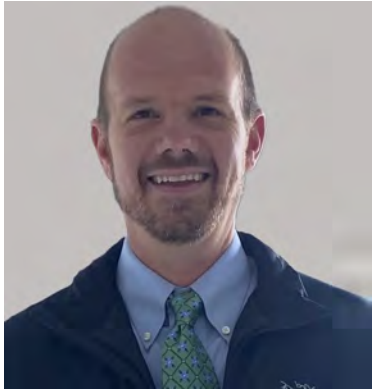


WELCOME TO UMASS LOWELL



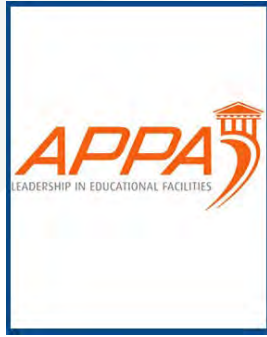
AGENDA

- Career Overview
- Campus Overview
- Tree Campus USA and Arboretum
- Student and Community Engagement
- Campus Viewer (ARC GIS) and Mapping Our Trees



Kevin Block
Grounds Operations Manager-
UMass Lowell
Certified Arborist- MCA and ISA





Professional
Membership



An aerial photograph of the UMass Lowell campus and the surrounding city of Lowell, Massachusetts. The Merrimack River flows through the scene, with a bridge crossing it on the left. The campus features several large academic buildings, a baseball field, a soccer field, and a track. The surrounding city is densely packed with residential and commercial buildings. The text "UMASS LOWELL" is overlaid on the left side of the image.

