

# **Town of Underhill**

## **ARPA Funds Use Proposal – PHASE 1**

**Committee/Group/Individual Requesting Funding:** Lisa Hoare

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**Date:** January 31, 2023

### **Proposal Name/Brief Description:**

#### Underhill Botanic Garden – Steps 1-2 of 5

Complete steps 1 and 2 of the Guide and Toolkit for Starting a Public Garden, created by the Longwood Gardens Fellows Program (see pages 1-33 of the attached document) with the goal of creating Vermont's first and only botanic garden accredited through Botanic Gardens Conservation International (BGCI) and with official status as a botanical garden by American Public Gardens Association (APGA). This accreditation distinguishes botanic gardens from non-botanic gardens and recognizes achievements in plant conservation.

This will include:

#### Step 1:

- Create a Start-up Team (or steering committee, advisory group, planning team, etc)
  - Establish communication strategies, build awareness, gather ideas, build relationships with stakeholders and potential partners
  - Assign responsibilities and begin implementing tasks
  - Set fundraising targets and timeline.
  - Context Research: Identify important considerations such as historical, economic, socio-cultural and ecological factors
- Concept Plan (who, what, where, when, why)
  - Proposed garden name
  - Draft of mission, vision, value statement and impact statement
  - Possible location, site options
  - Major features, components, programming, etc.
  - Proposed governance, legal and business models

#### Step 2:

- Establish governance model including legal, financial, advisory, etc. entities/boards
- Develop Strategic Plan

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- Identify key strategic issues and opportunities
- Prioritizes key stakeholders, audiences
- Document strategic goals, measurable objectives for the next 3-5 years
- Develop Site Plan (can be done without a site identified)
  - High-level concept for the physical design of the new garden that requires input from stakeholders, experts and more.
  - Will identify potential and specific sites (both public and private) and include recommendations.
  - Includes Environmental Impact Study and Feasibility Studies, if possible.
  - Requires services from a landscape architecture or master planning firm as well as other experts.
- Develop Business Plan
  - Done concurrently with Site Plan
  - Includes Executive Summary, programs and services, community and market analysis, organizational structure and management plan, etc.

**Estimated Cost/Description of Estimate Process** (use the space here and attach additional pages and any supporting documents):

Estimated Cost for Steps 1-2: \$40,000 to \$75,000.

Cost estimate includes:

- Stipend for Start-up Team (if necessary)
- Services from Landscape Architecture or Master Planning firm
- Services required from professionals to perform various impact / feasibility studies

\*\*. Cost estimates are based on online research with a bit extra added for cushion but if this proposal will be considered, I'd be happy to contact a few local firms and/or professionals to get a more accurate estimate of costs. Also, note that the cost for things like a Site Plan vary widely depending on size of property and number/type of features desired.

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Please Answer the following questions by marking the answer in the space provided.

### Benefit to Town of Underhill

Does this proposal

YES NO Not Sure

Invest in the town without creating a need for additional or ongoing revenue or expenses? Is this a one-time expense?	yes		
Benefit a population that was disproportionately impacted by the pandemic?	yes		
Benefit a population underserved prior to the pandemic?	yes		
Mitigate and/or help the Town adapt to the effects of climate change?	yes		
Improve or create infrastructure for Underhill? Ex. Natural resources, pedestrian access, transportation but not limited to	yes		
Align with or impact the goals and priorities of the Town Plan? <a href="#">LINK</a>	yes		

Comments:

1. Steps 1-2 in this proposal would be a one-time expense but further fundraising would be required to bring the whole project to completion. See additional comments.
2. For questions 2 and 3, the project, once completed would benefit these populations by offering educational, recreational and job opportunities within the town. Job opportunities would include everything from entry level to skilled and technical labor.
3. Again, once completed, the project would help support many of the town's objectives including: protect our heritage, facilitate economic activity, ensure access to education, protect the environment, preserve natural resources, provide recreation opportunities, encourage agriculture and forestry and possibly more.

### Feasibility of Project

Can this proposal

YES NO Not Sure

Be fully planned, estimated and obligated to the Town by December 31, 2024?	yes		
Be fully completed and paid for by the end of 2026?	yes		
Be used to leverage or match other grants, funds or projects?	yes		

Comments:

1. Pending any additional research needed with local firms, it is reasonable to think we could accomplish Step 1 by the end of 2024. A site plan (depending on complexity) takes 6-18 months to complete, so a December 31, 2026 deadline seems achievable.
2. In addition, there are many grant opportunities listed on the APGA website and there may be others available from state or federal funds.

