



# The Cornerpost

Journal of the Vermont Society of Land Surveyors  
Volume 55, Number 2 | Summer 2024

**WHAT'S UP  
WITH THE  
VT BOARD?**

**PAGE 6**

**HAVE A BEEF  
WITH COWS?**

**PAGE 12**

**REGISTER FOR THE  
FALL CONFERENCE**

**PAGE 26**



# YOUR SINGLE SOURCE FOR CAD, IT & FIELD SOLUTIONS



## OUR SERVICES:

- CAD SOFTWARE SALES, SUPPORT & TRAINING
- IT SUPPORT, MANAGEMENT & SECURITY
- AEC EQUIPMENT SALES INCLUDING TOTAL STATIONS, DATA COLLECTORS, GPS & SCANNERS

## CONTACT US

[www.cadnetservices.com](http://www.cadnetservices.com)  
[info@cadnetservices.com](mailto:info@cadnetservices.com)  
(603) 296-2376



# CADNET SERVICES



# The Cornerpost

Volume 55, No. 2 • Summer 2024

Published by the Vermont Society of Land Surveyors, a professional society dedicated to the advancement of the science of surveying and mapping. 802.777.6507 | www.vsls.org

### EXECUTIVE COMMITTEE

- Randy Otis, President
- Nate Yager, Vice President
- Lisa Ginett, Secretary
- Keith Van Iderstine, Treasurer
- Mark Day, Director
- Becky Gilson, Director
- Paul Hannan, Director

### EDITOR

Birgit McCall

### ART DIRECTOR

Kelly Cochrane-Collar

### SUBMITTING MATERIALS

Send any materials to:  
Email: [birgit@vsls.org](mailto:birgit@vsls.org)  
Vermont Society of Land Surveyors  
P.O. Box 99  
East Montpelier, VT 05651

### ADVERTISING RATES

Size	Member/Non-memb
Full page	\$450 yr/\$550 yr
Half page	\$250 yr/\$350 yr
Quarter page	\$150 yr/\$250 yr
Business card	\$100 yr/\$150/yr

- Ad subscriptions are for one full year (three issues).
- Ads must be print-ready.

Material taken from other publications must have permission to copy. Please include the publication editor's name and email address so we can request permission.

**CONTRIBUTE AN ARTICLE**  
Send it to [birgit@vsls.org](mailto:birgit@vsls.org)



12



8



14

# CONTENTS

## FEATURE ARTICLES

- President's Corner ..... 4
- Vermont Board News ..... 6
- NSPS Update..... 7
- One Surveyor's Lessons On Forestry in Northern Bavaria..... 8
- Have a Beef With Cows?.....12
- Random Notes.....14
- Spring Roundtables.....15
- Multiple Licenses and Certifications....16
- Special Field Notes:
  - The Bigelow Papers ..... 18
  - Meeting Minutes ..... 24
  - Fall Conference Registration.....26

## OUR ADVERTISERS

- Cadnet Services.....2
- Keystone Precision Instruments .....5
- Maine Technical Source .....13
- Murphy Sullivan Kronk..... 24

## SEND IN YOUR NEWS

Please consider making a contribution to an upcoming issue of *The Cornerpost*. Send your articles, news and photos to [birgit@vsls.org](mailto:birgit@vsls.org).



## ON THE COVER

In the Fall 2022 edition of *The Cornerpost*, Scott Taylor wrote an article about some City of Burlington Lease Lands disks he had. In the article he asked if anyone had ever seen one of these on a monument around Burlington. "Sure enough, at this year's spring VSLs meeting, Nate Yager told me he had seen one on North Street at the corner of a cemetery," Scott reports. "So we know that at least one was set." The monument is pictured here — located on the south side of North Street at the northeast corner of Elmwood Avenue Cemetery. The disk is set in a standard City of Burlington concrete monument, which is six inches square at the top, eight inches square at the bottom and five feet high.

Scott will have some of these disks up for auction at the VSLs Fall Conference in September.

# President's Corner

**The summer heat** has been a battle this year, and I struggle to write my column in these temperatures. This is a reminder to be safe out there in the field. Surveying has me out not only in all types of weather conditions, but also in locations with very different climates.



Not that long ago, I was on a job that had me working for 12 hours a day in the desert in Las Cruces, New Mexico. The sun in the desert is brutal. I discovered on the second day that I needed to wear gloves just to pick up the chisel I use to set benchmarks out of the bed of the truck. The metal was hot enough to burn me just from sitting in the bed of the truck. I bought special long-sleeve SPF shirts and large-brimmed hats, and every day I brought along copious amounts of sunscreen, a gallon of water, a quart of Gatorade, and my secret weapon – dill pickles.

The weather was beautiful, with not a raindrop in sight. There were fire ants, rattlers, scorpions, and more, but not a tick to be seen. As I climbed my first 4,000-footer in the 90-degree weather listening to my friends complain of the heat, I realized I haven't been bothered by the heat even one day since my time in the desert sun, and I am grateful for the vast experience this job has given me.

As some of you may know, I have recently started a new job at a large global firm, and the jury is out as to whether I will still travel around getting exposed to new things surveying, but what is of no doubt is that the journey of learning continues. I now have access to equipment I could only dream of at my last firm – from vertical take-off drones with lidar to mobile scanning on a high railer – which brings new challenges of when



Randy Otis beats the heat in Las Cruces, New Mexico.

to mobile scan, stationary or conventional survey. My first college degree did not consider nor prepare me for these choices, nor were there questions on my license exam related to these game changing technologies. This highlights to me the importance of continuing education, and the need to take it seriously. Whether that education is a seminar on tick safety, working in the heat, or the pros and cons of different lidar sensors.

Perhaps with that need in mind, I read an article from New Jersey that talks about whether a licensed professional should have to requalify or test to continue to practice. I hadn't really considered that before, as I know what I went through to get licensed and am passionate about the profession. Despite having had other licenses that required an abridged test periodically to maintain, I do not think we need this in surveying. I do however think we have a professional responsibility to stay educated, and practice what we are skilled in. With that in mind, our fall conference is coming up on Sept. 12-13, and I hope to see you all there. 🌍

*Randy Otis, L.S.*  
VLSL PRESIDENT



**MARK YOUR CALENDAR! FALL CONFERENCE • SEPT. 12-13 • FIRESIDE INN • LEBANON, NH**



# THANK YOU!

AS WE CELEBRATE OUR 35TH YEAR AT KEYSTONE PRECISION SOLUTIONS, WE EXTEND OUR HEARTFELT **THANKS TO YOU, OUR VALUED CUSTOMERS**. OVER THE YEARS, YOUR TRUST AND SUPPORT HAVE ENABLED US TO PROVIDE LEADING-EDGE GEOSPATIAL SOLUTIONS, SERVICE AND SUPPORT TO YOUR JOBSITES WHEN YOU NEED ACCURACY THE MOST. WE ARE PROUD TO HAVE BEEN YOUR CHOICE FOR THE INDUSTRY'S MOST INNOVATIVE PRODUCTS FROM CUTTING EDGE GEOSPATIAL MANUFACTURERS INCLUDING: TRIMBLE, EXYN TECHNOLOGIES, DJI, AND WINGTRA DRONES, AMONG OTHERS. YOUR PARTNERSHIP HAS BEEN INTEGRAL TO OUR SUCCESS, AND WE LOOK FORWARD TO CONTINUING TO SERVE YOUR NEEDS WITH EXCELLENCE AND EXPERTISE. HERE'S TO MANY MORE YEARS OF ACHIEVING GREAT HEIGHTS TOGETHER!

[keypre.com](http://keypre.com)



455 Fortune Boulevard, Unit 3  
Milford, MA 01757



**SALES:** 888.443.9840  
**SERVICE:** 510-455-7488

# What's Up with the Vermont Board?

A few changes are afoot with the Board of Land Surveyors

**TO QUOTE BOB DYLAN,** The Times They are a-Changin'!

Birgit asked if I would draft a brief summary of changes that the Board of Land Surveyors is currently seeing, and basically, I do what I am told! In all seriousness, she is correct: an update is definitely warranted.

