

# Tree Campus Higher Education 2020 Application



SUBMITTED: NOVEMBER 2020

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Lewis-Clark State College  
Arboretum Committee



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## Introduction

Lewis–Clark State College (LCSC) is located in Lewiston, Idaho. Founded in 1893, Lewis–Clark State College is a public undergraduate college with a three-part mission of academic programs, career & technical education programs, and community programs. One of the top public comprehensive four-year colleges in the West, with a beautiful campus, small classes, and superb faculty, LCSC is often described as a public institution with the feel and quality of a private college.



Lewiston is the county seat of Nez Perce County, Idaho, in the state's north central region. Lewiston is located at the confluence of the Snake River and Clearwater River, and it is the farthest inland seaport from the west coast. The City of Lewiston became a Tree City USA in 1988, and it maintains that designation today.



*Aerial shot of the LCSC Campus, nestled in the Lewiston community, with the Snake River running along its western edge.*

## Tree Campus USA Requirements

In alignment with the goals of the LCSC Arboretum Committee, starting in the Fiscal Year 2018-2019, LCSC seeks to complete the recognition required for Tree Campus USA. The Tree Campus USA requirements are:

1. Establish a Tree Advisory Committee
2. Develop a Tree Care Plan
3. Verification of dedicated annual expenditures on the Campus Tree Plan
4. Involvement in an Arbor Day Observance (removed for 2020)
5. Institution of a Service-Learning Project aimed at engaging the student body

# Standard 1 – Establish a Tree Advisory Committee

## Tree Advisory Committee (aka Arboretum Committee)

Creation of the LCSC Arboretum Committee was approved by the President’s Council in 2008, and then had its inaugural meeting in 2010. In 2016 it was first proposed to seek a Tree Campus USA designation. At that time, it was determined that the role of the Arboretum Committee would also act as the “Tree Advisory Committee” per the Arbor Day requirements. In this document, Arboretum Committee and Tree Advisory Committee are used interchangeably.



While responsibility for campus trees is assigned to the LCSC Physical Plant, the Arboretum Committee assists by providing guidance for future planning, input to a comprehensive campus tree plan, education of the campus community about the benefits of trees, and development of a community connection related to our campus and community trees.

### Current Committee Members

<i>Name</i>	<i>Staff, Faculty, Student or Community Member</i>	<i>Job Title</i>
Carrie Kyser, Chair	Staff	Instructional Designer (Landscape Architect)
Tim Barker	Community	Director, Lewiston Parks and Recreation
Wayne Bolon	Staff	Landscape Foreman, Physical Plant
Don Brigham	Community	Community Member, Landscape Architect
Julie Crea	Staff	Vice President for Finance & Administration
Rhett Diessner	Faculty	Professor of Psychology
Jeanette Gara	Faculty	Adjunct Faculty, Natural Sciences and Kinesiology; LCSC Learning Garden Founder
Tom Garrison	Staff	Director, Physical Plant
Jenni Light	Faculty	Professor of Engineering
Bill Malcolm	Community	Normal Hill Cemetery & Arboretum
Angie McClain	Staff	Administrative Assistant, Physical Plant
Gabe Mowry	Student	ASLCSC President (started fall 2020)
Ben Stowell	Student	Work Scholar (ended May 2020)

### 2020 Meeting Schedule

The committee had its inaugural meeting in 2010. In 2020, meeting dates for the full committee were:

- March 4, 2020; 1:00 – 2:30p,
- September 24, 2020; 2:00-3:00pm

Additional sub-committee meetings were held on topics such as the campus tree walk, Arbor Day observance event, and tree inventory project.

