



LEBANON BOARD OF CEMETERY TRUSTEES
JULY 13, 2021 - 5:00 PM
COUNCIL CHAMBERS, CITY HALL OR
REMOTE VIA VIRTUAL PLATFORM
LEBANONNH.GOV/LIVE

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- 1. Call to Order**
 - 2. Approval of Minutes**
 - A. June 8, 2021
 - B. March 23, 2021
 - 3. Cemetery Sexton Report**
 - 4. Old Business**
 - A. Fencing at Valley Cemetery - Prices
 - 5. New Business**
 - A. Turf Report from Tony
 - B. Assessments
 - 6. Future Agenda Items**
 - 7. Adjournment**

Meetings are open for in-person and remote attendance. Members of the public that wish to attend remotely may do so by going to LebanonNH.gov/Live where you will find instructions on how to enter the meeting. Members of the public will be able to participate and ask questions through the City's virtual platform or by phone. Please note: Should technical difficulties occur during the meeting that disrupts virtual or phone connection(s), the meeting will continue without remote access capabilities.

AGENDA
BOARD OF CEMETERY TRUSTEES
July 13, 2021

AGENDA ITEM 2
APPROVAL OF MINUTES:

June 8, 2021

DRAFT

**CITY OF LEBANON
BOARD OF CEMETERY TRUSTEES
REGULAR MEETING MINUTES
REMOTE VIA MICROSOFT TEAMS
LebanonNH.gov/Live
TUESDAY, June 8, 2021
5:00 PM**

MEMBERS PRESENT: Chair Fran Hanchett, Caitlyn Hauke, David Muzzy, Susan Painter

MEMBERS ABSENT: Vice Chair Antonio Palazzo

STAFF PRESENT: James Donison – Director Public Works, Paula Maville – Deputy City Manager

GUESTS: Judith Bush, Rainie Kelly and Billy Saine

I. CALL TO ORDER

The meeting was called to order at 5:01 PM by Chair Fran Hanchett.
A Roll Call of Board Members who participated remotely is listed above.

Review of meeting procedures and NH RSA 91-A “Right-to-Know” requirements.
Patrick McCarthy delivered the Right to Know procedures to the Members and the public.

II. APPROVAL OF MINUTES

A. May 11, 2021

*Mr. Muzzy MOVED to approve the May 11, 2021, Minutes as presented with amendments.
Seconded by Ms. Painter.*

Amendments: Page 1, Add ‘Patrick McCarthy’ to Staff Present; Page 2, Line 31; Correct ‘Among’ to ‘Amount’; Page 5, Line 45; Add ‘without the Board being aware of it.’

Roll Call Vote

Ms. Painter, Ms. Hauke, Mr. Muzzy, and Chair Hanchett all voting Yea.

None voted Nay.

**The Vote on the Motion was unanimously approved (4-0).*

III. CEMETERY SEXTON REPORT

A. Monthly Report

The month of May involved preparations for Memorial Day. There were two full burials and 13 cremations. The cemeteries were mowed, cleaned up and monuments addressed. Bids went out for the repair of cemetery stones, and it was again awarded to the same contractor. Sixty stones will be repaired, erected back up and cleaned with the biological cleaner. The cost will be \$25,000, the same as previous years and a few more stones will be done this year. The money will come out of the allotted money.

Mr. Muzzy pointed out several grave sites that need to be repaired. The Sexton will work directly with him to correct the areas that need work. Mr. Muzzy will put his notes in his annual report for the Staff.

IV. OLD BUSINESS**A. Fencing at Valley Cemetery**

Ms. Painter reported that she has a few house keeping items regarding the fence and asked for an understanding of what the Board thinks is a reasonable amount to spend and where the fence should go to help determine some appropriate fence options. She shared her screen, showing the City of Lebanon website that showed an attractive wood fence along the rail trail. This reminded her that the new fence should be in harmony with the existing fence. She feels more discussion should take place before a substantial amount, \$18,000 or more, is spent and before rushing into a decision. She believes that the fence toward the back and having the fence in the cemetery itself might keep people from dumping in that area as well. The Board previously voted to put up a fence to prevent access coming up from the rail trail. It is time for the Board to have a full discussion of what this means and what would be the legacy of this Board of Trustees.

