

TOWN OF CORNWALL

REGULAR MEETING OF THE

Board of Selectmen

Minutes for meeting held on:

Tuesday, July 16th, 2024

Hybrid – In Person at Cornwall Library
& Remotely Via Zoom

Present

Selectmen

Others

- Gordon Ridgway, First Selectman
- Rocco Botto
- Jennifer Markow

Jane Hall, Administrative Assistant
Press

12 - Total Attendees

| | |
|---------------------------------------|--|
| Call to Order | 7:33 pm |
| Approval of Minutes | <p>Minutes from 7/2/2024</p> <p><u>Motion:</u> Rocco Botto - Made motion to approve the minutes from 7/2/2024 Gordon Ridgway - Seconded the motion Discussion – none Motion passed unanimously</p> |
| Communications / Announcements | <p>Rocco Botto shared the following:</p> <ul style="list-style-type: none"> • Bears are out and about in Northwest Connecticut – home break ins in Cornwall <p>First Selectman Gordon Ridgway shared the following:</p> <ul style="list-style-type: none"> • Thank you to the Cornwall Library for opening the doors as the cooling center for town • Rummage sale is this weekend – appreciation to the dozens of volunteers who make that happen • Weather update – 35 years ago the famous tornado came through town – be on look out for popup thunderstorms • Drill with state of CT on hurricanes at end of the month |
| Additions to the Agenda | <p><u>Motion:</u> Gordon Ridgway - Made motion to approve add repairs to Cornwall Bridge Firehouse, Cream Hill Lake health report, Bear update, budget transfer, and Invasives to the agenda Jennifer Markow - Seconded the motion Discussion – none Motion passed unanimously</p> |
| 1. | <p><u>MSW / HRRRA</u> First Selectman Gordon Ridgway shared the following:</p> <ul style="list-style-type: none"> • History of Cornwall MSW (Municipal Solid Waste) Recap of meeting with Council of Governments last week – presentation from HRRRA (Housatonic Resource Recovery Agency) on MSW, composting, food scrap drop off, recycling efforts, education. COG will be voting on July 26th whether to pursue joining HRRRA • Speaking with, Ted Larson at the Transfer Station, he is in favor of keeping a municipal aspect to this and not privatizing our waste services |
| 2. | <p><u>Town Hall roof & gutters</u> First Selectman Gordon Ridgway shared the following:</p> <ul style="list-style-type: none"> • We have leaks in the Town Hall which has caused issues with the plaster. Will be working with building inspector to get a specification together to replaces shingles on roof and redo the gutters. |

| 3. | <p><u>STEAP grant – Cornwall Business, Façade, and Site Work</u> First Selectman Gordon Ridgway shared the following:</p> <ul style="list-style-type: none"> • Small Town Economic Assistance Program (STEAP) grant amount that he state is willing to give towns has been increased to 10 million dollars. • Attended a meeting for a project group called <i>Placeholders in Cornwall Bridge</i> – the group is looking to get a unified design and some work done in Cornwall Bridge <p>Discussion ensued on a recap on the history and use of STEAP grants in Cornwall, TRIP grant for crosswalk, needs for Cornwall Bridge traffic control.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|--|-------------------------------|---------------|-----------|---------------|---|-------------|---------------|---------|---|-------------|--------------------------|---------|---|-------------|-------------------------------|---------|---|-------------|---------------------|---------|---|-------------|---------------|-------|---|-------------|---------------------------|-------|---|--------------------|-----------------|---------|---|--------------------|---------------|----------|---|----------------|------------------------|---------|
| 4. | <p><u>West Cornwall Wastewater Project</u> First Selectman Gordon Ridgway shared the following:</p> <ul style="list-style-type: none"> • We got permission from HUD to proceed on the design work, that will be starting up over the summer | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5. | <p><u>Composting</u> First Selectman Gordon Ridgway invited Heidi Cunnick, Conservation Commission to speak on composting and the following was shared:</p> <ul style="list-style-type: none"> • The Conservation Commission is here to support whatever is needed to move forward to get composting in town – interim solution, possibly mirror what Falls Village and Sharon are using • Check with HERRA on what a next step would be for composting as they have successful composting programs with other towns • Interest in our whole 21 town regions to get on site composting starting | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Addition #1 | <p><u>Repairs to Cornwall Bridge Firehouse</u> Dick Sears, President of Cornwall Volunteer Fire Department presented a request and quotes for remediation of the Cornwall Bridge Firehouse (attached)</p> <p><u>Motion:</u> Gordon Ridgway - Made motion to proceed with remediation of the Cornwall Bridge Firehouse Rocco Botto - Seconded the motion Discussion – History of building and needs for improvement of land and building Motion passed unanimously</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Addition #2 | <p><u>Cream Hill Lake health report</u> Heidi Cunnick, Conservation Commission, shared the findings of the recent mapping and survey of Cream Hill Lake done by the State Department Aquatics Invasive Species at no cost. Discussion ensued on monitoring the lake and boat use.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Addition #3 | <p><u>Bear Update</u> First Selectman Gordon Ridgway shared the following:</p> <ul style="list-style-type: none"> • Bear break in at local transfer stations recently - Bears have visited at least 3 properties in town this week, broke into houses, cars, trucks, did substantial damage – Spoke with Maria Horn on getting something accomplished for bear population management • If people have encounters with bears, you should document it and can also attend a legislation session to share experience | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Addition #4 | <p><u>Budget Transfer</u> First Selectman Gordon Ridgway reviewed the proposed budget transfers totaling \$53,283:</p> <table border="1" data-bbox="289 1570 1279 1934"> <thead> <tr> <th></th> <th><u>From</u></th> <th><u>To</u></th> <th><u>Amount</u></th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Contingency</td> <td>Hammond Beach</td> <td>\$8,800</td> </tr> <tr> <td>2</td> <td>Contingency</td> <td>DPW: Vehicle Maintenance</td> <td>\$8,500</td> </tr> <tr> <td>3</td> <td>Contingency</td> <td>Land Use: ZEO and clerk hours</td> <td>\$7,600</td> </tr> <tr> <td>4</td> <td>Contingency</td> <td>Registrar of Voters</td> <td>\$3,380</td> </tr> <tr> <td>5</td> <td>Contingency</td> <td>Probate Court</td> <td>\$480</td> </tr> <tr> <td>6</td> <td>Contingency</td> <td>Municipal Agent for Aging</td> <td>\$103</td> </tr> <tr> <td>7</td> <td>Board of Education</td> <td>Social Services</td> <td>\$6,650</td> </tr> <tr> <td>8</td> <td>Board of Education</td> <td>Public Safety</td> <td>\$10,000</td> </tr> <tr> <td>9</td> <td>CEDC / Debt Sv</td> <td>Town Office Contracted</td> <td>\$7,770</td> </tr> </tbody> </table> | | <u>From</u> | <u>To</u> | <u>Amount</u> | 1 | Contingency | Hammond Beach | \$8,800 | 2 | Contingency | DPW: Vehicle Maintenance | \$8,500 | 3 | Contingency | Land Use: ZEO and clerk hours | \$7,600 | 4 | Contingency | Registrar of Voters | \$3,380 | 5 | Contingency | Probate Court | \$480 | 6 | Contingency | Municipal Agent for Aging | \$103 | 7 | Board of Education | Social Services | \$6,650 | 8 | Board of Education | Public Safety | \$10,000 | 9 | CEDC / Debt Sv | Town Office Contracted | \$7,770 |
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| | <p><u>Motion:</u> Gordon Ridgway - Made motion to that we do these 9 budget transfers and send them off to the Board of Finance Rocco Botto - Seconded the motion Discussion – none Motion passed unanimously</p> |
| Addition #5 | <p><u>Invasives</u> The Board of Selectmen received Invasives report (attached) from Conservation Commission at meeting. A recap of the report was presented by Heidi Cunnick. Discussion ensued on the invasives in town and a management plan.</p> |
| 6. | <p><u>Public Comment</u> none</p> |
| | <p><u>Adjournment:</u> 8:35 pm Respectfully Submitted: Jane Hall, Administrative Assistant</p> |

Invasive Plant Species Report for Cornwall, Connecticut

Prepared by

The Cornwall Conservation Commission (CCC)

Deb Bennett, Heidi Cunnick, Katherine Freygang and Lisa Keskinen

July 16, 2024



Photo credit is CIPWIG <https://cipwg.media.uconn.edu/wp-content/uploads/sites/244/2015/03/Photo-Notebook-Project-FINAL-reduced.pdf>

Table of Contents

| | |
|---|----------|
| Report Summary | 3 |
| Introduction | 4 |
| Invasive Species: “A Little Science, a Little Cornwall” | 4 |
| Mapping | 5 |
| Which Species to Control and by Whom? | 6 |
| Invasive Removal - a Species-specific Approach..... | 7 |
| Restoration | 8 |
| Table 1. Competitive Native Plants to Replace Invasives..... | 9 |
| Priority Species Control | 12 |
| Japanese knotweed Control | 12 |
| Japanese knotweed - additional information | |
| Grubbing:..... | 12 |
| Phragmites Control | 13 |
| Bittersweet Control | 14 |
| Second Tier Species Control | 15 |
| Garlic Mustard Control..... | 15 |
| Barberry Control..... | 16 |
| Aquatic Invasive Species | 17 |
| References:..... | 17 |
| UConn Invasive Plant Fact Sheets..... | 19 |
| Disposal of Terrestrial Invasive Plants | 29 |

Report Summary

Invasive plants disrupt ecosystems, threaten biodiversity, and incur economic costs, making them harmful to both natural environments and human well-being. This report identifies three species as priority invasives in Cornwall, which should be addressed by the Town leadership in collaboration with the Cornwall Conservation Commission (CCC) and other town groups and individuals:

1. Japanese knotweed
2. Phragmites
3. Asian bittersweet

Second-tier invasive species include Garlic mustard, Barberry, Burning bush, Multiflora rose, Japanese honeysuckle and Common mugwort, which should be largely addressed by the volunteer efforts of town residents and landowners.

Key recommendations:

1. Follow the USDA recommended practice of “Early Detection and Rapid Response (EDRR)” to identify and remove small patches of invasives before they proliferate.
2. Apply mapping to identify the problem extent and enable prioritization of work.
3. Identify the mechanisms and points of origination by and from which the species are spread and make efforts to stop the spread from those initial sites. For example, invasive species can be spread by town road equipment when mowing or gravelling.
4. Understand the plants’ biology to be able to use best practices in controlling the spread.
5. Treat the invasives using species-specific timing and methods including, but not limited to, mechanical means; pulling, mowing, cutting, excavating, and chemical means; herbicide.
6. Dispose of plant debris appropriately to avoid further spread.
7. Pursue biocontrols (the use of living organisms like insects and fungi to attack invasive plants) as they become available.
8. Encourage restoration of land areas with native seed mix and/or plantings as appropriate.
9. Educate and work with private landowners to address invasives on their property. (Note that some landowners may not be willing to have herbicides applied on their properties and no eradication with chemicals will be undertaken on private property without approval by landowners).
10. Write an annual action plan for the BoS for the top priority species and for townspeople’s effort. (Responsibility of the CCC)
11. Make efforts to control/eradicate priority invasive species when they occur on Town property.

Introduction

This Invasive Plant Report is presented by the Cornwall Conservation Commission in order to “address the proliferation of invasive species”, as outlined in the [Town of Cornwall Plan of Conservation & Development 2020](#). Our goal is to build a consensus approach on invasive plants, to enable town leadership to prioritize work and to minimize the cost of invasive eradication efforts.

This policy is a “living” document. Even as this is written, scientific research is ongoing and there are new control methods on the horizon that will be incorporated as deemed appropriate.

Invasive plants are detrimental because they:

Outcompete native species: Invasive plants grow rapidly and often outcompete native plants for resources such as sunlight, water, and nutrients, disrupting the balance of ecosystems.

Reduce biodiversity: By displacing native plants, invasive species reduce biodiversity, which can lead to negative cascading effects on other organisms dependent on those plants for food and habitat.

Alter habitats: Invasive plants can alter habitats by changing soil composition, shading out other vegetation, and even changing the availability of water, ultimately affecting the structure and function of ecosystems.

Impose economic costs: Invasive plants can damage agricultural crops, reduce land value, increase management costs for landowners, and require expensive eradication efforts by governments and conservation organizations.

Invasive Species: “A Little Science, a Little Cornwall”

In Cornwall, to date, little or no mapping or quantification of invasive species has been completed. However, anecdotal evidence from longtime residents suggests that over the past three decades Cornwall has seen an explosion of invasive species. The most pernicious invasive plants in the Cornwall landscape have gone from either very low levels or non-existent to landscape-scale invasions. This policy adopts a realistic approach; while it is virtually impossible to achieve complete eradication on a widespread, landscape-scale, controlling invasive species on a smaller scale can and should be accomplished.

The incursions of invasive species into Cornwall have often occurred by our own actions. Barberry and multiflora rose, planted in gardens from the 1920’s onward as ornamentals, have escaped into our woodlands. Bittersweet and Phragmites continue to be spread by ornamental wreaths and arrangements that are tossed into the landscape after use. Of current concern is the potential unintentional movement of invasives, by the Town Crew’s equipment.

Over the past half-century, scientists have disagreed about the damage caused by invasive plant species. In recent years, however, there is growing consensus on the need for invasive plant control¹ (Hulme and Simberloff, 2020). Researchers generally agree that, on balance, invasive plant species negatively impact the ecosystems they invade (Simberloff, 2011; Kumar Rai, P., & Singh, J. S.,

2020). Further, research on invasive species suggests their impacts are accelerating at an increasing rate (Pysek et al., 2020).

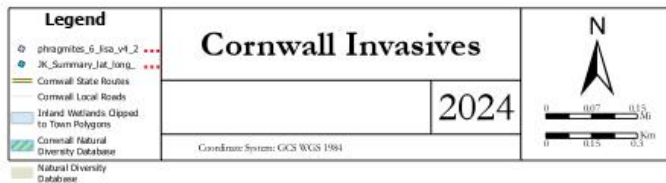
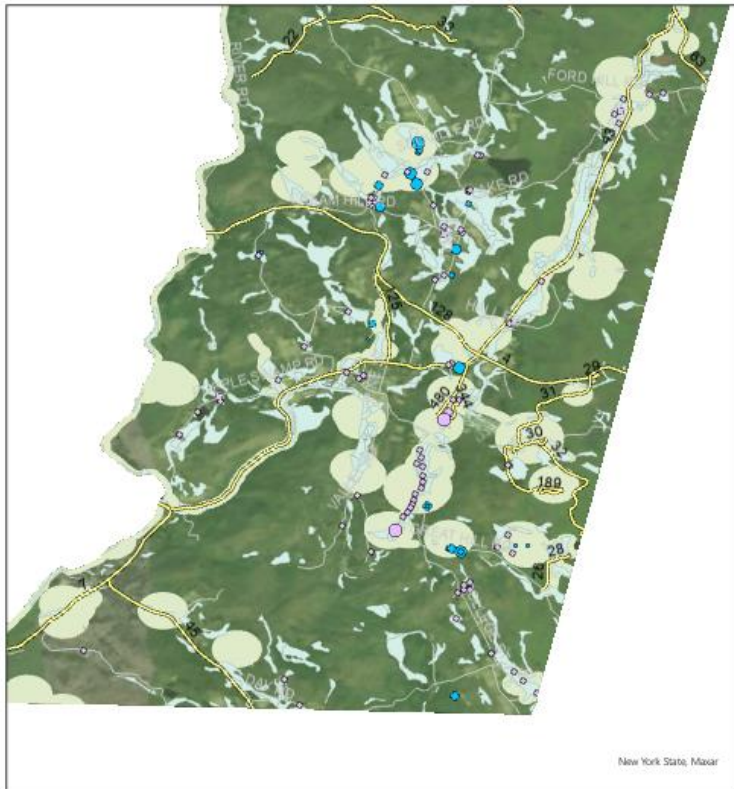
In Cornwall, invasives in our fields, forests, and wetlands decrease the richness and abundance of our native species, replacing them with species less able to deliver ecosystem services. In more Cornwellian words, we can recognize that when Phragmites crowd into our wetlands we lose views over cattail marshes that bring a sense of beauty and connection to nature. Japanese knotweed is being studied for its impact on stream and river flow. In a study of New Jersey rivers, Japanese knotweed was found to reduce streamflow by an average of 8% during summer months (Galster, J. C., & Vanderklein, D., 2023). In Cornwellian terms, this decrease during potentially dry summer months could make the difference in whether a well runs dry, or whether or not amphibians' eggs remain viable. Because invasives replace native species, there is an associated loss of food sources for pollinators and birds, resulting in an overall decrease in biodiversity.

An informal survey of literature on the Web of Science (the major database of peer reviewed science literature and a gold standard in rigorous scientific research), reveals there is no single solution or approach for invasive plant species. Treatment for any single invasive species depends on many parameters including; the species of concern, where it has invaded, the extent of the invasion, and the available treatment options.

Mapping

Mapping the top three invasive plant species should be performed on an ongoing basis. The CCC is preparing maps which show the invasive patches that are visible from town roads (invasives on state roads, state property or on private property may not appear on these maps). These maps can be supplemented and strengthened with the help of Cornwallians willing to contribute invasive locations on their own property to a centralized GIS manager (currently Heidi Cunnick). Maps should record the location, species, and size of infestation; treatment or management methods and dates; and restoration efforts that have been undertaken.

The following map is a draft that shows the mapping so far of Japanese knotweed (shown in blue dots) and Phragmites (shown in pink dots).



Which Species to Control and by Whom?

Recognizing the need to balance the negative impacts of invasive species with the costs associated with eradication efforts, the CCC considers the following species as having the highest negative ecological impact in Cornwall:

1. **Japanese knotweed (JK)** (*Reynoutria japonica*)

2. **Bittersweet** (*Celastrus orbiculatus*) also called Asian bittersweet
3. **Phragmites** (*Phragmites australis*) also called Common reed

The CCC recommends the Town of Cornwall work to control these top three invasive species when they occur on Town property. We make this recommendation because invasives on Town properties, especially roadsides, can spread to adjacent landowners' properties if not controlled. However, *Phragmites* control is so challenging that the Commission suggests limited control efforts on patches, in the hope that a bio-control may be available in the coming decade.

While there are many invasives that exist within the boundaries of Cornwall, the following are also prevalent and are considered second tier species:

Garlic mustard (*Aliaria petiolata*)

Barberry (*Berberis thunbergii*)

Burning bush (*Euonymus alatus*) also called Winged Euonymus

Multiflora rose (*Rosa multiflora*)

Japanese honeysuckle (*Lonicera Japonica*)

Common mugwort (*Artemisia vulgaris* L.)

The CCC recommends that second tier species be addressed largely by landowners and volunteers and will provide educational materials and links to resources to support these efforts.

We endorse the USDA recommended practice of "Early Detection and Rapid Response (EDRR)":

Early Detection and Rapid Response (EDRR) is a coordinated set of actions to find and eradicate new and emerging invasive species in a specific location before they can spread and cause harm. It is one of the most cost-effective and ecologically viable methods for controlling invasive species and is well worth the effort to protect natural and agricultural resources. Early interventions are more likely to be successful, while long-term management typically has higher association costs." - USDA

The CCC will provide an annual action plan to the BoS for the top three priority species.