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## **Duties of the Committee**

- Classifying, cataloguing, and placarding of trees/ plants on campus
- Developing educational opportunities/activities for students/ community
- Planning for maintenance, removal (as required), and replacement of trees/ shrubs
- Planning for other botanical exhibits on campus
- Organizing campus or community support/fund-raising
- Organizing an Arbor Day celebration each year

## **Terms of Members**

The committee members will serve for a minimum of one year with an option for renewing the following year. Committee members are expected to actively participate and contribute in developing policy and guidelines for the tree care plan. No set number of committee members is required; however, the committee must always include a representative from the following groups:

- LCSC Student
- LCSC Faculty Member
- LCSC Physical Plant staff
- Community (preferably city forester, municipal arborist, or landscape architect)

When new members for the committee need to be recruited, the Arboretum Committee Co-Chairs are responsible for nominating new members.

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## Standard 2 – Campus Tree Care Plan

### The LCSC Tree Care Plan

In 2015 LCSC initiated development of a tree care plan. The following plan is currently in place and was approved by the LCSC Physical Plant Director and the Arboretum Committee in 2019.

#### **Purpose**

The purpose of the Lewis-Clark State College Tree Care Plan is to define protocols and give guidance and direction as to the best practices for any developments affecting trees on campus. This plan will be used by the Physical Plant and the Arboretum Planning Committee in executing any of the landscape projects on campus properties.

The Tree Care Plan is meant to formalize the planning efforts to develop and maintain a diverse assemblage of temperate tree species. The plan is also a communication tool that facilitates the coordination between the campus departments and community organizations.

#### **Responsible Authority and Role of Tree Advisory Committee**

Implementing of the Tree Care Plan will be split between Lewis Clark State College Physical Plant staff and the Arboretum Committee. Physical Plant staff will remove, replace, and maintain trees at the recommendation of the Arboretum Committee. The Arboretum Committee's role as the Tree Advisory Committee is described in [Standard 1](#).

#### **Communication Strategy**

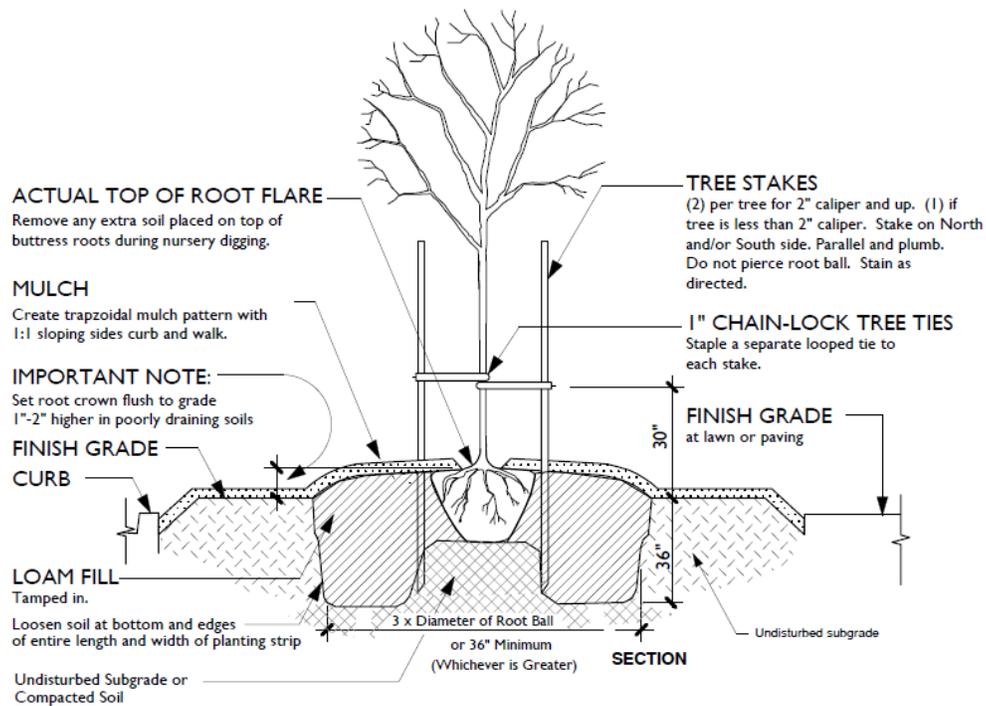
This plan will be provided to all Physical Plant employees who work on the campus grounds crew, as well as contractors, in order to ensure the adequate care and preservation of the campus trees particularly during new construction and building renovations. This plan shall be housed under the Administrative Services office and made public via the [Arboretum Project website](#) (Full URL: <http://www.lcsc.edu/administrative-services/arboretum-project/>). The Tree Care Plan should be included and recognized in future master plans for the campus. The Arboretum Committee will work in coordination with the LCSC Communications office to provide announcements to the LCSC staff, students, and faculty, as well as the surrounding communities when tree-related events are scheduled, such as Arbor Day observances.

