

**ASSOCIATED STUDENTS OF COLORADO STATE UNIVERSITY
FIFTY-SECOND SENATE
SESSION - 14th Session
DATE - November 16, 2022**

**BILL #5206
THE BEE BILL**

DISCLAIMER: A signature to sponsor is not the same as supporting the content of any piece of legislation, it is simply a statement asking for the legislation to be heard.

SPONSORED BY: Elizabeth Rencher, Budgetary Affairs Chair, Senator for the College of Business; Sammy Trout, University Affairs Chair, Senator for the College of Liberal Arts.

WRITTEN BY: Robert Long, ASCSU President; Joe Urynowicz, CSU Apiculture Club President.

COLLABORATED WITH:

ENDORSED BY: Ariadne Athey; Internal Affairs Chair, Senator for the Student Disability Center; Ellie Lutz, Associate Senator for the Pride Resource Center; Faraaz Bukhari, Recruitment and Retention Chair, Senator for the College of Health and Human Sciences; Rithik Correa, Senator for the Office of International Programs; Dory Schmidt, Senator for the College of Natural Sciences; David Wise, Deputy Director of Finance; Ben Torres-Doxey, Associate Senator for the Asian and Pacific American Cultural Center; Elijah Sandoval, ASCSU Vice-President; Budgetary Affairs Committee; University Affairs Committee;

ABSTRACT: The purpose of this bill is to improve accessibility, eco-friendliness, and relevant informatics for the Horticulture Center planting area and bee yard. To fulfill the goals of this bill, the 52nd Senate should allow the CSU Apiculture Club to utilize \$7,000 from the Senate Discretionary Fund.

WHEREAS

The CSU Apiculture Club was re-established in 2017 to provide CSU students an opportunity to learn about beekeeping and create environmental impact on the Fort Collins community. With the re-establishment of the Club, they were provided an area of land off of Center Avenue and Prospect Avenue to host a space for the bees. However, much of this space (880 square feet) goes unused when there could be improvements used there. Additionally, there have also been issues for club members who require wheelchair accommodations to access this area; and,

WHEREAS

The CSU Apiculture Club has been funded by ASCSU in the past under Bill #4813, also named Bee Bill. The difference being Bill #4813 funded the establishment of the apiary while this bill would provide some upgrades to the apiary; and,

WHEREAS

The CSU Apiculture Club does not possess the funding needed to make these additions to the environment possible. Therefore, they are asking for funding from ASCSU to support the ongoing success and growth of the CSU Apiculture club and ensure its long-term impact on the CSU community; so,

THEREFORE BE IT HEREBY ENACTED

That the 52nd ASCSU Senate allocate \$7,000 from the Senate Discretionary Fund to pay the CSU Apiculture Club within the bounds of the budget used in the proposal; and,

THEREFORE, BE IT HEREBY FURTHER ENACTED

That any unused funding related to this bill be allocated to the ASCSU fund balance no later than December 31st, 2023; and,

THEREFORE BE IT HEREBY FURTHER ENACTED

That a copy of this legislation be forwarded to Robert Long, ASCSU President; Ken Kinneer, Director of Environmental Affairs; Dave Hansen, CSU University Landscape Architect; Nicholas DeSalvo, ASCSU Speaker of the Senate; Joe Urynowicz, CSU Apiculture Club President; Jessi Sholts, ASCSU Advisor; Ashton Duffield, ASCSU Accountant.

PASSAGE

November 16, 2022

DATE



PRESIDENT ROBERT LONG



DATE

TAGS: CSU Horticulture Department, CSU Facilities Management, CSU Apiculture Club.