***Please attach estimates, quotes, drawings, or supporting documents or elaborate in any way you would like. Please note that the ARPA Advisory Committee only recommends projects to the***

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*Selectboard and the Selectboard has the ultimate authority to allocate the funds. [17 V.S.A. § 2664](#)*

### Links and More Information:

**Final Rule – Overview** at <https://home.treasury.gov/system/files/136/SLFRF-Final-Rule-Overview.pdf>

**Final Rule – FAQ's** at <https://home.treasury.gov/system/files/136/SLFRF-Final-Rule-FAQ.pdf>

**Specific Information for Town of Underhill** at [https://www.underhillvt.gov/vertical/sites/%7B4E962BB9-B4BB-4504-A3EE-ED54521A1BCE%7D/uploads/Coronavirus\\_Local\\_Fiscal\\_Recovery\\_Fund\\_Overview\\_Presentation\\_06092022.pdf](https://www.underhillvt.gov/vertical/sites/%7B4E962BB9-B4BB-4504-A3EE-ED54521A1BCE%7D/uploads/Coronavirus_Local_Fiscal_Recovery_Fund_Overview_Presentation_06092022.pdf)

### COMMENTS/JUSTIFICATION

Botanic gardens exist in many US states and around the world. Gardens that are accredited with Botanic Gardens Conservation International (BGCI) are aligned with that organization's conservation objectives and are part of a global network of similar facilities. Accreditation ensures standards and includes opportunities for funding, networking and more.

Similarly, the American Public Gardens Association works to promote education and opportunity for plant and land conservation, environmental stewardship and various sustainably efforts including supporting pollinator and habitat health.

Botanic and public gardens are leaders of ecological awareness and education and are incredibly diverse. Larger gardens support career horticulturists while others are run by a small staff of volunteers. Some offer formal education while others simply offer the experience of being outdoors. Some offer vast amounts of programming while others offer a handful of workshops or guided walks. Botanic gardens can be a handful of acres or several hundred acres and can offer any number of services.

Vermont has over 160 plant species that are either endangered or threatened and the state's highest peak was recently discovered to host a plant called Purple Crowberry, which was thought to be extinct. Botanic gardens can help educate and preserve these plant species, as well as animal species, while providing many important benefits and services to the community.

- Entry level and high-level, skilled and/or technical jobs
- All access education for youth and adults
- Volunteer opportunities for youth, adults and seniors
- Recreational activities including events for all residents
- Increased exposure and revenue opportunity for other local businesses
- Increased economic resilience for the town and residents

Other indirect benefits include: attracting new families to the town and surrounding area, increased appreciation and understanding of ecologically responsible practices, community building and social connections, natural history preservation and more. Potential partners may include: UVM Extension, UVM Maple Research Center, Vermont Garden Network.

There are **two excellent resources for planning, building and managing botanic gardens** (attached) and although the process would likely take several years to complete, it can be done in phases, can be accomplished using public and private resources, and unlike many other buildings or projects, will last for generations.

I have been a garden educator at the UVM Medical Center for nearly 12 years and have seen the transformation these spaces, skills and communities can have. I am very willing to participate in the process and have many contacts in the gardening community. In addition, I have visited a number of botanic gardens around the country and believe this area would be perfect for a facility of this type. Botanic gardens offer so much more than just beautiful gardens. They help preserve and share history, education, events, economic and job opportunities, environmental stewardship, and perhaps one of the most important functions is as a gathering space and community hub.

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### Resources:

Botanical Gardens Conservation International: [www.bgci.org](http://www.bgci.org)

American Public Gardens Association: [www.publicgardens.org](http://www.publicgardens.org)

A very small, urban botanic garden on 5 acres: <https://peoriaparks.org/places/luthy/>

A small botanic garden in Stockbridge, MA on 24 acres: <https://www.berkshirebotanical.org/our-gardens> (see map)

Small botanic garden with a focus on native plant preservation, located on a private estate (donated) in NY:

<https://www.stonecrop.org/>

Longwood Gardens Guide and Toolkit for New and Emerging Public Gardens

<https://longwoodgardens.org/sites/default/files/wysiwyg/guide-and-toolkit-new-and-emerging-public-gardenslgf2018.pdf>

BGCI's Manual on Planning, Developing and Managing Botanic Gardens: <https://www.bgci.org/resources/bgci-tools-and-resources/bgci-manual-on-planning-developing-and-managing-botanic-gardens/>

BGCI Botanic Garden Manual - <https://drive.google.com/file/d/1Q5jxzMtlC7NwRbwpZeo3IObNMm1Et3Jh/view>



BERKSHIRE  
BOTANICAL  
GARDEN

# MAP OF THE GARDEN



## 1. Barbara Euston Visitor Center and Shop

Start and end your visit here. Purchase your admission tickets and browse the Shop. We have a great assortment of garden tools, books, gifts and accessories, BBG Herb Associate products, and refreshments on offer.