UMASS LOWELL

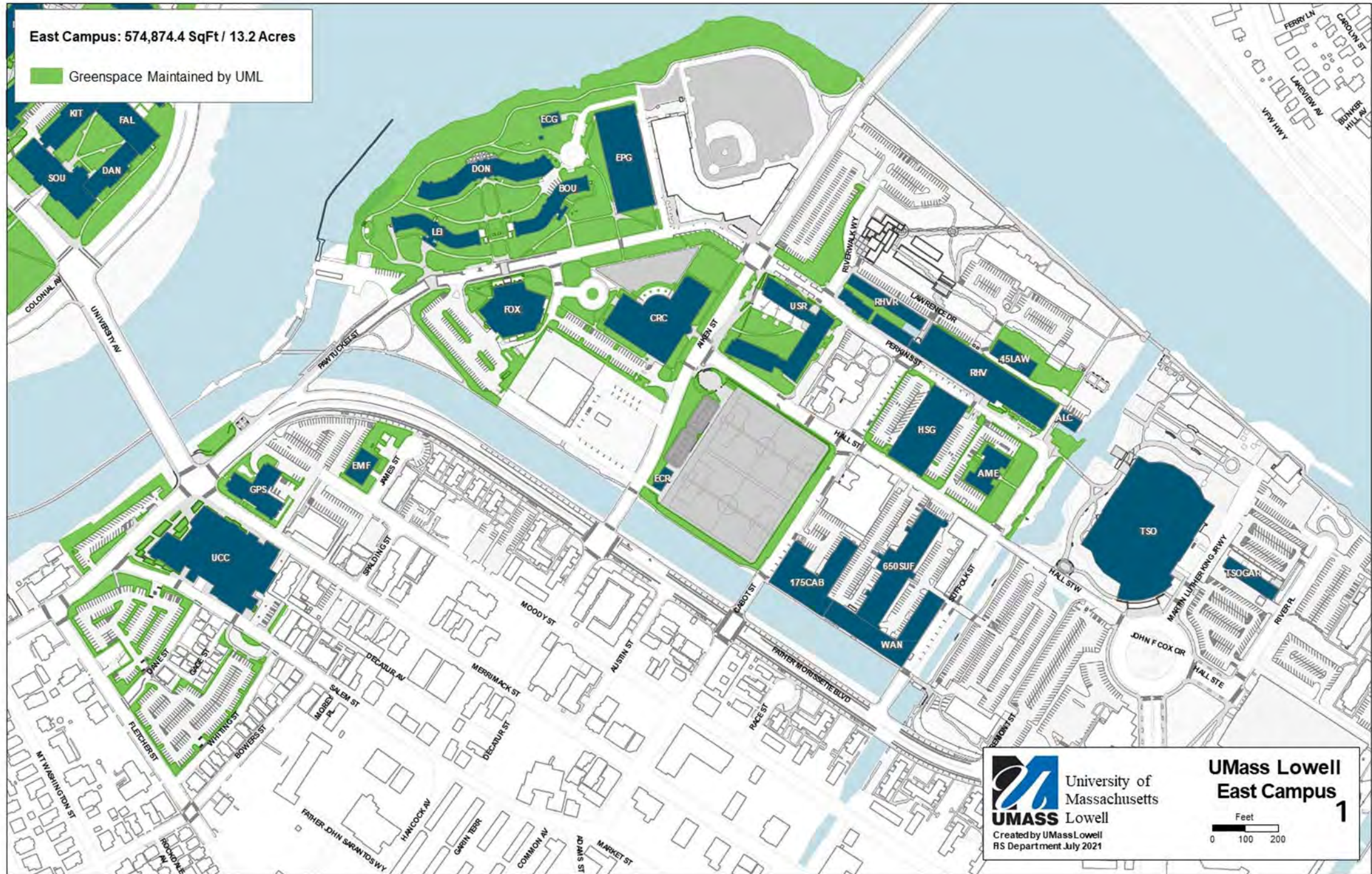


UMASS LOWELL GROUNDS ARE COMPRISED OF 140 ACRES ACROSS THREE CAMPUSES


- 8 grounds crew members
- 1700+ trees
- 21 acres of maintained lawns
- 4 acres or 175,000 sq feet of mulched garden beds

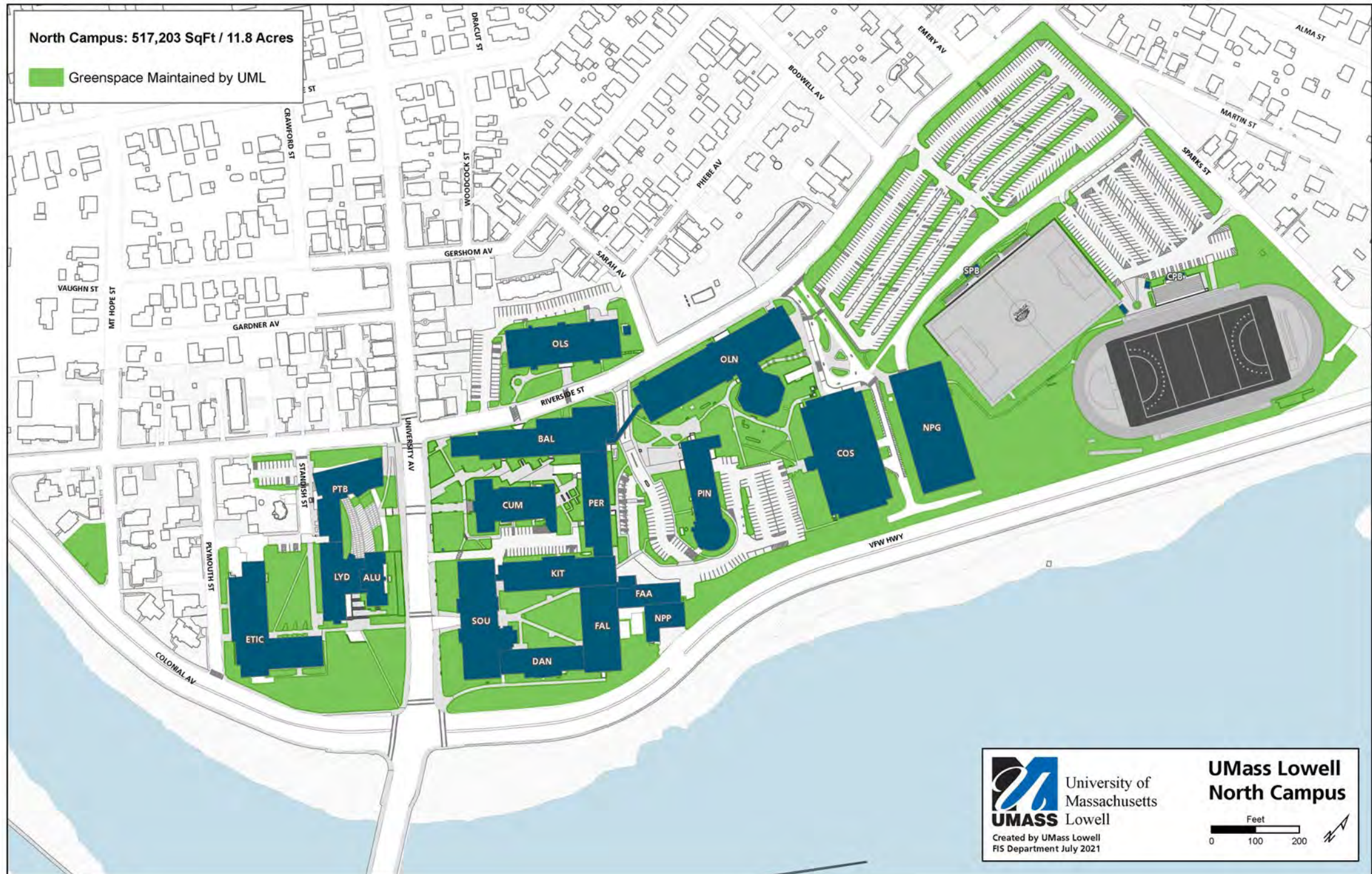
East Campus: 574,874.4 SqFt / 13.2 Acres