Unless you live under a rock, you know I have been voicing my concerns not only about the direction the Office of Professional Regulation (OPR) has taken the Board of Land Surveyors, but also about OPR's failure to replace members whose terms have expired. Well, we have a fresh new batch coming in, which greatly relieves the anxiety of OPR moving the profession to an "advisory status."

Please welcome Doug Henson, Tim Cowan and Mike Gaines. I am thrilled to have these three coming in as I exit the board in December after serving for 12 years. For Tim this will be his second round as a member, and that alone will hopefully add some push to revisit some of the asks that the board members had an opportunity to review and comment on. Doug has always been a very vocal and active member of VLS, and his strong opinions are never held to himself. That voice and persistence is needed now more than ever. Mike satisfies the newly licensed requirement based on Rule 1.4, but based on numerous conversations with him, his passion and experience

are not new by any means. His fresh eyes, current practice procedures and technology use will be key to moving the protection of the public forward with the ever-changing times.

John Diebold is now the board chair, and his cool head and constant preparation will keep the board running smoothly and hopefully strengthen the relationship with OPR.

As I walk away from many years of serving on the board, there are so many things that I will miss. My relationships with past members, such as Charlie Rockwell, Jonathan Abts, Tim Short, Seth Kittredge and Skip Nalette, all made me a better professional and a better surveyor. The experiences I had and people I met within NCEES were invaluable. Never have I experienced a more professional association of people that gives so much to the protection of the public and the betterment of the profession. They are amazingly organized and exhibit such patience with new volunteers.

Closing up, thank you to all who patiently listened to my badgering and ranting on the importance of protecting the public, thank you to all who offered advice and opinions, and finally to my family, namely my wife Jayne, and my employers, O'Leary-Burke Civil Associates and DuBois & King, who allowed me freedom to be part of the profession that I love so dearly. 🌱



## Tidbits of advice to the new members based on my tenure on the board:

- 1 Be passionate and push your ideas and theories. More than likely the members sitting next to you have the same thoughts.
- 2 Look at the rules and tune them up. See the three experience statutes in 2544(a) (5). Revisit the educational requirements and bring back the credit requirements options. Based on the current rules, an applicant with a B.S. in Civil Engineering is on the same path as a non-degree applicant. Both of those changes would ease the path towards licensure and not risk the protection of the public.
- 3 Get involved with NCEES. Robert Krebs was key in prompting me to step up, and I will never be able to thank him enough for taking the time to introduce me and help me get started. The places that I was able to travel to, the people and events I was able to see, and the experiences gained would never have happened to the farm boy from upstate New York without Bob and NCEES.



**Welcome to the new members of the Vermont Board of Land Surveyors**



Doug Henson, L.S.



Mike Gaines, L.S.



Tim Cowan, L.S.

# NSPS NEWS

BY GAYLE BURCHARD, L.S., VERMONT NSPS DIRECTOR



**IN APRIL**, the National Society of Professional Surveyors (NSPS) had its spring business meeting in Arlington, Va. The Student Competition was also there and was very well attended, with 24 teams competing. This year there was a high school team competing against the colleges (it's never too early to start the wonderful experience of surveying)! For all the results please refer to NSPS News and Views.

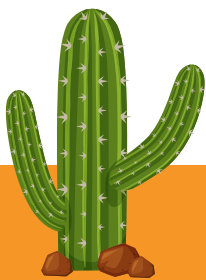
Tuesday, April 23, was Day on The Hill. This is a time when state directors meet with their senators and legislators to ask them to support or introduce bills that will directly benefit the surveying industry. This year we asked Congress to include a provision to the 2025 National Defense Authorization Act that would authorize a pilot program in the Department of Defense Transition Assistance Program. The program would target military personnel who have relevant training in military

surveying, mapping, and geospatial applications and transition them into applicable career opportunities in civilian sector surveying.

We also asked Congress to include a provision in disaster planning and response legislation that includes survey mark reestablishment and preservation by professional surveyors as part of cleanup discussions. The provision would also provide access to disaster relief and assistance programs.

State directors also respectfully urged U.S. Senators to sponsor a companion "sense of the Congress" resolution to highlight the important role that licensing surveyors, architects, and engineers plays in protecting the public. More on these issues and other bills that are impacting the surveying industry can be found in NSPS News and Views.


After Day on the Hill, state directors participated in committee meetings for two days, and the end of the week was devoted to the Board of Directors meeting. 🌐



## Next Up for NSPS

Fall Business Meeting  
October 21–23, 2024  
Albuquerque, N.M.

# One Surveyor's Forestry



## To the Vermont Society of Land Surveyors:

---

Hi Folks.

This is an update on life and times here in Southeastern Vermont and Southwestern New Hampshire, since I mostly retired five years ago. I still maintain my survey license in New Hampshire but did not renew my license in Vermont. I spend much of my time on building projects and historical pursuits, some of which I would like to share in the future if anyone is interested.

Well, enough of that gobbledy goop. Today while going through boxes of research notes and communications, I ran into a 15-year-old letter from George Butts, Vermont L.S. #11, who is one of my favorite old surveyor types that I've met in my life, so far. I read through the letter and would like to share it with the Society. I believe he intended for it to be published in *The Cornerpost*. It was in my "to be published file" but it fell through the cracks and was never published.

It is about a book titled "Niede-und Mittelwald in Franken, etc" (German) which primarily deals with forestry but also "gives an idea of how land measurements were made a hundred years ago."

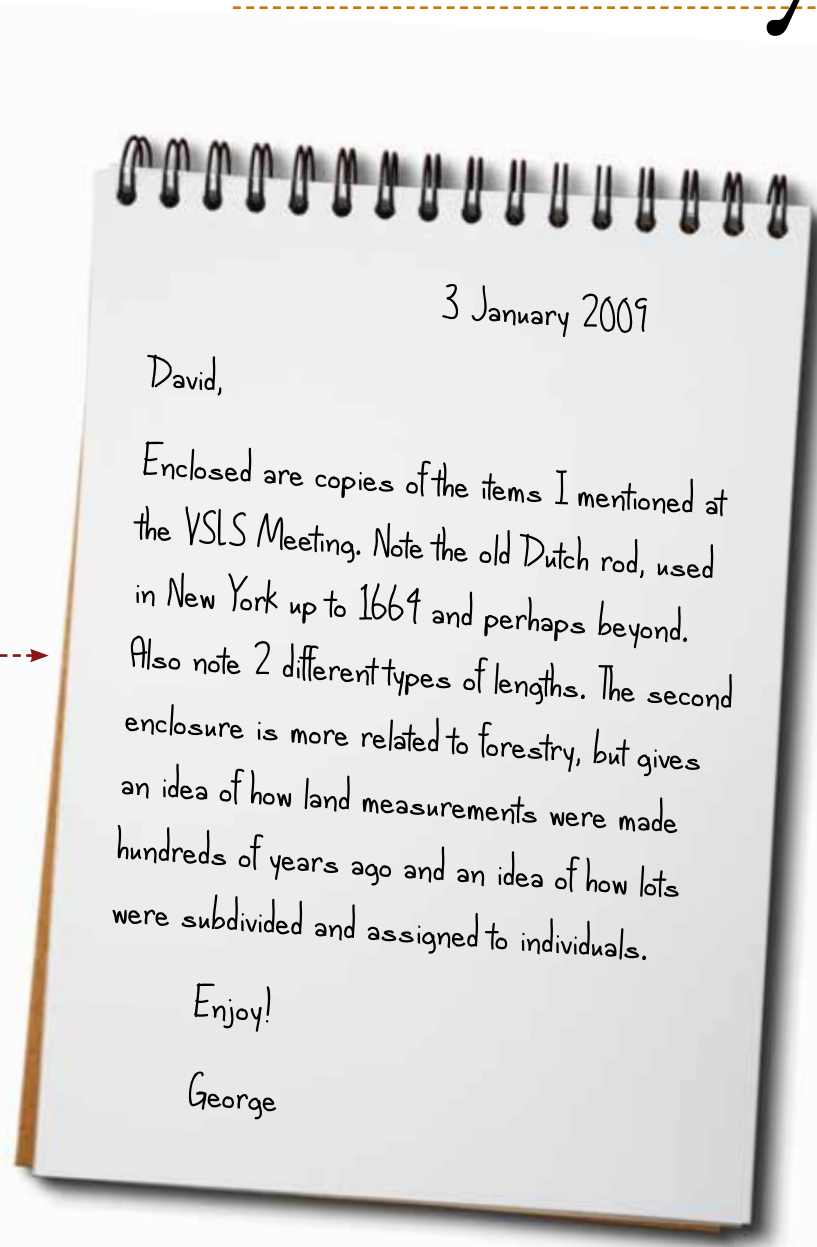
However I will let George tell the story.