Invasive Removal - a Species-specific Approach

Generally, research suggests that the greatest inroads into decreasing populations may be achieved by focusing on the control of a particular species' biological processes: the timing and method of reproduction, survival and growth (Ramula et al., 2008). Currently, promising controls are being researched and developed. Biocontrols are the use of living organisms like insects and fungi to attack invasive plants. For example, Purple Loosestrife has been successfully controlled by this method, specifically by the release of several predatory insect species. Biocontrols are approved only after thorough research and testing to avoid negative long-term impacts, and it may be years or possibly decades before biocontrols for our local invasive species are available. The CCC will continue to monitor all available treatments and recommend the most current and appropriate methods.

We advocate for an integrated control method; where possible and effective, we first advocate mechanical control (such as pulling, mowing, cutting and excavating). Where mechanical control cannot realistically be applied, chemical control (use of herbicides) may be necessary.

We recommend the timing and methods of work be determined using the **Connecticut Invasive Plant Management Calendar** provided by the CT Invasive Plant Working Group (CIPWG).

Connecticut Invasive Plant Management Calendar

Created by Emmett Varricchio and members of The Connecticut Invasive Plant Working Group



These species were the Top 10 species of concern as identified by attendees of the 2016 CIPWG Symposium

| | January | February | March | April | May | June | July | August | September | October | November | December |
|---|---------|----------|-------|-------|-----|------|------|--------|-----------|---------|----------|----------|
| Japanese Knotweed (<i>Polygonum cuspidatum</i>) | | | | | | | | | | | | |
| Oriental Bittersweet (<i>Celastrus orbiculatus</i>) | | | | | | | | | | | | |
| Japanese barberry (<i>Berberis thunbergii</i>) | | | | | | | | | | | | |
| Multiflora Rose (<i>Rosa multiflora</i>) | | | | | | | | | | | | |
| Mugwort (<i>Artemisia vulgaris</i>) | | | | | | | | | | | | |
| Garlic Mustard (<i>Alliaria petiolata</i>) | | | | | | | | | | | | |
| Autumn Olive (<i>Elaeagnus umbellata</i>) | | | | | | | | | | | | |
| Common Reed (<i>Phragmites australis</i>) | | | | | | | | | | | | |

Flowering Period Chemical: Foliar Cut/Paint Injection Mechanical: Cut Pull (seedlings) Mow

Restoration

Simply removing an invasive species often does not result in a consequent reestablishment of native species. If the invasion has resulted from environmental degradation, additional measures need to be taken (Collings et al., 2023). The United Nations has declared 2021–2030 to be the “Decade of Ecosystem Restoration” (Eisele and Hwang, 2019). Priorities of the initiative include mitigating the loss of biodiversity and land degradation, and sustainably-managing nitrogen to improve water quality. Wetland restoration is integral to these efforts. (Kettenring, 2020). Restoration using seeds, grasses, forbs (flowering species that don’t have woody parts), shrubs and/or trees to provide a new seed bank has become a widely recommended practice providing benefits for biodiversity (cite).

The Commission recommends that post-removal, native seed be sown and/or plantings be installed to aid site restoration until such time as the area is overtaken by adjacent native species. Such

work needs to be done in collaboration with experts in landscape design and installation and would be funding-dependent. The CCC intends to research and apply for grant funding to support eradication and restoration efforts.

Table 1. Competitive Native Plants to Replace Invasives

| Grasses / Grass-like | | | | |
|--|------------------------|------------------|-----------------|---|
| Name | Sun/Shade | Soil | Moisture | Attributes |
| Switchgrass <i>Panicum virgatum</i> | sun, part shade | clay, loam, sand | dry, moist, wet | Deep root systems, stabilizer of soils. Can occur in both fresh and brackish marshes. Considered aggressive for small home gardens. |
| Wool rush <i>Scirpus cyperinus</i> | sun | clay, loam, sand | moist, wet | Grows in tough clumps -- great for ditches and wet areas, will spread. Good for rain gardens and ditches. Host for Dion skipper and Eyed brown butterflies. |
| Northern sea oats <i>Chasmanthium latifolium</i> | part shade | clay, loam, sand | moist, wet | Self-seeds readily by attractive seed heads. Will handle some shade. |
| Perennials | | | | |
| Name | Sun/Shade | Soil | Moisture | Attributes |
| Boneset <i>Eupatorium perfoliatum</i> | sun, part shade, shade | clay, loam, sand | moist, wet | Floodplains and ditches - huge pollinator attractor! Interesting coarse texture in the landscape. Good for conservation and rain gardens as well. |
| Blue mistflower <i>Conoclinium coelestinum</i> | sun, part shade, shade | clay, loam | dry, moist, wet | Belongs to mint family - will wander if allowed. Great for meadows, damp woods. Vibrant violet flower. Not deer resistant |
| Sensitive fern <i>Onoclea sensibilis</i> | sun, part shade, shade | clay, loam, sand | moist, wet | Spreads by underground runners - good groundcover, but will range. Deer resistant. |
| Golden ragwort <i>Packera aurea</i> | sun, part shade, shade | loam | moist, wet | Boasts a long bloom time. Can be aggressive - prefers wetland/moist bottomland areas. |

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|---|------------------------|--------------------|--------------------|--|
| Cutleaf coneflower <i>Rudbeckia laciniata</i> | sun, part shade | clay, loam, sand | moist, wet | Tall, herbal uses. Will spread in wet areas and ditches. Tolerates acid soils. |
| Lyre-leaf sage <i>Salvia lyrata</i> | sun, part shade | loam, sand | dry, moist | Great groundcover - will self-seed freely. Can handle deep shade, prefers sun. Will bloom twice (spring and fall) if deadheaded. |
| Canadian goldenrod <i>Solidago canadensis</i> | sun, part shade | clay, loam, sand | dry, wet | Seen commonly in fields, roadsides, fallow spots. Good late-season source of nectar/pollen. |
| Mountain mint <i>Pycnanthemum</i> spp. | sun, part shade | depends on species | depends on species | Great for pollinators - <i>P. incanum</i> will handle shade, but most prefer sun. |
| Canadian germander <i>Teucrium canadense</i> | sun, part shade | clay, loam, sand | moist | Plants spread by rhizomes and prefer moist soils. Makes great cut flower and ground cover. |
| Bee balms <i>Monarda</i> spp | sun, part shade | depends on species | depends on species | Showy flowers. Belongs to the mint family. Great for pollinators. |
| Common milkweed <i>Asclepias syriaca</i> | sun | loam, sand | dry | Once established, will build colonies of milkweed. Can tolerate the tough soil found on the shoulders of roadways. |
| White snakeroot <i>Ageratina altissima</i> | sun, part shade, shade | clay, loam, sand | dry, moist | A tough plant that prefers basic soil types. |
| Annuals | | | | |
| Name | Sun/Shade | Soil | Moisture | Attributes |
| Orange jewelweed <i>Impatiens capensis</i> | part shade, shade | clay, loam, sand | moist, wet | Annual that competes well in areas populated by Japanese stiltgrass. Prefers moist bottomlands with shade. |
| Shrubs | | | | |

| Name | Sun/Shade | Soil | Moisture | Attributes |
|---|------------------------------|------------------------|-----------------------|--|
| Groundsel <i>Baccharis halimifolia</i> | sun | clay, loam, sand | dry, moist, wet | Dominates ditches and shoreline sites - tolerates flooding and salinity, alkaline sites. |
| Elderberry <i>Sambucus canadensis</i> | sun, part shade, shade | clay, loam, sand | moist, wet | Edible berries (human & wildlife), suckers, prefers alkaline soil, best in swamps. |
| Summersweet <i>Clethra alnifolia</i> | part shade, shade | clay, loam, sand | moist, wet | Very fragrant flowers- tolerates some salinity, suckers freely |
| Trees | | | | |
| Name | Sun/Shade | Soil | Moisture | Attributes |
| Sweetgum <i>Liquidambar styraciflua</i> | sun, part shade | clay, loam, sand | moist, wet | Wetland tree - can dominate wetland areas. Seeds contain shikimic acid (medicines) |
| Loblolly pine <i>Pinus taeda</i> | sun, part shade | clay, loam, sand | dry, moist, wet | Evergreen, winter cover, food for wildlife, acidic conditions. Early successional. |
| Eastern red cedar <i>Juniperus virginiana</i> | sun | clay, loam, sand | dry, moist | Fruit supports over 50 bird species - self-seeds readily. Alternate host for Cedar-Apple rust. |
| Boxelder <i>Acer negundo</i> | sun, part shade | clay, loam, sand | moist, wet | Grows in lowlands next to rivers or waterways. Tolerates a variety of soils. Wood is considered brittle. |
| Vines | | | | |
| Name | Sun/Shade | Soil | Moisture | Attributes |
| Virginia creeper <i>Parthenocissus quinquefolia</i> | sun, part shade, shade | clay, loam, sand | dry, moist, wet | Bank stabilizer - can be used as groundcover. Trim to control as needed. Great fall color. |
| Trumpet vine <i>Campsis radicans</i> | sun, part shade | clay, loam, sand | dry, moist | Very thick vines - try to keep off trees to avoid dragging or breaking branches. |

| | | | | |
|---|-----------------|------------------|------------|--|
| Native honeysuckle <i>Lonicera sempervirens</i> | sun, part shade | clay, loam, sand | dry, moist | Flowers a long time, attractive color. Very beneficial for wildlife. Grows less wildly than the Japanese species. Needs a vertical surface or trellis. |
|---|-----------------|------------------|------------|--|

Priority Species Control

For each species, we first summarize a recommended approach for large versus small infestations, then below these brief recommendations are the scientific literature from which these recommendations are developed. What follows is a synthesis of the best scientific support for control of these invasives that we could find.

Japanese knotweed Control

Smaller infestations: CCC Recommends Knotweed be addressed by grubbing (see below) when infestations are small.

Larger infestations: Cut or mow stalks in May/June, July/August, September/October, allowing regrowth between cuts. After the final cut, spray knotweed with ROUNDUP (glyphosate or wetland-approved versions of the same). Established stands of Japanese knotweed are difficult to eradicate even with repeated glyphosate treatments. Adequate control is usually not possible unless the entire stand of knotweed is treated (otherwise, it will re-invade via creeping rootstocks from untreated areas). However, glyphosate treatments weaken the plant and prevent it from dominating a site. Repeated treatments are necessary, preferably with injection. Note that while Triclopyr may be a more effective herbicide for this plant, it also may have more serious ecological impacts .

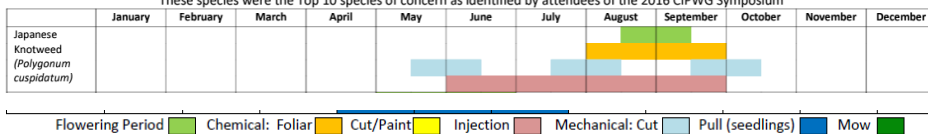
Disposal: Pile on site and monitor for regrowth. The area must be observed for several years to ensure re-sprouting does not occur. Plant material should not be removed from the site because this action risks further spreading.

Restoration: Restoration should be done after 3 years of control by planting strong natives like grey dogwood.

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These species were the Top 10 species of concern as identified by attendees of the 2016 CIPWG Symposium



Japanese knotweed - additional information

Grubbing:

This method is appropriate for very small populations or in environmentally sensitive areas where herbicides cannot be used. Using a digging tool, remove the entire plant including all roots and runners. Care must be taken not to spread rhizome fragments. Juvenile plants can be hand-pulled depending on soil conditions and root development. Any portions of the root system not removed will potentially re-sprout. All plant parts, including mature fruit, should be bagged and disposed of in the trash to prevent

re-establishment.

Cutting:

Repeated cutting may be effective in eliminating Japanese knotweed, but this strategy must be conducted for several years to obtain success. Cut the knotweed close to the ground at least 3 times a year. Cutting stems over time results in a significant reduction of rhizomatous reserves. Manual control is labor intensive, but where populations are small and isolated or in environmentally sensitive areas, it may be a good option.

Both mechanical and herbicidal control methods require continued treatment to prevent re-establishment of knotweed. Reintroducing native plants as competitors may be an alternative to continued treatment. However, more research needs to be done on which native species might be effective competitors and how they should be reintroduced.

Herbicides:

Triclopyr will kill the top growth within a few days, but Japanese knotweed may re-sprout following treatment. Residual effects on emergence and growth the following year are variable.

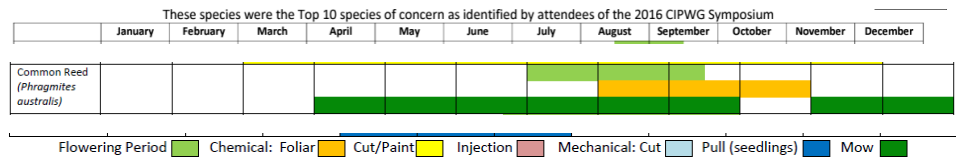
Glyphosate applied in spring or early summer may stunt or yellow growth, but knotweed will generally recover and continue growing. Glyphosate treatments in late summer or early fall are much more effective in preventing regrowth of Japanese knotweed the following year as the plant moves the chemical downward to the root zone in the fall.

Phragmites Control

Smaller Phragmites Stands: Small new incursions should be addressed asap with mowing and black tarp-plastic covering that be left in place for a year.

Larger Phragmites stands should be cut and painted with herbicide in the spring (see calendar), while larger patches should be considered for excavation and/or herbicide work. Based on the literature the CCC recommends using a wetland-approved glyphosate for this work.

Disposal: material should remain at the site. Seed heads should be bagged and/or covered with black plastic. Site should be monitored.



Phragmites - additional information

“The most effective means of Phragmites mechanical control is a combination of cutting or mowing (usually in the spring) and covering stubble with plastic (for one growing season). However, there are limitations to this application; it is usually applied to small areas, as it is

labor-intensive (Dawson and Hallows 1983; Boone et al. 1988; Marks et al. 1994; Kiviat 2006; Willcox 2013).”

“Excavation provides complete Phragmites control and is likely the only landscape-scale option for mechanical removal, but requires disproportionately greater costs in both time and resources. Land managers have successfully restored Phragmites-dominated dredge spoil sites to highly valued salt marshes in New England (Moore et al. 2009). In such cases, excavation to elevations at or below mean high water (i.e. coupling removal with restoration of hydrology) results in daily tidal flooding, increased salinity and sulfide, and resulted in restoration of native plant communities and associated faunal species in Connecticut and New Hampshire (Moore et al. 2009).”

“Controlled comparative studies have found that imazapyr is more effective than glyphosate in controlling Phragmites (Kay 1995; Getsinger et al. 2006; Derr 2008b; Mozdzer et al. 2008), but not without serious negative consequences to native plants including recolonization following the death of Phragmites (Mozdzer et al. 2008). The only studies that reported glyphosate exhibiting a greater impact on Phragmites under field conditions were two that used higher concentrations than recommended by the manufacturer (30 % in study vs. ,6 %recommended) and were not comparable to the rate of imazapyr used (5%) (Back and Holomuzki 2008; Back et al. 2012) (Fig. 4). Other studies have demonstrated that there is no need to use glyphosate in concentrations higher than those listed on the product label (Cheshier et al. 2012), and label instructions should not be exceeded due to potential negative consequences on flora and fauna. Land managers have noted that wetlands are slower to recover when imazapyr is used when compared with glyphosate herbicides (Mozdzer et al. 2008), which may be attributed to greater persistence in the soil.”

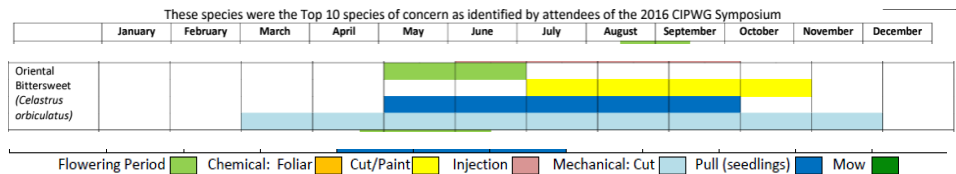
Bittersweet Control

Small vines and patches: Bittersweet’s deep roots makes pulling impractical for large plants. Manual removal is most effective when an infestation is detected early and seedlings are about 12” or less. Hand-pulling is recommended but the vine and all roots must be removed. Pulling large plants stimulates roots to resprout and form new clonal plants, intensifying the infestation. Repeated cutting at 1-2 ft. above the soil line exhausts bittersweet’s energy reserves. Cut at 2 ft for first cut; subsequent cuts may be at 1 ft. Repeated cutting weakens the plant, diminishing its size over time, the small to medium sized plant is easily pulled from the soil. Repeated cutting process also reduces the vine’s ability to climb and wrap around trees and shrubs.

Large vines: Mechanical and chemical methods are often effective when used in combination. Large individual vines can be cut at ground level; foliar herbicide treatments can then be applied directly to the rooted section. Basal application and stem injection methods can also be effective. These are preferred when there are desirable species present in the area.

Disposal: Pile on site and monitor for regrowth. The area must be observed for several years to ensure re-sprouting does not occur.

Restoration: If the bittersweet occurs in a relatively robust system of diverse native species, no restoration is necessary.



Kumar Rai, P., & Singh, J. S. (2020). Invasive alien plant species: Their impact on environment, ecosystem services and human health. In *Ecological Indicators* (Vol. 111). Elsevier B.V. <https://doi.org/10.1016/j.ecolind.2019.106020>

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University of Maryland Recommended Native Restoration Plants

Second Tier Species Control

Garlic Mustard Control

Mechanical: Can be easily hand-pulled during the growing season. **Scout for and pull garlic mustard in locations with few plants to control new invasions. Once flowers are evident, place removed plant material in bags and dispose of in the garbage.** Plants can also be repeatedly cut at the ground level prior to seed formation (before May). **Reduction of an extensive seedbank will require at least 5-10 years of consistent effort** and sites should be monitored in following years. Research from [Cornell University](https://www.cornell.edu/) asserts that mechanical control of garlic mustard-infested areas is counterproductive, causing soil disturbance that encourages more growth of garlic mustard, while established garlic mustard populations decline with time on their own.

Chemical: Follow label instructions for all applications. For large populations, a foliar application of a non-selective herbicide (e.g., glyphosate), may be recommended. 30% horticultural vinegar is showing some promise. Applications made during the early spring (March-April), when garlic mustard is one of the few plants actively growing, are less likely to injure native plant material (be alert for emerging native plant growth). By using chemical control, manual removal is not needed and the seed bank remains intact.

Direct Burning: Prescribed fires have been considered as a means of control; however, effectiveness has been found to vary. Burning is most effective in fire-dependent plant communities, where native plants are able to germinate and re-establish after a fire. A single directed burning will not by itself eliminate an established garlic mustard population. However, repeated fires to suppress garlic mustard may be detrimental to existing or emerging native plants. Flame weeding may be considered as a first step in a control strategy, followed by hand-pulling in subsequent years.

Biological Control: In Europe, populations of garlic mustard are managed by many native biological enemies. To date, in the United States, viable biological control options are still being evaluated. Refer to [CIPWG's Invasive Plant Management Calendar.pdf](#) for more information (cipwg.uconn.edu/pdf).

Barberry Control

Control is recommended to be done by home-landowners.

From UConn site https://ipm.cahnr.uconn.edu/invasive_plants_japanese_barberry/

For best results, integrate an early-season initial treatment (e.g., mechanical or directed burning) with a mid-season follow-up treatment (e.g., directed burning or herbicide application). Plants growing in full sun produce more seeds than those in shade, so their control should be prioritized. [Japanese Barberry Control Methods.pdf](#) (Ward, Williams, and Worthley) provides greater details.

