

TEMPLATE FOR CMap PROJECT

Project Title: TREE SURVEY
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<p>Project Description</p>	<p>TREE SURVEY Map the location, Genus, species, common name, size, overall health, of trees at or near Eisenhower Jr. High and Salt Lake Community College...Redwood Campus.</p>
<p>Community Issue or Problem Selected -How project evolved?</p>	<p>Urban trees are an important part of a healthy living environment. They do photosynthesis and provide oxygen for humans, pets, and urban wildlife to breathe. Trees also help with transpiration of moisture in the air, In addition, trees lower the local ambient temperature. They also add aesthetic beauty to our otherwise concrete jungle cities by giving us a touch of green to stimulate our “Nature Intelligence.”</p> <p>Grounds Keeping at Salt Lake Community College may benefit from data on tree health of some of their on campus trees. In particular we may be able to identify diseased trees that otherwise have yet to be identified as problematic.</p> <p>Taylorsville City may also be interested in this data on the neighborhood trees we map and evaluate.</p> <p>Field Botany Professors at Salt Lake Community College take students on walking field trips to identify local trees, both native and non-native species. Biological Science and 7th Grade Integrated Science teachers at Eisenhower Jr. High also take students out on walking field trips to use a dichotomus key to identify trees. Use of a dichotomus key is part of the 7th grade and Biology science core. This coming year there is a new Biology teacher and one new 7th Grade Integrated Science Teacher at Eisenhower Jr. High. They are not familiar with where to find the trees that can be identified as native or non-native and that can be identified with a basic</p>

	dichotomus key.
Community Partner(s)	Salt Lake Community College, U.S. Forest Service, USU Extension Office...Salt Lake County, Taylorsville City
Project Objectives	Map and identify tree types and condition of tree at and around SLCC and Eisenhower Jr. High. Provide data for SLCC Grounds Dept. SLCC Botany/Biology Dept., Taylorsville City, and for Science Teachers at Eisenhower Jr. High. Learn how to use a GPS unit and GIS software...for Earth Systems Globe Class.
Utah Core Standards/Objectives	7 th Grade Science Standard V, Objectives 1,2 and 3
Essential Question(s) -Spatial Issue	How do trees affect an urban environment? How is a dichotomus key used to identify specific organisms. How are organisms classified in the modern binomial nomenclature system?
Assessments (rubrics, scoring guides)	Student fill our data collection sheets with GPS coordinates and other data on tree health, size and type. Students also will demonstrate proficiency in the use of a dichotomus key of trees found in this part of Taylorsville.
Project Products	Map of several native and non-native trees in and around SLCC and EJHS. Booklet with identified trees with GPS coordinates and collected data...including tree health.
Project Timeline (include a step by step Procedures)	Contact SLCC Grounds Dept. Contact SLCC Botany/Biological Sciences Dept. Contact new Biology Teacher and new 7 th Grade Integrated Science Teacher. In Class: Teach vital vocabulary: serrated vs smooth edge

	<p>leaves, compound vs simple leaves, pinnate vs palmate leaves, lobed vs non-lobed, coniferous vs deciduous, opposite branching vs alternate branching, lobed vs non-lobed, venation, petiole, stem, braided, leaflets, fruit, group/bundled needles vs non-bundled needles, etc. Teach use of dichotomus key.</p>
Resources Needed	4 GPS Units, ArcMap, Computer Lab time, Color Printer w/ Ink. Camera, Dichotomus Key, US Forest Service Tree Measuring Stick
Skills Required	Reading a dicotomus key. Photography skills on close up and distance.
Project Team Member Roles	<p>Teacher(s): Mr. Robin Lyman, Mrs. Deanne Neal</p> <p>Students: 7th Grade Integrated Science students</p> <p>Partner(s): SLCC Biology or Botany Students, Utah State University Extension Office, US Forest Service</p>
Project Evaluation	Report on project and project products (map & booklet) ...to be sent to instructors, Principal, and Jessica Anderson of the Utah Education Network.
Project Bibliography	Community Mapping Class, Bart Farnsworth & Doug Anderson, Instructors, EEK = Environmental Education for Kids: http://www.dnr.state.wi.us/org/caer/ce/eeek/veg/treekey
Plans for Future CMaP Activities	<p>Water Quality Analysis of Jordan River Invasive Species Mapping for community/state</p> <p>Fossil Locations for USGS or U of U Earth Science Museum or North American Paleontological Associates Mapping of Geologic Hazards in Taylorsville</p>

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- Optional:
- Lesson Plans
 - Student Artifacts
 - Publicity