Your humble servant!

*David A. Mann LLS*

Chesterfield, N.H.

damsurveyor641@gmail.com



3 January 2009

David,

Enclosed are copies of the items I mentioned at the VSLS Meeting. Note the old Dutch rod, used in New York up to 1664 and perhaps beyond. Also note 2 different types of lengths. The second enclosure is more related to forestry, but gives an idea of how land measurements were made hundreds of years ago and an idea of how lots were subdivided and assigned to individuals.

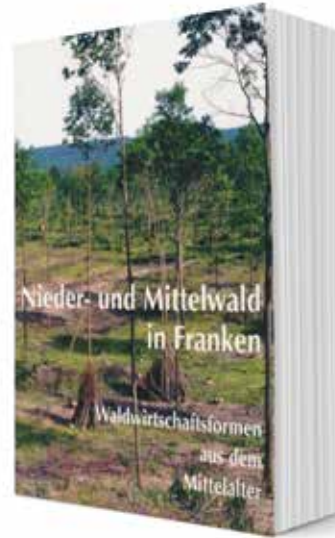
Enjoy!

George



# Lessons On in Northern Bavaria

A recently-unearthed article by VSLs Emeritus Member George Butts shows similarities between German and New England forestry and surveying.



**M**y education was in forestry, and I still have an interest there. If I could start over, I would have liked to have been a silviculturist, though good jobs in that field are hard to come by. It has a challenge similar to that of the boundary surveyor.

This explains why I bought the book titled “Nieder-und Mittelwald in Franken, Waldwirtschaftsformen aus dem Mittelalter” (Low and Middle Forest in Franconia, A Forest Management form from the Middle Ages). Franconia is an ethnic region in Northern Bavaria where I was stationed for three years, where my wife lived and her family still lives, and where I have visited many times and have developed an interest in its history and culture.

“Nieder” (Low) refers to a form of forest management whereby the young trees are primarily grown from sprouts of the stumps or roots, called a Coppice. A “Hoch” or high forest is one whereby the young trees grow from seeds or from planted seedlings; a middle forest is a combination of those two types. In the



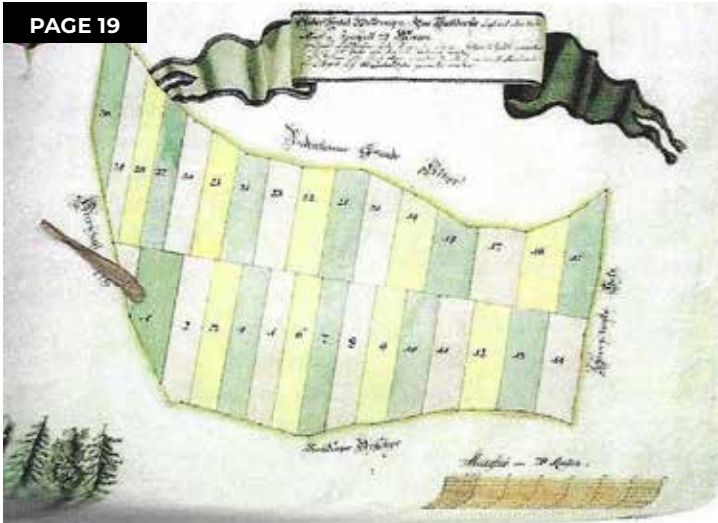
George Butts talks with an attendee in the history exhibit section of the 2010 Tunbridge Fair.

Middle Ages the main use of the forest was for fuel; the best fuel is from hardwood trees and they sprout the best. (Most conifers do not sprout, but there are always exceptions.) After coal came into use, fuel from trees became much less common and most of the forests in Europe were converted to conifers, which is what they are today.

The book is a study of the few remaining coppice forests in Franconia. It tells of the former uses (fuel, tan bark, bean and hay poles, etc), methods and other items of historical lore. It also includes several remaining towns where the practice has been kept up since medieval times.

When one has a forest that is to be managed, one first decides upon the desired end product, then which trees are best, and then the age at which the trees must be so that they meet the desired end product. For example, if one wants to grow hardwood sawlogs, this takes about 120 years and the 120 years is known as the rotation. If your forest contains 240 acres, that divided by the rotation equals 2 acres, the amount you can cut each year in perpetuity.

In this part of Europe (many other places also) the farmers formerly lived in a town for protection and farmed the outlying lands. Those farmers owned, in common, a forest for their needs. Many of these are no longer needed



“The following abstracts from the booklet also give us a glimpse of the survey practices of old. Note that the English are a Germanic race and many of the old customs are more or less the same.”

by the farmer but there exist a few that are used much as in the old days. These forests are the subject of the booklet and give a glimpse into the practices of the past.

The following abstracts from the booklet also give us a glimpse of the survey practices of old. Note that the English are a Germanic race and many of the old customs are more or less the same.

Page 19 is a 1795 map of a community forest. Note the date 1795. Also note that the forest has been divided into 30 cutting blocks, each containing the amount of land that can be cut each year. (In a coppice forest cut for fuel, 30 years is about the optimal rotation.

If there are, for example, 20 farmers who own in common a forest, then each farmer can cut 1/20th of the cutting block. Page 24 shows the farmers meeting in the forest and preparing to divide this year's cutting block into equal areas for the winter cut. Notice the “poles” to do the measuring. Page 29 shows the pole in use. The upper photo on Page 30 shows the standard pole for a particular town. This happens to be an oak stick fastened to the wall of the town office. The photo on the right shows the method of the temporary marks set to delineate each farmer's cutting lot; a split stob with an insert of grass or leaves.

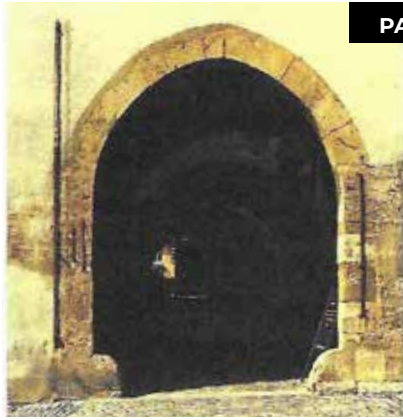
Page 93 shows the drawing of the cutting lots. Each cutting lot receives a number, slips are placed in a box and each owner draws from the box in the town office. (Sounds like what the proprietors did after surveying out a division of lots in New England.)

Page 96 shows the boundary markers of the perimeter of the entire forest. The one on the left is a field stone, the one on the right is a dressed stone marked with MF for the town of Michelfield and the date 1733. When a forest is monumented thusly it is said to be “stoned”.

Page 100 details a specific community Westheim. Their forest contains 67 hectares, of which about 50 are managed as a middle type reproduction. The rotation is 27 years and there are 24 right holders. Their rod, here, and in most other places, called a “Gert” or switch is 2.82 meters long. It seems that a Gert can be an instrument, a unit of measurement and an area. (Our rod can also be an instrument, a unit of measure and a area.) I have noticed that each town's Gert is slightly different in length, but all quite close.