MECHANICAL: May be sufficient to eradicate small infestations; for established stands, mechanical controls may be used in conjunction with chemical controls or directed burning. **Mechanical control efforts should be concentrated in the early spring**, while desirable native species are still dormant, and **late fall** - foliage remains later in the season than many other species.

Pulling/digging: **Roots are shallow. Removal of seedlings and small plants is efficient.** Tools (e.g., Extractigators, weed wrenches) can help facilitate removal of larger plants. **Root crowns must be removed in order to prevent resprouting.** Removal is easiest when the soil is moist. Minimize soil disturbance; tamp down soil after completion. Thick gloves and long canvas sleeves are recommended for protection from the plant's sharp spines.

Cutting/mowing: **Repeated cutting will limit barberry's spread, but resprouting will occur from the root crown.** Resprouts can be treated with herbicide or burned with a propane torch for greater efficacy.

DIRECTED BURNING: A propane torch can be used effectively. **Burn the base of stems near the ground to kill the tissues** that transport nutrients and water to the rest of the plant. For large specimens, it is recommended to remove top growth to make the base of the stems accessible and/or to allow the plants to re-sprout to deplete their root reserves before burning (e.g., plants cut in July; burned in

November of the same year). For more details, visit [Berberis thunbergii \(Fire Effects Information System\)](#). **Where pesticide use is restricted, mechanical removal followed by burning of resprouts is likely the most effective strategy.**

CHEMICAL: [Follow label instructions for all applications.](#)

Foliar sprays (e.g., glyphosate; triclopyr) are recommended for large infestations. Effective from one month after leaf expansion until autumn. Fall treatment, after other plants' foliage falls, helps minimize damage to desirable plants.

Cut-stem treatments: Cutting stems and then chemically painting the cut stems is effective, although very labor intensive; preferred for smaller infestations and to minimize damage to understory natives. Cut-stump treatment can be done in any season, **except in early spring, when plant sap is flowing upwards from roots to sprouts/stems.**

Barberry plants treated with any herbicide should be monitored for at least a year, as they may resprout. Refer to [Michigan Dept. of Natural Resources.pdf](#) for more details.

Aquatic Invasive Species

Cream Hill Lake was mapped for invasive species July 15, 2024 by the State of CT's Office of Aquatic Species <https://portal.ct.gov/caes-oais>. While the Conservation Commission and Lake Task Force arranged the survey and mapping out of a concern for the presence of *Eurasian milfoil*. No milfoil was found. We are currently waiting for the official report which is anticipated to be released to us in January 2025. However the scientist's Summer Stebbins suggested the look alike plant may well be *Bidens beckii*, a rare species that is protected in the state of CT.

For those interested in further investigation, what follows is a comprehensive abstract from a highly cited paper. The term "highly cited paper" is a descriptor from the Web of Science denoting a paper that has been highly influential in the science realm (Pysek et al., 2020).

ABSTRACT

Biological invasions are a global consequence of an increasingly connected world and the rise in human population size. The numbers of invasive alien species – the subset of alien species that spread widely in areas where they are not native, affecting the environment or human livelihoods – are increasing. Synergies with other global changes are exacerbating current invasions and facilitating new ones, thereby escalating the extent and impacts of invaders. Invasions have complex and often immense long-term direct and indirect impacts. In many cases, such impacts become apparent or problematic only when invaders are well established and have large ranges. Invasive alien species break down biogeographic realms, affect native species richness and abundance, increase the risk of native species extinction, affect the genetic composition of native populations, change native animal behaviour, alter phylogenetic diversity across communities, and modify trophic networks. Many invasive alien species also change ecosystem functioning and the delivery of ecosystem services by altering nutrient and contaminant cycling, hydrology, habitat structure, and disturbance regimes. These biodiversity and ecosystem impacts are accelerating and will increase further in the future. Scientific evidence has identified policy strategies to reduce future invasions, but these strategies are often insufficiently implemented. For some nations, notably Australia and New Zealand, biosecurity has become a national priority. There have been long-term successes, such as eradication of rats and cats on increasingly large islands and biological control of weeds across continental areas. However, in many countries, invasions receive little attention. Improved international cooperation is crucial to reduce the impacts of invasive alien species on biodiversity, ecosystem services, and human livelihoods. Countries can strengthen their biosecurity regulations to implement and enforce more effective management strategies that should also address other global changes that interact with invasions.

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UConn Invasive Plant Fact Sheets



INVASIVE PLANT FACTSHEET

Japanese knotweed (*Fallopia japonica*, syn. *Polygonum cuspidatum*)

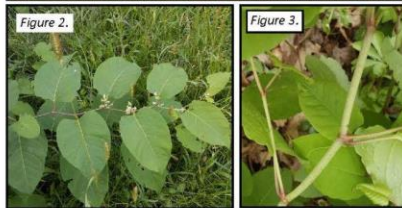
By Victoria Wallace, Alyssa Siegel-Miles, and Klaudia Sowizral, UConn Extension

Identifying Features:

- **OVERVIEW:** Perennial, herbaceous. Shrubby in appearance (Figure 1). Height 6-15 ft, with a deep taproot. **Allelopathic** (releases chemicals that can inhibit the growth of neighboring plant species).
- **LEAVES:** Simple, alternate; 4-6 in long, 3-5 in wide. **Broadly ovate** (broad and rounded or squared at the base); come abruptly to a point (Figure 2). **Emerges in early spring**, initially appearing visually similar to rhubarb or bamboo, then **unfurls with distinctly triangular**, bright red-purple leaves that turn green over time.
- **STEMS:** Smooth, **noticeably jointed and with reddish-purple mottling at nodes** (Figure 3). **Ocrea** (thin sheath) present at nodes, where the stem is swollen. **Hollow between nodes**. Covered in a fine whitish coating that easily rubs off.
- **FLOWERS:** Small white/cream colored flowers occur in **lacey, 3-4 in long clusters** at the upper leaf axils along the length of the stem in late August-Sept. (Figure 4).
- **SEED/FRUIT:** Dark brown, glossy, tiny seeds are enclosed in 8-9 mm long, three-winged achenes (papery fruits). Can be dispersed by wind, water, transported soil, birds, or insects. Dioecious.
- **ROOTS:** Deep taproot and extensive rhizomes (underground stems). Up to two-thirds of the plant's biomass exists underground (fs.fed.us).
- **REPRODUCTION/SPREAD:** Primarily vegetative by rhizomes, and, to a lesser extent, by seed. Extensive network of rhizomes quickly crowds out surrounding vegetation. Easily regenerates/forms clonal shoots from small pieces of rhizome or root tissue.

Habitat:

Japanese knotweed thrives in disturbed areas, along roadsides, and on stream or river banks, forming dense thickets that pose a significant ecological threat to riparian areas. Its ability to rapidly colonize an area threatens native vegetation and can greatly alter natural ecosystems. It can grow well in full sun, deep shade, soils of high salinity, and extreme drought. It can also survive severe floods. Its extensive root system has been known to penetrate asphalt and cracks in concrete.



From top: 1) An infestation of Japanese knotweed along a roadside. 2) Close up of foliage. 3) Juvenile stems. 4) Close up of flowers. 5) Arrows indicate the ideal location to cut stems multiple times during the growing season for mechanical control. Photo by [Petie Reed](#). Source: [Kathy Connolly](#). Photos by Alyssa Siegel-Miles except where noted.

For more information: ipm.uconn.edu and cjpwg.uconn.edu or contact: Victoria Wallace; victoria.wallace@uconn.edu

Japanese knotweed (*Fallopia japonica*, syn. *Polygonum cuspidatum*)

Control:

Prevention is key: early detection and rapid response are the most effective means of Japanese knotweed management.

MECHANICAL CONTROL:

- **Cut plants with pruners or loppers three times per year**, in May or early June, mid-July, and late August before flowers appear. **The third cut should be completed before fall** (by August 31 is recommended) to prevent the movement of the plants' energy from its leaves to its rhizomes. **Each stem should be cut below the lowest node** (refer to Figure 5, page 1). **Repeat this process for a minimum of three years.**
- Place all removed plant material in heavy duty contractor bags and dispose of in regular trash. **Do not place any cut plant material in a compost pile or leave on site. Rhizome fragments left on the ground can easily resprout.**
- **Follow-up maintenance for multiple years is critical to eradication success and to eliminate sprouting from all rhizomes**, which may produce new shoots for three years. Refer to [Nip the Knotweed](#) for more details.
- **Digging and hand-pulling of established plants are NOT recommended** as new shoots can easily form on root and rhizome fragments. (Hand-pulling is recommended for very young plants only.)
- Stem cutting efforts can be combined with shading (black or clear plastic) or a chemical application.

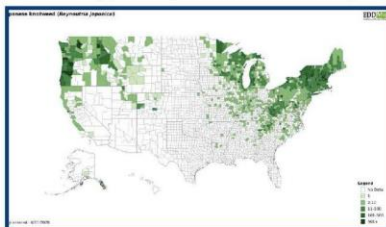
CHEMICAL CONTROL: [Follow label instructions for any chemical application.](#)

- Herbicides (e.g., glyphosate with a surfactant or triclopyr) **can be applied on leaf surfaces with sprayers, painted on cut stems, or administered via stem injection.**
- **Applications are recommended in late summer before flowering or just after flowering up until the first killing frost** (September-November). **Do not spray when plants are flowering;** many pollinators feed on the flowers.
- **Recommended protocol:** Cut or mow the plant to 2-3 in during mid-late spring (May-June) to prepare for a planned foliar treatment in late summer or fall. Cutting the plant in spring reduces plant height at the time of spraying, enabling better control of the spray, decreases the amount of product needed, and delays flowering so that plants can be sprayed in August without risk of harm to pollinators.
- **Follow-up treatments, the following year, are essential** to managing populations of Japanese knotweed, and should be timed after July 1st, similar to the initial treatment. Following year two, chemical treatments may be repeated every two years.
- Refer to [New Hampshire Department of Agriculture](#) or [Michigan Extension](#) for more details.

After cutting or chemical control (year two), replant with native species to minimize knotweed re-establishment.

Distribution:

Japanese knotweed is found throughout much of the U.S., especially in the Northwest, the Northeast, and the Northern Midwest.



EDDMaps. 2020. Early Detection & Distribution Mapping System. The University of Georgia - Center for Invasive Species and Ecosystem Health. Available online at <http://www.eddmaps.org>.

Other Facts and Background:

Japanese Knotweed is native to Eastern Asia, including China, Japan and Korea. It was introduced to the U.S. as an ornamental in the late 1800s and was initially used for erosion control. Its population spread rapidly and was noted as a problematic species by 1930. The plant is reported to have medicinal applications.

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SOURCES: cipwg.uconn.edu (Mgmt Calendar); [Michigan; extension.psu.edu](http://Michigan.extension.psu.edu); nvis.info; nrcs.usda.gov; extension.umaine.edu; agriculture.nh.gov

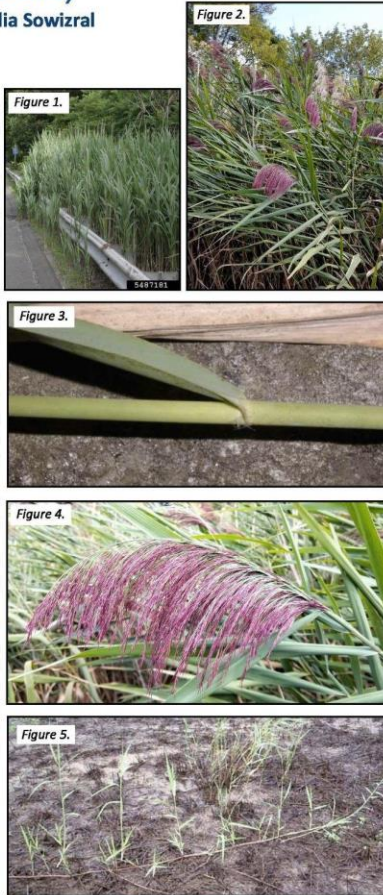
For more information: ipm.uconn.edu and cipwg.uconn.edu or contact: Victoria Wallace; victoria.wallace@uconn.edu

Common reed (*Phragmites australis*)

By Victoria Wallace, Alyssa Siegel-Miles, and Klaudia Sowizral
UConn Extension

Identifying Features:

- **OVERVIEW:** Aggressive, robust perennial grass, which creates dense infestations (Figure 1). Easily identified by its height (5-13 ft) and feathery flowers (Figure 2).
- **LEAVES:** ½-2 in wide, 6-18 in long; lance-shaped, alternate, upright to arching, blue-green. Leaf blades are smooth and flat or rolled. Veins parallel. Midvein is white near the base of the leaf; inconspicuous towards tip. Leaf sheath is open, glabrous (smooth). Long, fine, white hairs present where leaf blades diverge from the reedy stem (Figure 3).
- **STEMS:** Hollow, smooth; 6-12 ft tall. Tan or green, often red at the base, with smooth nodes and hollow internodes. Aerial stems borne from rhizome joints can take root and produce new shoots.
- **FLOWERS/INFLORESCENCES:** Densely branched, erect or drooping, fluffy, purple, 6-16 in long terminal flower spikes appear in June (Figure 4). Inflorescence matures to gray and persists through winter. Lance-shaped inflorescence is composed of 3-11 spikelets. The rachilla (stem between the florets) is covered with long silky hairs.
- **SEEDS:** Light-weight, brown, 8 mm long; form in August and disperse through January. Will not germinate in salinity greater than 2‰, or when deeper than 2 in. in soil.
- **ROOTS:** Extensive root networks often exceed 20 ft in length; form a dense, interwoven mass that grows 3-30 ft per year (growth is greater in nutrient-rich locations).
- **REPRODUCTION/SPREAD:** Mainly vegetative, via an extensive system of rhizomes (underground stems), which generate new plants (Figure 5) up to 43 ft from the parent plant. Can also spread by wind-blown or bird-deposited seed, although seed set is highly variable and germination rates are typically low. Maintenance equipment (e.g., mowers) can be a source of spread of both vegetative rhizome fragments or seed.



Habitat:

Phragmites creates dense monocultures in freshwater marshes and wetlands, as well as along river edges and roadsides. Common to brackish (slightly saline) environments and disturbed sites. Its salt tolerance allows it to persist where few species can survive. *Phragmites* prefers full sun, but can withstand partial shade. It invades and degrades vast areas of important wetland habitat, threatening the wildlife that depend on those areas for survival.

From top: 1) common reed monoculture along a roadside 2) mature, flowering common reed ** 3) foliage and ligule 4) flower ** 5) Rhizomes and vegetative spread. 1 Photos by Leslie J. Mehrhoff, University of Connecticut, Bugwood.org and Invasive.org. **Photos by Alyssa Siegel-Miles

For more information: ipm.uconn.edu and ciwag.uconn.edu or contact: Victoria Wallace, victoria.wallace@uconn.edu, (860) 885-2826

Control:

Common reed (*Phragmites australis*)

A combination of remediation tactics, including thorough monitoring and ongoing treatment, are necessary to manage invasive common reed. [New York Invasive Species Information](#) states that management should be “site-specific, goal-specific, and value-driven,” due to different variables found at each site. Native and non-native *Phragmites* appear similar, so **correct identification is critical** before taking management action. **A suitable restoration plan is necessary** before *Phragmites* removal is initiated. Timely replanting with native species adapted to site conditions is important for habitat protection, as elimination of *Phragmites* colonies may increase erosion.

PREVENTION: Plant or protect native species that can limit the spread of *Phragmites*. Jesuit’s bark (*Iva frutescens*), groundsel-tree (*Baccharis halimifolia*), black rush (*Juncus roemerianus*), and saltmeadow cordgrass (*Spartina patens*) can successfully compete with *Phragmites*. Ensure that proper sanitary practices are in place to prevent creating new populations of *Phragmites* via contaminated maintenance equipment (e.g. mowers).

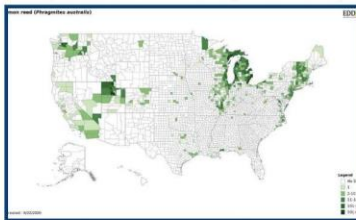
MECHANICAL: Hand pulling is not feasible due to common reed’s extensive rhizomes and root system. Mowing may be an appropriate component of a management plan, although it usually is required to be done in combination with chemical controls for long-term success. For best eradication results, plants should be cut annually just before the end of July, to maximize stress on the plant at its weakest point in the growing season. Remove any rhizome fragments, which can start new plants. Cutting common reed at the incorrect time of the year may increase stand density.

HYDROLOGIC: Manipulating the water level around *Phragmites* has been shown to decrease populations in some conditions. Refer to the [Element Stewardship Abstract](#) produced by the Nature Conservancy for more information.

CONTROLLED BURNING: Common reed can withstand burning - the top growth is killed but roots and rhizomes are not. Prescribed burns, in conjunction with chemical treatments, may be effective when performed the year following a chemical treatment, ideally in July-August or in the winter, prior to spring green up. Learn more at invasive.org or fs.fed.us.

CHEMICAL: Follow label instructions for all applications. Refer to [CIPWG Management Calendar](#) (cipwg.uconn.edu).

- **Foliar:** Systemic herbicides (e.g., glyphosate, Imazapyr - specified for wetland use when management is being performed in or near water bodies), may be applied to foliage from June to September, when plants are actively growing (late summer, after flowering, is recommended). Follow up treatments should be repeated annually, in August-September, after plants have sufficiently regrown from previous treatments.
- **Cut-stem** treatments are suitable for small infestations and can be performed from mid-summer to fall. Cut individual stems below the lowest leaf and apply a systemic herbicide (appropriate for aquatic use if applying in or near water) to the stem and around the cut edge.



EDDMaps. 2020. Early Detection & Distribution Mapping System. The University of Georgia - Center for Invasive Species and Ecosystem Health. Available online at <http://www.eddmaps.org>.

Distribution:

Common reed is found throughout the U.S., particularly in the northern Midwest, the Northeast, and on the west coast.

Other Facts and Background:

Invasive *Phragmites* was introduced to North America in the late 1700s-early 1800s. Native *Phragmites* species may form dense stands, but lack the aggressive characteristics of the European strain. Native common reed leaves are lighter (compared to *P. australis*) yellowish-green, its stems are smooth, shiny, red-brown to dark red-brown, and the leaf sheaths are more likely to be shed in winter. There is no evidence of hybridization between native and non-native *Phragmites*.

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1013777] from the USDA National Institute of Food and Agriculture.



