



2024 Campus Race to Zero Waste Case Study

Education and Awareness Category

“Up-cycling”: Amherst College’s Tread Shed - Our Campus Spoke Easy

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Focus of Case study:

A campus bike co-op aimed at “up-cycling” abandoned bikes through educating students with the tools and know-how to care for and fix up bikes.

Detailed description of campaign or effort:

Abandoned bikes have become a waste problem and a real challenge across college campuses. Every year a wave of bikes shows up on campus as students arrive. Sadly, many of these bikes end up abandoned on the rack come May, as they have fallen into disrepair, left to rust. Eventually, the locks are cut, and the bikes junked / sold for scrap. Most of the needed repairs are quick, inexpensive, and easy, but if students don’t have the tools, know-how, or ability to get the bike to an off-campus repair shop, the bike doesn’t get fixed and often ends up abandoned.

In an effort to reduce the number of abandoned bikes, foster a campus biking culture, help keep bikes rideable and in circulation, and educate and empower students with the tools and expertise to care for and fix their own bikes, a coalition of students, faculty, and staff at Amherst College created a student-run campus bike co-op and education hub, The Tread Shed, over the past year.

The Tread Shed “up-cycling” approach is working to significantly reduce the number of abandoned bicycles due to disrepair while providing an easy, accessible, and affordable option for students, faculty, and staff to service or work to own a bike. We have taken a systems-wide approach to closing the loop to stop the waste of abandoned bikes through the new bike co-op, a series of educational programs, campus infrastructure additions and enhancements, and bike services for the campus community including:

- Hosting **weekly open hour maintenance and repair workshops** at the shed for individuals seeking assistance, specialized equipment, or common consumables to maintain and fix their bikes.
- Taking a **systematic approach to identifying, collecting, and refurbishing abandoned bikes** across campus.

- **Developing an innovative sliding-scale volunteer-to-own bike program** by which students can claim any of the abandoned bikes in our bike inventory, and through volunteer /work hours in the shop fix up the bike towards eventual ownership.
- **Offering free indoor bike storage** over breaks, the summer, and study away to stop students from simply locking their bikes to the outdoor racks while they are away for extended periods of time and having the bike fall into disrepair.
- Providing **indoor bike parking** in the residence halls to help protect bikes from rain, snow, and humidity that may cause them to rust and eventually become abandoned.

Planning steps & timeline to implement:

The original idea for this project stemmed from the ongoing sense and observation that there were dozens of bicycles being abandoned across campus each year. The bikes were being gathered up and left in a pile to rust away. It appeared that the majority of these bikes were being abandoned because they were in some sort of disrepair - flat tires, rusty or broken chains, bad brakes. All were fairly routine fixes, but students had no easily accessible way or knowledge to get these repairs completed. The creation of the Tread Shed followed!

- A steering committee composed of students, staff, and faculty was established to develop a vision and plan for the new bike co-op.
- An empty garage on the edge of campus was identified as the home for the Tread Shed. The Office of Sustainability and Office of Student Engagement and Leadership provided seed funding to outfit the co-op with the required tools and equipment.
- In addition to the garage space three additional indoor campus spaces were identified to store and hold bikes.
- Once we had space, we needed people to oversee and manage the facility. The Office of Sustainability agreed to fund two student, part time bike technician / education positions. Each student technician / educator works 6 hrs a week holding scheduled weekly open hours, coordinating trainings and workshops, keeping an inventory of equipment and parts, ensuring the shed space is clean and organized, and collecting and triaging abandoned bikes. The technicians are intended to educate and assist students with working on their own bikes as opposed to the technician doing the work like you would find at a typical bike shop. Each technician is in charge of training and onboarding the next one after the end of the academic year. The goal is to educate and empower students around basic bike maintenance and upkeep.
- With a home and some staff, our next step was conducting a campus wide sweep last summer to identify, remove, collect, and store any abandoned bikes across campus. We developed a bike registration program and a “tagging” system to determine what bikes were in circulation. A tag was placed on all bikes on the racks, with a note to remove the tag if the bike was in use. Any bike that still had the tag after a few weeks was “collected” and moved into short-term storage.
- Whenever a bike was collected, a collection notice was left at the location from which the bike was removed that gave the storage location and contact information for the Tread Shed.
- Collected bikes were “Held” in storage for no less than 90 days to give the potential owner time to reach out to the Tread Shed and recover their bike if the bike was mistakenly identified as abandoned. We now have a regular bike tagging system throughout the year to ensure we have identified and removed



all abandoned bikes. Each bike is carefully cataloged and labeled as to when its holding window will expire. While in holding, the bike is triaged by one of the student bike technicians to assess its rideability and current state.

- Bike ownership entails a financial investment that many students are unable to meet, with a new bike costing upwards of several hundred dollars or more. One of our goals is to equip students on campus who want a bike with a bike, regardless of their ability to

afford a bike, while cultivating knowledge, experience, and confidence towards maintenance. If a bike remains unclaimed by the end of the holding period, the bike becomes available for a student to claim in our work-to-own program.