## 2. The Tree of Forty Fruit

Created through the process of grafting over several years, this single tree, when completed, will grow up to 40 different varieties of heirloom and rare stone fruit such as apricots, cherries, nectarines, peaches and plums.

*Design and grafting by contemporary artist Sam Van Aken, 2018-present*

## 3. Carol Tatkon Entry Garden

A mixed border garden of spring bulbs, annuals, and perennials that provide a riot of color in summer. Shrubs and trees add year-round structure and interest.

*Designed by Cudnohufsky Associates, 2002*

## 4. Ash-on-the-Rock

Long ago, a tiny green ash seed germinated in a crack in this boulder. Amazingly, its roots were able to find sufficient nutrients and water to grow into a mature shade tree. The destructive emerald ash borer, now firmly established in this area, could become a challenge for the tree, so we are closely monitoring its health.

## 5. Children's Discovery Garden

A special place for children of all ages to get their hands dirty and wet while exercising their imaginations and learning about food crops and flowers. A colorful playhouse structure was designed by local artist Allen Timmons.

## 6. Rain Garden

This garden is a vegetated buffer, a "living filter" through which sediment carried by surface water runoff from our parking lot is removed. The captured water slowly percolates through the soil into the ground water. We have planted shrubs that don't mind "wet feet" and provide a healthy habitat and food for many birds.

*Designed by Craig Okerstrom-Lang and Dorthe Hviid, 2002*

## 7. Fitzpatrick Conservatory

This historic curved glass conservatory is home to a containerized collection of succulents and tropical plants and is open to the public year round. Our Bulb Show fills the house with blooms in March.

## 8. Edible Gardens

The raised beds in these two plots are laid out in tidy grids, each highlighting one type of vegetable or fruit. Raised beds can be planted earlier in spring as their soil warms up faster than lower ground. This is a benefit in our short growing season. *Designed by Jack Staub, 2009*

## 9. Native Border

Our collection of native North American plants demonstrates the effective use of such shrubs and ground covers for a home garden setting. Native plants can often provide better food sources for native insects and birds while still offering ornamental value.

## 10. Education Center

Originally constructed in 1973, with a classroom addition added in 2011 through the generous support of the Lenox Garden Club to support the Garden's year-round education program. This building also hosts community groups and BBG fundraising events throughout the year.

## 11. Woodland

Shrubs, wildflowers and ferns abound beneath a canopy of mixed hardwood and conifer trees. A small vernal pond provides seasonal habitat for wetland plants and animals. Migratory songbirds abound each May.

## 12. Lexan Greenhouse

Thousands of annuals and vegetable plants are grown here each year from seeds, cuttings and plugs for our display gardens and plant sales. Take a look inside and see what we have growing!

## 13. Children's Vegetable Garden

Many children get their first taste of vegetable gardening here while attending The Farm and Garden Camp, which takes over our grounds each July and August. Explore this hidden garden to see what's growing in these raised beds.

## 14. Passive Solar Greenhouse

This unique structure demonstrates how solar energy can be harnessed to provide heat even in the coldest Berkshire winters. Built into a hillside, the greenhouse is insulated from arctic winds on the north side. Inside, water in rows of black plastic barrels is heated by the sun during the day, and heat is slowly released at night, keeping the greenhouse warm enough to overwinter plants hardy to 32°F. No other heat source is needed.

## 15. Center House Entry Garden

Designed by a team of landscape architecture students from University of Tennessee, this garden has a contemporary sensibility. The plant selection and naturalistic layout framing a fountain and fire feature evoke a feeling of serenity and simplicity. It is a favorite stop on many visitors' tour through our gardens.

## 16. Vista Garden

This garden room offers four-season interest with spring bulbs, spring and summer flowering shrubs, and trees with spectacular fall color, all interplanted with evergreens that look great even in winter.

*Designed by Cudnohufsky Associates and Dorthe Hviid, 1997.*

## 17. de Gersdorff Perennial Border

Sun-loving herbaceous perennials and ornamental grasses are planted in large drifts against a backdrop of flowering shrubs and trees. The colors keep changing all summer long.