Mr. McCarthy said the reason a chain link fence was suggested is because there are chain link fences on both ends of where the fence would be installed. The chain link fence is the path of least resistance. And perhaps some vegetation or vines can be added to improve the appearance of the fence. Ms. Painter believes a chain link fence does not belong on a bike path. And if the Board feels it is important to install a chain link fence, instead of another type of fence, can the fence be a diagonal fence in the cemetery. Chair Hanchett said she thought the fence would go along the property line. Ms. Painter asked why a fence cannot run along the back that is in the cemetery instead of on the bike path. The Board continued to discuss what other types of fences can be considered. The fence was voted on to prevent bikes from coming into the cemetery. Now some of the Board members are concerned about trash on the rail trail. Mr. McCarthy said he will get quotes for a 3 or 4 rail wood fence if asked to do so. Material expenses are very high currently. Ms. Painter will work on making a request for a fence she feels is appropriate. She is concerned about how the perpetual funds are going to be spent.

Doug Boisvert from Ward 3 spoke and asked about the offer from the Recreational Director to share in the cost of the fence and asked if there is more information about that offer. He also said he has seen chain link fence along other areas of the rail trail. He noticed that pieces of a makeshift fence that were put up to stop the use by bikes were ripped out several times. But that fence was not permanent enough to stop the bike traffic. Ms. Painter and Mr. McCarthy will work together during the next month to bring more information to the Board next month.

V. NEW BUSINESS**A. Infant Grave Monuments-Discuss and vote on lamb to be placed on the monuments**

*Ms. Hauke MOVED to approve the design of Lamb 1.
Seconded by Mr. Muzzy.*

Roll Call Vote

Chair Hanchett, Mr. Muzzy, Ms. Hauke, and Ms. Painter and all voting Yea.

None voted Nay.

**The Vote on the Motion was unanimously approved (4-0).*

B. Annual Assessment of Cemeteries

The annual assessment of the cemeteries is in the packet. Mr. McCarthy said the organization of the evaluations used in previous years worked out well. The reports will have to be completed in the next three weeks to be reviewed at the next meeting. The Board will try to get the assessment done in the next three weeks.

1
2 Mr. Muzzy said he would like to wish Patrick a Happy Birthday.

3
4 **C. Turf Report**

5
6 The turf report was sent; however, Mr. Palazzo is not present tonight and the Board will discuss it next
7 month. In the past few years, some soil samples were collected, and research plots have been tested.
8 They are determining what is the best soil, fertilizer, and best turf. They would like to get rid of the grubs
9 that seem to be taking over in some gravesites.

10
11 Ms. Painter asked for clarification about the site line from the grave sites past the columbariums to the
12 fountain. Mr. McCarthy said there is a 360-degree point of view. However, she feels the columbariums
13 would block the line of site from several graves. She would like to share some pictures that show the
14 fountain is not fully visible from several grave sites and she will send them to the Board offline. Mr.
15 Donison described where the columbarium will be situated and described the perspectives of view. Ms.
16 Painter would like to have the areas where the columbariums would be staked out, so Board members can
17 determine if there would be a clear line of site from all grave sites.

18
19 **VI. FUTURE AGENDA ITEMS**

20
21 Turf Report

22
23 **VII. ADJOURNMENT**

24
25 *Mr. Muzzy MOVED to adjourn the meeting.*
26 *Seconded by Ms. Hauke.*

27
28 **Roll Call Vote**

29 *Ms. Painter, Mr. Muzzy, Ms. Hauke, and Chair Hanchett all voting Yea.*

30 *None voted Nay.*

31 **The Vote on the Motion was unanimously approved (4-0).*

32
33 The meeting was adjourned at 5:57 PM.