Greenspace Maintained by UML



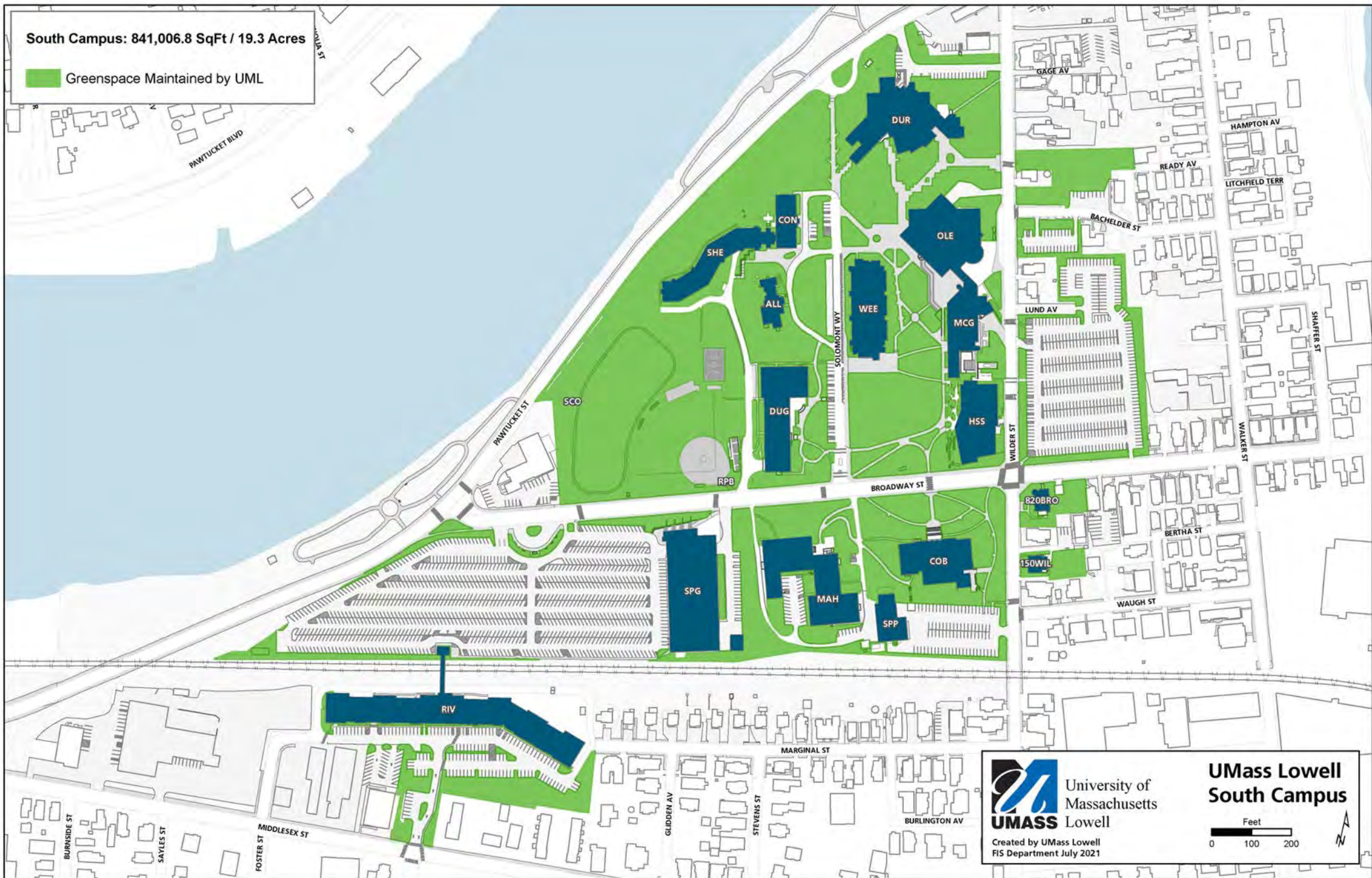
North Campus: 517,203 SqFt / 11.8 Acres

 Greenspace Maintained by UML



South Campus: 841,006.8 SqFt / 19.3 Acres

Greenspace Maintained by UML





An Arbor Day Foundation Program

ABOUT TREE CAMPUS HIGHER EDUCATION

- No matter where you're from, trees and green space are an integral part of a community, making them more livable, healthy, and beautiful, and benefiting the environment as a whole.
- The program provides a simple framework for colleges and universities to grow their community forests, achieve national recognition, and create a campus their students and staff are proud of.



WHY SHOULD MY SCHOOL PARTICIPATE?

1. A commitment to trees can significantly reduce the amount of energy your campus, and community, needs to generate.
2. Planting and maintaining trees absorbs carbon dioxide in the atmosphere, mitigating the effects of climate change. Green space provides important mental health benefits to students, faculty, and staff, as well as encourages physical activity.
3. Involving students in tree-related service-learning projects helps educate the next generation about the importance of caring for the environment.
4. Recognition also builds pride among your campus and the wider community.