Page 128. Another photo of the Gert in use. Top photo shows another way to mark the corner of the yearly cutting lot.

These procedures and customs have remained in place for several hundred years and can give one an idea and appreciation of the early settlers in New England. 🌲



Der Recklerwald Wäsenndorf

Die Fläche des 19,1 ha großen Recklerwaldes Wäsenndorf, von demen 18,3 ha noch als Mittelwald bewirtschaftet werden, liegen am Rißheimer Berg in der Gemarkung Krausshelm. Grundbesitzerin ist die Gemeinde Seinhelm. Eingeschlagen wird wie im direkt benachbarten Rißheimer Recklerwald im zwei-jährigen Turnus im Wechsel mit der Pflege der bauchbleibendsten Celdholz in der Gemarkung Wäsenndorf.

Die Umtriebszeit liegt bei 24 Jahren, die jährliche Herdfläche umfasst durchschnittlich 1,27 ha. Von den 26 Recklern nehmen bisher alle ihr Recht wahr, von zwei oder drei Personen wird das Recht an Eltern weitergegeben. Im Gegensatz zu vielen anderen Recklergemeinschaften und Waldgenossenschaften sind die Rechte alle gleich groß. Bei der Einteilung im Gelände nehmen die Vorkände jedoch einen gewissen Ausgleich je nach der Dichte des Holzbestandes und der Anzahl der Oberflüßer vor.

67 Reckler  
4-tel  
50 h mäßig hohe  
27 gen. Reckler  
2nd. nicht höher

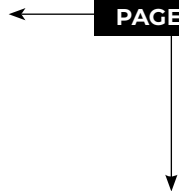
Der Körperwald Westheim

Der Körperwald Westheim liegt westlich von Kabenmühlheim und umfasst eine Fläche von etwa 60 ha. Daran werden noch ca. 50 ha als Mittelwald als 27-jährigen Umtrieb bewirtschaftet. Die 24 Reckler sind im Grundbuch als „Körperwälderhaber“ eingetragen. Der GEM 1951 Boden befindet sich im Besitz der Reckler, das Oberholz gehört allen Berechtigten, unabhängig davon, ob die Unterholzer ausgetrieben sind.

Die jährliche Stockholzfällung wird als „Baum- bzw. Söbnerfäll“ bezeichnet, die Ca hat hier ein Längenmaß von 42 Meter. Die Flächen sind in 16 Bauzeilen mit 4 Gert Breite und 40 Gert Länge und 8 Söbnerfäll mit 3,5 Gert Breite und 40 Gert Länge eingeteilt. Die unterschiedlichen Antriebszeiten sollen es ermöglichen, dass die Reckler mit den größeren Flächen als Holzlieferung für Fuhrladungen von Sägen beim Kichenbau ausgeglichen werden.<sup>56</sup> Zusätzlich sind jeweils auf zwei Bauzeilen ein Bauzeilen, das eine Größe von 2 Gert in der Breite und 40 Gert in der Länge umfasst. Dieses Rechte sind jedoch nicht ausgeglichen.

Das Erntesystem sowie die Holzabgabe erfolgt durch diejenigen Reckler, die ihr Recht wahrnehmen wollen. Im Jahr 1997 waren dies beispielsweise nur noch 10 der 24 Berechtigten. Die an der geringen Beteiligung resultierende verminderte jährliche Erntemenge führt zu einer Erhöhung der Umtriebs-

Switch  
2,82 m  
lang.



# Have a beef

BY SCOTT TAYLOR, L.S.

# with cows?



**I**T'S PROBABLY NOT AS COMMON NOW, what with fewer farms and less need to traverse around with an instrument on a tripod, but in the good old days we often found ourselves in a cow pasture with an instrument set up.

Cows being cows, they had to go investigate what this person was doing in their pasture. I was never afraid of being attacked; I just worried about the instrument. I would find myself surrounded by a herd of very curious cows. I'd go to one side to shoo the cows back, and the cows on the other side would start moving closer to the instrument. So back and forth I would go, trying to keep them back. I could spend as much time shooing the cows as running the gun. Eventually the cows got bored and wandered away.

Now if there was a bull in the field, that was another story. 🐮

Here are a couple of simple rules to follow to help keep you safe if you should have to set up in a cow pasture:

- 1 Always check first and make sure there is not a bull in the herd. They tend to take exception to anything in the pasture other than themselves and their cows.
- 2 If the pasture has an electric fence around it, always assume the power is on. I think most of us have stories about encounters with an electric fence.

**Stay safe out there!**



# Your Measurement Technology Source ...



For 50 years, engineers, architects, surveyors and contractors have relied on **MTS** as their source for the latest in precision measurement technology. **MTS** has an experienced team that can partner with you to provide the right solution for your application and the training to be confident that the job is done right.

From the sky or on the land, underwater or underground, **MTS** has the most advanced measurement solutions to fit your needs.



Whether it's UAV, Terrestrial Positioning, GNSS, 3D Laser Scanning or Underground Detection, the professionals at **MTS** can present and provide training/service on all the products we sell.

For more information about the one **source** that can meet your measurement technology needs - from Field to Finish, call **MTS** today at **800-322-5003**.



 **VISIT US**  
**WWW.MAINETECHNICAL.COM**

 **CONTACT US**  
**800-322-5003**

YARMOUTH, ME | WOBURN, MA | WAPPINGERS FALLS, NY | SYRACUSE, NY

## PRESERVATION COMMITTEE UPDATE AND REQUEST

We have had a Preservation Committee for close to 30 years now and we're starting to accumulate a sizable collection of old plans. In the early days, we paid to have a large number of plats scanned. The VSLS no longer has the funds to do this.

At the December 2023 meeting, members voted to create a Survey Preservation Donation category to be used towards the cost of scanning surveys donated to VSLS. Eventually this fund will be big enough to allow us to pay for more scanning. Unfortunately, we already have a backlog of surveys that have been offered to us, but we don't have the resources to scan them. Until we can build up the funds to pay for scanning, a quicker way to get scanning is to do it ourselves. Many of us have printer/scanners that can handle 24x36 plats. We

all have slow times when we could fit in some time to do some scanning. Mark Day has already volunteered to scan the surveys of George Bedard. If we could get more members to volunteer to do some scanning, we could start to put a dent in the backlog and ensure that these plats aren't lost forever.

→ If you're willing to do some scanning, please contact Birgit ([birgit@vsls.org](mailto:birgit@vsls.org)) or a member of the Preservation Committee: Scott Taylor, Harris Abbott, Mark Day, Malcolm Moore and Eric Morse.



**Don't have time to scan? Consider giving to the Survey Preservation Fund instead!**



## PERMANENT MARKERS?

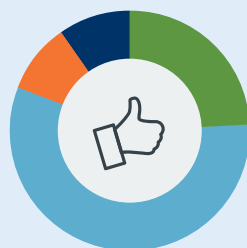
Malcolm Moore, L.S., sent in these photos from his travels near Seldovia, Alaska, where he came across a 1956 triangulation station BALSA at the mouth of Kachemak Bay. "Because of gradual erosion," he says, "its witness monuments will soon fall into the sea."

## SPRING ROUNDTABLES SCENES AND SURVEY



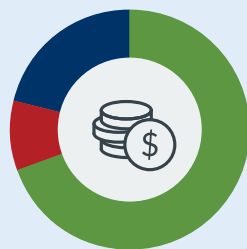
→ In an earlier survey, VSLs members indicated a desire to explore alternative meeting venues in order to save costs. For the Spring Roundtables, we tried out the Canadian Club in Barre. We were able to lower the registration price by about \$50 and still have a reception with a free drink at the end, and snacks throughout the day.

At the end of the event, we asked attendees for their impressions. The majority of attendees were happy with the experiment, and we received the message to not mess with lunch loud and clear. We will continue to try to find lower cost options without compromising the quality and quantity of the food.



