropolitan St. Louis

Every day, people make decisions about land use that significantly alter the ability of the living world to function. In metropolitan regions, people often pursue short-term strategies that don't fully value or even consider the lifesupporting roles of nearby natural assets – forests, farmlands, grasslands, wetlands, lakes, rivers, creeks, caves, and bluffs - that transcend geopolitical boundaries.

Every day, people can make different decisions. What would it take for everyone everywhere to center their community design, planning, policies, and practices around their natural assets? Across sectors and scales, how can nature-centric design become the norm?

BiodiverseCity St. Louis was recently tapped to lead a multi-sector effort to develop and advance a regional biodiversity target, one of six goals developed as part of the OneSTL Sustainability Plan to advance sustainability throughout St. Louis.

Regional Biodiversity Target | By 2025, 100 percent of the biodiversity vision, atlas, and action plan to actively guide their



BIOMESIL | Phase I: Vision Framework (2018-2019)

Executive Summary | Scope of the regional biodiversity vision, atlas, and action plan

- Places the focus on our region's natural assets within and across ecoregions •
- Makes the case for the triple bottom-line benefits of biodiversity
- Cites existing biodiversity data and metrics for our region as benchmarks •
- User-scenarios for planners, policy-makers, and citizens/residents
- Scope of partners and collaborators organizations, agencies, institutions, community groups

Vision Map | A 17-county macro-visualization of a region connected by nature, a map without geopolitical boundaries that can transform our identity as a region

Mississippi River Bluff Corridor

Ecological Data Directory | Curated list of ecological data, reports, maps • Sourced from multiple agencies/organizations, published by East-West Gateway Council of Governments

- Organized by topic and/or geographic region •
- Designed to aid in data-driven planning

Biomesti Phase II: Atlas and Action Plan (2019-2025)

Vision Map | detailed data layers

- Layer I existing: watersheds, ecological site descriptions, urban tree canopy, protected sites, threatened and endangered species, trails (land and water trails), Important Bird Areas, Conservation Opportunity Areas
- Layer II challenge zones: flood zones, hot spots of development pressure, heat maps of invasive species •
- patchwork of adjacent public/private lands, multi-solving strategies (local food production/human health/recreation/wildlife habitat, climate resilience), The Nature Conservancy's Resilient Land Mapping tool

County Profiles | county-specific maps and stats

- Species inventories threatened/endangered status
- Habitat inventories types, quantity, quality (ex: impaired streams) •
- Economic valuations of habitats and species (Earth Economics) •
- Municipality charts comparisons of acres of parks, open space, etc. •
- Opportunities related to land-sharing and land-saving strategies —> •

Biodiversity Corridors | profiles and plans

- Signature species data: iconic, at-risk, common
- Potential geographic focus areas to maximize connectivity, • including existing corridors: MODOT/IDOT, railways, utilities, etc.
- Map of challenge zones biologically valuable natural areas that may be at risk •
- Map of human capacity for stewardship inventory of existing community-based groups and plans •
- Multi-scale demonstration projects parcel, neighborhood, community, municipality, county, multi-county, region •

Best Practices for Biodiverse Cities and Communities

- Missouri Department of Conservation's Conservation Planning Tool •
- Case studies and model ordinances •
- Land management solutions and strategies ٠
- Community engagement (BiomeSTL iNaturalist Project) •
- Sample metrics from other communities/regions

• Potential corridors to highlight: City of St. Louis Urban Corridor, Confluence Greenway, Henry Shaw Ozark Corridor, Missouri River Country, Green Crescent Corridor, Kaskaskia River Forest Corridor, Meramec Basin Conservation Plan,

• Layer III – aspiration/opportunity zones: connectivity between habitat fragments, ecological reserves that encompass a

Land-sharing | to integrate living, natural

Land-saving | to identify, protect, and