Citations for any external references:

BELOW IS THE PROPOSAL BY THE CSU APICULTURE CLUB



Student Apiary Funding Proposal Fall 2022

CSU Apiculture Club

Joseph Urynowicz, CSU Apiculture Club President

After a fifth year of healthy honeybees, the Colorado State University (CSU) Apiculture Club is looking to improve its apiary and beekeeping program. Hives have been successfully managed at the Durrell Center in conjunction with Housing and Dining as well as the Horticulture Center, where the bee yard is located. The club has also worked in conjunction with the Pollinator Friendly Campus Committee under the President's Sustainability Commission to meet the goal of creating a pollinator-friendly campus. With space provided by the CSU Horticulture Department acting as a cosponsor with this contribution and funding support from ASCSU, the CSU Apiculture Club is proposing to develop a pollinator garden in the CSU bee yard. The pollinator garden will provide CSU students and the CSU Apiculture Club with space to learn about pollinating bees, pollinator-friendly plants, and the techniques associated with hands-on beekeeping in an open and safe environment. Developments made with the proposed grant would contribute to establishing a long-term, self-sustaining pollinator area on campus, working toward a more pollinator friendly campus, and contributing toward CSU water minimization efforts.

The CSU Apiculture Club:

The CSU Apiculture Club was reestablished in 2017 with the goal of providing CSU students an opportunity to receive hands-on beekeeping experience and learn what it is to be a beekeeper. In the spring of 2018, the club established its first hives with funding from the Housing and Dining Sustainability Fund and the Associated Students of Colorado State University (ASCSU). These hives were the first student to run hives on campus in fifty years and acted as both a learning area for the club members and as an outlet for CSU community pollinator awareness. The club remains the best opportunity for CSU students wishing to learn about and interact with honeybees. Since the summer of 2018 we have successfully integrated and maintained our hives, even collecting honey harvests each year. Since its reestablishment, the club has attracted the interest of many CSU students with the number of CSU Apiculture Club members increasing each year. The club also acts as a resource for the broader CSU and Fort Collins community acting in a close relationship with the Pollinator Friendly Campus

Committee. The club has participated in educational outreach, presenting about bees on campus to CSU Faculty and staff, local kindergarteners, and to various groups around northern Colorado. At CSU, the club serves as the swarm collection group, responding to reports of 'unwanted' honeybees campuswide. The club's efforts have been recognized through features on several local and state media platforms with multiple appearances on SOURCE as well as KCSU and even a segment on 9 News.

Location:

The CSU Apiculture Club bee yard is currently located at the CSU Horticulture Center located off Centre Avenue and Prospect Avenue. The proximity to campus and nearby tree and flower gardens has made this the perfect location for the bee yard. The area encompasses around 880 square feet of land, all of which has the potential to be developed into a usable space. The area is accessible by a dirt road that reaches the gate to the property, allowing visitors with accessibility requirements the ability to get to the gate of the bee yard.

Why The CSU Apiculture Needs a Pollinator Garden and ASCSU Funding:

After years of thriving bees and education on campus, and an ever-increasing number of members, the club wishes to take advantage of the size and potential of the current bee-yard location.

- 1) Provide a visitor-friendly learning environment
- 2) Decrease campus water usage by utilizing Xeriscape methods and low water consuming plants
- 3) Provide the CSU Apiculture Club honeybees and local pollinators with perennial plants to increase pollination
- 4) Create an aesthetically pleasing area, free of weeds, for Apiculture Club members and visitors to enjoy for years to come

Visitor Friendly Learning Environment/Area Access:

The area is currently accessed by the club from a locked, south gate at CSU Horticulture Center planting area. While access to the hives is currently restricted to personnel at the Horticulture

Center and management of the CSU Apiculture Club, club members frequent the area for club activities and learning opportunities. Last fall during club meetings, accessibility issues posed a problem. Members of the club needing wheelchair access had difficulty reaching the hives. Easy accessibility to the hives is a critical focus which stresses the need of a path from the entrance to the hive location.

Decrease Campus Water Usage

Sustainability and limiting environmental impact remain extremely important to the CSU Apiculture Club and its goals. The club wishes to join campus efforts to reduce water consumption by adopting water-saving irrigation and land development practices. Xeriscaping the area without the need for sod has been proven to reduce water consumption by up to 75 percent. This, coupled with specific low-water, pollinator-friendly plants ensure that the minimum amount of water is being used but the goals of the visitors, club, university, and of course the pollinators that will frequent the area are all met.

Provide CSU Apiculture Club Bees With Pollination-Friendly Plants

While honeybees can travel up to 5 miles away from the hive to pollinate, having flowers and trees closer in proximity to the hives is convenient for bees, beekeepers, and visitors. The honeybees themselves don't need to travel as far to pollinate, the visitors and club members get the pleasure of observing the CSU honeybees pollinating firsthand in the bee yard, and the beekeepers (club managers) have a space to educate visitors and club members.