SOURCES: cipwg.uconn.edu; cce.cornell.edu; invasive.org; usgs.gov; extension.umaine.edu; plants.usda.gov; mdc.mo.gov; Breen, Bailey, Violli

For more information: ipm.uconn.edu and cipwg.uconn.edu or contact: Victoria Wallace, victoria.wallace@uconn.edu, (860) 885-2826

Asiatic bittersweet (*Celastrus orbiculatus*)

By Victoria Wallace, Alyssa Siegel-Miles and Klaudia Sowizral
UConn Extension

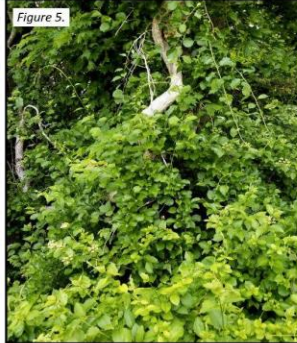
Identifying Features:

- **OVERVIEW:** Deciduous woody vine that climbs, suffocates and strangles other plants. Vines can grow up to 60 ft tall and 4 in. in diameter (Figure 1). Also known as Oriental bittersweet.
- **LEAVES:** Alternate, 1-4 in. long, elliptical to circular (Figure 2). Pointed or round tip, bluntly toothed margins, glossy (not hairy). Yellow in autumn.
- **STEMS:** Green when young (Figure 3), maturing to tan. Climb for support, lack tendrils, and have obvious **lenticels** (raised pores). Bark is tannish and furrowed.
- **FLOWERS:** Small and greenish (Figure 3), blooms in May-June. Male and female flowers usually occur on separate plants. Flowers grow among the leaves at leaf axils (in contrast to native bittersweet's flowers/fruit, which are found only at twig tips).
- **SEED/FRUIT:** Small, globose, with a green casing that matures to yellow; casing splits open to reveal red berry-like fruit (Figure 4). Fruit is poisonous to humans, but eaten and dispersed by birds. Fruit persists through winter.
- **ROOTS:** Orange roots that sucker aggressively, especially when the plant is cut at the soil line or pulled without removal of all roots.
- **REPRODUCTION:** By seed. Also spreads vegetatively by spreading underground roots that form new stems.



Habitat:

Asiatic bittersweet grows in a wide variety of habitats, including rocky slopes, grasslands, beaches, and flood plain forests. Although it thrives in full sun locations, seedlings are extremely shade-tolerant. It is most commonly found in open woodlands, abandoned fields, forest and woodland edges, and roadsides, where Asiatic bittersweet can outcompete other vegetation, twining around and strangling trees (Figure 5).



From top:
1) mature twining vines;
2) unripe fruit and foliage;
3) foliage and stems close up with emerging inconspicuous flowers;
4) mature, split open fruit;
5) bittersweet has overwhelmed and strangled these trees. Photos by Alyssa Siegel-Miles.

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Asiatic bittersweet (*Celastrus orbiculatus*)

Control:

MECHANICAL CONTROL:

- Seedlings/very young plants can be pulled or removed. **Routine monitoring for seedling emergence** is critical. Seedlings are easiest to remove when the soil is moist and the population is small. Pull steadily and slowly to minimize soil disturbance. Tamp down the soil after plants are removed.
- **Bittersweet's deep root system** often makes pulling or torching impractical for any plant larger than a seedling. It is not recommended to pull established plants or cut them at the soil line, as this action stimulates the roots to resprout, forming new (clonal) plants and intensifying the infestation.
- **Repeated cutting of bittersweet at 1-2 ft. above the soil line** exhausts the plant's energy reserves. Plants will resprout from the nodes below the cut rather than from the soil line. Cut at 2 ft for the first cut; subsequent cuts may be at 1 ft. Repeated cutting (at least 1-3x/year, for multiple years, depending on the size of the plant) at the 1-2 ft. line weakens the plant to the point that a small to medium sized plant may be easily pulled from the soil. This cutting process also **reduces the vine's ability to climb and wrap itself around trees and shrubs**. Cut vines that are left hanging in the canopy will eventually deteriorate. Commitment and follow through are required to achieve control. Mechanical control may need to be combined with chemical controls for larger plants or larger populations.



Figure 6. This bittersweet has resprouted after it was cut at the two-foot line. Cutting at this height prevents the plants from forming suckers from the roots and weakens the plant over time.

CHEMICAL CONTROL: Follow label direction when using all chemical treatments.

- Glyphosate or triclopyr can be **painted on cut stems in late summer or applied as foliar sprays**. Glyphosate is most effective for cut surface treatment while plants are fully leafed and actively growing. When using a non-selective foliar spray, care must be taken to avoid injury to neighboring plants. Visit [Michigan Dept. of Natural Resources](http://MichiganDept.ofNaturalResources) for more details.

DISPOSAL OF REMOVED PLANTS: Plant material with fruit present should be burned or bagged and disposed of in municipal waste. Plant parts without fruit should be placed in the sun to dry and may be put in a compost or mulch pile, provided that care is taken to ensure that all removed plant parts are dead and no fruit is present.

Distribution:

Asiatic bittersweet is found mostly in the northeast regions of the U.S., including all the New England states. Outbreaks are found as far west as Minnesota and in some southern states.



EDDMaps. 2020. Early Detection & Distribution Mapping System. The University of Georgia - Center for Invasive Species and Ecosystem Health. Available online at <http://www.eddmaps.org>.

Other Facts and Background:

Asiatic bittersweet is native to Eastern Asia, including Japan, China, and Korea. It was originally introduced to the U.S. as an ornamental and for erosion control. In CT, its movement as well as its sale is prohibited. **Do not buy or make wreaths of the fruit of these vines.**

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Funds to support the creation of this document were provided by the *Crop Protection and Pest Management Extension Implementation Program [grant no. 2017-70006-27201/project accession no. 1013777]* from the *USDA National Institute of Food and Agriculture*.



SOURCES: CIPWG Invasive Plant Mgmt. Calendar, cipwg.uconn.edu; invasive.org; mnfi.anr.msu.edu; wiki.bugwood.org; agriculture.nh.gov

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Garlic mustard (*Alliaria petiolata*)

By Victoria Wallace, Alyssa Siegel-Miles, and Klaudia Sowizral
UConn Extension

Identifying Features:

- **OVERVIEW:** A vigorous, multi-stemmed **biennial** (two years to mature and set seed). Laboratory studies have found that garlic mustard releases chemicals that can inhibit the growth of neighboring plant species. A single plant can populate or repopulate an entire site (*Figure 1*).
- **LEAVES:** **First year**, basal rosette foliage is rounded with **toothed margins** (*Figure 2*). Up to 4 in. in diameter. **The main leaf veins arise from a single point.** Foliage has an **odor of garlic** when crushed. Basal rosettes remain green through fall and winter. **Second year** leaves on flower stalks are triangular, smaller, and **alternately arranged**.
- **FLOWERS:** Four-petaled white flowers appear in May to June on a stem above the foliage (*Figure 3*). Flower stalks emerge from the basal rosette in early spring of the second year and the plant dies after setting seed. Flower stalks can grow to a **height of up to 3 ft.**, however, flowers can also appear on much shorter stems. Garlic mustard is commonly the only tall, broad-leafed, four-petaled white woodland plant blooming in early spring. Flowers are either self-pollinated or cross-pollinated by insects.
- **SEED/FRUIT:** The seed pods (siliques) are long, narrow, four-sided (*Figure 4*) and contain rows of small, black, oblong seeds.
- **ROOTS:** White tap root has an S-shaped curve at the top (*Figure 5*).
- **REPRODUCTION:** Reproduces by seed only. An average, single plant produces between 600-7,500 seeds. Soil disturbance aids in seed germination and establishment; populations are greater in disturbed sites.



From top: 1) invasion of garlic mustard in a forested area; 2) basal rosette - juvenile stage (Photo by Alyssa Siegel-Miles); 3) mature plant with flowers; 4) seed pods (siliques); 5) basal rosette with S-root. Photos by Donna Ellis except where noted.

Habitat:

Garlic mustard can thrive in a variety of climates and grows in full sun to full shade. It can survive in relatively dry to wet soil. The plant grows most aggressively in woodland areas with moist soil. It shoots up in early spring, posing a particular threat to spring ephemeral wildflowers.

Garlic mustard (*Alliaria petiolata*)

Control:

MECHANICAL CONTROL: Can be easily hand-pulled during the growing season. Scout for and pull garlic mustard in locations with few plants to control new invasions. Once flowers are evident, place removed plant material in bags and dispose of in garbage. Plants can also be repeatedly cut at the ground level prior to seed formation (before May). Reduction of an extensive seedbank will require at least 5-10 years of consistent effort and sites should be monitored in following years. [Research from Cornell University](#) asserts that mechanical control of garlic mustard-infested areas is counterproductive, causing soil disturbance that encourages more growth of garlic mustard, while established garlic mustard populations decline with time on their own.

CHEMICAL CONTROL: Follow label direction when using all chemical treatments. For large populations, a foliar application of a non-selective herbicide (e.g., glyphosate), may be recommended. Applications made during the early spring (March-April), when garlic mustard is one of the few plants actively growing, are less likely to injure native plant material (be alert for emerging native plant growth).

DIRECTED BURNING: Prescribed fires have been considered as a means of control; however, effectiveness has been found to vary. Burning is most effective in fire-dependent plant communities, where native plants are able to germinate and re-establish after a fire. A single directed burning will not by itself eliminate an established garlic mustard population. However, repeated fires to suppress garlic mustard may be detrimental to existing or emerging native plants. Flame weeding may be considered as a first step in a control strategy, followed by hand-pulling in subsequent years.

BIOLOGICAL CONTROL: In Europe, populations of garlic mustard are managed by many native biological enemies. To date, in the United States, viable biological control options are still being evaluated.

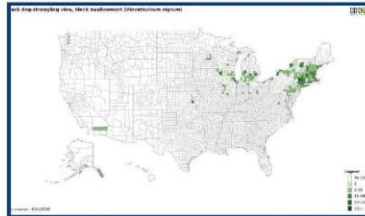
Refer to [CIPWG's Invasive Plant Management Calendar](#) for more information (cipwg.uconn.edu).



Garlic mustard flower. Photo by Victoria Nuzzo, Natural Area Consultants, Bugwood.org

Distribution:

Garlic mustard is commonly found in the Northeastern U.S., south to Georgia, and scattered throughout the Midwest and regions in the Pacific northwest.



EDDMaps. 2020. Early Detection & Distribution Mapping System. The University of Georgia - Center for Invasive Species and Ecosystem Health. Available online at <http://www.eddmaps.org>.

Other Facts and Background:

Garlic mustard is native to Europe and parts of Asia. Originally introduced from Europe as a source of food, the plant was first recorded in North America in Long Island, New York in 1868. Garlic mustard is edible for humans, but eaten by few native insect or animal species. Lack of predation has contributed to its ability to take over many woodland areas in the northeast.

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SOURCES: cipwg.uconn.edu; uconn.edu; nyis.info; njaes.rutgers.edu; invasive.org; fs.fed.org; Video, B. Blossey, Cornell

For more information: ipm.uconn.edu and cipwg.uconn.edu or contact: Victoria Wallace; victoria.wallace@uconn.edu; (860) 885-2826

Japanese Barberry (*Berberis thunbergii*)

By Victoria Wallace, Alyssa Siegel-Miles, and Klaudia Sowizral, UConn Extension

Identifying Features:

- **OVERVIEW:** Deciduous shrub. Typically 2-3 ft. tall, but can grow up to 6 ft. Slightly wider than tall. Grows in dense thickets with arching branches (Figure 1). Zone 4-8.
- **LEAVES:** Alternate, small (up to an inch long). Ovate (**egg-shaped**), **simple**, and **entire** (smooth edges); **grow in clusters** (Figure 2). Leaf tip is wider than the base. Bright green in spring and summer; turning maroon, purple, or red in autumn. Cultivars include yellow, red, and purple foliage spring through fall. In native woodland understories, it is highly conspicuous, as leaves and flowers emerge much earlier in spring and foliage remains longer into fall than most native species.
- **STEMS:** Very twiggy and deeply grooved, with multiple thin woody stems branching out from one point in the ground. **A single, sharp, long spine is evident at each leaf node.** Bark turns reddish-brown in winter; with **yellow inner bark.**
- **FLOWERS:** Small, dangling yellow flowers in clusters of 2-4 at nodes in April to May, profuse along the entire length of the stem (Figure 3). Insect-pollinated.
- **ROOTS:** **Yellow**, fibrous, and shallow; with rhizomes (underground reproductive stems).
- **FRUIT:** Many hard, elliptical, **bright red drupes** produced late summer through October (Figure 4); often persist into winter after leaves have been shed.
- **REPRODUCTION/SPREAD:** Seeds dispersed by birds and small mammals; however, most seeds fall close to the parent plant. Seeds germinate in spring, with germination rates estimated to be as high as 90% (mdinvasives.org). Clonal shoots from rhizomes sprout below ground, and tips of branches can root when they touch the ground.
- **Associated with the spread of Lyme disease.** Higher densities of rodent hosts and deer ticks prefer to shelter under barberry than under native shrubs. When populations of barberry are controlled, fewer mice and ticks are present.

Habitat:

Japanese barberry is **very adaptable and can tolerate a variety of conditions**, including drought. Prefers well-drained soils in semi-shade, but also common to sunny areas. Dense populations are found in open fields and meadows, pastures, and roadsides. **Barberry frequently escapes** into woodlands, forest edges, early successional forest, forested wetlands, and stream banks, disturbing native habitats and threatening our native flora and fauna. **Resistant to deer browsing.** When deer numbers are high, native plant populations are decimated, while barberry thrives.



From top: growth habit - mature plant (photo by [Steve Manning, bugwood.org](#)); close up of leaves (photo by [Alyssa Siegel-Miles](#)); flowers (photo by [Leslie J. Mehrhoff, University of Connecticut](#)); close up of fruits (photo by [Barry Rice, forestryimages.org](#)).

Control:

Japanese Barberry

(*Berberis thunbergii*)

For best results, integrate an early-season initial treatment (e.g., mechanical or directed burning) with a mid-season follow-up treatment (e.g., directed burning or herbicide application). Plants growing in full sun produce more seeds than those in shade, so their control should be prioritized. [Japanese Barberry Control Methods](#), by Ward, Williams, and Worthley, provides greater details.

MECHANICAL CONTROL: May be sufficient to eradicate small infestations; for established stands, mechanical controls may be used in conjunction with chemical controls or directed burning. **Mechanical control efforts should be concentrated in the early spring**, while desirable native species are still dormant, and **late fall** - foliage remains later in the season than many other species.

Pulling/digging: **Roots are shallow. Removal of seedlings and small plants is efficient.** Tools (e.g., Extractigators, weed wrenches) can help facilitate removal of larger plants. **Root crowns must be removed in order to prevent resprouting.** Removal is easiest when the soil is moist. Minimize soil disturbance; tamp down soil after completion. Thick gloves and long canvas sleeves are recommended for protection from the plant's sharp spines.

Cutting/mowing: **Repeated cutting will limit barberry's spread, but resprouting will occur from the root crown.** Resprouts can be treated with herbicide or burned with a propane torch for greater efficacy.

DIRECTED BURNING: A propane torch can be used effectively. **Burn the base of stems near the ground to kill the tissues** that transport nutrients and water to the rest of the plant. For large specimens, it is recommended to remove top growth to make the base of the stems accessible and/or to allow the plants to re-sprout to deplete their root reserves before burning (e.g., plants cut in July; burned in November of the same year). For more details, visit [fs.fed.us](#). **Where pesticide use is restricted, mechanical removal followed by burning of resprouts is likely the most effective strategy.**

CHEMICAL CONTROL: Follow label direction when using all chemical treatments.

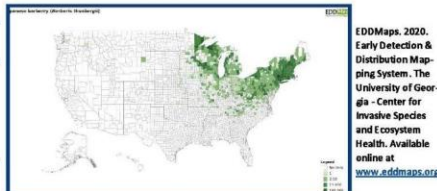
Foliar sprays (e.g., glyphosate; triclopyr) are recommended for large infestations. Effective from one month after leaf expansion until autumn. Fall treatment, after other plants' foliage falls, helps minimize damage to desirable plants.

Cut-stem treatments: Cutting stems and then chemically painting the cut stems is effective, although very labor intensive; preferred for smaller infestations and to minimize damage to understory natives. Cut-stump treatment can be done in any season, **except in early spring, when plant sap is flowing upwards from roots to sprouts/stems.**

Barberry plants treated with any herbicide should be monitored for at least a year, as they may resprout. Refer to [Michigan Dept. of Natural Resources](#) for more details.

Distribution:

Japanese Barberry is found in the Northeastern U.S., as well as northern states in the Midwest. **Invasive in all New England states.** Populations extend from Maine to North Carolina, and west to Minnesota.



Background and Native Alternatives:

Japanese barberry originated from Japan and was brought to the U.S. as an ornamental in the late 1800s. Planting seed-bearing Japanese barberry is not recommended, to prevent seed production and dispersal. Seedless cultivars have recently become commercially available. **Common winterberry (*Ilex verticillata*) and highbush blueberry (*Vaccinium corymbosum*) are recommended native alternatives.**

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SOURCES: [CIPWG Management Calendar](#), [cipwg.uconn.edu](#); [bugwood.org](#); [invasive.org](#); [extension.umaine.edu](#); [mnfi.anr.msu.edu](#)

For more information: [ipm.uconn.edu](#) and [cipwg.uconn.edu](#) or contact: Victoria Wallace, victoria.wallace@uconn.edu, (860) 885-2826

Disposal of Terrestrial Invasive Plants



Guidelines for Disposal of Terrestrial Invasive Plants

Produced by:
The Connecticut Department of Energy and Environmental Protection and the University of Connecticut, 2014

INTRODUCTION:

Efforts to control invasive plants may generate large amounts of plant material and soil or sediment containing viable parts. This material must be appropriately managed or it could contribute to the reestablishment and spread of the species at the controlled site, the disposal site or landfill, or elsewhere. In many cases, plants may regrow in future years. It is very important to monitor sites after control efforts to prevent invasive plants from reestablishing and re-invading the area. In general, it is best to control plants early in the season, before they begin to flower. In some cases, fruits and seeds can continue to mature even on plants that have been uprooted, so it is important to check plants for flowers before deciding on a disposal option. It is advisable to leave plants controlled by herbicides in place instead of removing them.



A purple loosestrife invasion in Wethersfield, CT. Photo by Donna Ellis.

This document focuses on the disposal of invasive plant material after control work takes place and does not include information about invasive plant control. Once control activities have concluded, please use these general guidelines to dispose of invasive plant materials as safely and effectively as possible. Visit the website of the Connecticut Invasive Plant Working Group (www.cipwg.uconn.edu), use other resources, or ask a gardening or landscape professional for advice and information on controlling invasive plants on your property. Additionally, remember that each situation is unique and this document is intended only as a basic guide.

LEGAL NOTES:

While it is illegal to transport material of any species listed under Connecticut General Statute Sec. 22a-381d as an invasive plant, the statute includes an exception for the moving of plant material for the purpose of eradication. Applications of herbicides in aquatic environments require a permit from the Connecticut Department of Energy and Environmental Protection (CT Gen. Stat. Sec. 22a-66z). Applications of herbicides on a property that is not owned by you require a valid pesticide applicator's license (CGS Sec. 22a-47).

Also, please be aware that it is illegal to transport plant material of any kind (invasive or otherwise) on boats or boat trailers and that boats and boat trailers must be inspected for aquatic plants before being transported (CGS Sec. 15-180). Burning may be conducted through the local Open Burning Official as required by CGS Sec. 22a-174(f), if the town has

an open burning program and the local Open Burning Office approves of the proposed burn. Always check the local fire danger and the Air Quality Index before you burn and follow all federal, state, and local laws and ordinances when conducting invasive plant removal or disposal. Special reporting and disposal instructions exist for mile-a-minute vine (*Persicaria perfoliata*). To report mile-a-minute vine, send an email to mileaminute@uconn.edu. For information about the appropriate disposal of aquatic invasive plants, please refer to the DEEP guide on aquatic invasive plant disposal available at www.cipwg.uconn.edu or contact DEEP at 860-424-3589.