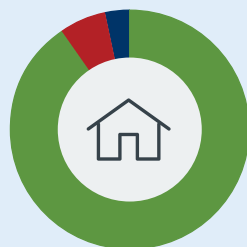
How satisfied were you with the venue?

- Very Satisfied: **23%**
- Satisfied: **54%**
- Neutral: **9%**
- No Response: **9%**



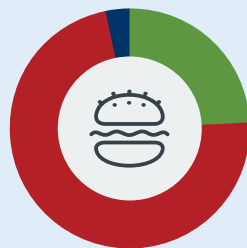
Do you think the change in venue was worth the savings?

- Yes: **66%**
- No: **9%**
- No Response: **20%**



Should we choose similar lower-priced venues in the future?

- Yes: **86%**
- No: **6%**
- No Response: **3%**



Should we try to cut food costs in the future?

- Yes: **23%**
- No: **69%**
- No Response: **3%**

THOUGHTS ON PROFESSIONAL  
PRACTICE & EDUCATION

# Multiple Discipline Licenses and Certifications

What credentials are best  
for a long and fulfilling  
career in land surveying?

BY KNUD E. HERMANSEN  
P.L.S., P.E., PH.D., ESQ.



T

his is the ninth article I've prepared in the series offering thoughts on professional practice and education. In this article, I discuss multiple discipline licenses and certifications. Contrary to many of my other articles, I doubt there are opposing sides that wish to argue or advocate for or against what I write. Though I suppose there will always be one or two readers that may wish to dispute what I have written.

I use the term "license" and the term "certificate" to indicate separate and distinct achievements. As I will use these terms in this article, a license is an authorization to practice that is governed by a separate government board. Various state laws require a person have this authorization in order to provide some defined service to the public.

A certificate, on the other hand, is generally an accomplishment used to indicate some special knowledge, achievement, or skill set of the certificate holder. Many certifications are controlled by private or government organizations that have taken it upon themselves to exert dominion over some special body of knowledge or skill. The necessity of having the certificate to provide a service is usually governed by private contract, local law, or

agency regulation rather than state statute or mandatory regulation.

What I mean by multiple licenses or certifications is that the licensed surveyor is also licensed or certified in some other profession, specialty, practice, or trade. For example, in addition to my surveying license, I also hold licenses as a professional engineer and attorney at law.

I don't think multiple discipline licenses or certificates are always necessary. I do think other professional licenses and certifications can be helpful and profitable, especially if connected to land surveying services. I would estimate that half the licensed surveyors that have practiced for 10 or more years hold other professional licenses or certificates along with their survey license. I think a vast majority find



their licenses and certificates useful and profitable. After all, if not useful or profitable, licenses and certificates can be dropped or relinquished.

Some of the most common licenses that are held by land surveyors in conjunction with their survey license include: professional engineer, forester, landscape architect, attorney, realtor, and septic system designer.

Certifications are more numerous and widespread among surveyors. Certifications that are popular among licensed surveyors include: photogrammetrist, wetlands specialist, notary, OSHA, federal surveyor, project manager, floodplain manager, drone operator, and hydrographer, to name a few. The term “certification” is often attached to the name of the specialty, the entirety abbreviated, and placed after the surveyor license such as a certified floodplain manager (CFM) or certified federal surveyor (CFedS).

licenses are best obtained while young with grand plans or while old and unfulfilled dreams (bucket list), or frustrated with just one license. I make this statement because the work and effort required for the second license is not always commensurate with employment, family, and other commitments that a typical middle aged person would have.

I should note that often one license can be obtained with just an undergraduate degree in surveying and a second license obtained with a graduate school degree in another field. Such is the case when obtaining a law degree.

Certificates are easier to obtain as they seldom require a specific degree, though wetlands specialist is often an



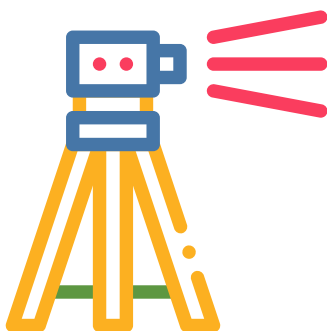
**“I would estimate that half the licensed surveyors that have practiced for 10 or more years hold other professional licenses or certificates along with their survey license. I think a vast majority find their licenses and certificates useful and profitable.”**

Additional licenses are not easy to obtain and often require extra college courses, additional degrees, experience, and testing. There are exceptions to this statement, though, such as the licensed real estate agent (realtor). I am unaware of any state that offers a realtor degree, though I would not be surprised to be informed of some university program that does offer such a degree. Thirty years in college teaching has shown a degree is easily initiated at an institution based on the attraction of the degree name among the inexperienced youth rather than the needs of society or demands of the society.

I am not going to discuss how to obtain two or more licenses in detail, since state law often governs the ease or difficulty of such endeavors. I believe two or more

exception requiring a degree focused on soil science, biology, or botany. Most certificates are gained by experience and testing or in a few cases, just testing. Information for obtaining certifications is readily available on the internet. Experience has shown that many certifications are gained by happenstance, where services are performed in a particular area, leading the practitioner to conclude the next step toward certification makes sense.

I would encourage surveyors to seek licenses or certifications in fields or services they enjoy or wish to pursue. I would encourage young people about to embark on the path to a surveying career to examine their options and to make the most of their college experience. I suspect I am not the only person that wishes they had deviated somewhat in youthful pursuits to make the most of a professional career. 🌍



Scan the QR code to find other books and articles by Knud Hermansen.

# SPECIAL FIELD NOTES

[The Bigelow Papers]



## INTRODUCTION

In May of 1967, the Vermont Society of Land Surveyors, then known as the Vermont Society of Surveyors, held its 3rd annual meeting. After dinner President Bob Dufresne introduced Paul Bigelow as the evening speaker. Paul kept every surveyor present spellbound with some well directed “critical comments.” It was very apparent that Paul knew his subject from first hand experience and that his intent was to educate and not to scorn. His subtle Yankee humor was used constructively, not negatively.

Phillips Bill of Deerfield, Massachusetts, President of the American Congress on Surveying and Mapping, was in the audience. Phil was so impressed that he had the address printed in the *Journal of Surveying and Mapping*, though under a different title.

**“Both of Paul’s essays should be read by every Vermont surveyor at least once a year.”**

The Society’s main efforts at that time, however, were directed towards legislation requiring the licensing of land surveyors. After that goal had been accomplished, the membership concerned itself, among other items, with the improvement of land surveying practices in Vermont. From these beginnings, the Society produced the first educational seminar in 1973.

Several experienced surveyors from around the

state cooperated in a presentation titled “What the Licensed Surveyor in the State of Vermont Should Know.” Paul prepared the part about record research, which is the second work included herein.

Both of Paul’s essays should be read by every Vermont surveyor at least once a year. The editor has added a few footnotes of explanation or to indicate items that are of special significance. These footnotes are keyed into the main text in brackets in this manner [1]. For the footnote itself see page 13 et seq.

Paul Bigelow was born in Stowe, Vermont in 1906 and graduated from Montpelier High School. In 1927 he received a degree in Electrical Engineering from the Rensselaer Polytechnic Institute.

After graduation, Paul worked in New York City testing and repairing meters; in Texas and Louisiana on a seismograph party; and in Vermont for the State Highway Department. He then worked on road construction, bulldozing and logging, and in 1932 started to survey lands part-time. In 1935 he became a full-time land surveyor.

Paul is licensed in Vermont as a Land Surveyor and as a Professional Engineer. He is a member of the Rotary and the American Congress on Surveying and Mapping; a life member of the Vermont Society of Engineers and Emeritus Member of the Vermont Society of Land Surveyors.