Aesthetics of a Pollinator Garden

The several facilities, landscaping, planting, and maintenance crews at CSU have done an incredible job of making campus an area where people want to be. Flowers, gardens, and trees provide color and vibrancy to the campus learning space. The CSU Apiculture Club bee yard has the potential of becoming another of CSU's beautiful learning environments. Currently, weeds and other grasses have made their home in the area. After the installation of a xeriscape pollinator garden, pollinator-friendly plants will take the place of grasses and weeds. The potential of the area is immense. An aesthetically pleasing, water-conserving, colorful bee yard is something that very few campuses can offer to their students.

A xeriscape pollinator garden would not only ensure more conducive learning but better the health of the bees and other pollinators. With an increasing number of CSU students interested in bees and beekeeping, the need for a friendly learning environment is becoming increasingly important. Another year of CSU Apiculture Club students successfully managing hives gets the club closer to becoming a permanent learning fixture on campus. Though the CSU Apiculture Club provided many opportunities for hands-on beekeeping to CSU students just last year, it does not currently possess the funding needed to establish this learning environment. A grant from ASCSU would not only establish the CSU Apiculture Club and ensure its long-term impact on the CSU community but would provide eager learners with a strategically designed learning space, able to be utilized for years to come.

The Location:

Current Land Features

A pre-installed, full-circle sprinkler system significantly increases the feasibility of this project. All watering logistics have been accounted for, making it so that once plants, and other landscaping features included in pollinator garden space are installed, the area can immediately be used as a functioning learning space. The area is outlined by clear land boundaries to the neighboring agricultural space within the CSU Horticulture Center area. The neighboring agricultural space, surrounding trees, and gardens speak to the soil health in the area. To be sure the soil is in prime planting condition, compost was tilled into the bee yard area in 2020, so planting can begin without soil preparation.

The hives are kept on wooden bee stands that have been staked to the ground on the west side of the property (see *Figure 2* below.) Because of a successful spring and summer, the club is now managing 10 hives and has expanded to 5 bee stands to support them. The stands and hives are kept away from the sprinkler system's irrigation radius, so water does not pose an issue to hives.

To kickstart pollinator garden efforts last fall, the CSU Apiculture Club planted two young apple trees within the bee yard space. They have been thriving in the new location and will grow and develop as the area around them does the same. It's clear that the area contains all the necessary foundations to support this project.

The figures below depict aerial views of the property as well as current land features.