GRASSES AND SEDGES

It may be difficult to tell if a grass is flowering or is already producing fruits. Treat all flowering grasses as if they have already begun to produce viable seeds. Minimize movement of any flowering plants and do not compost. Thoroughly check grasses for flowering prior to control or disposal efforts.



A Japanese stiltgrass invasion in a woodland setting. Photo by Les Mehrhoff (IPANE).

| Method | Description |
|------------------------|---|
| Air dry | Plant development stage: Prior to flowering Pull plants and leave with roots exposed to dry out. Leave on site. Check site in future years for re-sprouting plants. |
| Bag and dispose | Plant development stage: During or after flowering. Do not compost. Bag all material and allow to rot in sunny location for several weeks, then dispose of in regular trash to be landfilled or incinerated. Note: This is not an appropriate method to dispose of grass clippings created from mowing regular lawns. Grass clippings may not be disposed of in solid waste streams to go to landfills, as this would be a violation of CGS Sec. 22a-208v. This method should only be used to dispose of invasive grasses listed on the Connecticut Invasive Plant List if off site disposal is needed after the plants have been pulled or removed from an area. |

Notes:

Special care should be taken when disposing of rhizomatous species such as those listed to the right. Plants that spread readily from root fragments or other plant parts should be disposed of in a way that will not allow the material to continue to grow and spread.

| Scientific Name | Common Name | Reproductive method |
|-----------------------------|------------------------|---------------------|
| <i>Butomus umbellatus</i> | Flowering Rush | rhizomes* |
| <i>Carex kobomugi</i> | Japanese sedge | rhizomes* |
| <i>Glyceria maxima</i> | Reed mannagrass | rhizomes* |
| <i>Iris pseudacorus</i> | Yellow flag iris | rhizomes* |
| <i>Miscanthus sinensis</i> | Eulalia | rhizomes* |
| <i>Phragmites australis</i> | Phragmites/Common reed | rhizomes* |
| <i>Poa compressa</i> | Canada bluegrass | rhizomes* |

*rhizome=underground creeping stem

ACKNOWLEDGEMENTS:

This document is based on several previously existing works, particularly a non-native plant disposal document from the University of New Hampshire Cooperative Extension (January 2010), a NH DOT Best Management Practices document (2008), and an aquatic plant disposal document from the Invasive Plant Atlas of New England

(2002). Special thanks to Les Mehrhoff (IPANE), Donna Ellis (UConn), K.C. Alexander, Chuck Lee, Tim Marsh, Nancy Murray and Brad Robinson (DEEP), Logan Senack, and the CT Invasive Plants Council for providing feedback and information for this document.

For more information about invasive plants, visit www.cipwg.uconn.edu or www.ct.gov/deep (search "invasive species").

Photos courtesy of IPANE, Donna Ellis, Stacey Leicht, and Les Mehrhoff.



TREES, SHRUBS, AND WOODY VINES

The best time to dispose of invasive plants is before plants flower and produce seed. After flowers, fruits, or seeds develop, minimize movement of the plants to prevent unnecessary dispersal. Leave plants on site if possible. Do not compost plants that are actively flowering or fruiting and do not bring to a transfer station, compost site, or brush processing site that may compost or mulch the material.



Asiatic Bittersweet, a woody vine, can damage trees as it grows. Photos by Donna Ellis (left) and Lea Mehrhoff, IPANE (right).

| Method | Description |
|---------------------------------|--|
| Air dry | Plant development stage: Prior to flowering. Small seedlings can be pulled and left with roots exposed to dry out. This material can be left on site or can be composted once it is fully dead and dried. |
| Chip and compost | Plant development stage: Prior to flowering. Chip and use as mulch on site, or add to compost once fully dead and dried. If during or after flowering , chip but do not compost. Leave on site and monitor. Do not send to a commercial or municipal compost site. |
| Construct brush piles | Plant development stage: Prior to flowering. Consider using larger woody plants to construct brush piles for wildlife habitat. Pile all material into a single location. Visit www.ct.gov/deep (search "Brush Piles") for information about building brush piles from the Connecticut Department of Energy and Environmental Protection. Make sure all material is fully dead and dried before use. Note: brush piles may create ideal habitat for mice and ticks. Do not construct brush piles near areas of human habitation. If during or after flowering, cover brush pile to prevent spread by birds, etc. |
| Incinerate | Plant development stage: During or after flowering. Incineration of material may be a viable option if it can be bagged and transported securely to an incinerator. Contact your town to determine if your regular solid waste/trash is incinerated. |
| Gather material and burn | Plant development stage: During or after flowering. Burn only in accordance with all federal, state, and local laws and ordinances and permits. Monitor weather conditions prior to ignition to avoid hazardous fires. See "Legal Notes" section, above, for more information. |
| Use as firewood | Plant development stage: During or after flowering. Use as firewood locally. Moving firewood large distances may spread invasive insects. Visit www.dontmovefirewood.org for more information. |
| Note on vines | It is generally not necessary and sometimes not possible to dispose of vines that may be caught high in trees or wrapped tightly around tree trunks. If the vine is cut at the base and dies, the plant will gradually break apart and fall out of the tree. Dead and dried fallen fragments may be disposed of as described above. |
| Additional notes | Plant development stage: Prior to flowering or during or after flowering. Large stumps and branches may require special disposal. Contact your town for more information about appropriate disposal options. |



HERBACEOUS (NON-WOODY) PLANTS

See next page for information about the disposal of invasive grasses.

| Method | Description |
|------------------------------|--|
| Air dry | Plant development stage: Prior to flowering. Pull and leave with roots exposed to dry out. This material can be left on site or can be composted once it is fully dead and dried. |
| Construct brush piles | Plant development stage: Prior to flowering or during and after flowering. Pile all material into a single location. Visit www.ct.gov/deep (search "Brush Piles") for information about building brush piles from the Connecticut Department of Energy and Environmental Protection. Make sure all material is fully dead and dried before use. Note: brush piles may create ideal habitat for mice and ticks. Do not construct brush piles near areas of human habitation. If during or after flowering, cover brush pile to prevent spread by birds, etc. Placing plastic under the pile may help prevent re-sprouting and covering with plastic may reduce dispersal. |
| Incinerate | Plant development stage: During or after flowering. After fruits develop, minimize movement of the plants to prevent the unnecessary dispersal of seeds. Leave plants on site if possible. Do not compost on site and do not bring to a transfer station, compost site, or brush processing site that may compost or mulch the material. Incineration of material may be a viable option if it can be transported securely to an incinerator. Contact your town to find out if your regular solid waste/trash is incinerated. |
| Bag and dispose | Plant development stage: During or after flowering. Do not compost. Bag all material and allow to rot in sunny location for several weeks, then dispose of in trash. <i>If volume of material is too large to bag:</i> Remove all flowering heads, secure flowering heads in plastic bag and allow to rot, then dispose of in trash. Wait until following year to attempt control and disposal before flowering. |

Composting Exceptions:

Although most invasive plants can be composted once fully dead and dried as noted above, some species should not be composted at all because they have rhizomes or other parts that may survive in compost and spread to new locations when the compost is distributed. Use of these plants in brush piles is also not advisable unless a plastic or other barrier is added to prevent the plants from contacting the ground and re-rooting. Use an alternate method to dispose of these plants.

| Scientific Name | Common Name | Reproductive method |
|--------------------------------|----------------------|--------------------------|
| <i>Aegopodium podagraria</i> | Goutweed | stolons |
| <i>Centaurea biebersteinii</i> | Spotted knapweed | shoots |
| <i>Cirsium arvense</i> | Canada thistle | rhizomes*/creeping stems |
| <i>Euphorbia cyparissias</i> | Cypress spurge | lateral root buds |
| <i>Euphorbia esula</i> | Leafy spurge | root fragments |
| <i>Lepidium latifolium</i> | Perennial pepperweed | rhizomes*/creeping stems |
| <i>Lysimachia vulgaris</i> | Garden loosestrife | rhizomes* |
| <i>Ornithogalum umbellatum</i> | Star-of-Bethlehem | bulbs |
| <i>Polygonum cuspidatum</i> | Japanese knotweed | rhizomes* |
| <i>Polygonum sachalinense</i> | Giant knotweed | rhizomes* |
| <i>Ranunculus ficaria</i> | Fig buttercup | vegetative tubers |
| <i>Rumex acetosella</i> | Sheep sorrel | rhizomes* |
| <i>Valeriana officinalis</i> | Garden heliotrope | rhizomes* |

*rhizome=underground creeping stem





**Cornwall Volunteer
Fire Department**
289 Sharon Goshen Tpke.
West Cornwall, CT 06796



Hello, Cornwall Board of Selectmen,

Over the past year, the officers of the Cornwall Volunteer Fire Department have gathered various quotes to address problems that we have identified at the Cornwall Bridge Firehouse. These problems are connected to drainage issues, water exposure, and mold. We want to work to mitigate these issues so we can better utilize the space, namely by installing a gear washer for our turnout gear. The department has recently purchased a gear washer which will help reduce carcinogenic exposure through better cleaning and decontaminating of our gear. The department has also spent funds on paint and through the generosity of Fox Painting, who donated their time, the firehouse will soon receive a fresh coat.

Due to the lack of drainage around the building's east end water has leaked through the wall into the firehouse, allowing mold to grow throughout the interior of the building. There are also old septic drains in the old kitchen area which allows water to flow into the building. We have consulted engineer Bill Colby who stated that improving the drainage swale behind the firehouse will help provide an outlet for the water and hopefully mitigate some of the water problems. Jim Vanicky has worked to improve the swale. We have also met with three companies to help us move forward.

We want to eliminate water from entering the building. Adding a sump pump into the floor will help ensure that all water that seeps through the wall will be pumped out to avoid further mold buildup. This system can be installed by Connecticut Basement Systems for ~\$7,442. The quote from CBS is attached.

ServiceMaster has provided a quote for mold remediation. They quoted the work for \$4,718.01. They noted that they would have to remove moldy drywall in this process. This quote is also attached.

DRC Plumbing LLC can work on capping the old septic drains for us, as well as installing new plumbing for our gear washer. Drew Roehl has offered to volunteer his time to the department as a token of gratitude.

Please note that these quotes were received a couple of months ago and are subject to slight changes. There are other unquoted costs of this project including installing new drywall to replace the moldy areas.

Moving forward, approval of these expenditures would allow us to mitigate water damage and mold issues in our firehouse, while also installing a new gear washer for further protection. This project would also allow us to plan out future renovations to the building in areas such as the kitchen which is currently nonfunctional.

We look forward to hearing back and working with you on this project.

Thank you,

Dick Sears, President

William Russ, Chief

James Vanicky, Asst. Chief

Ian Ridgway, Captain

Ted Larson, Captain

Chris Jackson, Lieutenant

Josh Tyson, Lieutenant



ServiceMaster

ServiceMaster
579 South Leonard St
Waterbury CT 06708

EIN 06-1173654

Client: Cornwall Fire Department
Property: 35 Kent Rd S
Cornwall , CT 06754

Cellular: (916) 610-8879

Operator: MATT

Estimator: Brody Stevenson
Company: ServiceMaster Albino
Business: 579 South Leonard St
Waterbury , CT 06708

Business: (203) 228-7327
E-mail: brody@smalbino.com

Type of Estimate:

Date Entered: 3/29/2024

Date Assigned:

Price List: CTNH8X_MAR24

Labor Efficiency: Restoration/Service/Remodel

Estimate: CORNWALL_FIRE_DEPT

Costs related to mold remediation. Servicemaster has not performed any air sampling however, a clearance test can be performed from a third party per customer request. (price subject to change if any air sampling is conducted)



ServiceMaster

ServiceMaster
579 South Leonard St
Waterbury CT 06708

EIN 06-1173654

CORNWALL_FIRE_DEPT

General

| DESCRIPTION | QTY |
|---|----------------|
| 1. Equipment setup, take down, and monitoring (hourly charge) | 2.00 HR |
| 2. Asbestos Testing | 1.00 EA |
| 3. Add for personal protective equipment - Heavy duty | 2.00 EA |
| 4. Negative air fan/Air scrubber (24 hr period) - No monit. | 1.00 DA |
| 5. Haul debris - per pickup truck load - including dump fees | 1.00 EA |

Main Level

| DESCRIPTION | QTY | Height: 9' 6" |
|--|-----------|---------------|
| 6. Tear out wet drywall, cleanup, bag - Cat 3 | 714.00 SF | |
| 7. HEPA Vacuuming - Light - (PER SF) Lower section of walls | 315.00 SF | |
| 8. Clean the surface area - Heavy Lower section of walls | 315.00 SF | |
| 9. Clean floor | 714.00 SF | |
| 10. Disinfect building - fog / spray - per SF | 714.00 SF | |

| DESCRIPTION | QTY | Height: 8' |
|--|-----------|------------|
| 11. Tear out wet drywall, cleanup, bag - Cat 3 | 80.00 SF | |
| 12. Clean the surface area - Heavy Lower section of walls | 169.50 SF | |
| 13. HEPA Vacuuming - Light - (PER SF) Walls and Ceiling | 645.33 SF | |
| 14. Clean floor | 190.00 SF | |
| 15. Disinfect building - fog / spray - per SF | 190.00 SF | |

Grand Total

\$4,718.01



ServiceMaster

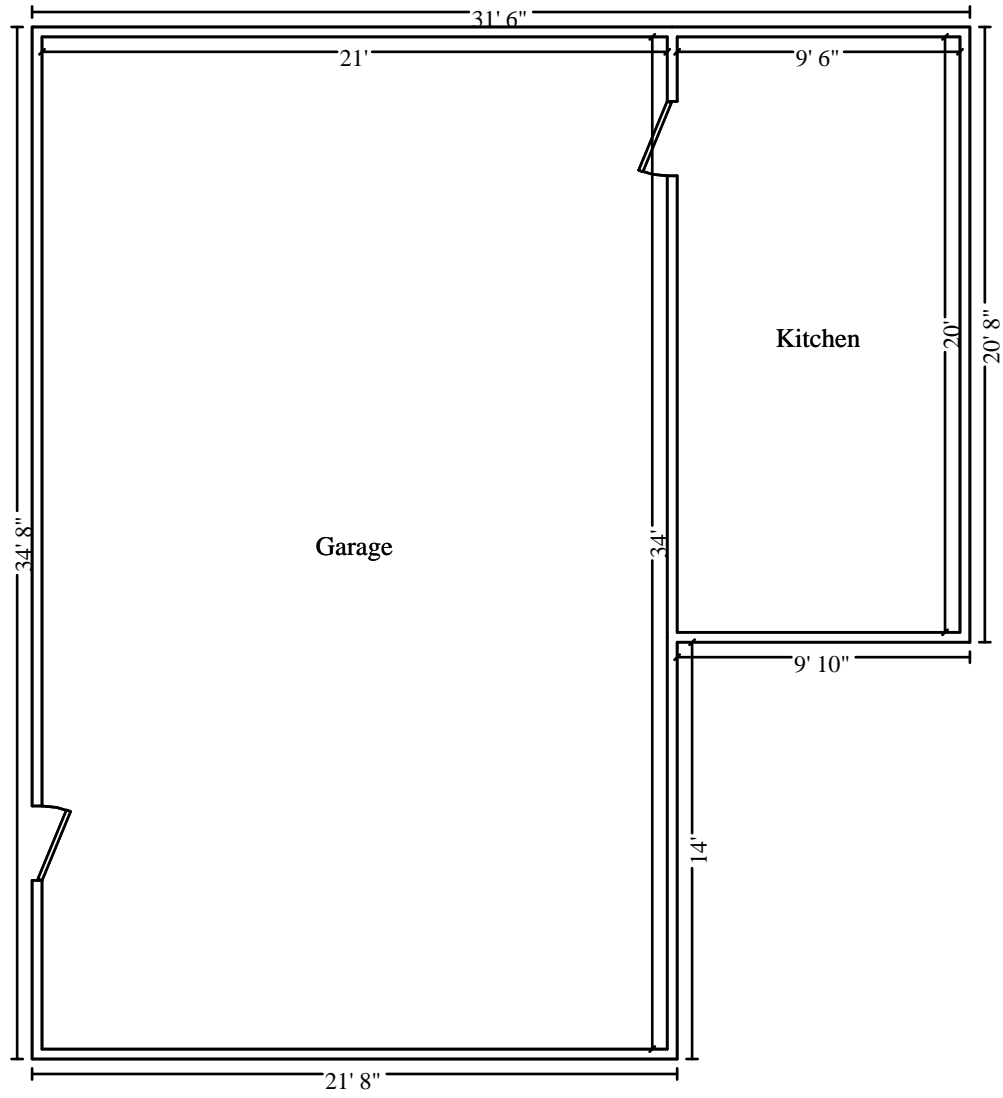
ServiceMaster
579 South Leonard St
Waterbury CT 06708

EIN 06-1173654

Brody Stevenson

Grand Total Areas:

| | | | | | |
|----------|--------------------|--------|-----------------------------|----------|------------------------|
| 1,467.00 | SF Walls | 904.00 | SF Ceiling | 2,371.00 | SF Walls and Ceiling |
| 904.00 | SF Floor | 100.44 | SY Flooring | 161.50 | LF Floor Perimeter |
| 0.00 | SF Long Wall | 0.00 | SF Short Wall | 169.00 | LF Ceil. Perimeter |
| 904.00 | Floor Area | 954.33 | Total Area | 1,467.00 | Interior Wall Area |
| 1,312.08 | Exterior Wall Area | 132.33 | Exterior Perimeter of Walls | | |
| 0.00 | Surface Area | 0.00 | Number of Squares | 0.00 | Total Perimeter Length |
| 0.00 | Total Ridge Length | 0.00 | Total Hip Length | | |





Prepared by:
 Steve Godbout
 C (866) 708-7258
 sgodbout@ljctbs.com

 Connecticut Basement Systems Inc.
 CT#0526823 WC#0644-
 H94PC5504MA147215
 connecticutbasementsystems.com
 TF (800) 541-0487
 F (203) 463-9339
 License# CT: 0526823 WC: 06440-H94
 MA: 147215 RI: 38081

Prepared for:
 Chris Jackson
 ctjackson90@yahoo.com
 C (914) 610-8879
 P (914) 610-8879
 PR521761

Proposal

Job location:
 35 Kent Road South
 Cornwall Bridge, CT 06754

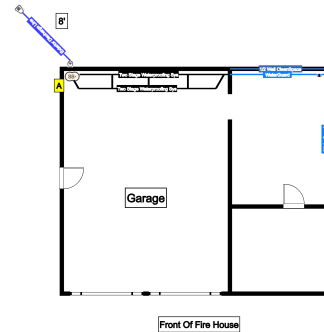
Prepared on:
 6-10-24

Product List

| | | | | | |
|-------------------------------|-------|----------------------------------|-------|-----------------------------------|-------|
| WaterGuard | 37 ft | WaterGuard Port | 1 | Two Stage Waterproofing Sys | 20 ft |
| SuperSump Plus | 1 | IceGuard | 1 | LawnScape Outlet | 1 |
| Exterior Discharge Line | 8 ft | CleanSpace 1/2 Wall System | 37 ft | | |

Project Summary

| | |
|---|-------------------|
| My Basement | \$7,442.00 |
| Total Investment | \$7,442.00 |
| Total Contract Price | \$7,442.00 |
| Deposit Required - 30% | \$2,232.60 |
| Deposit Paid | \$0.00 |
| Amount Due Upon Installation | \$7,442.00 |



Customer Consent

Customer fully understands and accepts the transferable warranty provided, which covers only the areas of the basement addressed and does not cover water damage to home, property, or personal items. Partial perimeter systems carry a limited warranty. Unless in the notes, installation of the system does not include painting, finished carpentry, electrical work, or replacement of floor tile or carpeting. Contractor cannot be responsible for frozen discharge lines without an IceGuard. Warranty does not cover condensation, damp spot discoloration, and window well flooding. Customer shall grant contractor a 60 day right to remedy any problem after reported. Homeowner responsible for moving objects away from walls and back again. Some dust should be expected from work. Additional work needed will be at customer expense. Homeowner assumes all responsibility for damages due to breakage of any hidden fuel/water/utility service lines on surface or below.