34
35 Respectfully Submitted,

36 Linda Billings

37 Recording Secretary

AGENDA
BOARD OF CEMETERY TRUSTEES
July 13, 2021

AGENDA ITEM 2
APPROVAL OF MINUTES:

March 23, 2021

DRAFT

**CITY OF LEBANON
BOARD OF CEMETERY TRUSTEES
REGULAR MEETING MINUTES
REMOTE VIA MICROSOFT TEAMS
LebanonNH.gov/Live
TUESDAY, March 23, 2021
5:00 PM**

MEMBERS PRESENT: Chair Fran Hanchett, Vice Chair Antonio Palazzo, Caitlyn Hauke, David Muzzy, and Susan Painter

MEMBERS ABSENT: None

STAFF PRESENT: Pat McCarthy – Sexton, Paula Maville – Deputy City Manager

GUESTS: Patrick Healy

I. CALL TO ORDER

The meeting was called to order at 5:00 PM by Chair Fran Hanchett.
A Roll Call of Board Members who participated remotely is listed above.

Review of meeting procedures and NH RSA 91-A “Right-to-Know” requirements

Chair Hanchett delivered the Right to Know procedures to the Members and the public.

II. DISCUSSION ITEM: NATURAL BURIALS

A. Discussion with Director Patrick Healy, Green Mount Cemetery, Montpelier, VT

Mr. Healy gave an overview of the Green Mount Cemetery. He is the Director of a very hilly, 40 acres cemetery, and has been with the cemetery for 33 years. He has been involved a varying capacity with the New England Cemetery Association and the Vermont Cemetery Association. He described natural burials and offered guidance from his experience. His definition is the burial of a non-embalmed body at a depth of not shallower than 3.5 feet. It is buried within a wood or wicker casket, shroud or other cloth covering. The objective is to compost the body as naturally as possible. He has done eight natural burials. It is imperative that the natural burial takes place as quickly as possible, even during the winter. As the time of death nears, family should inform cemetery employees so they can get the grave open and the site prepared. He finds that pre-need planning is essential for everyone involved. He spends time with the family or purchaser of the lot to inform them in advance how natural burials differ from traditional burials. He said the back fill is important for microbial activity. They backfill with a compost and sand mix that they make. They sometimes add a layer of hay before the body is placed in the grave. They do not use a casket lowering device because it creates an air space between the body and the bottom of the grave. They use a rough-cut piece of lumber with 100% natural rope straps to lower the body and they bury everything along with the body. How the body will be moved to the grave has to be determined in advance and needs enough people available for the weight of the body. He is not sure if the family can do this in New Hampshire or if it needs to be done by a funeral director. If the body is in a shroud or has a covering, there may be stains on it and there may be some odor because the body starts decomposing within 2 hours. One service used incense and that could mask the odor. The back fill of sand and compost is partially filled in by the family, if they want to, and the staff usually completes the work. It is important to move the body from the vehicle to the grave site as quickly as possible, especially if it is not in a casket or wicker basket. When his staff is involved, they move the body and leave it on top the ground until the service. The natural grave lot size is increased to 5 feet wide, to eliminate the possibility of digging into another grave. Every natural burial grave has a grass marker to keep track of the location

1 of the grave. They have permitted natural graves within the traditional areas of the cemetery however;
2 they have a new section specific for natural burials. They do not permit upright monuments, just level
3 grass markers. That area will only be mowed once a year just to clean it up. They want to avoid
4 problems with mice and ticks. One of the biggest concerns he initially had was grave site disturbance, but
5 they have not had problems with any animals digging up any of the remains. Others across the country
6 have not seen that problem either. He recommends starting slowly with a small separate section to see
7 how it goes. If it goes well the Board can consider incorporating natural burials with the traditional
8 cemetery sections.