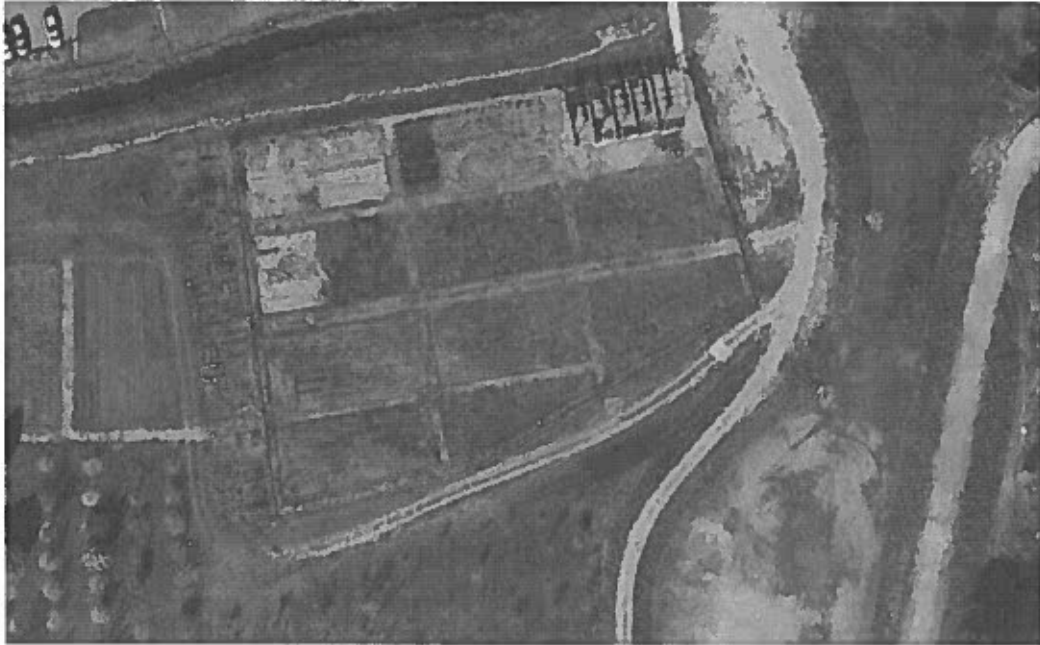


Figure 1: Aerial view of Horticulture Center planting area and bee yard

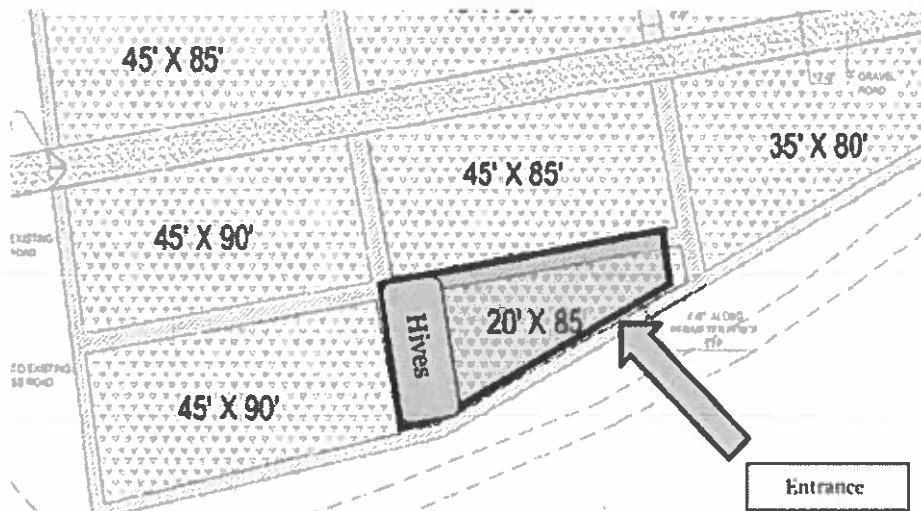


Figure 2: Hive Location and Entrance Location



Figure 3: Ground view of bee yard plot



Figure 4: CSU Apiculture Club members meeting in the bee yard

Proposal Components

Land Developments

- Path

The proposal includes creating a path for better hive accessibility that runs from the entrance of the bee yard to the hives. This path will provide wheelchair access, easier mobility, and visibility of all hives and plants in the pollinator garden.

- Rock

Decorative rock is a critical aspect of this project for many reasons. First, rock could provide seating if necessary and break up the area nicely to provide a beautiful, more natural area for birds and pollinating insects. Rocks would also ensure that the area is never accidentally mowed or plowed. Decorative rock has not been included in the funding portion of this proposal because they were kindly donated to the club by Hydraulics Lab management at the Engineering Research Center located at the CSU Foothills Campus.

- Mulch

The ground of the planting area will be made up of mulch. Mulch is the best option because it is natural and would discourage weeds from popping up in the area. Mulch is not included on the items list of this proposal because it is available for free at several locations near CSU.

- Plants

Undoubtedly, plants are a huge focus of this project. Maximizing the amount of pollinator-friendly plants in the bee yard is important for pollination, learning, and aesthetics. Choosing the right plants for this development is important, and the club will make plant decisions to fit its goals based on the inventory of High-Country Gardens, the company in which the plants will be ordered from. The order would be placed mid-winter so that all plants are able to be delivered before planting season in the springtime. Smaller plants do better when planted in the spring due to more time for root growth and more forgiving conditions. The price included in this proposal is the average price per plant.

CSU Apiculture Club Signage

The CSU Apiculture Club has needed signage for the bee yard since its establishment but has lacked the funding to make it happen. The university offers resources to design and produce campus signs. The club has started this process already and has designs for signs already made (seen below.) Now, all that is needed is the funds to put production into work.