Authorized Signature _____ **Date** _____

Any alteration from the above specifications and corresponding price adjustment (if necessary) will be made only at the Customer's request or approval. Completing the work in this Proposal at the time scheduled is contingent upon accidents or delays beyond our control. This Proposal is based primarily on the Customer's description of the problem. This Proposal is valid for 30 days.

Acceptance of Contract— I am/we are aware of and agree to the contents of this Proposal and the attached Limited Warranty (together, the "Contract"). You are authorized to do the work as specified. Payment will be made as outlined above. I/we understand that all deposits paid are non-refundable after expiration of three day right of rescission. I am/we are aware of and agree to the entire contents and additional pages of this proposal, (together, the "contract"), by signing below I am/we are signing all pages.

Customer Signature _____ **Date** _____

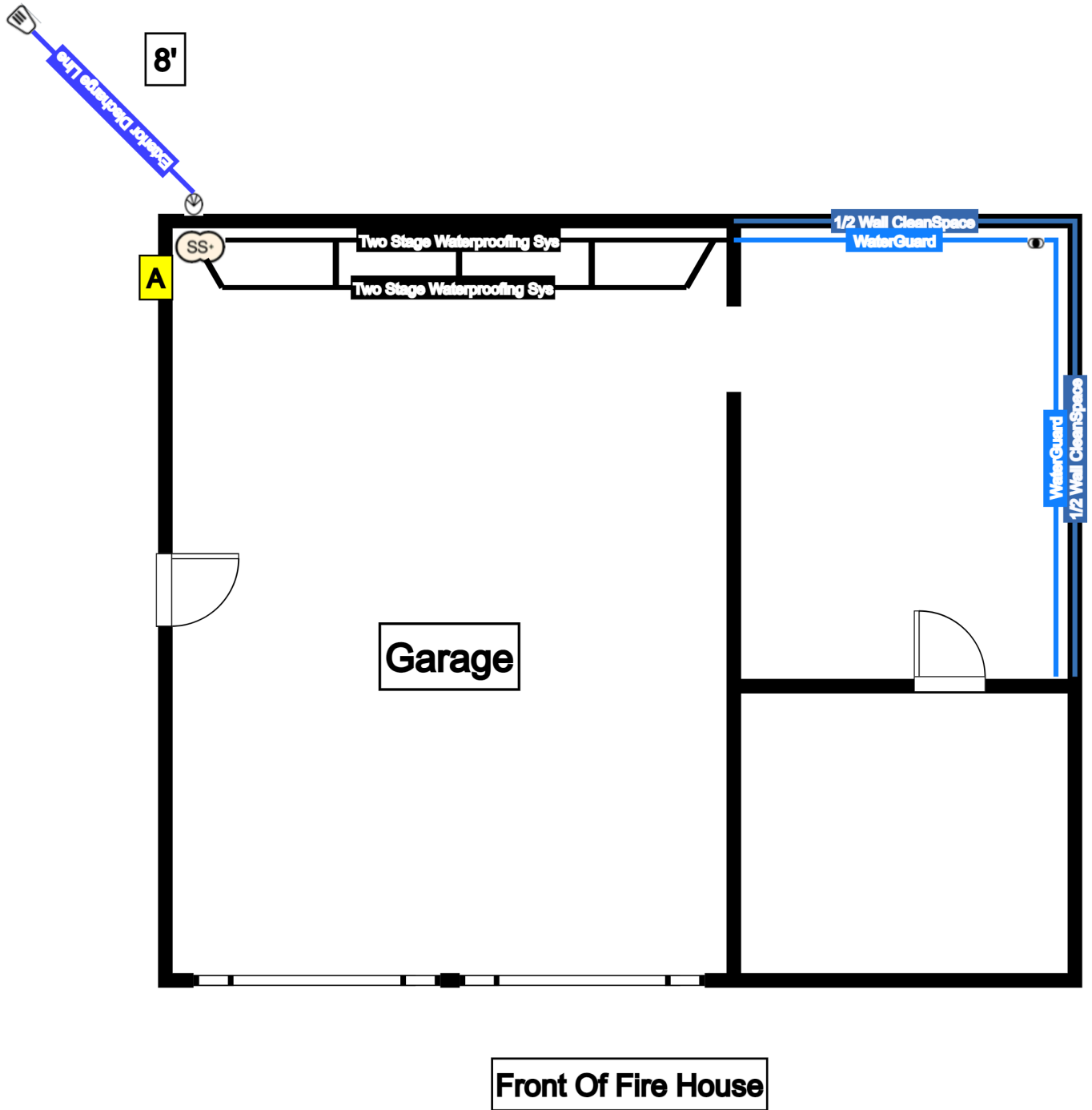
A full perimeter system with a TripleSafe Pumping System was recommended

Initial _____

Sales Tax is not included and will be billed separately if applicable.

Initial _____

Job Details



Type of Wall Block
Existing Wall Finish Plain
Existing Floor Finish Concrete
Discharge line length away from house 8
 A) Existing Electrical Outlet.

Job Details (Continued)

Specifications

1) Install WaterGuard sub-floor drainage system as indicated in job drawing. 2) Install WaterGuard Port for access to system. 3) Install two stage waterproofing system as noted on drawing. 4) Install 1/3 hp cast iron pump in TripleSafe liner with clean pump stand. 5) Install IceGuard to prevent floods from clogged or frozen discharge line. 6) Install LawnScape outlet at end of discharge line. 7) Install discharge line as shown. 8) Install CleanSpace 1/2 Wall System on walls as shown on drawing.

Customer Will

- 1.) Provide proper dedicated electrical outlets for all pumps, and other electrical devices after the completion of the installation.
- 2.) Move items 4 feet away from perimeter.
- 3.) Remove shelving/cabinets/sink/workbench.
- 4.) Remove 2 feet or more of flooring around perimeter.
- 5.) Customer understands that there may be ponding of water in discharge area under certain conditions.
- 6.) Complete and agrees to any items mentioned in this Contract under "Customer Will" and/or "Additional Notes" that apply.

--Customer Initials: _____--

Additional Notes

- 1) Customer understands that this is a Partial WaterGuard System (Solution) and that the Dry Floor Warranty will not apply. Additional work may be required at added costs. Initial _____ Full perimeter water proofing is always recommended.
- 2) Install WaterGuard as shown in drawing with WaterGuard inspection port(s). Two Stage DryTrak waterproofing will be installed in the garage location.
- 3) Install SuperSump pump system as shown in drawing. Run exterior discharge line 8 feet away from building. UltraSump battery backup is always recommended.
- 4) Install ½ wall high Clean Space for block wall leaks or radon and tie into WaterGuard.

*** Customer will have asbestos flooring removed prior to installation. ***

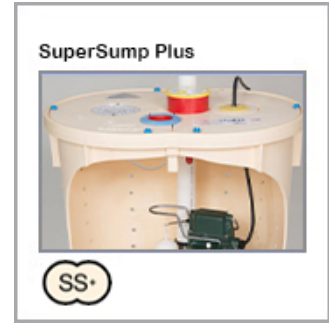
All jobs are subject to Production review, In the unlikely event a job is not approved, the job will be canceled and deposit will be returned to customer without penalty.

NOTES TO CREW: This is a fire house, main garage has block with footing exposed. Flooring is flushed with footing. (Spoke with Jason and confirmed TwoStage for this area. WaterGuard will be installed in remainder of next room.

Recommendation Notes

*** SaniDry Sedona dehumidifier to prevent mold and reduce odors. ***

Products



Limited Warranty

The warranty is considered in effect when job is completed and paid in full.

If water from the walls or floor wall joint passes through the perimeter water control system and onto the basement floor, we will provide the additional labor and materials to fix the leak at no additional charge to the homeowner. This warranty applies to WaterGuard and Two Stage systems, along with the specific areas where the system is installed. Said warranty will be in effect for the lifetime of the structure. This warranty may be transferred to future homeowners provided we are notified within 30 days of the real estate transfer. The water control system shall not rust, rot, or corrode for as long as you own the home.

If the entire perimeter of the basement was not treated, then additional work at an additional charge to the customer could be necessary to extend the system or treat other areas or other problems not addressed by this work. Pump or power failure may be possible, therefore this warranty is not a guarantee of a dry basement, as the scope of this work cannot guarantee that in all circumstances.

This warranty shall not apply to: condensation, or any system that has been altered in any way, water vapor transmission, concrete discoloration from capillary action, water squirting out of the walls over the system, window well flooding, plumbing leaks, surface water flooding, leaks from chimneys or garages, or efflorescence (white powder) on concrete. Contractor cannot be responsible for peeling paint, water that has been pumped from the house, dust created from installation, damage to hidden fuel lines or plumbing, or frozen discharge lines without an IceGuard. A DryTrak system alone will not eliminate seepage from floor cracks. Floor cracks are warranted against leakage with full perimeter WaterGuard or full perimeter Two Stage systems.

Primary AC operated sump pumps are covered under a separate manufacturer's warranty which is 36 months from date of installation. DC operated back-up pumps are covered under a separate manufacturer's warranty which is 36 months from date of installation. Failure of any pump for any reason is outside the scope of this warranty. Back-up pumps that run off a battery, if not maintained, or that are called on to run beyond the current life of the battery, can fail. These systems are very much recommended but cannot be relied upon to work in every situation. Annual maintenance is recommended to find potential problems, but not required for this warranty to be in effect. Electrical work is not included in the contract and problems from electrical connections or lack thereof are disclaimed.

Drainage systems clogging or malfunctioning from iron ochre, iron gel, or iron bacteria from the soil are rare, the contractor cannot be responsible for these situations, and that system will require cleaning, flushing, or other service as necessary to keep it functioning for that particular situation.

A CleanSpace crawl space encapsulation system will isolate the home from the earth. The humidity level in the air will be lowered, reducing moisture needed for mold growth, however the encapsulation system does not claim to be a mold mitigation system. Wet crawl spaces require a drainage system, and a SmartSump system to remedy the problem with water below the CleanSpace liner. CleanSpace has a transferable 25-year warranty – there will be no charge for service calls on any tears or holes in the CleanSpace liner, in the unlikely event this occurs. Sump pumps are covered under a separate manufacturer warranty. Installation of the system does not include extending discharge lines, or electrical work unless specified. Contractor is not responsible for frozen discharge lines without an IceGuard, water once it is pumped from house, or condensation.

THIS WARRANTY DOES NOT COVER, AND THE CONTRACTOR SPECIFICALLY DISCLAIMS LIABILITY FOR WATER DAMAGE TO FLOOR COVERINGS, FURNITURE, STORED ITEMS, FINISHED WALLS, AND OTHER OBJECTS INSIDE THE FOUNDATION. Contractor will not be responsible for any damages caused by mold; to include, but not be limited to, property damage, personal injury, loss of income, emotional distress, death, loss of use, loss of value, any adverse health effects, or any other effects. Homeowner agrees to keep area dry and report all other obligations on contractor's part. There are no other warranties verbal or written.

Items For Which Customer Is Responsible – Customer is responsible for:

1) making full payment to the crew leader upon substantial completion of the work; 2) preparing the work area for installation; 3) any finish carpentry, painting, paneling, landscaping, etc. that may be necessary after Contractor's work is finished; 4) marking any private lines such as satellite cables, propane lines, sprinkler system lines, etc.; and 5) any items mentioned in this Contract under "Customer Will" or "Additional Notes."

Notice of Right to Cancel

You are entering into a contract. If that contract is a result of, or in connection with a salesman's direct contact with, or call to you at your residence without your soliciting the contract or call, then you have a legal right to void the contract or sale by notifying us within three business days from whichever of the following events occurs last:

1. The date of the transaction, which is: _____ or
2. The date you received this notice of cancellation.

How to Cancel

If you decide to cancel this transaction, you may do so by notifying us in writing at:

Connecticut Basement Systems Inc.

TF (800) 541-0487

F (203) 463-9339

connecticutbasementsystems.com

33 Progress Ave

Seymour, CT 06483

You may use any written statement that is signed and dated by you and states your intentions to cancel, or you may use this notice by dating and signing below. Keep one copy of the notice because it contains important information about your rights.

I wish to cancel.

Owner's Signature _____ Date _____

Owner's Signature _____ Date _____

The undersigned acknowledges receipt of the two copies of the Notice of Right to Cancel.

Owner's Signature _____ Date _____

Owner's Signature _____ Date _____

| | <u>From</u> | Amount | <u>To</u> | Amount |
|-------|-------------------------|-----------|-------------------------------------|-----------|
| One | Contingency (#10000) | 50.00 | Assessor Contracted Svcs (# 52216) | 50.00 |
| Two | Contingency (#10000) | 6,300.00 | Hammond Beach wages (#69103) | 6,300.00 |
| Three | EE Health Ins (# 57544) | 11,500.00 | DPW Equipment Repairs (#63016) | 11,500.00 |
| Four | Contingency (#10000) | 2,140.00 | Payroll Expense (#58140) | 2,140.00 |
| Five | Contingency (#10000) | 200.00 | Social Services supplies (#67905) | 200.00 |
| Six | EE Health Ins (# 57544) | 7,800.00 | CVFD Operations (#65050) | 7,800.00 |
| Seven | EE Health Ins (# 57544) | 6,000.00 | Registrar's wages (#56602) | 6,000.00 |
| Eight | Contingency (#10000) | 19,100.00 | Town Offices Contracted Sv (#57116) | 19,100.00 |
| | | | | |

DRAFT

53,090.00

DRAFT

53,090.00

- 1 Budgeted \$16,183 (spent \$18,198) \$4,800 for GIS service set up and consulting
- 2 Budgeted \$36,678 (spent \$42,9300) Lifeguard coverage
- 3 Budgeted \$55,000 (spent \$66,421) Skidsteer repairs and '04 Intl Dump repairs
- 4 Budgeted \$ 61,426 (spent \$63,602.13) direct deposit fees and \$1,921 in PTO for Covid exposure
- 5 Budgeted \$1,200 (spent \$2,700) all telephone costs
- 6 Budgeted \$77,075 (spent \$84,890) timing of final FY '22 invoice
- 7 Budgeted \$5,427 (spent \$10,027) additional mandatory / required training costs
- 8 Budgeted \$17,0000 (spent \$32,078) Computer consultant / Cyber Security upgrades

Approval

Board of Selectmen

Board of Finance

DRAFT

| | |
|-------------------------|-----------|
| Total Contingency Trnsf | 27,790.00 |
| Total EE HI Trnsf | 25,300.00 |
| | 53,090.00 |

Town of Cornwall
FY '23 Budget
 July 2022 through June 2023

| | Jul '22 - Ju... | Budget | \$ Over Bud... | % of Budget |
|--|---------------------|---------------------|-------------------|---------------|
| Ordinary Income/Expense | | | | |
| Income | | | | |
| Fees For Services | | | | |
| 300459 · After School Tuition | 15,702.20 | | | |
| 300461 · Building Permits | 0.00 | | | |
| 300462 · Town Clerk's Fees | 76,833.60 | 50,000.00 | 26,833.60 | 153.7% |
| 300463 · Hammond Beach Passes | 5,297.00 | 2,000.00 | 3,297.00 | 264.9% |
| 300464 · Brush Dump Fees | 0.00 | 1.00 | -1.00 | 0.0% |
| 300465 · Landfill Receipts | 14,027.32 | 12,000.00 | 2,027.32 | 116.9% |
| 300466 · P & Z Fees | 578.00 | | | |
| 300467 · Park & Recreation | 898.00 | 3,000.00 | -2,102.00 | 29.9% |
| 300469 · Other fees, charges | 0.00 | 4,500.00 | -4,500.00 | 0.0% |
| Fees For Services - Other | 90.00 | | | |
| Total Fees For Services | 113,426.12 | 71,501.00 | 41,925.12 | 158.6% |
| Other Revenues | | | | |
| NIPS Environmental Fees | 850.20 | | | |
| 300472 · Commercial Recycling | 5,268.59 | 3,500.00 | 1,768.59 | 150.5% |
| 300474 · CCS Programs | 450.00 | | | |
| 300475 · PILOT (local) | 24,827.21 | 20,000.00 | 4,827.21 | 124.1% |
| 300476 · CCS Tuition | 21,000.00 | | | |
| 300485 · Miscellaneous (pistol permits) | 9,304.00 | 1,000.00 | 8,304.00 | 930.4% |
| Other Revenues - Other | -13.71 | | | |
| Total Other Revenues | 61,686.29 | 24,500.00 | 37,186.29 | 251.8% |
| Property Taxes | | | | |
| 300402 · Current Levy | | | | |
| 3004204 · Collections | 6,891,856.83 | 6,773,095.00 | 118,761.83 | 101.8% |
| 3004206 · Refunds | -45,772.04 | | | |
| Total 300402 · Current Levy | 6,846,084.79 | 6,773,095.00 | 72,989.79 | 101.1% |
| 300403 · Delinquent Taxes & MVS | 81,722.28 | 65,000.00 | 16,722.28 | 125.7% |
| 300410 · Interest and Fees | 36,478.75 | 25,000.00 | 11,478.75 | 145.9% |
| 300414 · 490 property Tax Penalty | 85,087.50 | | | |
| Total Property Taxes | 7,049,373.32 | 6,863,095.00 | 186,278.32 | 102.7% |
| State Education Grants | | | | |
| 300421 · For Education Purposes | 26,691.00 | 13,308.00 | 13,383.00 | 200.6% |
| Total State Education Grants | 26,691.00 | 13,308.00 | 13,383.00 | 200.6% |
| State General Grants | | | | |
| 300431 · Transportation Grant | 224,627.78 | 222,804.00 | 1,823.78 | 100.8% |
| 300432 · Indian Casino Funds | 4,434.00 | 4,434.00 | 0.00 | 100.0% |
| 300434 · In Lieu Tax Grant | 10,640.81 | 13,516.00 | -2,875.19 | 78.7% |
| 300438 · Telephone Access | 6,842.59 | 7,000.00 | -157.41 | 97.8% |
| 300447 · Vet's Disabled Tax Relief | 607.03 | 550.00 | 57.03 | 110.4% |
| 300448 · Town Clerk's Grant | 5,500.00 | 5,500.00 | 0.00 | 100.0% |
| 300453 · LoCIP Bonded Funds | 65,455.00 | 32,388.00 | 33,067.00 | 202.1% |
| 300454 · Misc State Payments | 15,814.43 | 8,877.00 | 6,937.43 | 178.2% |
| Total State General Grants | 333,921.64 | 295,069.00 | 38,852.64 | 113.2% |
| Transfers/Non-Revenue Receipts | | | | |
| 300486 · Undesignated Fund Balance | | | | |
| Undesignated Fund Balance | 0.00 | 175,000.00 | -175,000.00 | 0.0% |
| 300486 · Undesignated Fund Balance - Other | 0.00 | 0.00 | 0.00 | 0.0% |