Tools for Assessing and Managing
Forests & Community Trees



CAMPUS ARBORETUM

BENEFITS FOR THE COMMUNITY

1,709
DOCUMENTED TREES
ACROSS 3 CAMPUSES

471
TREES
SOUTH CAMPUS

450
TREES
NORTH CAMPUS

788
TREES
EAST CAMPUS

22%
CANOPY COVER

31%
CANOPY COVER

26%
CANOPY COVER

ANNUAL ECOSYSTEM SERVICES

2024 I-TREE ECO SURVEY + ASSESSMENT

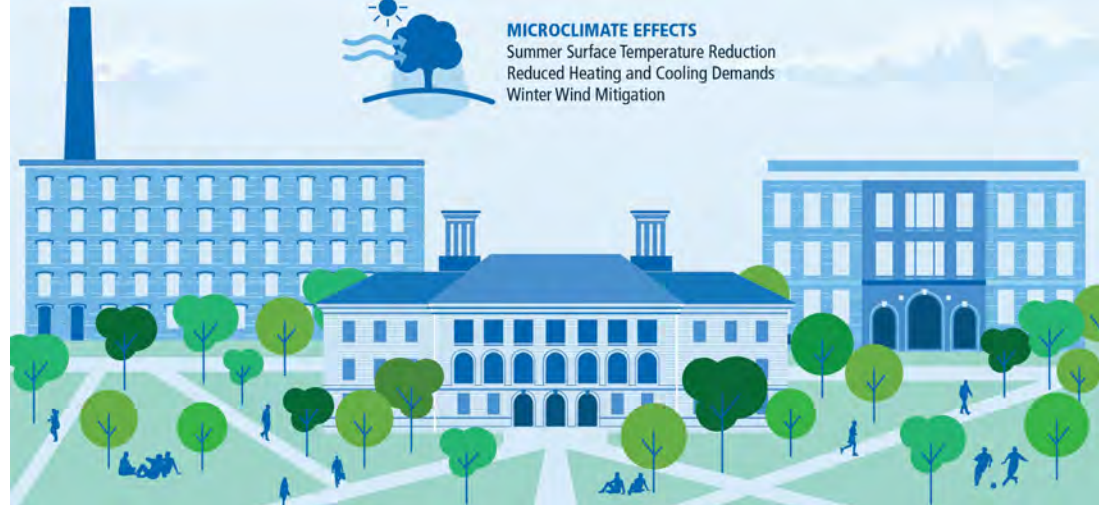
632 lbs
AIR POLLUTANT REMOVAL

13.5 tons
CARBON SEQUESTERED

258,031 gal
STORM WATER RUNOFF DIVERTED



MICROCLIMATE EFFECTS
Summer Surface Temperature Reduction
Reduced Heating and Cooling Demands
Winter Wind Mitigation



UMASS LOWELL- TREE CAMPUS USA

- UMASS LOWELL BECAME A TREE CAMPUS USA IN 2010
 - CREATE TREE ADVISORY CTE.
 - CREATE A MANAGEMENT PLAN
 - ANNUAL ARBOR DAY SERVICE - LEARNING PROJECT



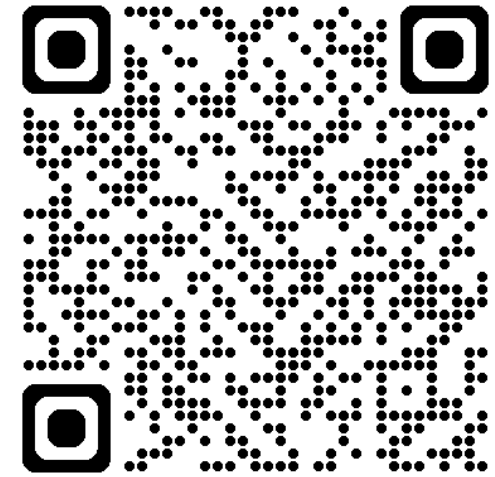


2024 ARBOR DAY CELEBRATION

COLLABORATION ACROSS THE STATE, CITY, AND CAMPUS

GREENING THE GATEWAY CITIES PROGRAM

The Massachusetts Greening the Gateway Cities Program (GGCP) is an environmental and energy efficiency program designed to reduce household heating and cooling energy use by increasing tree canopy cover in urban residential areas in the state's Gateway Cities.



