

Carlisle Conservation Commission
June 27, 2013

Pursuant to the notice filed with the Town Clerk, Chair Kelly Guarino called the meeting to order in the Clark Room at the Town Hall at 7:55 p.m. Vice Chair Luke Ascolillo and Commissioners Tom Brownrigg and Peter Burn (7:55 p.m.) and Conservation Administrator Sylvia Willard were also present. Commissioners Tom Brown, Jen Bush and Lee Tatistcheff were not present.

Report on Britton's Violet: Plant Ecologist/Botanist Sally Zielinski Ph.D. was present to provide the Commission with background information on Britton's Violet (*Viola brittoniana* Pollard), the rare stemless blue violet that was recently discovered on the Elliott Conservation Land, owned by the Sudbury Valley Trustees and encumbered by CR #65 held by the Town of Carlisle through its Conservation Commission. She has observed, studied, monitored and developed restoration and management strategies for *V. brittoniana* since 1989.

The following is a summary of the presentation:

There are about thirty species of violets in Massachusetts, with two of them being considered "rare" – Britton's Violet and the Sand Violet. Britton's is classified as "Threatened" in Massachusetts and is thereby protected under the Massachusetts Endangered Species Act.

In terms of the range, *V. Brittoniana* is a native plant found along the eastern coastal plain from Massachusetts to the Carolinas. There are about 24 known populations in the Commonwealth, seven of which are found along the Concord and Sudbury Rivers: Concord (1); Bedford (4); and Carlisle (2). Carlisle has the northernmost documented populations, with the most recent being documented in May 2013.

The Britton's Violet grows in flat plains. It is a facultative wetland plant, so in terms of the Wetlands Protection Act, it occurs either in Land Subject to Flooding or Bordering Vegetated Wetlands. The wetland type is more often than not a wet meadow. The plant is found in two habitats locally: along trails in the woods and in a mowed wet meadow field. They tend to be denser and flower more prolifically in a mowed field.

These plants are flood tolerant, and generally they get flooded at least once a year. They are known to be flood tolerant when they are dormant, but this year flooding has occurred during the flowering season and at this time it is unclear what will happen to the plants – some of which have been under water for two weeks. Seeds are known to be distributed by ants, but it could also be that these rare flooding events at the time of fruiting could mean that the seeds get carried by floodwater. That would be a likely explanation for why these plants occur along the river.

In terms of the identification/reporting process, Zielinski said the new population had been discovered on the Elliott Land by Louise Hara during a Trails Committee walk.

A few days later, Louise and a group of others, including herself, Laura Mattei from Sudbury Valley Trustees, Tom Brownrigg and Sylvia Willard verified the identification and started documenting. Shortly thereafter, Laura and another SVT staff member counted the plants. They had originally estimated at least

40 plants, but a week later, when seedlings had started to germinate, they counted 262 plants, making this the largest population along the Concord River. The next step was to submit documentation to NHESP via their new on-line Plant Observation Reporting system, which includes location, site characteristics, population size, threats to population and recommendations for future monitoring/management.

Primary threats include habitat loss through development and competition from invasive and some native plants. They have documented about 12 different invasive plants that have been found with the violets in various locations, including glossy buckthorn, porcelain berry, black swallow wort, winged euonymus, bittersweet, 2 honeysuckles, purple loosestrife, garlic mustard and multiflora rose – a/k/a “the dirty dozen”. Certain native /introduced plants can also be problematic in the habitat because they spread so easily. Zielinski said they have also identified a location where there is another violet nearby that is cross-pollinating with the Britton’s creating a hybrid form.

Management recommendations include periodic mowing, ideally at least twice a year, in August after the fruits have set and later in the fall. Zielinski said she and staffers from NEWFS did an invasive species control test project in Concord a couple of years ago where they cut buckthorn and treated stems with herbicide. Follow up monitoring the following season showed positive results.

Questions from the Commission:

Guarino asked how the populations became established in the absence of mechanized mowing over the last 100 years. Zielinski said there were descriptions from the early 1900’s in late May when people going along the river described it as “a sea of purple as far as the eye could see”. She attributes this to the fact that a lot of land had been cleared for grazing.

Brownrigg asked if the hybrid violet would be considered another state-listed plant. Zielinski said she did not think so. He asked if the population of Britton’s Violets is exclusive to the SVT land. Zielinski said that although they have only been confirmed on Lot 6, she thinks there is potential for it to be on some of the other properties within the development as well. Brownrigg asked if it would be advisable to publicize the locations of the plants in Carlisle. Zielinski said it’s best to not be too specific about locations because of possible poaching, but it’s also good to advertise that we have these plants in town so people can be on the lookout for them.

“We have a real treasure here” Zielinski concluded.

8:10 p.m. Request for Change to (DEP #125-0938): Issued: 5/17/2013; Septic System Design Change; Reduction in grading:

Applicant Paul Gaboury was present to request approval of a Plan Change relative to the septic system design. He presented a Plan showing the revised design superimposed over the previously approved second iteration. He said he is hoping to go with the revised design because it is a more cost effective system than the originally approved plan. He noted that the new design, which is also a Cultech system, pulls the poly-barrier farther back from the setback, has a smaller footprint, and requires half the area for twice the volume. The revised Plan is currently under review by the BOH.