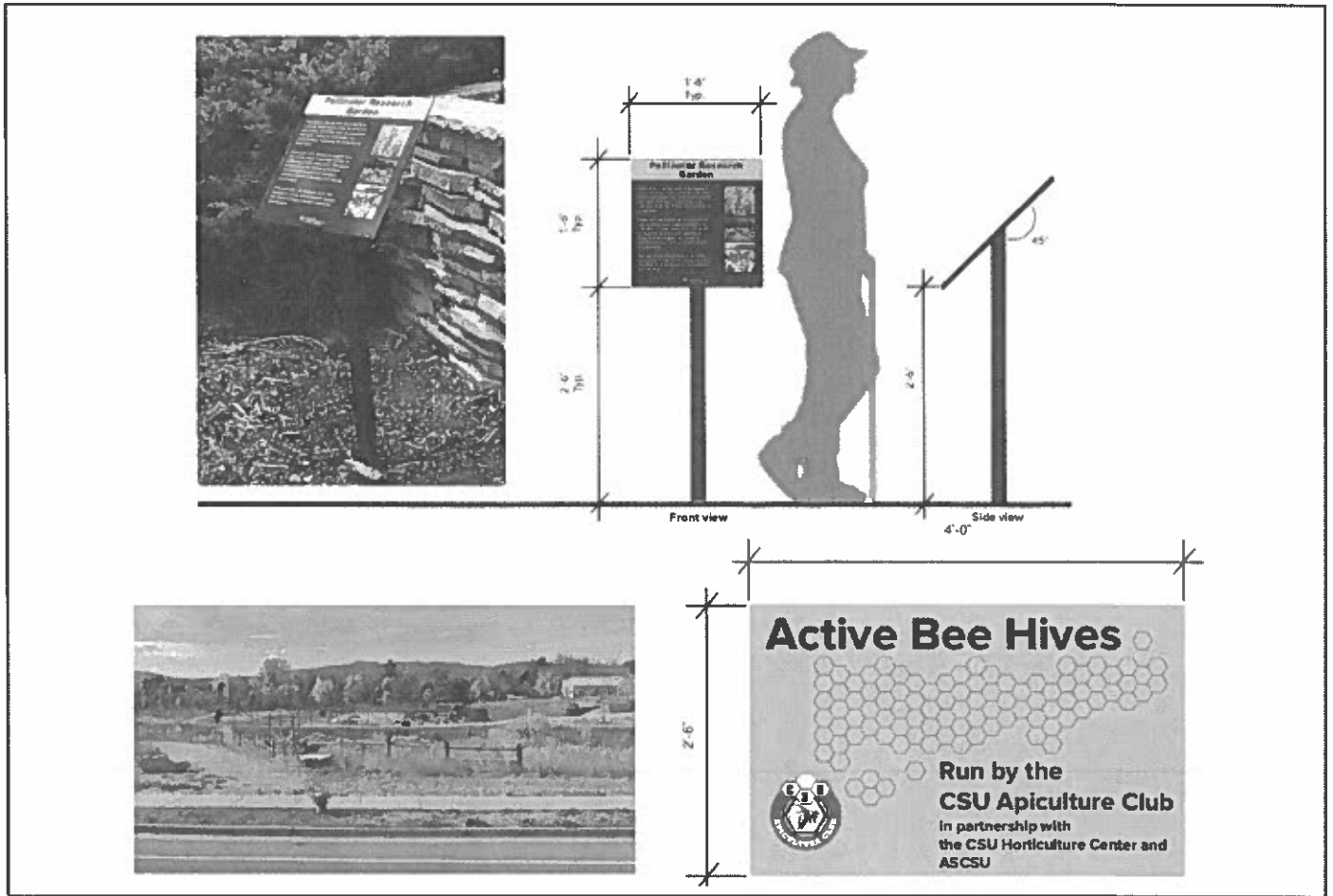


Figure 5: CSU Bee Club Sign Designs

Improvements to the Club

Along with the implementation of a pollinator garden, the club would also like to take this opportunity to improve upon its foundation. A key aspect of a club's longevity is its ability to promote itself to the student body. This is done through campus events and outreach as well as through advertisement. Merchandise can play a huge role in advertising for the club. Both a logo and a slogan were created during the club's establishment, yet only stickers have been made. Creating merchandise to be seen and worn around campus is a great way to spread the word about the club. This portion includes merchandise for club management but primarily for the students involved in the club as well as merchandise to give away at outreach events.