9
10 The Board was given the opportunity to ask questions of Mr. Healy. Mr. Palazzo sent Mr. Healy a list of
11 questions. He is concerned about liability and cost. He asked about the extra steps, pre-need planning,
12 making compost, different straps, moving the body and more. He asked how much extra time is required
13 for a natural burial than a traditional burial. Mr. Healy has not done the time analysis, but he is thinking
14 that it may take less time. He always does pre-need planning with every burial. They have more
15 flexibility because the hole is shallower and does not depend on anyone else or the vault company. They
16 always make their own compost for use in the cemetery. They have done 8 natural burials, but he feels it
17 is easier in his mind to do a natural burial than the traditional burial. The cost of the ropes and boards are
18 about \$20, less than waiting on the vault company and bringing out the machine to lower the body. Mr.
19 Palazzo said he is concerned about the extra expense for overtime for the staff doing the work. Mr.
20 McCarthy said they are open 7 days a week. Lebanon charges full burials at \$450 on weekdays, \$700 on
21 weekends and \$875 on holidays. Anything after regular business hours is another \$100 per hour. Green
22 Mount charges \$950 on weekdays and an extra \$350 on weekends for traditional burials. They are
23 charging \$1200 for natural burials in the summer and \$1400 in the Winter. This allows for the extra
24 procedures, time, and materials.

25
26 Mr. Muzzy asked if any of the natural burials have been in the traditional cemetery. There have been 5
27 and the first one was a year ago in January. They have seen some settling, but when they started they
28 were digging the graves too wide. Some people have been buried in a wicker casket and it can be
29 narrower, about 30 inches wide. In the natural section, they back filled some of the graves after a short
30 time. In the summertime there was some shrinkage in a couple of weeks. In the winter they wait for
31 Spring. The amount of rain affects the settling. In the Winter, they place bales of hay over the body to
32 keep the ground from freezing. This allows the body to continue to decompose. Albeit slower than in the
33 warmer weather. Because the sand packs tighter, there appears to be less shrinkage. They are not
34 concerned with the natural burials within the traditional cemetery. They are not replacing the sod. In the
35 summer, a few days after the burial, they water the ground to eliminate air spaces to compress the soil.

36
37 Ms. Painter asked how the plots and graves are sold. The graves are sold as single or multiple grave plots
38 at one time. They are giving each plot extra room and he will send the Board a sketch of the area. The
39 plots are on a steep slope, are sold left to right, and there are 4 rows of plots planned. There are trees
40 interspersed between some of the plots. They are selling the lot next to the last lot that was sold and there
41 is no choice to be placed in a different or selected location. Within the traditional cemetery and
42 traditional burials, they have a choice of the location.

43
44 Ms. Hauke asked if the natural burials are an easy addition or was it challenging. Mr. Healy feels
45 comfortable with the process and may do it himself. In the beginning he fought the State's bill to allow
46 natural burials and was not supportive. He was afraid of all the things that could potentially go wrong.
47 He held a public information meeting that was attended by 50 people who supported natural burials. At
48 first there was some trepidation on the part of the Director, but after several burials, he is comfortable
49 with the option.

50
51 Mr. Palazzo asked for more information about the costs. Mr. Health only has one other staff member and
52 has not analyzed the cost. He would have to understand the staffing in Lebanon and the worker's union to
53 help Lebanon determine the potential costs. He offered to help the Sexton with the cost analysis. In the

1 recent past, Green Mount's cemetery staff have stood back and let the family participate in the burial as
2 much as they want. He does offer to help the family move the body if needed. The dirt is there for the
3 family to shovel in some of the dirt, but the staff usually finishes the job. He is not concerned about the
4 liability related to involving the family.

5
6 Mr. McCarthy says they operate 9 cemeteries and maintain 1 private owned Jewish cemetery. There is an
7 on-call service to notify Staff that there is a need for a burial. The arrangements for the funeral are
8 handled by the funeral home. The City just sells the grave site. City staff are not allowed to meet with or
9 counsel the family, according to NH law. There are some differences between Vermont and New
10 Hampshire rules and laws. The Green Mount Cemetery rules state that the family is responsible for
11 moving the body, but he has been willing to help the family. If the family takes charge, they fulfill the
12 role of the funeral director. The family is responsible to move the body. The staff once used their mini
13 excavator when the body weighed too much to be moved by people. Mr. McCarthy asked how a waiver
14 of liability is addressed, and as yet, Mr. Healy has not done so. However, other places have a process and
15 requirement to complete the waivers. They have also stated in their rules that it will require a court order
16 to move the body once it has been buried.