Town of Cornwall
FY '23 Budget
July 2022 through June 2023

| | Jul '22 - Ju... | Budget | \$ Over Bud... | % of Budget |
|--|-----------------|--------------|----------------|-------------|
| Total 300486 · Undesignated Fund Balance | 0.00 | 175,000.00 | -175,000.00 | 0.0% |
| 300490 · Non Revenue Credits - Refunds | 4,771.60 | | | |
| 300492 · Interest Income | 62,585.42 | 5,000.00 | 57,585.42 | 1,251.7% |
| 300493 · Misc Interest Income | | | | |
| Gates | 9,483.61 | | | |
| Muni Reserve | 19,032.58 | | | |
| Total 300493 · Misc Interest Income | 28,516.19 | | | |
| Total Transfers/Non-Revenue Receipts | 95,873.21 | 180,000.00 | -84,126.79 | 53.3% |
| 300494 · ARPA funding | 0.00 | 45,000.00 | -45,000.00 | 0.0% |
| Total Income | 7,680,971.58 | 7,492,473.00 | 188,498.58 | 102.5% |
| Gross Profit | 7,680,971.58 | 7,492,473.00 | 188,498.58 | 102.5% |
| Expense | | | | |
| Voided checks | 0.00 | | | |
| 01 · Board of Selectmen Budget | | | | |
| After School Program | | | | |
| 68580 · After School Program | 15,702.20 | | | |
| Total After School Program | 15,702.20 | | | |
| Assessor | | | | |
| 52002 · Assessor's Salary | 22,920.56 | 22,921.00 | -0.44 | 100.0% |
| 52003 · Assessor's Clerk Salary | 14,808.67 | 15,002.00 | -193.33 | 98.7% |
| 52205 · Office Supplies | 656.50 | 2,000.00 | -1,343.50 | 32.8% |
| 52209 · Mileage, Travel | 182.51 | 600.00 | -417.49 | 30.4% |
| 52210 · Meetings / Memberships | 0.00 | 15.00 | -15.00 | 0.0% |
| 52216 · Contracted Services | 18,197.97 | 16,183.00 | 2,014.97 | 112.5% |
| Total Assessor | 56,766.21 | 56,721.00 | 45.21 | 100.1% |
| Board of Assessment Appeals | | | | |
| 53002 · BAA Salaries | 0.00 | 498.00 | -498.00 | 0.0% |
| 53004 · BAA Clerk Wage | 0.00 | 1.00 | -1.00 | 0.0% |
| 53105 · Expenditures | 0.00 | 1.00 | -1.00 | 0.0% |
| Total Board of Assessment Appeals | 0.00 | 500.00 | -500.00 | 0.0% |
| Board of Selectmen | | | | |
| 50202 · Selectmen's Salaries | 71,508.86 | 71,509.00 | -0.14 | 100.0% |
| 50203 · Administrative Assistant | 42,193.22 | 42,811.00 | -617.78 | 98.6% |
| 50204 · BOS Temporary Clerk | 0.00 | 1,391.00 | -1,391.00 | 0.0% |
| 50305 · BOS Office Supplies | 754.47 | 925.00 | -170.53 | 81.6% |
| 50308 · BOS Bids, Legal Etc | 265.19 | 450.00 | -184.81 | 58.9% |
| 50309 · BOS Meetings, Mileage | 0.00 | 150.00 | -150.00 | 0.0% |
| 50310 · BOS Meetings, Memb's | 210.18 | 300.00 | -89.82 | 70.1% |
| 50316 · BOS Contracted Services | 350.00 | 0.00 | 350.00 | 100.0% |
| 50346 · BOS Postage | 0.00 | 120.00 | -120.00 | 0.0% |
| Total Board of Selectmen | 115,281.92 | 117,656.00 | -2,374.08 | 98.0% |
| Finance Department | | | | |
| 53402 · Treasurer's Salary | 3,791.10 | 3,791.00 | 0.10 | 100.0% |
| 53403 · Finance Director Salary | 43,351.32 | 43,351.00 | 0.32 | 100.0% |
| 53404 · Treasurers Clerk | 0.00 | 300.00 | -300.00 | 0.0% |
| 53505 · Office Supplies | 422.21 | 1,100.00 | -677.79 | 38.4% |
| 53507 · Printing | 3,400.00 | 3,400.00 | 0.00 | 100.0% |
| 53515 · Computer | 2,582.08 | 2,780.00 | -197.92 | 92.9% |

Town of Cornwall
FY '23 Budget
July 2022 through June 2023

| | Jul '22 - Ju... | Budget | \$ Over Bud... | % of Budget |
|--|-------------------|-------------------|-------------------|---------------|
| 53516 · Contracted Services | 0.17 | 0.00 | 0.17 | 100.0% |
| 53546 · Postage | 1,263.00 | 1,200.00 | 63.00 | 105.3% |
| 53550 · Town Audit | 16,500.00 | 17,500.00 | -1,000.00 | 94.3% |
| Total Finance Department | 71,309.88 | 73,422.00 | -2,112.12 | 97.1% |
| Hammond Beach | | | | |
| 69103 · Salaries | 42,930.02 | 36,678.00 | 6,252.02 | 117.0% |
| 69207 · Programs | 29.60 | 1,000.00 | -970.40 | 3.0% |
| 69213 · Utilities | 1,413.29 | 1,000.00 | 413.29 | 141.3% |
| 69214 · Supplies | 1,523.92 | 400.00 | 1,123.92 | 381.0% |
| 69215 · Equipment | 188.31 | 300.00 | -111.69 | 62.8% |
| 69216 · Contracted Services | 743.00 | 1,200.00 | -457.00 | 61.9% |
| Total Hammond Beach | 46,828.14 | 40,578.00 | 6,250.14 | 115.4% |
| Highway Administration / Suppli | | | | |
| 60011 · Garage Heat | 9,789.27 | 10,000.00 | -210.73 | 97.9% |
| 60013 · Utilities | 8,506.45 | 6,000.00 | 2,506.45 | 141.8% |
| 60014 · DPW | | | | |
| Seminars | 100.00 | | | |
| Supply Expense | 18,325.10 | 11,000.00 | 7,325.10 | 166.6% |
| Welding Supplies | 1,196.02 | | | |
| 60014 · DPW - Other | 108.95 | | | |
| Total 60014 · DPW | 19,730.07 | 11,000.00 | 8,730.07 | 179.4% |
| 60015 · Small Tools / Equipment | 2,476.84 | 2,500.00 | -23.16 | 99.1% |
| 60016 · Contracted Services | 30,222.78 | 30,000.00 | 222.78 | 100.7% |
| 60018 · Small Equipment Repairs | 827.32 | 1,000.00 | -172.68 | 82.7% |
| 60035 · Garage Repairs (building) | 0.00 | 2,000.00 | -2,000.00 | 0.0% |
| 61010 · Drug Testing | 0.00 | 200.00 | -200.00 | 0.0% |
| 61603 · Labor Expense | | | | |
| OT Labor Expense | 8,458.36 | 17,588.00 | -9,129.64 | 48.1% |
| Regular Labor Expense | 267,426.22 | 263,904.00 | 3,522.22 | 101.3% |
| Total 61603 · Labor Expense | 275,884.58 | 281,492.00 | -5,607.42 | 98.0% |
| 61604 · HWY Temporary Labor | 4,202.25 | 6,000.00 | -1,797.75 | 70.0% |
| 62012 · Fuel and Oil | | | | |
| Fuel | 40,988.19 | 0.00 | 40,988.19 | 100.0% |
| Oil and Grease | 2,306.08 | | | |
| 62012 · Fuel and Oil - Other | 0.00 | 35,000.00 | -35,000.00 | 0.0% |
| Total 62012 · Fuel and Oil | 43,294.27 | 35,000.00 | 8,294.27 | 123.7% |
| 62014 · Highway Signs | 854.58 | 2,500.00 | -1,645.42 | 34.2% |
| 62018 · Road Materials | 21,872.83 | 20,000.00 | 1,872.83 | 109.4% |
| 62050 · Snow Removal | | | | |
| Snow Removal Expense | | | | |
| Misc | 3,068.62 | | | |
| Salt | 37,527.29 | | | |
| Snow Removal Expense - Other | 0.00 | 68,000.00 | -68,000.00 | 0.0% |
| Total Snow Removal Expense | 40,595.91 | 68,000.00 | -27,404.09 | 59.7% |
| Total 62050 · Snow Removal | 40,595.91 | 68,000.00 | -27,404.09 | 59.7% |
| 64016 · Tree Maintenance | 32,430.00 | 23,000.00 | 9,430.00 | 141.0% |
| Total Highway Administration / Suppli | 490,687.15 | 498,692.00 | -8,004.85 | 98.4% |
| Highway Vehicle Maintenance | | | | |

Town of Cornwall
 FY '23 Budget
 July 2022 through June 2023

| | Jul '22 - Ju... | Budget | \$ Over Bud... | % of Budget |
|--|-------------------|-------------------|-------------------|---------------|
| 63016 · Vehicle / Equipment Maint | | | | |
| 63021 · #1 ~ 2017 F250 | 123.80 | | | |
| 63022 · All Vehicles | 2,949.10 | 0.00 | 2,949.10 | 100.0% |
| 63023 · #3 ~ 2014 F550 | 3,933.27 | | | |
| 63024 · #9 ~ 2003 Intl Dump | 300.00 | | | |
| 63025 · Chipper | 417.41 | | | |
| 63026 · #6 ~ 2004 Intl Dump | 10,350.30 | | | |
| 63027 · Grader | 4,038.12 | | | |
| 63028 · Loader ~ Cat 914 | 6,537.81 | | | |
| 63030 · Backhoe ~ #410 | 629.12 | | | |
| 63031 · Mower / Cutter / Roller | 1,025.82 | | | |
| 63032 · #10 ~ 2007 Intl Dump | 4,577.49 | | | |
| 63036 · Skid Steer - Bob Cat 2001 863G | 18,444.90 | | | |
| 63037 · Ford 6610 Mower | 2,431.09 | | | |
| 63040 · Trk #8 - 2015 Freightleiner | 4,377.70 | | | |
| 63041 · JD Loader 2018 | 497.74 | | | |
| 63098 · # 9 ~ '23 Western Star 4700 | 3,459.65 | | | |
| 63016 · Vehicle / Equipment Maint - Other | 2,327.58 | 55,000.00 | -52,672.42 | 4.2% |
| Total 63016 · Vehicle / Equipment Maint | 66,420.90 | 55,000.00 | 11,420.90 | 120.8% |
| Total Highway Vehicle Maintenance | 66,420.90 | 55,000.00 | 11,420.90 | 120.8% |
| Insurance and Benefits | | | | |
| 57540 · General Insurance | 2,335.00 | 4,919.00 | -2,584.00 | 47.5% |
| 57542 · Worker's Compensation | 37,191.73 | 40,559.00 | -3,367.27 | 91.7% |
| 57543 · Public Liability | 50,736.15 | 65,089.00 | -14,352.85 | 77.9% |
| 57544 · Employees Health Insurance | 242,794.75 | 271,767.00 | -28,972.25 | 89.3% |
| 57545 · Employee's Pension Plan | 46,034.79 | 46,290.00 | -255.21 | 99.4% |
| Total Insurance and Benefits | 379,092.42 | 428,624.00 | -49,531.58 | 88.4% |
| Land Use | | | | |
| 54202 · Zoning Enf Wage | 7,352.20 | 7,563.00 | -210.80 | 97.2% |
| 54203 · Land Use Administrator | 10,315.57 | 11,754.00 | -1,438.43 | 87.8% |
| 54204 · Land Use Clerk | 9,014.99 | 6,781.00 | 2,233.99 | 132.9% |
| 54305 · Office Supplies | 195.95 | 500.00 | -304.05 | 39.2% |
| 54307 · Printing | 0.00 | 200.00 | -200.00 | 0.0% |
| 54308 · Legal Notices | 1,573.94 | 800.00 | 773.94 | 196.7% |
| 54310 · Meetings / Mileage | 0.00 | 500.00 | -500.00 | 0.0% |
| 54315 · Computer | 0.00 | 400.00 | -400.00 | 0.0% |
| 54316 · Consulting | 0.00 | 2,500.00 | -2,500.00 | 0.0% |
| 54317 · Legal | 3,713.79 | 1,500.00 | 2,213.79 | 247.6% |
| Total Land Use | 32,166.44 | 32,498.00 | -331.56 | 99.0% |
| Organizational Support | | | | |
| 70080 · Cornwall Child Center | 50,000.00 | 50,000.00 | 0.00 | 100.0% |
| 70180 · Cornwall Library | 60,000.00 | 60,000.00 | 0.00 | 100.0% |
| 70185 · Cornwall Historical Society | 6,000.00 | 6,000.00 | 0.00 | 100.0% |
| 70190 · Cornwall Housing Corp | 4,000.00 | 4,000.00 | 0.00 | 100.0% |
| 70195 · Cornwall Conservation Trust | 2,000.00 | 2,000.00 | 0.00 | 100.0% |
| 70270 · NW COG and COST | 2,327.80 | 1,252.00 | 1,075.80 | 185.9% |
| 70271 · CCM (CT Conference of Municipal | 1,042.00 | 2,025.00 | -983.00 | 51.5% |
| 70585 · Tax Refunds | 0.00 | 500.00 | -500.00 | 0.0% |
| 70780 · Cemetery Maintenance | 2,900.00 | 3,600.00 | -700.00 | 80.6% |
| 70870 · Regional Housing | 0.00 | 100.00 | -100.00 | 0.0% |
| 71070 · NW Conservation District | 600.00 | 600.00 | 0.00 | 100.0% |
| 71170 · Housatonic River Commission | 400.00 | 400.00 | 0.00 | 100.0% |
| 71260 · Geer Dial a Ride | 9,500.00 | 9,500.00 | 0.00 | 100.0% |
| 71360 · Susan B. Anthony Project | 1,500.00 | 1,500.00 | 0.00 | 100.0% |

Town of Cornwall
FY '23 Budget
July 2022 through June 2023

| | Jul '22 - Ju... | Budget | \$ Over Bud... | % of Budget |
|---|-------------------|-------------------|------------------|---------------|
| 71480 · Town Celebrations | 957.00 | 500.00 | 457.00 | 191.4% |
| 71560 · NW Corner Chore Service | 5,000.00 | 5,000.00 | 0.00 | 100.0% |
| 71660 · Women's Support Service | 1,500.00 | 1,500.00 | 0.00 | 100.0% |
| 71760 · Regional Mental Health | 0.00 | 152.00 | -152.00 | 0.0% |
| 71860 · Housatonic Youth Service | 4,838.00 | 4,838.00 | 0.00 | 100.0% |
| 71980 · Agricultural Advisory | 900.00 | 900.00 | 0.00 | 100.0% |
| 72070 · Elderly Nutrition Project | 543.66 | 544.00 | -0.34 | 99.9% |
| 72071 · Greenwoods Counseling Referrals | 6,000.00 | 6,000.00 | 0.00 | 100.0% |
| 72072 · HVA - Housatonic Valley Assoc | 250.00 | 250.00 | 0.00 | 100.0% |
| 72074 · Conservation Commission | 1,833.02 | 2,260.00 | -426.98 | 81.1% |
| 72075 · Economic Study Group | 5,546.60 | 6,500.00 | -953.40 | 85.3% |
| 72077 · FISH | 250.00 | 250.00 | 0.00 | 100.0% |
| 72078 · Little Guild | 2,000.00 | 2,000.00 | 0.00 | 100.0% |
| Total Organizational Support | 169,888.08 | 172,171.00 | -2,282.92 | 98.7% |
| Park & Recreation | | | | |
| 68503 · Salaries | 25,729.34 | 25,729.00 | 0.34 | 100.0% |
| 68506 · Supplies & Tech | 1,221.45 | 1,300.00 | -78.55 | 94.0% |
| 68507 · Park & Rec Program | 10,352.22 | 11,000.00 | -647.78 | 94.1% |
| 68512 · Basketball | 135.00 | 1,000.00 | -865.00 | 13.5% |
| 68513 · Soccer | 595.00 | 2,100.00 | -1,505.00 | 28.3% |
| 68514 · Skiing | 0.00 | 2,800.00 | -2,800.00 | 0.0% |
| 68515 · Baseball & Gymnastics | 100.00 | 2,000.00 | -1,900.00 | 5.0% |
| 68516 · Fields / Services | 13,245.13 | 9,000.00 | 4,245.13 | 147.2% |
| Total Park & Recreation | 51,378.14 | 54,929.00 | -3,550.86 | 93.5% |
| Payroll Expenses | | | | |
| QB Payroll Expense | 1,051.79 | | | |
| 58140 · Social Security / Medicare | 60,584.91 | 61,426.00 | -841.09 | 98.6% |
| Payroll Expenses - Other | 1,920.88 | | | |
| Total Payroll Expenses | 63,557.58 | 61,426.00 | 2,131.58 | 103.5% |
| Probate Court | | | | |
| 53916 · Contracted Services | 3,005.60 | 3,006.00 | -0.40 | 100.0% |
| Total Probate Court | 3,005.60 | 3,006.00 | -0.40 | 100.0% |
| Public Health & Welfare | | | | |
| Commission on Aging | | | | |
| 68003 · Municipal Agent Salary | 1,194.18 | 1,194.00 | 0.18 | 100.0% |
| Total Commission on Aging | 1,194.18 | 1,194.00 | 0.18 | 100.0% |
| Social Service | | | | |
| 67803 · Social Service Administrator | 32,381.44 | 32,381.00 | 0.44 | 100.0% |
| 67804 · Food and Fuel Fund | 6,500.00 | 6,500.00 | 0.00 | 100.0% |
| 67905 · Office Supplies | 2,700.34 | 1,200.00 | 1,500.34 | 225.0% |
| 67909 · Mileage / Traves | 0.00 | 500.00 | -500.00 | 0.0% |
| 67910 · Meetings / Memberships | 0.00 | 100.00 | -100.00 | 0.0% |
| 67991 · General Assistance | 0.00 | 500.00 | -500.00 | 0.0% |
| 67992 · GA Medical | 0.00 | 200.00 | -200.00 | 0.0% |
| 67993 · GA Burial | 0.00 | 1.00 | -1.00 | 0.0% |
| Total Social Service | 41,581.78 | 41,382.00 | 199.78 | 100.5% |
| 67700 · Torrington Area Health | 8,581.68 | 8,582.00 | -0.32 | 100.0% |
| 67702 · NW CT Transit | 0.00 | 615.00 | -615.00 | 0.0% |
| 67703 · Senior Van | 10,200.00 | 10,500.00 | -300.00 | 97.1% |
| 67716 · V.N.A. | 4,500.00 | 4,500.00 | 0.00 | 100.0% |