#### **Tree Care and Tree Planting Policies**

Proper planting is essential in maintaining health and longevity of the trees on campus. Trees must be selected in accordance with the recommended planting lists and in relation to site conditions and will be installed in the suitable locations. New planting is beneficial in the case of excessive specimen loss in other areas on campus, as well as for community education purposes. When information needed for tree care and tree planting are not found in this document, reference will be made to the ANSI A300 Standards. ANSI is the American National Standards Institute, with ANSI A300 being the tree care industry standard of care. You can access the [ANSI A300 Standards on the Tree Care Industry Association website](#) (Full URL: [https://www.tcia.org/TCIA/BUSINESS/ANSI\\_A300\\_Standards\\_/TCIA/BUSINESS/A300\\_Standards/A300\\_Standards.aspx](https://www.tcia.org/TCIA/BUSINESS/ANSI_A300_Standards_/TCIA/BUSINESS/A300_Standards/A300_Standards.aspx)).

## Tree Planting

Trees will be planted in spring or autumn according to ANSI A300 and in reference to the diagram below. Guying, staking, wrapping, pruning, mulching, fertilizing, watering and other ongoing maintenance of trees and shrubs should be accomplished as directed in the technical sections of these Standards. Newly planted trees must receive adequate water weekly during the entire first growing season right up until dormancy in the fall, by irrigation or placement of ooze bag or hand watering. All new trees planted will be added to the tree inventory database, and marked with tree identification information when appropriate.



### NOTES:

- Trees planted too deeply will not be accepted.
- Remove tree ties and stakes one year after planting unless directed otherwise.
- Provide trees planted in lawn with minimum 5 foot diameter bark area.  
Hold bark away from trunk.
- Remove burlap, string and/or wire completely from tree prior to final installation.
- Finish grade is top of topsoil. Mulch is in addition.

## TREE PLANTING DETAIL

For Trees within 5' of hardscape paving

Not to Scale



*Tree Planting Detail is sourced from Oregon State University and can be located online at <https://fa.oregonstate.edu/file/csdiagra328000atreeplantingdetailpng>*

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## Tree Selection

The key goal of tree selection is to select trees that are hardy to our region, maintain biodiversity, and add aesthetics to the LCSC campus. Trees are selected based on site conditions and in accordance with the recommended replacement species listed in [Appendix B](#). All trees will be purchased from local, reputable nurseries and be inspected for quality upon delivery, rejecting any defective stock. If a specimen from the list cannot be located, Physical Plant staff will consult a Landscape Architect on the Arboretum Committee for guidance on an alternative.

## Tree Maintenance

Physical Plant staff and seasonal employees will clean up campus landscaping by removing fallen debris and conducting minor pruning. All arboricultural practices on LCSC Campus will adhere to the standards set forth by the ANSI A300 guidelines.

Campus trees are maintained by a Physical Plant crew or a contracted tree service. Trees are assessed annually for signs of required maintenance such as pruning, fertilizing, or pest treatment. Trees are generally pruned on a three to four-year cycle with damaged or pre-determined hazard trees taking priority. The Physical Plant crew uses ANSI A 300 (Part 2) and the best management practices on tree and shrub fertilization (International Society of Arboriculture, ISA) as guides for fertilizing trees on campus. When pests are suspected, and arborist is consulted to determine the need to treatment and/or removal.