17
18 Ms. Painter asked if there is any plan to reuse the graves. Green Mount does not intend to do so. In
19 Germany, they reuse the graves after 20 years. The bones are dug up and placed in a separate area. Mr.
20 Healy said if the body did not decompose correctly, it can be a nasty situation. He would allow the burial
21 of a cremated body on top of a natural burial, in the same plot, but not if it is in an urn. They place the
22 cremated remains a couple of feet deep and their plots are large enough to place the remains at the head or
23 the foot as well.

24
25 There has not been any special training for Mr. Healy or his staff. They are learning as they go, and
26 things are getting better. Mr. Muzzy asked if a funeral home is required to be involved. Most of the
27 burials have involved a funeral home and the home brings the body, but it is not required. The funeral
28 directors know how to handle decomposing bodies and Mr. Healy is not concerned about the sanitation of
29 the hearse. The funeral home registers the burial transit permit and the staff person at the cemetery brings
30 it to the Town Clerk to register it. There is not much fluid from the body as it decomposes, it penetrates
31 the back fill and does not move away. The body dries up faster than when it is in a vault.

32
33 Ms. Hauke asked if he has concerns about handling bodies carrying disease in natural burials. He is a
34 little concerned, but he believes diseases are alive when the body is alive, but once it is dead there is less
35 worry of transmittal. Mr. McCarthy asked if there are any bodies that they would turn away due to
36 disease or treatments that bodies have undergone. Mr. Healy said he does not have an answer about this.
37 He believes the ground and microbial action is a good thing. He would not turn down any body that was
38 in a casket, so he does not believe he would turn anyone away. Mr. McCarthy noted that in a casket there
39 would be a vapor barrier that would prohibit transmittal. It is an interesting question that needs further
40 research. Mr. McCarthy asked if there is potential of seepage between the graves, even if they are 5 feet
41 wide. The goal is to get the body decomposed as quickly as possible, so hopefully with the right soil and
42 moisture content of the land it would not be a problem. If it is clay soil and the moisture content of the
43 land is high, it may have more potential problems.

44
45 Mr. Palazzo asked about issues with the Union. Lebanon employees are union members. So far there are
46 2 employees at Green Mount, they are untrained, they have only done 8 burials and the oldest burial is
47 only one year old. Mr. Palazzo suggested setting up a separate cemetery and hiring someone such as Mr.
48 Healy to contract for the natural burials. The question remains if there is a market for natural burials. Mr.
49 Healy noted that most of the natural burials would have opted for cremation and it is hard to say what the
50 actual market is for natural burials.

51
52 Ms. Painter asked if his city is supportive of the natural burials. Mr. Healy said in general, the citizens are
53 supportive, so long as there are choices. He has not noticed any push back from anyone. Last year the

1 area looked very natural because they only mowed a small portion of the grass and people liked it.

2
3 Last year Mr. Healy did about 50 traditional burials, and 50% were full burials. At other times, almost
4 80% were cremations. There is always someone on the cemetery grounds to communicate with visitors
5 and family. He does not know how many people would want a natural burial and or if they would be
6 living close enough to allow for a natural burial.

7
8 Ms. Hauke asked if he learned anything that he would do different. Mr. Healy studied natural burials for
9 a couple of years before they started doing them. They started slow, they did not announce it and they did
10 not advertise natural burials. It helped that they have moved slow. It is hard to meet all the terms of a
11 fully natural burial as people want to be able to drive close, have water spickets, and need a pathway to
12 the graves.

13
14 They are not mounding the grave sites because they want things to settle as soon as possible and they like
15 to water the grave to help it settle. When there is mounding with their soil, the water runs off instead of
16 settling. The dirt remains soft and they monitor the natural section. They do not intend to mow, but will
17 put wildflowers over the graves, so perfect leveling is not essential.