The 26 Gateway Cities in Massachusetts

Attleboro, Barnstable, Brockton, Chelsea, Chicopee, Everett, Fall River, Fitchburg, Haverhill, Holyoke, Lawrence, Leominster, Lowell, Lynn, Malden, Methuen, New Bedford, Peabody, Pittsfield, Quincy, Revere, Salem, Springfield, Taunton, Westfield, Worcester

URBAN HEAT ISLAND EFFECT

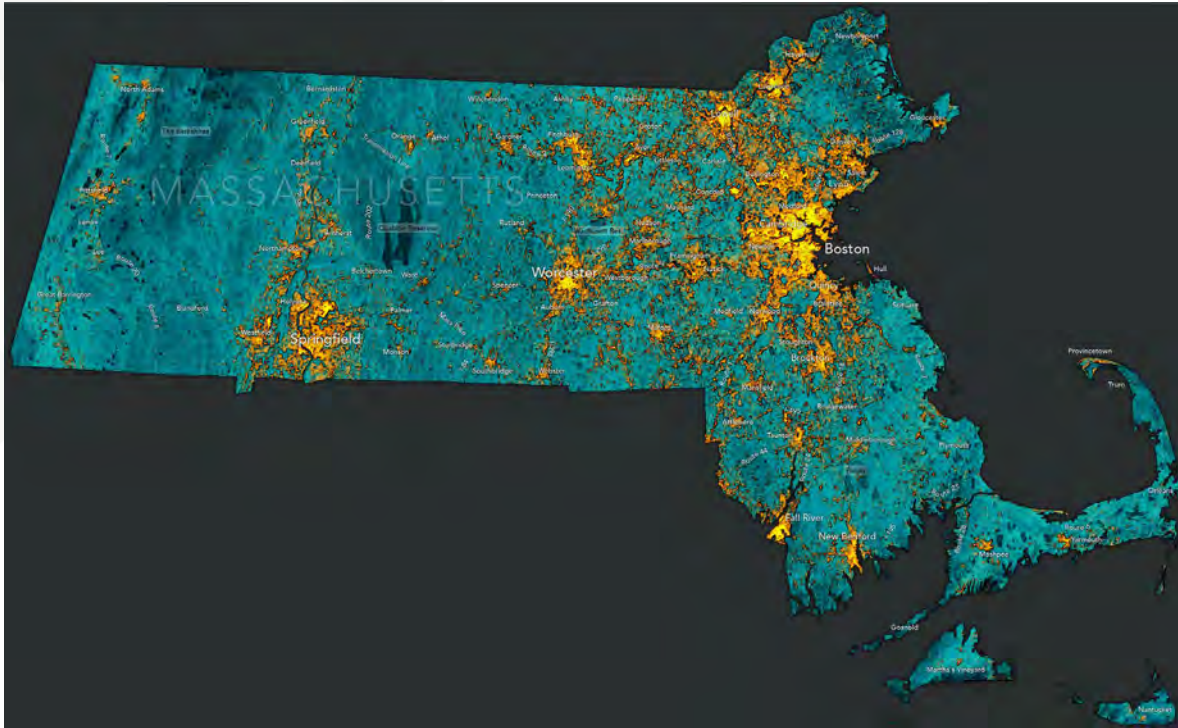


Photo courtesy of Bostonography

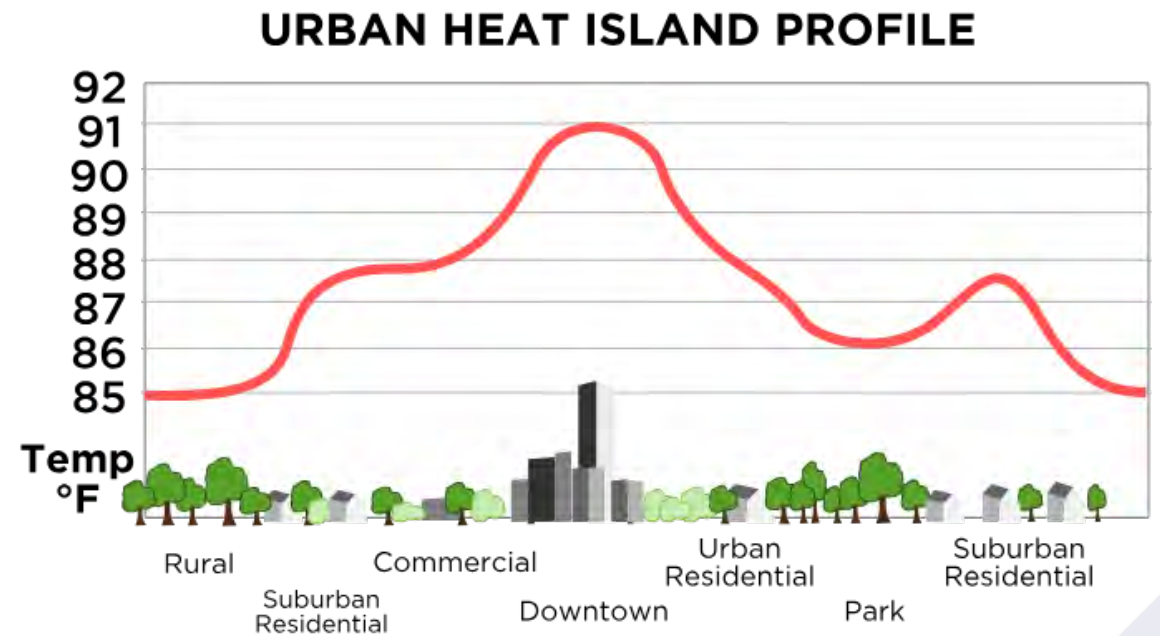
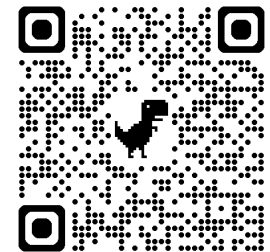