- Our student bike technicians provide guidance and training to assist students with fixing up their “claimed” bikes. We have a supply of used bike parts that students can pull from to make any repairs as they work to get the abandoned bike rideable.

- The committee worked with the facilities team to identify indoor locations within the residence halls where either new or existing racks could be placed to help reduce long term exposure of bikes to the elements. We successfully piloted five indoor locations this first year, and hope to expand indoor parking to all of the residence halls as space and funding allow.

- The Office of Sustainability also offers free bike storage for students over the summer, holiday breaks, and for students studying away. This had been an ongoing issue whereby students would simply lock their bike to a rack and leave it for extended periods of time while they were away from campus. The bikes would sit and rust and fall into disrepair. This storage program has been very popular with 46 students utilizing the storage option. We are confident this will help reduce the number of abandoned bikes across campus moving forward.

Resources and stakeholders involved:

The Tread Shed has been a great collaborative partnership with support and coordination among the Office of Sustainability, a faculty member (Ren Wiscons), Facilities, Student Activities, Campus Safety, the Administration, and the rapidly expanding campus biking community (students, staff, and faculty) - a real win for all involved. This project is one part of a much larger, more comprehensive effort to build a stronger biking culture and community across campus.

- The Office of Student Engagement and Leadership provided an initial couple thousand dollar seed fund to purchase the tools and equipment needed to outfit the co-op.

- The Tread Shed staffing and operations are funded by the Office of Sustainability. Two students are hired as paid bike managers / technicians during the school year and one student is hired over the summer to oversee and manage the program. During the school year the students work 6 hrs a week; during the summer the fellow works full time for 8 weeks. Staff from the Sustainability Office manage and support the student workers.

- The Tread Shed has a governing board made up of faculty, staff, and students that meets as needed to discuss opportunities and issues as they arise.

Describe the Results of this campaign component:

The Tread Shed has been wildly successful in its first year. We have collected over 100 abandoned bikes from across campus and diverted them from being scrapped and landfilled. We have created a well-

organized, closed loop system by which bikes are remaining in circulation and accessible to the wider campus community. The work-to-own program has made having a bike affordable and accessible to every student (and staff) who wants a bike. Since the Tread Shed's birth, 30 bikes have either finished being repaired and are now being used by a new student, or are claimed and still in the process of being fixed up. Other bikes in the remaining inventory are being claimed on a regular basis.

The weekly open hours, trainings, and workshops have gone very well with more than 50 students actively participating over the school year.

The Tread Shed has garnered a lot of campus attention, including a recent article in the Student Paper - <https://amherststudent.com/article/tread-shed-tinkering-as-pedagogy/>, and has developed a solid following on social media and now has its own regular newsletter. In addition to hosting the open hours and workshops, the technicians regularly table at the dining hall and at campus events to increase awareness and promote the Tread Shed and its programs, as well as hosting regular bike tune-up events for students, staff, and faculty.

What would you do differently in the future?

Overall the launch and first full year of the program have gone extremely well. In line with the mission of the Tread Shed and sustainability in general, one main goal is to discourage students from buying new bikes from local retailers and instead getting a hand-me-down through the Shed. We are still working to get the word out to incoming students about the Tread Shed and availability of bikes already on campus, and we hope to include information about the Tread Shed in the orientation messaging over the summer.

We are also strongly considering starting a new program in which the student technicians fix up 15-20 of the abandoned bikes to create a seed pool of bikes that can be checked out for a semester or a year, giving students access to bikes who are unable or unwilling for various reasons to repair and own a bike themselves. This idea was inspired by Amherst College's existing bike share program, which allows for one-day bike check outs and is wildly popular, especially in the spring and summer, and students frequently complain about the time limits on the bike share.

What advice would you give to another college that wanted to do a similar effort?

Here is some advice for those interested in doing something similar:

- (1) Having a dedicated space to house the bike co-op, ideally on campus, is critical to getting participation and creating identity and a campus presence.
- (2) Bikes are bulky, and you will want to find a place to get them out of the elements as they await repair. Having an indoor space where you can store a decent number of bikes (>50) will be beneficial.
- (3) Identify both an initial funding source (a few thousand dollars) and a long term funding source to purchase the needed tools and supplies, hire and pay a student manager and/or technician, and replenish expendables as needed.
- (4) Create a website/social media site that is easy to find and contains all pertinent information, such as schedules for open hours and events. Also have clear, consistent, and timely messaging to students.
- (5) Have a clear and communicated process for identifying and collecting abandoned bikes and then keep detailed records for all bikes collected (where they were collected from, when they were collected, etc ...)

- (6) Encourage a bike registration process to keep track of bikes on campus, and reduce the risk of accidentally collecting a bike that is still in use.
- (7) Have a dedicated staff member or Office (like the Sustainability Office) to run point and coordinate management and oversee the program to ensure continuity across years, as student workers eventually graduate.