*George F. Butts*

Editor, Chittenden, Vt., May 1987

# Some Critical Comments on Vermont Land Surveyors

PRESENTATION BY PAUL BIGELOW (1906–2002) • 1967 VT LAND SURVEYORS ANNUAL MEETING

## President Dufresne and fellow members of the Vermont Society of Surveyors:

The first stated object of our Society is to “advance the science of surveying and mapping.” I might note here that the branch of land surveying which involves retracing old boundaries must be considered as being far from an “exact” science, in Vermont at least. I shall attempt to further our stated object by making a few critical comments on the present state of land surveying in Vermont.

My contention is that the great majority of the land surveyors now practicing in Vermont are doing poor work and this general observation must include the members of this Society. I shall offer several examples of what I consider poor surveying practices and if some should involve our members, please remember that the criticism is not intended as personal, but I do want you to know it is US I am talking about and not some old timer from Essex County who uses only a pocket compass and never heard of the Vermont Society of Surveyors.

While I do not feel uniquely qualified to make these criticisms I have, in 35 years of part time and full time practice, managed to observe, and I hope correct, some of my own mistakes and also to observe poor practices on the part of others which I would like to see corrected.

The land surveying field may be divided into two categories:

- A. The monumenting, measuring and mapping of new sub-divisions of existing parcels, including writing of legal descriptions, and [1]
- B. The retracement, remonumenting and mapping of existing parcels.

Our biggest failures in category “A” are as follows:

1. Failure to give the basis of bearings used. This is the most common failure of all. Not one map or legal description in a hundred will tell you whether bearings given are based on grid north, true north, magnetic north or “assumed” north.
2. Failure to set reasonably permanent monuments.
3. Failure to use the proper precision for the particular job and the tendency to indicate on the map a precision which is entirely unwarranted by the measurements made on the ground. [2]

The latter is really a form of fraud, unintentional though it may be. It is quite common. For the purposes of this discussion “precision” means the degree of refinement of a

measurement and a measurement can be accurate without being precise or it can be indicated precisely without being at all accurate.

4. Failure to close the survey.
5. Failure to indicate on the map exactly what the surveyors did and, in many cases, who the surveyor was.

I can offer one horrible example which illustrates all five of these common failures of Vermont surveyors of subdivisions. Recently I was asked to survey a parcel of land being sold and the owner assured me the task would be simple “because,” as he said, “you have surveyed most of the surrounding properties and I have had surveys made of the two parcels I have sold off and there is a surveyor’s map of one of them.”

The first thing I noted on the map was a prominent “Note -- all taping to ground.” I interpreted this rather cryptic remark to mean that the surveyor did not level his tape. Some of the lines measured were on slopes of up to 20 degrees from the horizontal; nevertheless, the distances were shown to tenths of feet. This is an example of failing to use the proper precision for the job, as well as indicating on the map a precision which was not actually attained by measurements on the ground.

The map indicated five iron pipes were set for monuments. Of the two I found, one was about 18 inches long, which was driven about 4 inches and could easily have been pulled by a five-year-old, and one about 3 feet long laying on the ground, having fallen from its own weight. Fortunately, one witness tree had been blazed, which enabled me to drive it within a probable 3 feet of its original location. This is an example of poor monumentation.

The line which I had to retrace was about 900 feet long through two deep ravines and a dense growth of hemlock. I looked in vain for blazed trees or any cutting to indicate the survey path. I then learned this line had not been run but had been calculated. This line as shown on the map was not marked as calculated, the bearing was shown as a northwest bearing and shown to the nearest minute and the distance was shown to tenths of feet. The actual bearing of this line was a northeast bearing. Inasmuch as the calculation of this line involved slope distances, it obviously could not be calculated to the nearest minute or to the nearest tenth of a foot.

Here are examples of failure to indicate what the surveyor did, failure to close a survey with resultant error in bearing which would have been disclosed by closure, failure to mark the line through the woods and failure to indicate the actual precision attained. The north arrow shown on the

map was not marked to indicate which north it represented. My survey indicated it to be magnetic and it appeared that the surveyor had determined the magnetic bearings of one line and had used that line as a basis for the bearings of the remaining lines which were calculated from angles turned to the nearest minute. I consider this method to be entirely appropriate and the only practical one to use for most transit surveys in this vicinity. However, there was nothing on the map to indicate directly that this method was the one used.

Also lacking was the name of the surveyor, only the name of the surveying firm (which name shall remain forever unknown). I wish that those of my audience who are members of surveying firms would give serious consideration to showing on your maps the names of the persons who did the survey and who drafted the map. I believe this would make these men more conscious of their responsibilities and would encourage better work by assuring recognition of work well done. [3]

I sincerely hope that if the man who did the survey I have cited is in this audience, he will forgive me for using this particular example. I can assure him that all of the failures are, unfortunately, quite common in Vermont.

Some surveyors in Vermont are still using magnetic bearings in the survey of small sub-divisions. This means that future relocations of lost corners can be uncertain by as much as several feet because of the inherent inaccuracy of the compass.

One of my associates recently completed a map which included his own survey, plus an adjoining parcel recently surveyed by others. The map furnished for the adjoining survey showed bearings to the nearest minute and indicated that they were “true north bearings.” My associate’s bearings, when adjusted for approximate declination, failed to check these so-called “true north bearings” by several degrees. When a surveyor gives “true north” – bearings to the nearest minute – he is implying thereby that he has determined true north, either by observation or from a suitable reference line, with a precision of one minute of arc. There were no reference lines in the vicinity and I am quite sure this surveyor did not take observations to determine true north with a precision of one minute. This is an example of “pretended precision,” which could have been avoided if the surveyor had correctly indicated the basis of his bearings.

Before proceeding to category “B” I would like to offer, for the benefit of any of you who will be searching land records for that elusive legal description needed to furnish vague hints for your search on the ground for equally elusive evidence, if any, left by former “surveyors,” so-called, definitions of the words and phrases as used in these descriptions. Certain terms had entirely different meanings to the farmers, lawyers, loggers, town clerks, and store keepers who wrote these descriptions than to the men who compiled our dictionaries.

“Parallel lines” are any lines which do not actually intersect each other within the vision of a rather near-sighted person. Any lines which do visibly intersect always form “90 degree angles” or “right angles.”

“Northerly” means any direction except due south and may occasionally include that. [4]

“100 acres more or less” means somewhere between 5 and 500 acres.

“A stake and stones” means a small twig long since rotted away, surrounded by up to 3 small cobbles well concealed under 6 inches of dead leaves. If there has been logging in the vicinity, there will be at least 3 tree tops over the leaves.

An “iron stake” is a figment of some lawyer’s imagination. It was mentioned in his reference book example of survey descriptions. Many hours have been wasted by surveyors looking for these “iron stakes” on the ground.

A “rectangle” is any 4-sided figure.

“Beginning at a point in the road” means beginning at what the farmer, in 1872, imagined to be the center line of travelled way, the center line of right-of-way, the edge of travelled way, the edge of right-of-way, or any other convenient point near a road from which to start pacing.

And so on. [5]

Land surveying category “B11, the retracement and remonumentation of former surveys, also includes the surveying and marking on the ground of previous subdivisions established in deed descriptions only without benefit of survey. Many of our failures in category “A” apply equally to category “B”. In addition, there are two other common failures peculiar to category “B”.

First, failure to recognize the cardinal principle of retracement; namely, the surveyor must attempt to retrace the steps of the original surveyor. If there was no original survey, he must attempt to determine the intent of the original grantor and grantee from the appropriate deed descriptions. In either case he must rely on evidence in the land records and on the ground rather than on the precision of his measurements. One prominent land surveyor has aptly stated he was more of a land detective than a land surveyor.

A corollary of this failure is our failure to indicate on our maps the evidence upon which we based our survey and to indicate any specific uncertainties caused by ambiguities in descriptions and evidence. I am sure many of you will agree with me that there are many such ambiguities.