Image courtesy of <https://storymaps.arcgis.com/>





2023 Arbor Day and Arboretum Accreditation Celebration

WHAT IS AN ARBORETUM?

University of Massachusetts Lowell Arboretum

ARBORETUM: OUTDOOR
LIVING TREE MUSEUM

A LIVING COLLECTION
EMPLOYED TO EDUCATE
OTHERS ABOUT THE
IMPORTANCE OF TREES
AND THEIR
CONSERVATION.





Key Stats

2524 arboreta
worldwide in the
Morton Register

763
arboreta accredited
globally

41 countries
with accredited arboreta

January 2025

Level I – 443 arboreta
Level II – 226 arboreta
Level III – 49 arboreta
Level IV – 45 arboreta

ARBORETUM ACCREDITATION LEVELS

	LEVEL I	LEVEL II	LEVEL III	LEVEL IV
Arboretum plan	■	■	■	■
Organizational or governance group	■	■	■	■
Labeled tree and woody plant taxa				
25+	■			
100+		■		
500+			■	■
Staff or volunteer support				
Volunteer or paid	■			
Paid management		■	■	■
Curator			■	■
Scientific or conservation staff				■
Public dimension				
Public access and at least one event per year	■	■	■	■
Enhanced public and educational programs		■	■	■
Substantial educational programming			■	■
Collections policy		■	■	■
Collaboration with other arboreta			■	■
Collections data sharing with networked collections			■	■
Tree science, planting, and conservation activities			■	■
Substantial and integrated woody plant conservation				■



HOW DO YOU BECOME AN ARBORETUM?

1. COMPLETE A COMPREHENSIVE TREE INVENTORY OF ENTIRE CAMPUS
2. PUT TOGETHER AN ARBORETUM PLAN THAT CONSISTED OF:
 - MISSION AND PURPOSE
 - MANAGEMENT PLAN
 - DESIGN GUIDELINES
 - COLLECTION POLICIES