## Tree Removal

Tree removal will occur under the following circumstances:

- Insect and/or disease infestations are so advanced, that recovery is unlikely or impossible.
- Defects in tree structure indicate a higher level of risk than the Arboretum Planning Committee is willing to accept.
- Damage from people or weather events necessitate removal, emergency or otherwise
- Construction or renovation on campus necessitates removal (review [Protection and Preservation](#) section)

Stump grinding will always occur after removal of a major tree to facilitate the replacement of that tree.

## Management in case of Catastrophic Event

In the event of severe weather conditions (i.e., winds, blizzards) fallen trees and branches will be removed by Physical Plant staff or an outside tree removal company. Roads and streets shall be cleared first, then access to critical buildings. During the planting season following a catastrophic weather event, the Arboretum Committee and Physical Plant will coordinate replacement and/or treatment of damaged trees. Refer to the information in [Tree Damage Assessment](#) for more information on assessment of trees damaged in a catastrophic event.

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## **Tree Damage Assessment**

Assessment on low profile trees is performed via the Arboretum Committee or LCSC Physical Plant grounds staff. Higher profile trees are assessed by an outside consultant (such as a Certified Arborist). Results from the evaluation determines whether the tree should be removed, pruned, or receive treatment such as fertilization or insect/disease control. Assessment of trees will be conducted annually as a prevention strategy. Removed trees are updated on the tree inventory list.

Whenever it is determined that violation of this procedure has occurred, the Physical Plant representative or designee from Arboretum Committee shall immediately issue written and oral notice to the person or company or department in violation, identifying the nature and location of the violation and specifying that remedial action is necessary to bring the violation into compliance.

## **Protection and Preservation**

Prior to construction, trees of high landscape or educational value will be identified for protection and preservation. Tree protection zones shall be established and maintained for all trees to be preserved in a construction site. A consulting arborist or landscape architect will determine the best strategy for placing a tree protection zone around the tree so that it may survive the construction period. During construction, all trees that must be removed to make room for a new building will be replaced by a similar tree elsewhere on campus chosen from the tree selection guide. Trees in poor health or of an undesirable species near the construction site will also be selected for removal and replacement.

## **Prohibited Practices**

To best protect and maintain the health of trees on campus, the following items are prohibited practices:

- Topping, heading cuts and hat-racking of trees is strictly prohibited except where necessary to provide clearance for utility lines.
- Bicycles, mopeds, and other wheeled vehicles shall not be parked and locked to young trees under any circumstance.
- Removing plant material, damaging stems, or excavating near trees is prohibited unless conducted or supervised by trained staff for specific purposes.
- Destroying trees by any means is also prohibited.
- Trees cannot be planted for dedication without pre-approval of the Arboretum Committee and the LCSC Physical Plant.

## **Goals and Targets**

The campus will transition away from large and senescent specimens and towards a variety of species. Future trees planted on campus need to be less susceptible to disease and storm damage. To achieve this goal, a tree inventory is continually being developed and maintained in order to evaluate existing species and determine viable replacement trees.

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## Tree Inventory

The LCSC Arboretum Committee and LCSC Physical Plant staff shall maintain an inventory of trees on the campus and other grounds owned by the college. The purpose of the inventory is to keep track of the diversity and health of trees that are currently part of the campus. The inventory aids in the maintenance of trees on campus and helps inform decisions about future species for planting. The inventory also provides students with the opportunity to learn real-world applications of GIS technology through the collection and upkeep of data, data analysis, and report writing.

LCSC Arboretum Committee in coordination with LCSC students will maintain and update the campus tree inventory on an annual basis. Current data has been collected using the GIS Collector App and stored in the GIS geodatabase.

Data collected includes:

- Tree Number
- Tree Species
- Height
- Diameter at Breast Height
- Tree Condition based on International Society of Arboriculture Parameters
- Year Planted (if known)
- Comments (e.g. recommended work)

The [LCSC Tree Inventory](https://www.arcgis.com/home/webmap/viewer.html?webmap=1eec00cecf1d4c84ba5d49718b12c3c1) is available for viewing by the public. (Full URL: <https://www.arcgis.com/home/webmap/viewer.html?webmap=1eec00cecf1d4c84ba5d49718b12c3c1>).