18
19 Mr. McCarthy asked how they would handle a body with a communicable disease if they were not
20 informed until after the body was handled. Mr. Healy said he would call Human Resources, seek
21 guidance and medical advice, and do any necessary testing. Mr. Healy notifies the family if there is any
22 disturbance such as a road wash out or a monument vandalism. It would be the same for animal
23 disturbance. It still seems that there is no disturbance from animals, although there was an incidence of
24 bears in Russia that did disturb graves. Mr. McCarthy noted a time when a body that was 12 feet deep
25 was found by a cadaver dog.

26
27 Mr. McCarthy asked about different fee structures for traditional and natural burials and if it is
28 discriminative to charge a different rate for a natural burial than a regular burial. Mr. Healy said he has
29 not had any push back on the cost and he does not believe it is discriminatory to charge a different rate,
30 because the process and needs are different. And if that is a problem, he would raise the rate of the
31 traditional burials.

32
33 Mr. Saine, a member of the public, asked about the wicker and wood caskets and how the extra air space
34 impacts the natural burials related to sink holes. Mr. Healy asks people to walk directly from the road to
35 the grave plot and they should not encounter sink holes. Mostly, the cemetery people need to keep an eye
36 on the graves. So far, they have only used funeral homes to transfer the body. They are planning for the
37 options that would be appropriate if a family wants to move the body to the cemetery.

38
39 Mr. McCarthy asked if they are concerned that after 15 or 20 years a casket might collapse and cause a
40 problem with a mower or machine going over it. It possibly is a concern, so they are paying attention to
41 all the graves. In the case of Muslim graves, they have filled the casket with dirt and did not leave the
42 cover on the vault. In most cases, people who want a natural burial do not want a casket, usually a shroud
43 or a wicker basket. All the natural graves have grass markers and they may resort to noting on the stones
44 if there is a natural burial in the location. The outlier, the one unnoticed natural burial, can be a problem
45 because it is not anticipated in a traditional location.

46
47 Mr. Healy said some of their assistance comes from a correction facility, since 1982. He is the Director
48 and there is one staff person for the cemetery. The people from the correction facility do lawn
49 maintenance and if needed, they can assist with burials. They do not always have inmate assistance.

50
51 Mr. Boisvert, a member of the public, asked if traditional burials require a vault or outer container. They
52 do require vaults for caskets, but not for urns. They have a liability form for a cremation. If the remains
53 are not in an urn, they will not handle the remains in the future. Mr. Boisvert has worked in the

cemeteries for many years. He has seen collapses on adjacent grave sites during a separate burial ceremony. If there is a void from a gasket, there is potential for a collapse. This is a concern if natural burials are allowed in all the cemetery areas. Mr. Healy said he is not worried about it if the body is in a wicker casket and they are using a sand mixture that really packs. It should be one of the concerns if they are mixed in with other traditional burial areas. He believes a sheet or a shroud over the body is the most desirable and a wicker casket follows. A wood casket is the least desirable for a natural burial. And keeping staff protected with vaccinations is essential.

Ms. Painter clarified that this Board is not considering putting natural burials within the traditional burial settings. It is not being considered at this time.

There were no additional questions from the Board or the public. Mr. Healy said he looks forward to meeting with the Sexton and the Board in the future if the Board decides to continue discussing natural burials.

B. Continued Review of Draft Outline of Proposed Amendments

Ms. Painter suggested that the Board continue to consider all the information that they just learned and not discuss the proposed amendments at this time.

III. ADJOURNMENT

Vice Chair Palazzo MOVED for adjournment.

Seconded by Ms. Painter.

Roll Call Vote

Vice Chair Palazzo, Mr. Muzzy, Ms. Hauke, Ms. Painter, and Chair Hanchett all voting Yea.

None voted Nay.

**The Vote on the Motion was unanimously approved (5-0).*

The meeting was adjourned at 6:39 PM.