UNIVERSITY OF MASSACHUSETTS LOWELL
ARBORETUM PLAN
2023



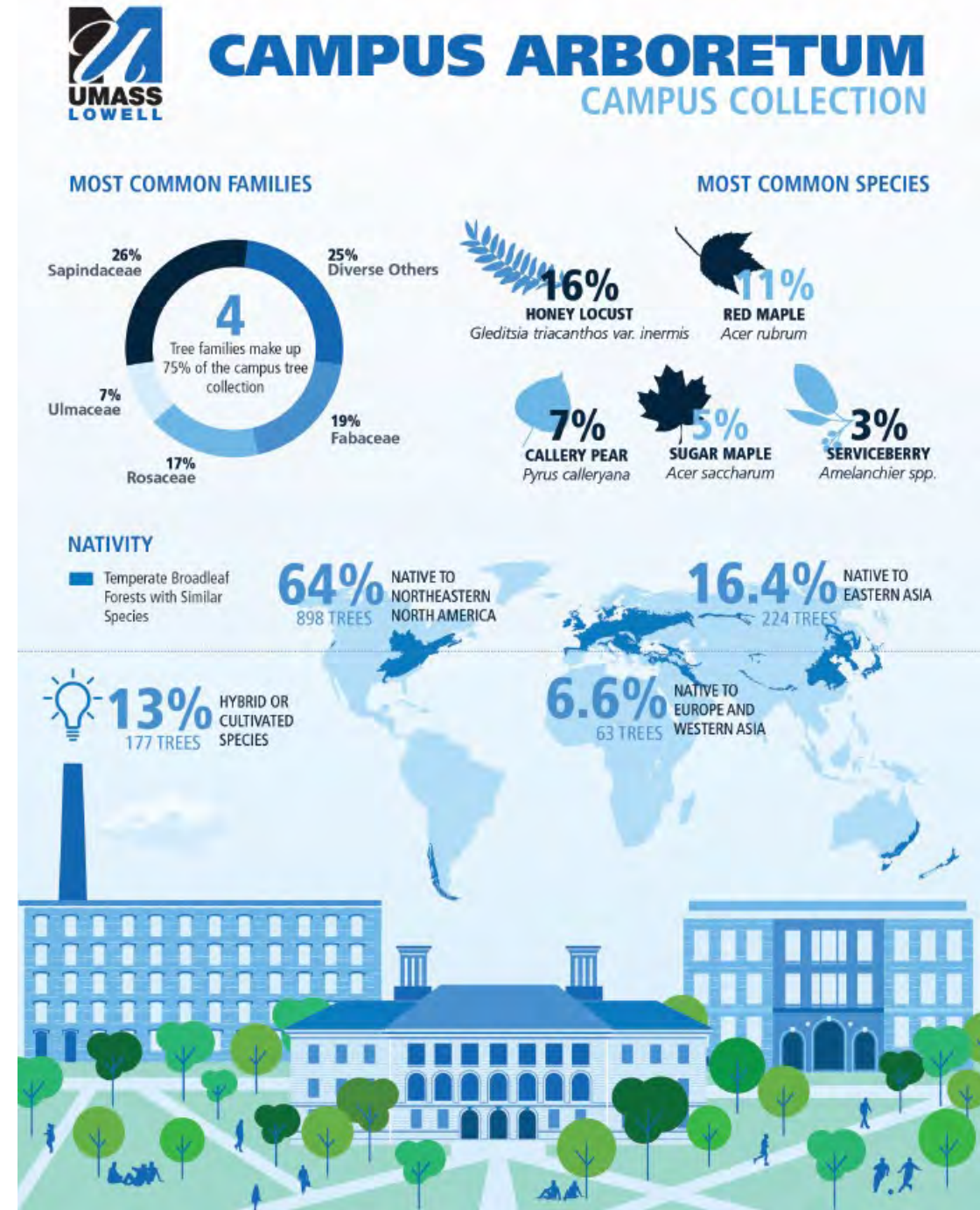
UML ARBORETUM MISSION

MISSION

The mission of the UML Arboretum is to develop and maintain a living plant collection that will provide a safe, attractive, educational and sustainable urban forest that faculty, staff, students and visitors can use as a resource for teaching, learning and enjoyment.

Objectives of the Collection

- Provide educational opportunities for student and faculty research and outreach projects
- Increase ecological resources including pollinator and songbird habitat
- Increase tree canopy where possible to address urban heat island effects
- Maintain and increase woody plant diversity at 140+ species



OVER THE LAST TWO YEARS WE HAVE
PLANTED OVER 200 TREES ON CAMPUS AND
HAVE INCREASED OUR PLANT DIVERSITY BY
60 SPECIES/CULTIVARS



WHY ARE ARBORETA IMPORTANT FOR COLLEGES AND UNIVERSITIES?



RECREATION



STUDENT-LED PROJECTS



INSPIRING SUSTAINABILITY



OUTDOOR EDUCATION



CLASS RESEARCH



ALUMNI NOSTALGIA

STUDENT ENGAGEMENT





STUDENT LED INITIATIVES - ECO FEST

FACULTY/ STUDENT RESEARCH - LIVING LABS

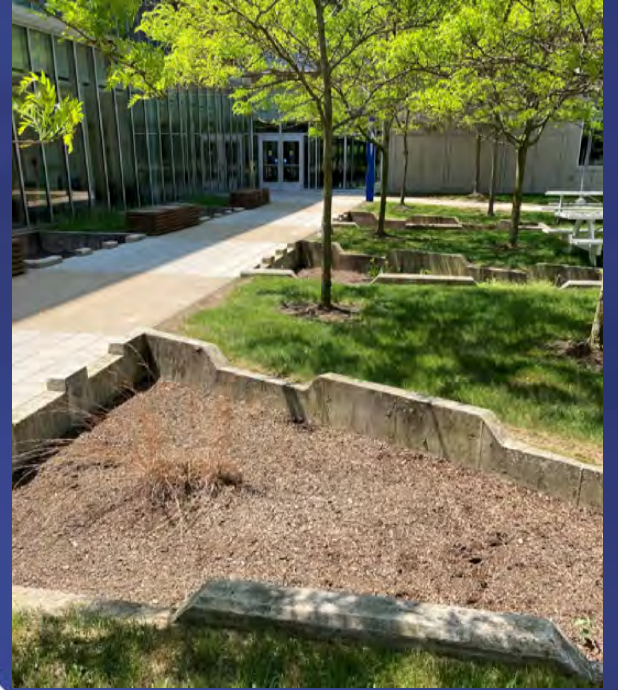


Pollinator Habitat

This area has been planted with a variety of flowering native plants to attract a wide variety of pollinators, including bees, flower flies, hummingbirds and butterflies. Nearly 90% of flowering plants rely on pollinators for fertilization. Pollinators are essential to our local food system.



This garden serves as an example of UMass Lowell's approach to sustainable grounds management—which also includes natural lawn care, rain gardens and urban forestry.



Electric/Battery Powered Landscape Equipment

Department of Energy Resources (DOER)- helps create a clean, affordable, equitable and resilient energy future for the Commonwealth.

Leading By Example (LBE) - works collaboratively with state agencies and public colleges and universities to advance clean energy and sustainable practices that reduce the environmental impacts of state government operations.