As of Spring 2020 semester, 1437 trees had been inventoried on campus.

## Standard 3 – Dedicated Expenses to the Tree Care Program

The funding for the Arboretum Committee comes from an account with the LCSC Foundation as well as the Physical Plant budget. These combined sources create the budget that is allocated to the tree care program. With a full-time enrollment of 2,883 students for Fall 2018 that would mean a recommended minimum \$6649 be allocated. To build and maintain our trees on campus, LCSC has exceeded that recommendation.

### LCSC Foundation Account for the Arboretum Project

The LCSC Foundation account, created for an arboretum project, was started in December 2014. The funds in this account are provided by a donor. All funds in this account are allocated for the arboretum project. Since its inception, that account has disbursed \$28,265 for the development and maintenance of the campus trees. At the end of the year of 2020, our balance is \$60,734.74.

	Deposits	Disbursements	Balance
<b>FY 2014-2015</b>			
14-Dec	\$30,000.00		\$30,000.00
15-Jan	\$35,000.00		\$65,000.00
15-Jun		\$11,994.26	\$53,005.74
<b>FY 2015-2016</b>			
	\$0.00	\$0.00	\$53,005.74
<b>FY 2016-2017</b>			
16-Aug	\$28,000.00		\$81,005.74
<b>FY 2018-2019</b>			
18-Mar		\$16,271.00	\$64,734.74
<b>Year 2020</b>			
14-Jul		\$4,000.00	\$60,734.74

### LCSC Physical Plant Budget

The LCSC Physical Plant is responsible for the grounds maintenance and landscape on the campus. The estimated expenses from their annual budget allocated to the tree care plan are as follows:

Cost of Trees Purchased	\$ 1500 to \$2000 per year
Labor, Equipment, and Maintenance	\$ 1500 to \$2000 per year
Tree Removal	\$ 2500 to \$3000 per year

The annual budget for all of the grounds maintenance and landscape, including tree care, for the Physical Plant is as follows:

Funds from the Provost	\$ 18000 per year
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## Volunteer Time

The [Arboretum Committee](#) is made up of volunteers. The community members on the committee volunteer their time, as well as the faculty and students. The LCSC staff members on the committee complete their duties as part of their general job functions. Approximately 20 hours of volunteer time and labor come from this group each year.

Other volunteer support comes from our student organization, the Associated Students of Lewis-Clark State College (ASLCSC), which is comprised of elected students who represent the student body, interacting with college administrators and faculty to ensure that students enjoy a quality education experience. ASLCSC has partnered with the Arboretum Committee on the planning and execution of Arbor Day events in 2018 and 2019. You can read more about their involvement in [Standard 4 – Annual Arbor Day Observance Event](#). This group plans to partner with LCSC for future Arbor Day events.



*Photo of the 2018-2019 school year members of the Associated Students of Lewis-Clark State College (ASLCSC). You can [learn more about ASLCSC on their webpage](http://www.lcsc.edu/aslcsc/) (Full URL: <http://www.lcsc.edu/aslcsc/>)*

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## Standard 4 – Annual Arbor Day Observance Event

### 2020 Arbor Day Observance

Due to the COVID-19 Pandemic, LCSC did not participate in a 2020 Arbor Day Observance.

A ceremonial tree planting in celebration of receiving the Tree Campus USA designation for 2019 was planned. That event would have coincided with the annual Art Under the Elms event held on campus. Due to LCSC classes being moved fully online, staff working remotely, and the Art Under the Elms festival being canceled, the Arbor Day Observance was also canceled.

### Previous Arbor Day Events

#### Presidents' Row Addition

A tree planting ceremony to honor Lewis-Clark State College President Dr. Cynthia Pemberton as part of Presidents' Row was held on Arbor Day, April 26, 2019 at 2:30 p.m. near the intersection of Seventh Avenue and Fifth Street on the LCSC campus. The ceremony was free and open to the public. With help from the college's Foundation office, Arboretum Committee, Physical Plant office, and the Associated Students of LCSC, Presidents' Row now consists of 16 trees with the addition of the Purple Robe Black Locust tree that was planted to honor President Pemberton.