Town of Cornwall
FY '23 Budget
 July 2022 through June 2023

| | Jul '22 - Ju... | Budget | \$ Over Bud... | % of Budget |
|--|-------------------|-------------------|-------------------|---------------|
| 67760 · Hepatitis B. Vaccine | 0.00 | 300.00 | -300.00 | 0.0% |
| Total Public Health & Welfare | 66,057.64 | 67,073.00 | -1,015.36 | 98.5% |
| Public Safety | | | | |
| 65016 · CVFD Physical Exams | 6,387.00 | 6,000.00 | 387.00 | 106.5% |
| 65035 · Firehouse Maintenance | 31,030.64 | 30,000.00 | 1,030.64 | 103.4% |
| 65045 · CVFD Service Incentive | 1,333.00 | 31,000.00 | -29,667.00 | 4.3% |
| 65050 · CVFD Operations, Fire, Rescue | 84,889.51 | 77,075.00 | 7,814.51 | 110.1% |
| 65051 · CVFD Ambulance | 27,344.21 | 28,665.00 | -1,320.79 | 95.4% |
| 66003 · Fire Marshal Salary | 4,393.86 | 3,000.00 | 1,393.86 | 146.5% |
| 66005 · Fire Marshal Expenses | 1,311.37 | 1,500.00 | -188.63 | 87.4% |
| 66016 · 911 Contract | 18,322.20 | 18,322.00 | 0.20 | 100.0% |
| 66050 · Civil Preparedness | 46,400.00 | 46,500.00 | -100.00 | 99.8% |
| Total Public Safety | 221,411.79 | 242,062.00 | -20,650.21 | 91.5% |
| Registrars of Voters | | | | |
| 56602 · Registrars' Salaries | 10,027.10 | 5,427.00 | 4,600.10 | 184.8% |
| 56603 · Election Workers' Wages | 1,932.70 | 2,307.00 | -374.30 | 83.8% |
| 56805 · Office Supplies | 598.78 | 200.00 | 398.78 | 299.4% |
| 56809 · Mileage / Travel | 0.00 | 50.00 | -50.00 | 0.0% |
| 56810 · Meetings/Memberships | 1,300.00 | 200.00 | 1,100.00 | 650.0% |
| 56816 · Contracted Services | 2,689.00 | 2,550.00 | 139.00 | 105.5% |
| 56846 · Postage | 159.20 | 70.00 | 89.20 | 227.4% |
| Total Registrars of Voters | 16,706.78 | 10,804.00 | 5,902.78 | 154.6% |
| Sanitation & Recycling | | | | |
| 62787 · Bulk Waste | 29,203.57 | 32,000.00 | -2,796.43 | 91.3% |
| 67002 · Salaries / Wages | 81,535.64 | 75,363.00 | 6,172.64 | 108.2% |
| 67114 · Landfill Supplies / Repairs | 6,802.49 | 7,000.00 | -197.51 | 97.2% |
| 67116 · MSW Hauling | 21,034.73 | 23,000.00 | -1,965.27 | 91.5% |
| 67119 · Site Testing | 9,899.10 | 10,000.00 | -100.90 | 99.0% |
| 67135 · Building Repairs | 17.80 | 500.00 | -482.20 | 3.6% |
| 67216 · MIRA Contract | 31,532.88 | 33,000.00 | -1,467.12 | 95.6% |
| 67288 · Hazardous Waste | 2,780.10 | 3,000.00 | -219.90 | 92.7% |
| 67289 · Compost | 500.00 | 3,000.00 | -2,500.00 | 16.7% |
| 67305 · Recycling Expense | 2,691.75 | 3,000.00 | -308.25 | 89.7% |
| 67316 · Recycling Box Rent | 756.00 | 1,000.00 | -244.00 | 75.6% |
| 67388 · Recycling Hauling | 12,831.83 | 14,000.00 | -1,168.17 | 91.7% |
| Total Sanitation & Recycling | 199,585.89 | 204,863.00 | -5,277.11 | 97.4% |
| Tax Collector | | | | |
| 52502 · Salary | 28,310.10 | 28,310.00 | 0.10 | 100.0% |
| 52503 · Tax Collector's Clerk Wage | 2,714.36 | 3,853.00 | -1,138.64 | 70.4% |
| 52705 · Office Supplies | 400.70 | 400.00 | 0.70 | 100.2% |
| 52707 · Printing | 1,272.79 | 1,200.00 | 72.79 | 106.1% |
| 52708 · Legal Notices | 772.56 | 450.00 | 322.56 | 171.7% |
| 52710 · Meetings / Memberships | 459.43 | 400.00 | 59.43 | 114.9% |
| 52715 · Computer | 0.00 | 800.00 | -800.00 | 0.0% |
| 52716 · Contracted Services | 6,815.46 | 7,019.00 | -203.54 | 97.1% |
| 52746 · Postage | 2,653.03 | 1,478.00 | 1,175.03 | 179.5% |
| Total Tax Collector | 43,398.43 | 43,910.00 | -511.57 | 98.8% |
| Town Clerk | | | | |
| 50902 · Town Clerk Salary | 48,848.80 | 48,849.00 | -0.20 | 100.0% |
| 50903 · Assistant Town Clerk Wage | 3,737.92 | 5,919.00 | -2,181.08 | 63.2% |
| 51105 · Office Supplies | 742.30 | 775.00 | -32.70 | 95.8% |
| 51108 · Legal Notices | 205.28 | 525.00 | -319.72 | 39.1% |

Town of Cornwall
FY '23 Budget
 July 2022 through June 2023

| | Jul '22 - Ju... | Budget | \$ Over Bud... | % of Budget |
|--|---------------------|---------------------|-------------------|---------------|
| 51110 · Meetings, Memberships | 511.51 | 900.00 | -388.49 | 56.8% |
| 51115 · Computer | 0.00 | 1,000.00 | -1,000.00 | 0.0% |
| 51116 · Contracted Services | 13,578.07 | 15,000.00 | -1,421.93 | 90.5% |
| 51117 · Elections | 723.02 | 1,050.00 | -326.98 | 68.9% |
| 51146 · Postage | 321.56 | 400.00 | -78.44 | 80.4% |
| Total Town Clerk | 68,668.46 | 74,418.00 | -5,749.54 | 92.3% |
| Town Office Administration | | | | |
| 57103 · Town Office Custodian | 4,764.11 | 4,500.00 | 264.11 | 105.9% |
| 57105 · Town Office Supplies | 1,934.02 | 3,000.00 | -1,065.98 | 64.5% |
| 57111 · Town Office Heating | 10,486.79 | 8,000.00 | 2,486.79 | 131.1% |
| 57113 · Town Office Utilities | 17,467.07 | 18,000.00 | -532.93 | 97.0% |
| 57116 · Town Office Contracted | 32,077.67 | 17,000.00 | 15,077.67 | 188.7% |
| 57117 · Town Counsel | 14,024.50 | 11,000.00 | 3,024.50 | 127.5% |
| 57135 · Town Building Repairs | 333.74 | 500.00 | -166.26 | 66.7% |
| Total Town Office Administration | 81,087.90 | 62,000.00 | 19,087.90 | 130.8% |
| Transfers | | | | |
| 10000 · Contingency | 0.00 | 30,000.00 | -30,000.00 | 0.0% |
| 10001 · To Animal Control | 3,500.00 | 3,500.00 | 0.00 | 100.0% |
| Total Transfers | 3,500.00 | 33,500.00 | -30,000.00 | 10.4% |
| Total 01 · Board of Selectmen Budget | 2,262,501.55 | 2,333,853.00 | -71,351.45 | 96.9% |
| 02 · Board of Education | | | | |
| 80080 · Board of Education Expenses | | | | |
| 1 · Personnel - Salaries | | | | |
| 1.1 · Certified Personnel | | | | |
| 1111000 · Teachers | 968,321.84 | | | |
| 1111250 · Title I Reading | 50,337.22 | | | |
| 1112410 · Principal | 134,550.00 | | | |
| 1212140 · School Psychologist | 29,311.72 | | | |
| Total 1.1 · Certified Personnel | 1,182,520.78 | | | |
| 1.2 · Classified and Professional | | | | |
| 1121000 · Teachers Assistants | 28,709.51 | | | |
| 1121003 · Finance Director | 12,660.96 | | | |
| 1142134 · School Nurse | 59,849.41 | | | |
| 1152222 · Library Paraprofessional | 27,878.07 | | | |
| 1152312 · Board Clerk | 45,408.44 | | | |
| 1162411 · Administrative Assistant | 62,898.84 | | | |
| 1172610 · Custodians | 116,662.55 | | | |
| Total 1.2 · Classified and Professional | 354,067.78 | | | |
| 1.3 · Temporary Staff -Cert and Class | | | | |
| 1211002 · Enrichment, After School Progra | 6,082.53 | | | |
| 1211004 · Teachers, Extra Duty | 11,428.50 | | | |
| 1211005 · Teachers, Special Assignments | -127.49 | | | |
| 1212134 · Nurse Subs | 2,607.50 | | | |
| 1212411 · Office Subs | 3,049.92 | | | |
| 1231000 · Teacher Subs | 15,843.41 | | | |
| Total 1.3 · Temporary Staff -Cert and Class | 38,884.37 | | | |
| Total 1 · Personnel - Salaries | 1,575,472.93 | | | |
| 2 · Employee Benefits | | | | |
| 2100000 · Health Insurance -Med & Dental | 354,911.40 | | | |

Town of Cornwall
FY '23 Budget
July 2022 through June 2023

| | Jul '22 - Ju... | Budget | \$ Over Bud... | % of Budget |
|--|-------------------|--------|----------------|-------------|
| 2110000 · Life Insurance | 2,218.15 | | | |
| 2200000 · Social Security | 31,627.68 | | | |
| 2210000 · Medicare | 22,174.38 | | | |
| 2300000 · Pension | 25,104.67 | | | |
| 2700000 · Worker's Compensation | 7,267.40 | | | |
| Total 2 · Employee Benefits | 443,303.68 | | | |
| 3 · Professional & Technical Servfi | | | | |
| 3.1 · Administrative Services | | | | |
| 3102134 · H/O Software Support | 544.94 | | | |
| 3102410 · Office Database Software Suppor | 3,189.87 | | | |
| 3102411 · AESOP Support | 1,093.96 | | | |
| 3102515 · Accounting Software Support | 2,000.21 | | | |
| Total 3.1 · Administrative Services | 6,828.98 | | | |
| 3.2 · Professional Educational Servic | | | | |
| 3201000 · Field Trips / Special Programs | 3,029.35 | | | |
| 3201001 · Outdoor Ed Programs | 5,144.00 | | | |
| 3202000 · Online Subscriptions | 13,302.44 | | | |
| 3202219 · Education Connection | 328.00 | | | |
| 3202222 · Library Software Support | 911.01 | | | |
| 3231005 · MSAP | 6,950.71 | | | |
| Total 3.2 · Professional Educational Servic | 29,665.51 | | | |
| 3.3 · Profess'L Training & Developmen | | | | |
| 3202210 · In-Service | 1,726.10 | | | |
| Total 3.3 · Profess'L Training & Developmen | 1,726.10 | | | |
| 3.4 · Other Professional Services | | | | |
| 3402130 · Medical Services - Students | 1,250.00 | | | |
| Total 3.4 · Other Professional Services | 1,250.00 | | | |
| Total 3 · Professional & Technical Servfi | 39,470.59 | | | |
| 4 · Purchased Property Services | | | | |
| 4.1 · Cleaning & Disposal Services | | | | |
| 4102620 · Septic System | 1,170.00 | | | |
| 4212620 · Refuse Removal / Recycling | 5,642.90 | | | |
| 4242630 · Grounds / Snowplowing / Gutters | 13,458.00 | | | |
| 4242631 · Brush / Tree Work | 2,548.00 | | | |
| Total 4.1 · Cleaning & Disposal Services | 22,818.90 | | | |
| 4.2 · Repair & Maintenance Services | | | | |
| 4311000 · Instructional Equipment - R & M | 634.50 | | | |
| 4312410 · Office Equipment - R & M | 190.00 | | | |
| 4312620 · HVAC Systems / Plumbing | 5,712.03 | | | |
| 4312621 · Constrcted Services | 4,736.80 | | | |
| 4312622 · Service Contracts - Elev & Gen | 4,589.96 | | | |
| 4312623 · Painting | 66.53 | | | |
| 4312640 · Maint Equip - R & M | 2,994.39 | | | |
| 4312641 · Asbestos Management Plan | 580.00 | | | |
| 4312642 · Water Systems | 4,300.00 | | | |
| 4312660 · Security & Fire Alarm Systems | 16,343.84 | | | |
| 4312661 · Fire Extinguishers R & M | 434.75 | | | |
| 4322230 · Computers - R & M | 35,599.00 | | | |

Town of Cornwall
FY '23 Budget
 July 2022 through June 2023

| | Jul '22 - Ju... | Budget | \$ Over Bud... | % of Budget |
|--|-----------------|--------|----------------|-------------|
| Total 4.2 · Repair & Maintenance Services | 76,181.80 | | | |
| 4.3 · Rentals | | | | |
| 4422690 · Equipment Rental | 11,355.66 | | | |
| Total 4.3 · Rentals | 11,355.66 | | | |
| Total 4 · Purchased Property Services | 110,356.36 | | | |
| 5 · Other Purchased Services | | | | |
| 5.1 · Student Transportation | | | | |
| 5192720 · CCS, HVRHS Busses | 209,433.71 | | | |
| 5192721 · Sport & Field Trips | 6,624.43 | | | |
| Total 5.1 · Student Transportation | 216,058.14 | | | |
| 5.2 · Insurance | | | | |
| 5201153 · Student Athletics | 120.44 | | | |
| 5202000 · Multi-Peril Insurance | 26,535.66 | | | |
| Total 5.2 · Insurance | 26,656.10 | | | |
| 5.3 · Communications | | | | |
| 5302229 · Internet / Online Services | 1,476.00 | | | |
| 5302410 · Postage | 441.69 | | | |
| 5312410 · Telephone | 6,431.51 | | | |
| 5402410 · Legal Notices | 549.45 | | | |
| Total 5.3 · Communications | 8,898.65 | | | |
| 5.5 · Region One | | | | |
| 5616111 · HVRHS Tuition | 807,331.00 | | | |
| 5616112 · Pupil Services | 509,678.00 | | | |
| 5616113 · Administrative Services | 133,205.00 | | | |
| Total 5.5 · Region One | 1,450,214.00 | | | |
| 5.6 · Summer Skills | | | | |
| 5616114 · Summer Skills Program | 6,193.13 | | | |
| Total 5.6 · Summer Skills | 6,193.13 | | | |
| 5.7 · Travel | | | | |
| 5801000 · Staff | 988.30 | | | |
| 5802610 · Custodians | 13.10 | | | |
| Total 5.7 · Travel | 1,001.40 | | | |
| 5.9 · Other Services | | | | |
| 5900000 · Copy / Print | 7,114.39 | | | |
| 5992722 · Food Services Operation Mngmt | 444.60 | | | |
| Total 5.9 · Other Services | 7,558.99 | | | |
| Total 5 · Other Purchased Services | 1,716,580.41 | | | |
| 6 · Supplies | | | | |
| 6.1 · Supplies | | | | |
| 6101000 · General Instructional Supplies | 20,974.23 | | | |
| 6102130 · Health Office Supplies | 754.35 | | | |
| 6102222 · Library Supplies | 303.59 | | | |
| 6102310 · Board of Ed Supplies | 6,673.76 | | | |
| 6102410 · Office Supplies | 3,371.81 | | | |
| 6102411 · PBIS Supplies | 153.94 | | | |

Town of Cornwall
FY '23 Budget
July 2022 through June 2023

| | Jul '22 - Ju... | Budget | \$ Over Bud... | % of Budget |
|--|---------------------|---------------------|--------------------|---------------|
| 6102490 · Graduation | 5,620.53 | | | |
| 6132600 · Maintenance Supplies | 16,776.25 | | | |
| Total 6.1 · Supplies | 54,628.46 | | | |
| 6.2 · Energy | | | | |
| 6222610 · Electricity | 25,474.77 | | | |
| 6232610 · Propane | 88.50 | | | |
| 6242610 · Fuel Oil | 1,625.00 | | | |
| 6262620 · Gasoline | 24.93 | | | |
| Total 6.2 · Energy | 27,213.20 | | | |
| 6.3 · Books & Periodicals | | | | |
| 6401000 · Textbooks | 19,489.95 | | | |
| 6401100 · Tradebooks | 782.36 | | | |
| 6402220 · Periodicals | 213.11 | | | |
| 6402222 · Library Collection | 1,698.67 | | | |
| 6402410 · Professional Books | 732.94 | | | |
| Total 6.3 · Books & Periodicals | 22,917.03 | | | |
| 6.4 · Tech Supplies | | | | |
| 6502230 · Tech Related Supplies | 1,044.03 | | | |
| 6502231 · Tech Related Software | 899.00 | | | |
| Total 6.4 · Tech Supplies | 1,943.03 | | | |
| Total 6 · Supplies | 106,701.72 | | | |
| 7 · Equipment | | | | |
| 7.1 · Equipment | | | | |
| 7331000 · Classroom Furniture / Equipment | 544.39 | | | |
| 7342223 · AV Equipment | 1,298.00 | | | |
| 7342230 · Technology - Hardware | 17,334.50 | | | |
| 7352230 · Technology - Program Software | 437.50 | | | |
| 7392410 · Office Equipment | 194.34 | | | |
| Total 7.1 · Equipment | 19,808.73 | | | |
| Total 7 · Equipment | 19,808.73 | | | |
| 8 · Other Objectives | | | | |
| 8.1 · Dues & Fees | | | | |
| 8102410 · Professional Dues & Fees | 2,239.26 | | | |
| Total 8.1 · Dues & Fees | 2,239.26 | | | |
| Total 8 · Other Objectives | 2,239.26 | | | |
| 80080 · Board of Education Expenses - Other | 0.00 | 4,115,197.00 | -4,115,197.00 | 0.0% |
| Total 80080 · Board of Education Expenses | 4,013,933.68 | 4,115,197.00 | -101,263.32 | 97.5% |
| Total 02 · Board of Education | 4,013,933.68 | 4,115,197.00 | -101,263.32 | 97.5% |
| 03 · Capital Expenditures | | | | |
| 80015 · CCS Capital Projects | 40,000.00 | 40,000.00 | 0.00 | 100.0% |
| 90015 · BOS Capital Projects | 660,000.00 | 660,000.00 | 0.00 | 100.0% |
| Total 03 · Capital Expenditures | 700,000.00 | 700,000.00 | 0.00 | 100.0% |
| 04 · Debt Service | | | | |
| 73195 · Commercial Loan 000733727 (Prin | 150,000.00 | 320,000.00 | -170,000.00 | 46.9% |
| 73295 · Commercial Loan 000733727 (Int) | 17,679.69 | 23,423.00 | -5,743.31 | 75.5% |

Town of Cornwall
 FY '23 Budget
 July 2022 through June 2023

| | <u>Jul '22 - Ju...</u> | <u>Budget</u> | <u>\$ Over Bud...</u> | <u>% of Budget</u> |
|--------------------------------------|------------------------|---------------------|-----------------------|--------------------|
| 73300 · 2012 GOB Refunding Principal | 170,000.00 | | | |
| 73310 · 2012 GOB Refunding Interest | 5,743.75 | | | |
| Total 04 · Debt Service | 343,423.44 | 343,423.00 | 0.44 | 100.0% |
| Total Expense | 7,319,858.67 | 7,492,473.00 | -172,614.33 | 97.7% |
| Net Ordinary Income | 361,112.91 | 0.00 | 361,112.91 | 100.0% |
| Net Income | 361,112.91 | 0.00 | 361,112.91 | 100.0% |