Area Maintenance/Labor:

The area will be maintained (weeding, watering, trash pickup, etc.) by the CSU Apiculture Club. Labor involved with the installation process (besides implementation of rock) will be done by members and administration of the CSU Apiculture Club as well as cooperating clubs (TBD.)

Space Use:

The pollinator garden will encompass all 880 square feet of available space that isn't being used for bees. The bees on the west side of the property will not be moved. The club will utilize the newly developed area to its fullest potential by maximizing available planting space. Taller plants will be planted in the middle of the property so that the sprinklers can reach all shorter vegetation first.

- Floodplain Consideration

There will be no volume of material taken away from the site to make room for the decorative rock or other pollinator garden features. The club has coordinated closely with CSU campus floodplain manager, Susanne Cordery, who has kindly confirmed that there are concrete cylinders on the site rising about 3-5 inches out of the ground indicating the maximum height the land can be before flooding becomes a concern and volumes need to be offset. The volume of the area underneath these cylinders can be calculated and used to determine the volume of material available to add before flooding becomes an issue.

Funding Impact:

The long-term impact of funding from ASCSU would be a self-sufficient entity on campus with both the supplies and the space requirements to operate for many years to come without need for additional exterior funding. The supplies purchased with the money provided will not only allow us to make the improvements to the location, but it will better our ability to educate both members of the club and the broader CSU and Northern Colorado Communities. It will allow us to expand and provide greater purpose and outreach to the community. This funding along with the correct guidance will lay the groundwork for the future of beekeeping on the CSU campus for years to come.

Overview of Items:

Item	Quantity	Cost Per	Cost Total	Vendor
CSU BEE CLUB SIGNS	2	700	1,400	CSU Design - Jessica Kramer
MOVEABLE 12' WOODEN PATHWAY	6	115	690	Amazon.com
PLANTS	200	15	3,000	High Country Gardens
COLMET 8 FT. X 4 IN. 14-GAUGE BROWN STEEL LANDSCAPE EDGING (5-PACK)	5	116.87	584.35	The Home Depot

ECOBORDER 4 FT. BROWN RUBBER LANDSCAPE EDGING	4	10.98	43.92	The Home Depot
Safety Equipment	6	150	900	Bees and Co.
		Total Cost	6618.27	

Table 1: Proposal Items Requiring Funding

Project Process

Early Preparation

In preparation for the spring, all plants will need to be ordered in the winter months. This ensures that the plants are ready to be shipped by planting time in the spring. High Country Gardens fits the needs of the club well and is a well-trusted vendor of plants across the country. All other items included in *Table 1* will also need to be ordered before any labor.

Attaining Materials

- Mulch will be collected by CSU Apiculture Club management and club members. There are many sites in relative vicinity to the CSU campus that give away mulch for free. One or more of these sites will be utilized to provide mulch.
- Garden edging will be purchased at the local Home Depot by CSU Apiculture Club management.

- All landscaping and gardening tools and materials will be donated by CSU Apiculture Club management and volunteers.
- Plants from High Country Gardens will be shipped to the site, ready to plant.
- Rocks have kindly been donated to the club by the administration at the CSU Hydraulics Lab at the Foothills Campus

Installation

All labor will be done in the spring. The ground will be slightly tilled when the ground warms. Mulch, rocks, paths, and holes will all need to be ready and installed in the days before planting. Larger rocks will be placed on site by CSU Apiculture Club management without the need of club members. Volunteers from the CSU Hydraulics Lab, the donors of the rock itself, plan to assist in the rock installation as well. All other installation (planting and mulch) will be done by the CSU Apiculture Club members and other volunteers. CSU Apiculture Club signs will be installed by CSU Facilities Management.

Maintenance

The area will be maintained (weeding, watering, trash pickup, etc.) by the CSU Apiculture Club. Labor involved with the installation process (besides implementation of rock) will be done by members and administration of the CSU Apiculture Club as well as cooperating clubs (TBD.)