Please review the [full article about the Arbor Day event](http://www.lcsc.edu/news/2019/03/25/president%E2%80%99s-row-tree-planting-on-april-26-will-honor-lcsc%E2%80%99s-pemberton/) on the LCSC News page (Full URL: <http://www.lcsc.edu/news/2019/03/25/president%E2%80%99s-row-tree-planting-on-april-26-will-honor-lcsc%E2%80%99s-pemberton/>)

#### Presidents' Row Inaugural Planting

As part of Lewis-Clark State College's 125th anniversary celebration, the college planted a row of new trees along Seventh Avenue to honor past, current, and future presidents of the college. This is the legacy project for this year by the Associated Students of LCSC, which is comprised of elected student officers who represent the student body.

The first tree, in honor of LCSC's first President George Knepper, was planted on Seventh Avenue just east of the entrance to the Fourth Street parking lot. There were 13 trees planted between the entrance to the parking lot and the Fifth Street entrance to campus. The final two president trees were planted on the east side of the Fifth Street entrance to campus near where the bus stop location is. Those two trees were planted during a special ceremony on Arbor Day, April 27, 2018. The public was invited to attend the ceremony.

View the [full article about the LCSC Presidents' Row initial planting](http://www.lcsc.edu/news/2018/03/13/aslcsc-project-will-plant-row-of-trees-to-honor-the-college-presidents/) event on the LCSC News page (Full URL: <http://www.lcsc.edu/news/2018/03/13/aslcsc-project-will-plant-row-of-trees-to-honor-the-college-presidents/>)



*The 2018 ASLCSC President, AJ Baron, and LCSC President Tony Fernandez shake hands after planting the tree to commemorate Dr. Fernandez's time as LCSC President.*

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## Standard 5 – Service-Learning Projects

### 2020 Service-Learning Projects

#### Research on Tree Walks to Reduce Stress

LCSC professors Dr. Rhett Diessner and Dr. Rachelle Genthos, and their undergraduate research assistants studied the stress relieving qualities of taking a 10 minute “tree walk” on campus. Participants were directed to stop four times along the walk to mindfully pay attention, with all their senses, to particular trees. The walk started at a dawn redwood (*Metasequoia glyptostroboides*), then went to a giant linden/basswood (*Tilia americana*), next a tall elm (*Ulmus americana*), and ended with a large pair of sequoias (*Sequoiadendron giganteum*).

Results showed significant stress reduction for the tree walkers, compared to a non-walking control group. The benefits of stress reduction were the most substantial for the students who had the highest levels of stress at the beginning of the walk. The service learning was most pronounced for the six student research assistants, and the 18 students in an advanced research methods class, who served as the guides on the walks.

#### Tree Inventory

The inventory of LCSC campus trees started when the Arboretum Committee was founded in 2008. Each semester, students work to keep the tree inventory updated. During the Spring 2020 semester, all trees that had previously charted were confirmed by our LCSC Work Scholar, Ben Stowell. Trees that had been removed due to disease or damage we noted in the inventory.

Information on data included in the Tree Inventory and a link to the data is provided in the Standard 2 – Campus Tree Care Plan > The LCSC Tree Care Plan > Goals and Targets > [Tree Inventory](#) section.



*Screen capture of the Tree Inventory Map from the online database.*

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## Past Service-Learning Projects

### Learning Garden

The Lewis-Clark State College Learning Garden and Outdoor Classroom serves the campus and the community by providing a creative and inspiring learning facility. The Learning Garden supports the LCSC motto of “Connecting learning to life” by providing access to fresh, locally-grown foods, demonstrating environmental sustainability, practicing wellness techniques, and developing plant-based experimental educational opportunities on the LCSC campus. In 2015, student scholar Doug Koch planted fruit trees in the garden. Today, the trees bear fruit and contribute to the locally-grown foods.

