Campus Resources for Natural History Education: Development, Benefits and Outreach

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Natural history collections and curated local field guides can enhance both biological education and community engagement with natural history. At ESU, we have developed a series of educational resources to strengthen natural history training in STEM majors, including a curated museum collection and two campus field guides.

Each resource supports natural history education in multiple ways:



Students are involved in the creation, development, and maintenance of the museum & guides;



The museum & guides are regularly used to support classroom activities for ESU students;



External groups & members of the public come to our campus to visit the museum and take walking tours using the field guides.

The Schisler Museum of Wildlife & Natural

History and McMunn Planetarium was made

('62) and Fannie Greene ('62) Schisler, and

Charles A. "Tony" ('69) and Patricia Lythgoe

Quote: Charles Elton, 1927. Animal Ecology.

('68) McMunn. Development of the ESU

Arboretum Guide was supported by ESU

Student Activity Association, and the

Sustainability Commission.

possible by ESU alumni and supporters Arthur

faculty in Biological Sciences & Geography, the

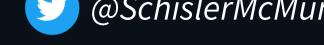


Acknowledgments & Contacts





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Schisler Museum



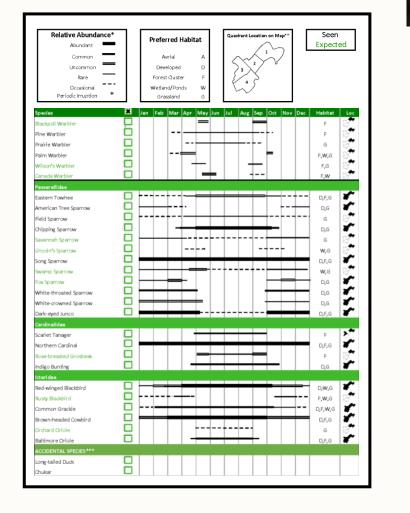


The Schisler Museum of Wildlife & Natural History and McMunn Planetarium serves as a regional center for natural history and science education, beginning at the K-12 level and continuing through university academic programs and a broad range of community groups. The museum houses over 140 wildlife specimens from around the world, presented in interpretive habitat displays.

Bird Checklist







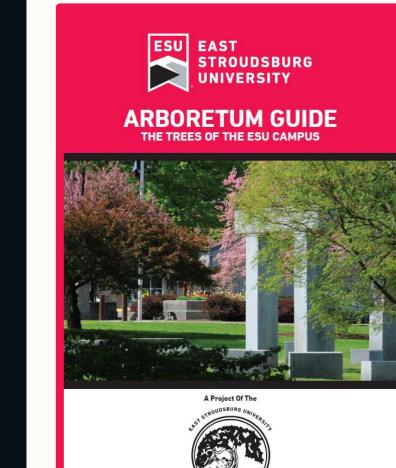


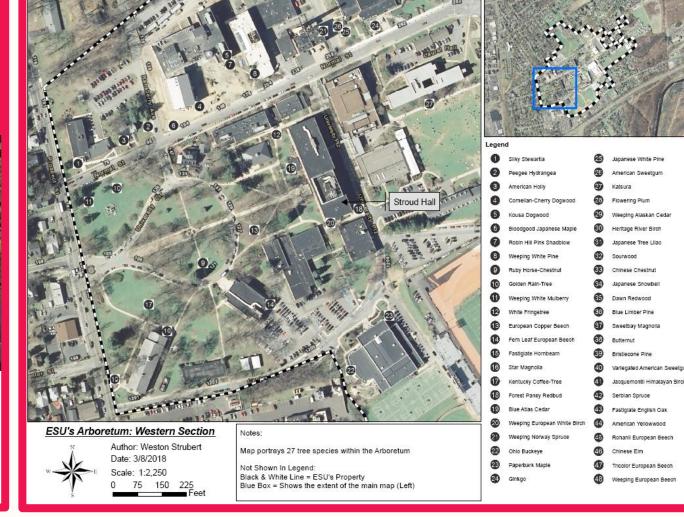


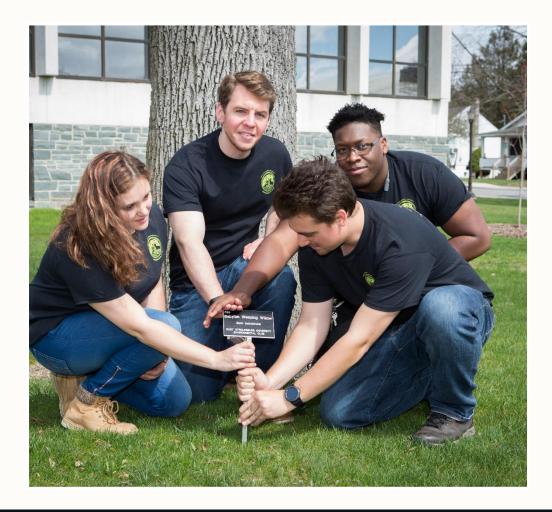
The ESU Bird Checklist provides information on bird species found on campus, including seasonal abundance and habitat (developed, forested, wetland, and fields) preferences within campus areas.

tinyurl.com/ESUBirdChecklist

Arboretum Guide







The ESU Arboretum Guide highlights 48 campus trees, noting identifying features and details of their natural history. A student-created map of the trees supports self-guided tours.

tinyurl.com/ESUArboretum

Ecology is a new name for a very old subjects It simply means scientific natural history. - Charles Elton

Development



Classroom Use

Outreach

The museum provides a service learning opportunity for students working as museum facilitators and who led creation of the guides. Art students also assisted with painting exhibit backgrounds.

The museum has had visitors from

ecology and mammalogy, as well as

courses in art and education. Student

facilitators employed in the museum

The museum provides outreach for

local school groups from grades K-

groups, private parties, and the

museum each year.

12, nearby universities, community

general public. Hundreds of groups

and over 10,000 individuals visit the

also gain skills in natural history

education and museum studies.

biology courses such as, zoology,

Development



The ESU Bird Checklist was created as a part of a student's graduate research project. Additional students were enlisted to report sightings of rare or noteworthy birds spotted on campus. GIS was used to create a campus map of bird habitat areas.

Classroom Use



Classes such as Ornithology and Field Zoology can use the checklist as a part of their lab field outings, and as a reference guide for the birds that students see on campus daily.

Outreach



the checklist in the future.

Development



The guide was developed by the ESU Environmental Club, led by a biology graduate student. Students identified tree species, wrote descriptions, and used GIS to create an arboretum map.

Classroom Use



The arboretum guide is used in classroom activities for botany and ecology courses. Students learn to identify and study plants starting with the campus trees that they walk past

Outreach





The arboretum has supported community outreach events for local environmental and gardening groups, including guided walks and tree plantings.





The ESU Bird Checklist allows local individuals and prospective students to get involved in citizen science by keeping track of bird sightings and providing the opportunity to report interesting sightings to be added to