Photos and Graphics:

Press and Social Media

Website: <https://www.amherst.edu/about/sustainability/programs/transportation/treadshed>

The Amherst Student Newspaper Article

<https://amherststudent.com/article/tread-shed-tinkering-as-pedagogy>

Tread Shed - Some Example Social Media Posts

<https://www.instagram.com/p/C48EAXVsT4/>

<https://www.instagram.com/p/Cy3M66xAIKb/>

Tread Shed Logo:



Example Posters



THE TREAD SHED

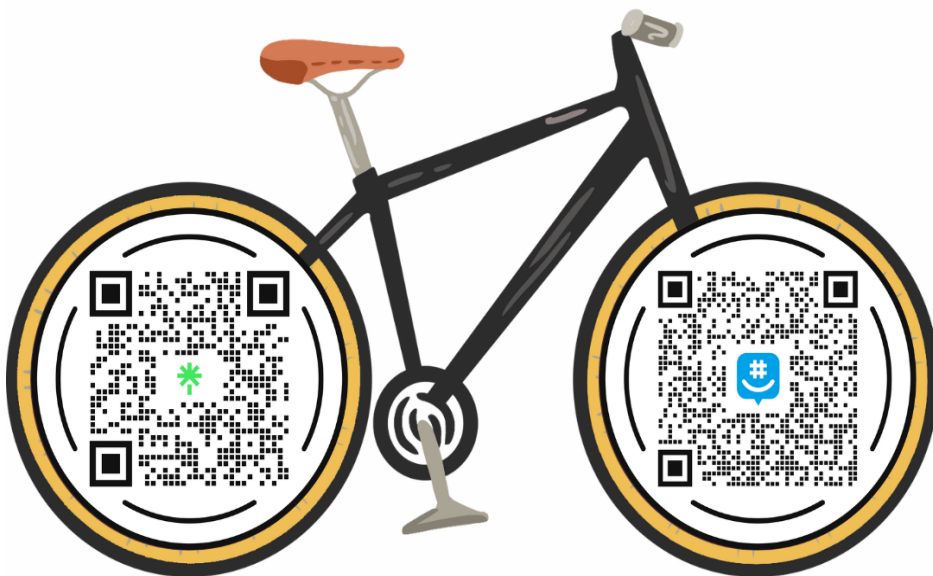
YOUR ONE-STOP SHOP FOR BIKE
ACQUISITION, REPAIRS, AND
EDUCATION.

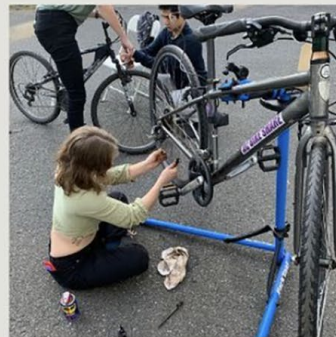
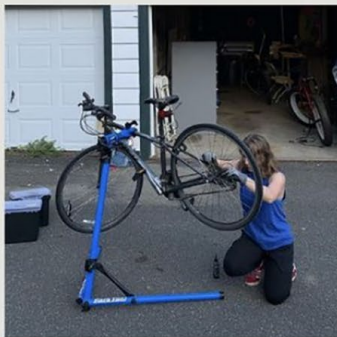
OPEN HOURS

SUNDAYS 2-4PM

MONDAYS 6:30-8PM

WEDNESDAYS AND FRIDAYS 10-11AM





Tread Shed Spotlight: Work-To-Own

Want to become bike-savvy? Want to own a bike? Swing by the Tread Shed on Mondays and Thursdays 4:15-5:45 to chat with Ry, our bike technician, about getting hooked up with some wheels.

1

Swing by the shed (between Clark and Cooper House) and pick out a bike

2

Chat with whoever is working there about what work the bike will need in order to make it rideable

3

Put in the hours! (remove rust, fix brakes, replace parts, etc.)

4

Ride off into the sunset



Some Photos:



Home of the Tread Shed. (PC: Wes Dripps)



The shed has all of the necessary tools for basic bike repair and maintenance. (PC: Wes Dripps)



The Tread Shed inside work space. (PC: Wes Dripps)



Students claim and fix up abandoned bikes at the shed in our work to own program. (PC: CiCi Curran)



The outside workspace at the Tread Shed. (PC: Wes Dripps)



The upstairs holding area at the Tread Shed that houses part of the collection of abandoned bikes from which students can claim a bike to work on towards ownership. (PC: Wes Dripps)



One of the on-campus storage facilities for holding collected bikes for the duration of their three month holding period. (PC: Wes Dripps)



A Tread Shed Open Hour with students working on their “claimed” bikes. (PC: Office of Sustainability)



**The indoor bike storage facility for storing bikes for students over breaks, the summer, and study away.
(PC: Wes Dripps)**



Indoor bike parking within a first-year residence hall. (PC: Wes Dripps)