### Campus Tree Tours

As part of the Introduction to GIS (GIS 271) several service-learning opportunities are available. One of those is an opportunity for students to create a tree tour. This year students completed tours featuring four or five favorite trees of people who care deeply about the campus urban forest. This year the students completed tours for Todd Kilburn (co-Chair of the Arboretum Committee), Dr. Bill Manschreck (Arboretum Committee member and LCSC Foundation), and Liz Martin (LCSC Faculty).

- [Todd J. Kilburn Arbor Day Walk](http://www.lcsc.edu/media/6712213/Todd-Kilburns-Arbor-Day-Walk.pdf) (Full URL: <http://www.lcsc.edu/media/6712213/Todd-Kilburns-Arbor-Day-Walk.pdf>)
- [Dr. Mannschreck’s Favorite Trees](http://www.lcsc.edu/media/6712210/Dr-Mannshrecks-Arbor-Day-Tree-Tour.pdf) tour (Full URL: <http://www.lcsc.edu/media/6712210/Dr-Mannshrecks-Arbor-Day-Tree-Tour.pdf>)
- [Liz Martin’s Favorite Trees](http://www.lcsc.edu/media/6712216/Liz-Martins-Favorite-Trees.pdf) tour (Full URL: <http://www.lcsc.edu/media/6712216/Liz-Martins-Favorite-Trees.pdf>)

The tree tours are posted on the LCSC website. Creation of the maps combines learning with interactions between the campus community and community members. The project enhances both the student’s knowledge of using GIS with creating a tree tour that can be used by all visitors to the LCSC campus. Each student spent approximately 15 hours creating the GIS maps for this project (3 students x 15 hours = 45 total hours). Along with the Tree Tours being featured on the website, they will be featured at the Arboretum Committee booth at the fall 2019 Welcome Fair event.

### Tree Identification Tags

Throughout campus, many of the trees have species identification tags. These have been an on-going project for the campus for over 10 years. Courses on campus, such a botany, use the tree tags when learning about plant identification. An update to the tree tag is planned for 2021.



*Many of the trees on the campus are tagged with identification information stating the species common name, Latin name, and area of origin.*

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## Conclusion

Lewis-Clark State College strives to maintain a healthy urban forest on their campus in Lewiston, Idaho. The [mission of LCSC](http://www.lcsc.edu/president/vision-and-mission) is to prepare students to become successful leaders, engaged citizens, and lifelong learners (Full URL: <http://www.lcsc.edu/president/vision-and-mission>). The core themes at LCSC are *opportunity, success, and partnerships*. In alignment with Tree Campus Higher Education, LCSC seeks to promote *opportunities* for students to learn about importance of trees, *successfully* maintain and grow our urban forest, and create *partnerships* with organizations who share of mission of stewardship.



*Reid Centennial Hall at Lewis-Clark State College, built in 1893, is the oldest building still in use in Idaho's higher education system.*

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# Appendices

## Appendix A – Definition of Terms

- **Arborist:** A specialist in the cultivation and care of trees and shrubs, including tree surgery, the diagnosis, treatment, and prevention of tree diseases, and the control of pests.
- **ANSI A300 Standards:** ANSI is the American National Standards Institute, with ANSI A300 being the tree care industry standard of care.
- **Diameter, breast height (DBH):** The diameter or width of the main stem of a tree as measured 4.5 feet above the natural grade at its base. Whenever a branch, limb, defect or abnormal swelling of the trunk occurs at this height, the DBH shall be measured at the nearest point above or below 4.5 feet at which a normal diameter occurs.
- **Guying:** (see Staking)
- **Hat-racking:** Removing apical stems on young trees to curtail height
- **Heading Cut:** Cutting a branch back to a small twig that will not assume dominance to achieve structural objectives
- **Landscape Architect:** Landscape architecture is regulated in Idaho. All landscape architects are required to be licensed
- **Staking:** Staking and guying trees provide wind protection and allow trees to grow straight. Though not always necessary, they are useful in certain circumstances such as areas with strong prevailing winds and top-heavy trees with small root balls. Without proper support, trees can shift back and forth in their planting holes, severing smaller roots and lengthening the establishment period.
- **Tree Protection Zone:** An area surrounding a tree where certain activities are prohibited during construction in an effort to prevent damage
- **Topping:** An intermodal cut to limit the size of a tree
- **Urban Forest:** A wooded area, forest, or collection of trees and vegetation that grows within a city, town, or suburb.