Respectfully Submitted,

Linda Billings

Recording Secretary

AGENDA
BOARD OF CEMETERY TRUSTEES
July 13, 2021

AGENDA ITEM 5
NEW BUSINESS:

TURF REPORT FROM TONY

Review of landscape notes

June 6, 2021

Tony Palazzo

General comments on grasses at Lebanon cemeteries

I consider the grasses currently at the Lebanon cemeteries to be low maintenance turf. To provide the resources to have the grasses look like what you see on a golf course would be very costly to start and maintain. Therefore, in my opinion, we should try to maintain a suitable and stable vegetative cover (grass and weeds) due to the application of limited resources. The major limitation in retarding good grass growth is drought. Four cemeteries have sandy soils that do not hold water. Large areas in most cemeteries are sunny and dry. In areas where there are depressions (grave settling) there are usually good grasses, which is an indication that moisture is a limiting factor. Also, soil tests of four cemeteries show acidity (average pH 5.5) and low levels of organic matter.

Most of the vegetation existing on the cemeteries are grasses, weeds (lots of crabgrass), and forbs. In general, weeds dominate. In sunny areas, crabgrass is particularly dominant in the summer. Shady areas there is moss. All areas are stable and mostly covered with vegetation, but the aesthetics is not pleasing.

I have worked on several situations with the Cemetery Sexton since being nominated for the Board of Trustees. These are:

- Conducting a fall fertilization test to hopefully bring back suitable grasses that are already present in the lawns. More on this later in this report.
- Advising on Grub control. The Valley Cemetery has an infestation of grubs that are destroying the turf. Using chemical controls are expensive and rather use a more slower, more permanent biological control method. Applying nematodes will take approximately three years to develop a suitable control population but it will be long lasting. You can do about three acres of land for only about \$200.
- Developing methods to utilize compost to improve grass growth.
- Developing plans to improve grass growth on individual cemeteries.
- Providing advice on purchasing different types of grass seed to be used in reseeding. Hopefully, fall fertilization and use of proper grass seed and fertilization during reseeding can improve the vegetative cover.

Fertilization demonstration

The general objective of the tests is improve the grasses through fall fertilization. Fall fertilization has proven to be a cost efficient/beneficial method for lawns by increasing dominance of good grasses without all the extra top growth that occurs with spring fertilization.

We established two plots at the Valley and West Lebanon Cemeteries in fall 2019 with two different rates of fertilizer at each. We applied 1 or 2 pounds of nitrogen/1000 sq ft on 10 x 50 sq ft plots. Fertilizer was 10-10-10 grade. The results were inconsistent and it looks like it depended on the vegetation we were fertilizing. Both sites are sandy and had a mixture of good grasses (fine fescues, some Kentucky bluegrass) and weeds (crabgrass) and forbs. The better results were from the West Lebanon Cemetery. The section near the road that received the regular rate of fertilizer had better grasses and this may be due to the fact that this plot started with better grasses when we fertilized. The higher rate was mostly crabgrass. At the Valley Cemetery, both sites were dominated with crabgrass and I did not notice much improvement in better grasses.

There is some evidence that from some other areas, especially with sites that were disturbed, that good grasses exist and will return with fertilization. I think we should do a second application this fall.

The benefits of the fertilization was slow, but greatly improved in the second year. We assessed the results of the 2019 test in two sandy soil areas at the Valley and West Lebanon Cemeteries. The site at Valley Cemetery there was no beneficial results by applying the fertilizer. However, at the West Lebanon Cemetery, there were beneficial results. The benefits were that there was increased prevalence of good grasses and the green color of the good grasses was noticeable among the dead crabgrass. At both sites there was no difference between the fertilizer rates. The better grasses included bentgrass, fine fescue, and orchardgrass.

It was decided to use the same areas as last year but apply only one fertilizer rate of 2 lbs nitrogen/1000 sq ft over both the previous areas. The area measured 20 x 50 feet or 1000 sq ft. We staked the site and used 10-10-10 fertilizer.

November 9, 2020

Began noting a beneficial response from the fertilizer applications at both sites. The good grasses, Kentucky bluegrass and bentgrass, were covering 40-50% of plots.

April 5, 2021

Both sites had green grasses and were in better condition than the surrounding areas. Valley Cemetery had some bluegrasses and the West Lebanon had a better grass cover with more diverse species.