A decision of the Vermont Supreme Court in 1930 is an excellent illustration of the cardinal principle. [6] The case involved an owner of an original town lot which was deeded to him as 100 acres, shown on the town lotting map as 100 acres and described in the original town field book by such metes and bounds as to make it 100 acres. The surveyor for the adjoining property owner was able to show from evidence on the ground that the original surveyors made

errors in measurements that made one whole tier of town lots about one-half their prescribed widths.

The Supreme Court ruled, in effect, that what the owner really owned was the town lot as laid out on the ground by the original survey of the town, instead of what that same survey called for in the field book. In other words, it was not what the original surveyors said they did that counted, it was what they actually did as proven by evidence on the ground.

These surveyors of our original town lots went into the then completely uninhabited wilderness for periods of several weeks, taking for provisions a barrel of salted cod fish and a barrel of rum. At the end of the period there was usually some cod fish left. This cod fish surplus might explain the gross inaccuracy cited. Smaller inaccuracies might be explained by a Vermont law passed around 1780 which was something like this -- "In perambulating or running town lines throughout this state, an allowance of one chain in 30 shall be made for swag." In other words, if a surveyor's work was otherwise accurate he was required by law to arbitrarily introduce a 3-1/3 percent inaccuracy.

In view of all of the above, I maintain that a retracement surveyor who measures distances to a hundredth of a foot and angles to the nearest minute in attempting to retrace the steps of these original surveyors is engaged primarily in wasting his client's money. [7]

Most retracement surveyors fail to indicate on their maps which corner markers they found and which they set and also what evidence was found on the ground or in the land records determined their survey.

A few years ago a client for whom I had done considerable subdivision work on a tract of about a hundred acres decided he wanted a perimeter survey of the part I had not surveyed. I was busy at the time and he hired another surveyor to do the work and asked me to combine our surveys into an overall map. This surveyor got the former owner to show him the corners and then proceeded to tie them together by a random survey with stadia distances and with angles read to the nearest minute. From these measurements he calculated the bearings and distances of the boundaries which he expressed to the nearest second of arc and hundredth of a foot.

He had an excellent opportunity to close a large loop of the survey with very little additional work but failed to take advantage of it. I was not too surprised to find the error of closure of our combined surveys to be about 300 feet. After this surveyor did some re-calculating, the error was reduced to about 200 feet. His purported results indicated a precision far beyond what could possibly be attained with his methods of measurement. Because he failed to close his survey, he was unaware of large errors made in measurements or calculations or both. His representations were so misleading that they bordered on fraud.

Even most taped distances are not determined with a precision justifying their expression to hundredths of a foot. Just the temperature correction for a mild winter day would amount to about 0.03 feet in every 100 feet. Any bearings calculated from stadia distances will be uncertain by up to 1/4 degree. [8]

The second common failure is the failure to recognize the proper function of a surveyor. The proper function of a surveyor in retracement surveys can best be compared to that of a lawyer. A lawyer does not establish laws. Statute laws are established by legislatures and common laws are established by courts-of-law. The lawyer's function is to give his client his opinion on what the established law is and how it affects the case at hand. And never forget that 50% of the lawyers who go to court are wrong.

Similarly, a surveyor does not establish lines and corners. They are established by deeds which express the common consent of the parties concerned or by court order. The surveyor's function is to give his client his opinion, based on evidence found in the land records and on the ground, where these established lines and corners are and to mark them as nearly as possible in the previously established locations. And never forget that at least 50% of surveyors who testify in court are wrong.

We retracement surveyors are sadly lacking in humility. We should be more forthright in admitting that our conclusions are far from infallible. We should let our clients know that due to circumstances beyond our control it is usually impossible for us to give them answers that are certain. We should indulge in some justified and legitimate "buck passing" by making appropriate notes on our maps, or in our reports, that not only may get us "off the hook," but will also educate the public in the primary causes of our uncertainties and just possibly might encourage the voters to demand laws to correct the inexcusably casual manner in which land transactions have been, and are being, handled in Vermont.

Following are two examples of appropriate notes on maps:

1. "The N. 80-3/4° W. and S. 79° W. lines and line following Slide Brook were run and marked as agreed to by George Sawyer {the adjoining property owner} July 1960, and are a compromise between fences found and an ambiguous description in a deed recorded in Book 8. Page 145, of Fayston Land Records."
2. "The description, (on which this survey depends) in a deed recorded in Book 21, Page 233, of Fayston Land Records, is incomplete, self contradictory and otherwise incorrect. Lines and corners were marked to conform as nearly as possible with apparent intent of parties concerned."

Now a word about fences. I very much deplore the tendency of all lawyers and many surveyors to consider any existing fence, no matter how crooked it is or what bearing it follows, to be a property line. The implication of such a line of reasoning is that no man can build a fence on his own land without risking the loss of part of his land to the adjoining property owner. The determination of adverse possession is extremely complicated and in any case is definitely not the proper function of a surveyor. The surveyor should make his survey conform as nearly as possible to evidence in the land records and on the ground and report the extent of any apparent adverse possession to his client and advise him to get legal counsel if needed.

A fence should only be considered as indicating a boundary if it satisfies all of three conditions:

1. It should be reasonably straight.
2. It should be on the proper bearing.
3. It should be the best available evidence indicating the original location of the boundary. [9]

The only exception to this rule is when the deed description specifically calls for a line following an existing fence, in which case the surveyor must follow every crook and turn and hope it is the same fence, or in the same location, as the fence originally called for. An example of irresponsible use of fences as evidence follows.

A few years ago one of my clients discovered a well-blazed, brightly painted line marked through the middle of what he had always supposed was his sugar orchard. My search of the land records revealed that his boundary was an original lot line which was well defined for several miles by a reasonably straight fence. Straight, that is, except for a short section below the sugar place where the fence changed direction to by-pass a ledge and faded away instead of turning back to join the remaining straight fence above the ledge. The new owner of the adjoining property had hired a self-styled "surveyor" who had not wasted any time by consulting the land records or by determining lot line bearings. When he came to the bend in the fence he faithfully followed it as far as he could find it and then continued in the same direction through the sugar place for about a thousand feet, finally dead-ending about 140 feet from the true boundary.

The man who perpetrated this outrage was one of the loudest critics at a legislature hearing on our proposed surveyor's registration law. We can appreciate his desire to keep required standards for surveyors as low as possible. I will say he did a wonderful job of blazing trees, making many deep cuts and painting them a bright red. Too bad they weren't on a property line.

In closing I shall list items that should appear on property maps and are often missing therefrom:

1. A title, usually including the owner's name and the town and state in which the land is located.
2. A scale, including a graphic scale.
3. A north arrow with designation as to which north it represents.
4. Name of surveyor and assistant. [3]
5. Month and year of survey.
6. A source of bearings or datum line (usually missing).
7. Bearings and distances of property lines, survey lines, and ties.
8. Names of abutting property owners (often missing).
9. A legend.
10. Area, if desired by client.
11. Note any exceptions or easements such as cemeteries, springs, pipe lines, rights-of-way, etc. owned by others.
12. Numbers of any highways and arrows with distances to nearest road intersection or community.
13. A border, also where applicable.
14. Type of survey (if a compass survey).
15. A datum plane and bench locations if elevations are involved.
16. Calculated bearings and distances should be so noted.
17. Type of monument should be noted, also whether each monument was "set" or "found" (often missing).
18. At least 4 coordinate intersection tick marks. Either your local coordinate system or the Vermont Coordinate System.
19. Show original town lot lines and numbers (often missing).
20. Show record book and page numbers of any key references in the land records.
21. Give month and year of any tree blazing done to mark lines in woods. [10]
22. Note existing evidence, such as old blazes, old corners, fences, stone walls, etc., used to determine boundaries.

## EDITORIAL COMMENTS

### *Comments by George Butts, 1987*

These footnotes have been added by the editor to clarify some points, to add additional information and to indicate some of Paul's practices that have been helpful to the editor.