## Appendix B – Recommended Tree List

### Deciduous Trees

#### Small Deciduous Trees (<25' Mature Height)

Common Name	Latin Name	Notes (if needed)
Acer griseum	<i>Paperbark Maple</i>	
Cercis canadensis	<i>Eastern Red Bud</i>	Pink to Purple Flowering; select cultivars not already on campus
Cotinus coggygria 'Atropurpurea'	<i>Purple Smoke Tree</i>	Purple Flowering
Cornus kousa	<i>Kousa Dogwood</i>	White Flowering
Prunus virginiana 'Can.Red'	<i>Canada Red Chokecherry</i>	White Flowering

#### Medium Deciduous Trees (25' - 60' Mature Height)

Common Name	Latin Name	Notes (if needed)
Aesculus x carnea	<i>Red Horsechestnut</i>	Red Flowering; Messy tree, plant away from sidewalks
Catalpa bignonioides	<i>Catalpa</i>	White flowering; Messy Tree, plant away from sidewalks
Cercidiphyllum japonicum	<i>Katsura Tree</i>	
Fraxinus Americana 'Aut. Purple'	<i>Autumn Purple Ash</i>	
Koelreuteria paniculata	<i>Golden Rain Tree</i>	Yellow Flowering
Liquidamber styraciflua	<i>Sweet Gum</i>	Messy tree, plant away from sidewalks
Sophora japonica	<i>Pagoda/Scholar Tree</i>	
Tilia cordata	<i>Littleleaf Linden</i>	
Zelkova serrata	<i>Zelkova</i>	

#### Large Deciduous Trees (>60' Mature Height)

Common Name	Latin Name	Notes (if needed)
Metasequoia glyptostroboides	<i>Dawn Redwood</i>	
Liriodendron tulipifera	<i>Tulip Poplar</i>	Messy tree, plant away from sidewalks
Fagus sylvatica pupurea	<i>Purple Beech</i>	
Fagus sylvatica 'Tri-Color'	<i>Tri-Color Beech</i>	
Quercus frainetto	<i>Forest Green Oak</i>	Messy tree, plant away from sidewalks

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## Evergreen Trees

### Small Evergreen Trees (<25' Mature Height)

Common Name	Latin Name	Notes (if needed)
Hinoki Cypress	<i>Chamaecyparis obtusa</i>	Needs moisture; best in shaded areas

### Medium Evergreen Trees (25' - 60' Mature Height)

Common Name	Latin Name	Notes (if needed)
Cupressus arizonica	<i>Arizona Cypress</i>	
Cupressus x leylandii	<i>Leyland Cypress</i>	

### Large Evergreen Trees (>60' Mature Height)

Common Name	Latin Name	Notes (if needed)
Abies concolor	<i>White (Concolor) Fir</i>	
Cedrus atlantica	<i>Atlas Cedar</i>	
Cedrus libanii	<i>Lebanon Cedar</i>	
Sequoiadendron giganteum	<i>Sequoia</i>	

Note: Tree species not on this list need to be approved by a landscape architect or arborist representing the Arboretum Committee before being planted on campus. This includes trees planted as memorials.

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## Acknowledgements

All photos in the document were provide by the LCSC Communications Office or from the LCSC webpage.

Information about Lewis-Clark State College was gathered from the [www.lcsc.edu](http://www.lcsc.edu) webpage.

Application report for 2020 was written by LCSC Arboretum Committee Chair, Carrie Kyser; edited by Arboretum Committee members.

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