RIST URBAN AGRICULTURE GREENHOUSE & FARM





ROOFTOP GARDENS





HOPE GARDEN

AT UMASS LOWELL

yellow tulips are a sign of hope.

despite the dark, cold conditions of winter, each spring, tulips bloom

and so can you.



FOOD FOREST & LABYRINTH WELLNESS GARDEN



FOOD FOREST AND LABYRINTH WELLNESS GARDEN



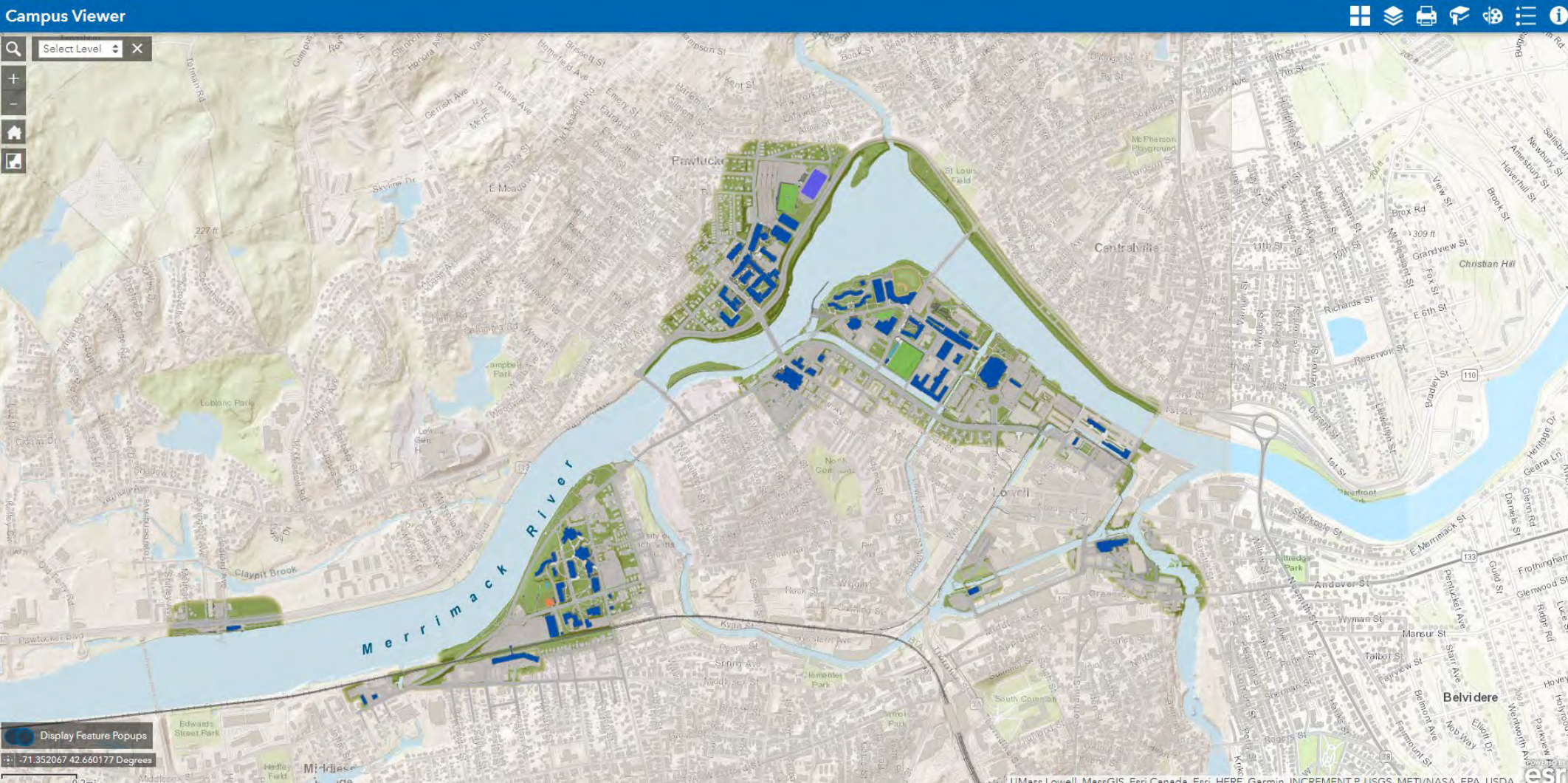
FOOD FOREST AND LABYRINTH WELLNESS GARDEN



Kevin Block
Grounds Operations Manager
Kevin_Block@uml.edu



Questions?



CAMPUS VIEWER

maps.uml.edu/secure – Campus viewer

[ArcGIS Enterprise - UML Trees Editing Map](#)

<https://www.uml.edu/office-sustainability/urban-agriculture-program/arboretum/>- arboretum

Volunteer App- [UML Trees Volunteer App](#)

[ITree](#)