*Designed by Lyle L. Blundell, 1954*

## 18. Frelinghuysen Shade Border

A border of shade-tolerant perennials backed by flowering shrubs and shade trees. Many of the perennials provide ornamental value primarily through their foliage.

*Designed by Edith Edelman and Douglas Ruhren, 1999.*

## 19. Daylily Walk

An American Daylily Society Display Garden featuring more than 200 historic and new cultivars from 120 years of hybridizing. The daylilies are organized chronologically by date of introduction and put on a great show in July and August. *Designed by Dorthe Hviid, 2003.*

## 20. Arboretum/Pinetum

This area of the Garden features a diverse selection of native and exotic trees including American beech, copper beech, honey locust, little-leaf linden, Ohio buckeye, downy hawthorn and yellowwood.

## 21. Foster Rock Garden

This large stone outcropping is home to plants adapted to the high winds, poor soils, harsh winters and sparse rainfall of mountain habitats around the world.

## 22. Hosta Garden

A shady part of the Garden that is perfectly suited for our collection of hardy Hosta cultivars interplanted with wildflowers and other woodland plants, framed by a backdrop of ferns.

## 23. Primrose Walk

The shade of old apple trees and moist soil make for a happy home for primroses. Here they form a patchwork of color in early- to mid-spring.

## 24. Pond Garden

A woodland water garden with a trickling waterfall showcasing plants that thrive in moist, shady conditions. The garden features native plants with bulbs and spring flowers stealing the show in May. *Design renovated by Anthony Archer-Wills, 2010*

## 25. Lucy's Garden

BBG's topiary collection showcases the horticultural practice of clipping plants into specific shapes. These living sculptures, surrounded by a copper beech hedge, were created from boxwood, yew, and arborvitae and represent animals as well as inanimate objects. A gazebo provides a shady spot to take a break from your tour.

*Designed by Matthew Larkin, 2018*

## 26. Martha Stewart Cottage Garden

An exuberant garden area incorporating heirloom varieties and modern cultivars of flowers and vegetables, interplanted in the English cottage garden tradition and anchored by a garden shed featuring a living sedum roof.

*Designed by Martha Stewart, 2009*

## 27. Rose Garden

Our rose garden contains hundreds of shrub roses in an informal setting anchored by a stone mill wheel. In collaboration with David Austin Roses, BBG is trialing a beautiful assortment of new English roses that are known for their color, perfume, and ability to repeat bloom even after their first spectacular show in June.

*Designed by Michael Marriott, 2011. Stonework by Mark Mendel.*

## 28. New Wave Garden

Embracing ecological principles that were popularized by Piet Oudolf and other European designers, this low-maintenance garden contains plants well adapted to its site and soil conditions. Despite its lush growth, the garden requires little weeding and no watering. The vigorous plants form dense plant communities, often self-seeding and spreading naturally. Our gardeners leave the spent foliage standing all winter. With snow and frost, this creates beautiful scenes and provides food and shelter for wildlife. In early spring, the garden is quickly renovated and cut back before new growth starts.

## 29. Herb Garden

First featured in 1937, this historic garden contains over 100 varieties of hardy and tender herbs, planted in terraced hillside beds according to their use and ornamental value. The excellent drainage of the steep and sunny site allows us to grow herbs that might otherwise not like our challenging climate.

*Design renovated by Page Dickey, 2009*

## 30. Meadow Walk

A mown path meandering through this uncultivated space invites exploration of a large meadow and woodland edge. Through careful intervention, we plan to enrich the meadow ecology with increasing numbers of wildflower species, while invasive weeds will be selectively removed to create a new balance of plants.

## 31. Herb Production Garden

Behind our Center House you will find a sunny garden where BBG's Herb Associate volunteer group grow the culinary herbs used in making products that are sold in the BBG Shop. Crops include annual herbs such as basil and marjoram, perennial herbs like lavender and mint, and even edible flowers. These ingredients are turned into delicious mustards, vinegars and herb mixes.

## 32. Procter Mixed Border Garden

An old-fashioned mixed border garden planted with trees, shrubs, perennials, annuals and bulbs in a predominately cool, pink, blue and purple color scheme.

*Designed by E. Gillette Wilcox, 1965*

## 33. Center House

The oldest structure on BBG's property, this 18th century farmhouse was recently renovated and expanded to include a botanical art gallery, reference library, teaching kitchen and classroom. Don't miss our stunning living wall in the entrance foyer!