Burn moved to accept the septic system design change as a field change subject to BOH approval, Ascolillo seconded and all voted in favor. The applicant signed and dated the proposed revised Plan for the record.

Minutes: *Brownrigg moved to accept the minutes of April 11 and 25, 2013 as amended with minor edits, Burn seconded and all voted in favor.*

8:15 p.m. (DEP #125-0940) Notice of Intent, Continued Hearing

Applicant: Luciano Mangarella

Project Location: Elliott Farms – 291 River Road

Project Description: To address the requirements of an Enforcement Order for work undertaken in Resource Areas that are outside the scope of the Order of Conditions, DEP #125-0893

Guarino re-opened the continued hearing under the provisions of the Massachusetts Wetlands Protection Act and the Carlisle Wetlands Protection Bylaw. The hearing was continued to July 11, 2013 at 9 p.m. at the applicant's request. Willard reported that, after reviewing the wetland delineation on site originally done in 2010, she had concerns and will be conducting a site visit with David Crossman of B & C Associates on July 3 in order to re-evaluate some of the wetlands flags at the project site.

Towle Field Herbicide Treatment:

Brownrigg reported having conducted a recent site visit to Towle Field also attended by Conservation Administrator Willard, CISMA liaison Lynn Knight, and Amanda Weise, Ecological Programs Coordinator for the New England Wild Flower Society (NEWFS). The purpose of the visit was to determine how much area the NEWFS crew could cover using one of the remaining work days from the CISMA/Pulling Together Initiative Grant to address poison ivy and buckthorn. Weise estimated she and her crew of four staffers could treat the north area of the field (approximately one acre) within one day with perhaps some time left over to treat an additional area at Towle. Brownrigg said he really liked (Ascolillo's great idea!!) of devoting the remaining time to treating the Bobolink area, perhaps a one-acre area. He also suggested treating the areas to the right and left of where the trail comes out so that people will be able to see the difference following the herbicide treatment.

A notice will be placed in the *Carlisle Mosquito* and abutters will be notified that there will be a Public Hearing on July 11, 2013 relative to the potential use of herbicides at Towle. Contingent upon the outcome of the public hearing, Weise has suggested that the field be mowed about two weeks prior to treatment in order to get the grasses down and improve the efficacy of the treatment.

Ascolillo asked if Brownrigg would coordinate obtaining estimates for treating the entire field using FY14 maintenance funds. Brownrigg said he would be doing some additional research and would plan to get an estimate from NEWFS and at least two other licensed applicators. Guarino suggested the Commission also get cost information for field edge clearing at Towle.

COCs: (DEP #125-209) Clark Farm Road; Applicant: Three Realty Trust; Project: Construction of four single-family dwelling units and gravel access drive; Partial COC Issued: 10/06/1992
Willard reported that she has not yet completed her assessment of the project.

Land Use Permit: A Land Use Permit was circulated for signatures allowing film crew members from High Output, Inc. / the Massachusetts Production Coalition use of the parking lot at Foss Farm on July 21, 2013 from 11:00 a.m. to 6:30 p.m. relative to a film project they will be conducting on Bedford Road. Willard noted that the organization has made a donation to the Conservation Gift Fund in the amount of \$125.00.

FY13 Budget Encumbrances:

The Commission discussed priorities relative to encumbering funds for field edge clearing on Conservation Lands. All agreed that field edge clearing at Towle and Greenough were top priorities, noting there is a 20 to 30 foot wide swath of buckthorn along the edges of the two fields at Greenough.

Willard is in the process of securing a contract allowing up to \$4,900 from Cook Company, the contractor used for field edge clearing at Foss Farm in 2012. It was also agreed that these areas should be retreated the following season using funds from the FY14 General Fund/Repair and Maintenance Line Item.

Ascolillo moved to encumber up to \$4,900 from the FY13 ConsCom Budget for field edge maintenance with priorities as discussed, Burn seconded the motion and all voted in favor.

Ascolillo moved to encumber \$2,801 for summer field mowing at Towle and Benfield, Burn seconded the motion and all voted in favor.

Open Space and Recreation Report: Guarino reported having attended the public meeting on June 26, 2013 lead by Louise Hara regarding the draft 2013 OS&R Report. The most significant changes from the previous OS&R Report included the addition of GIS maps, the inclusion of an ADA Transition Five-Year Action Plan, and improved coordination with the Recreation Commission. She said they also received valuable input from the Carlisle Parents' Connection at the meeting.

FEMA Flood Mapping: Willard reported progress in downloading the revised FEMA Flood Insurance Rate Maps onto a laptop computer for public access. The revised maps were produced using LIDAR (Light Detection and Ranging) Technology, allowing a more accurate depiction of elevations in the watershed. FEMA has provided towns with maps showing the proposed revised FEMA 100-year flood line and also highlighting the difference between the new proposed flood elevations and the previous determinations. Willard said the Board of Selectmen has asked that she and Planning Board Administrator George Mansfield discuss the revised maps at their next meeting.

9:20 p.m. *Brownrigg moved to adjourn, Burn seconded and all voted in favor.*

Respectfully submitted,
Mary Hopkins
Administrative Assistant

DOCUMENT REGISTER:

Photo of Britton's Violet (*Viola brittonianna*) submitted by Sally Zielinski

About Britton's Violet by Sally Zielinski dated June 27, 2013

Paul Gaboury – Revised Septic Design Plan signed June 27, 2013