- [1] It is interesting to note that 20 years ago Paul considered the writing of new legal descriptions the work of the land surveyor. At the present time, how many descriptions of new parcels are being prepared by surveyors?
- [2] Paul makes a comment here of a "poor surveying practice" that is still going on. Our new EDMs and our computers spit out distances to the nearest thousandth of a foot and bearings to the nearest second. Some of this raw data is appearing as is on plats, indicating a false degree of accuracy, what Paul calls "pretended precision."
- [3] This is one of the many ideas we gleaned from Paul. We learned in school that it was important legally to put all names of the field party in the field notebook. When all party members (except one young chainman) are locating the lines between heaven and hades, that former young chainman might be able to testify about the survey work done. Why not the same for the plat? In addition, we have found that our assistants' pride in the work has improved when they see their names on the plat.
- [4] The Vermont Supreme Court once ruled by inference that the south side of the highway was actually the north side. *O'Brien v. Dewey*, 120 VT 340 (1958).
- [5] We have always enjoyed what we call Bigelow's Vermont dictionary. The sad part is that it is as true today as it was 20 years ago.
- [6] *Neill v. Ward*, 103 VT 117. This case includes possibly the most boundary law of any Vermont case. Every Vermont surveyor should read the entire case.
- [7] Paul is right if the survey's only purpose was to locate the client's property boundaries. When you consider, however, that more accurate distances and bearings have great value in the perpetuation of those boundaries, the client's money may not have been wasted.
- [8] This statement also has a valid exception. In certain cases one can traverse along a line using a transit and stadia and determine the line's bearing to an accuracy greater than 15 minutes. From what we understand, the Vermont-Massachusetts State Boundary was surveyed in this manner in the 1890s. A retracement of 4 miles of this boundary proved that the bearings were of a high accuracy. The distances, however, were of a much lower accuracy.
- [9] Even in this year of 1987, Paul's discussion of fences and boundaries is perhaps the best I have ever read. There are far too many surveyors today that show irregular fences as boundaries. Wonder how many could pass Paul's 3 point test?
- [10] This is another of Paul's recommendations we have adopted. There is little value in determining the age of a blaze unless the legal record (your filed plat, or at the minimum a reference in a deed to your survey) indicated who blazed what lines and when. Many lines were blazed a long time after the survey was done. Though some lines blazed after the completion of the survey are in the proper location, many are not. See "Parsons' Gunstock Lot," page 16.

We will publish Paul Bigelow's second article — on land records research — in the next issue of *The Cornerpost*. If you would like to view "The Bigelow Papers" in their entirety, use your phone to scan the QR code.



## February 15, 2024 • 6:00 p.m. • Zoom Video Call

Our February meeting was originally planned to be in person, but due to an impending snow storm the committee met via Zoom. The meeting was called to order at 6:15 P.M. In attendance were Randy Otis, Paul Hannan, Lisa Ginett, Keith Van Iderstine, Mark Day and our Administrator, Birgit McCall. Absent: Nate Yager and Becky Gilson.

**Secretary's Minutes**

Minutes for the Executive Committee meeting for January 11, 2024 were reviewed. Two small revisions were noted and the motion to approve the minutes was duly made and seconded and the vote was unanimously: to approve the minutes of the January 11, 2024 Executive Committee meeting with the noted revisions.

**Treasurer's Report**

Treasurer's report for the period of January 1 to February 12, 2024. Total income was \$16,066.21, total expenses were \$4,590.99, for a net income of \$11,475.22. Bank balance is at \$18,497.50, which does not include the VSLs General Fund investments which total \$49,817.67. The winter webinar produced \$6,000.00 in profit.

**Administrator's Report**

Birgit reports that membership renewals are going well. She mailed paper renewal forms to anybody without an email in the system. She notes that she sent out renewals by email about 2 ½ weeks ago and will email reminders later this week. She asked at what point she should send out paper renewals by mail to those that have not yet responded. She also asked when does someone get cut off for non-renewal as well as when to stop sending the non-renewing members "The Cornerpost". The group seemed to think that we should send a limit of two more "Cornerposts." Mark looked up the Bylaws, which state that a member is cut off after one year and then 30 days after notification.

Spring and fall events are progressing, with four afternoon speakers lined up for the morning round tables. The venue will probably be in Stowe but as the venue is quite expensive the Program Committee is still looking for other possibilities. The fall venue will be at the Fireside Inn in Lebanon, NH. Randy suggested some other venues that he has worked with and liked.

Plans for the joint Vermont-New Hampshire meeting are proceeding and currently center around Late March / early April 2025 in the Upper Valley.

Birgit reports that our Quickbooks desktop will no longer be supported starting in July if we do not renew, which would cost \$650.00 per year. They are trying to move everyone to their online version which costs \$30.00 per

month. After discussions and testimony given by some Executive Committee members who had made the switch, it was decided that we would not renew and keep using the outdated version until something makes us switch.


**Other Business**

The VSLs has been asked if we can man a booth at the Central Vermont Career Center trade fair on May 8 from 5:30-7:30 PM. It is free to attend and host a booth. This is a rename for the Barre Tech Center. It was mentioned that we should ask Gayle Burchard, as she has great NSPS handouts.

The group discussed the request from NSPS to supply further support at \$500.00 per year. Although there are some extra prerequisites for this donation, it was felt that as our budget was already stretched and we do support the NSPS by paying \$50.00 per year per each of our members. We are declining the offer.

There being no other business the meeting was adjourned at 6:38 P.M.

Respectfully submitted,  
Lisa Ginett, VSLs Secretary



**EXPERIENCE FOCUS  
JUDGMENT**

Attorneys with extensive experience in survey related issues including land and water boundaries, rights of way, easements, lakeshore protection and other land ownership and use issues.

275 COLLEGE STREET, PO BOX 4485  
BURLINGTON, VT 05406-4485  
802.861.7000 | MSKVT.COM



**March 21, 2024 • 7:00 p.m. • Three Penny Taproom, Montpelier**

The meeting was called to order at 6:53 P.M. In attendance were Randy Otis, Paul Hannan, Keith Van Iderstine, Becky Gilson, Mark Day, Nate Yager and our Administrator: Birgit McCall. Absent: Lisa Ginnett.

**Secretary's Minutes**

Minutes for the Executive Committee meeting for February 15, 2024 were reviewed. A motion to approve the minutes was duly made and seconded and the vote was unanimous.

**Treasurer's Report**

Treasurer's report for the period of January 1 to March, 2024. Total income was \$21,454.66, total expenses were \$11,221.51, with a net income of \$10,233.15. Bank balance is at \$18,327.26, which does not include the VLSL General Fund investments which total \$50,928.02. Spring Roundtable registration income is \$2,017.50 to date.

**Administrator's Report**

Birgit reports that a few more membership renewals have come in as part of registration for Spring. The location of Canadian Club in Barre has been finalized. Registration is still pretty slow at this point, but it's early yet.

Birgit is still working with Seth in NH on the joint-meeting for Spring 2025. The venue details are still coming in.

**Other Business**

There will be no meeting in April due to the Spring Roundtables.

There being no other business the meeting was adjourned at 7:20 P.M.

Respectfully submitted,  
Birgit McCall, VLSL Administrator

**May 16, 2024 • 6:00 p.m. • Google Meet**

The meeting was called to order at 6:13 P.M. In attendance were Randy Otis, Lisa Ginnett, Keith Van Iderstine, Becky Gilson, Mark Day and our Administrator: Birgit McCall. Absent: Nate Yager and Paul Hannan.

**Secretary's Minutes**

Minutes for the Executive Committee meeting for March 21, 2024 were reviewed. The motion to approve the minutes was duly made and seconded and the vote was unanimous: to approve the minutes of the March 21, 2024 Executive Committee meeting.

**Treasurer's Report**

Treasurer's report for the period of January 1 to May 13, 2024. The treasurer's report was given by Birgit as Keith was experiencing technical difficulties. Total income was \$33,443.95, total expenses were \$22,635.40, for a net income of \$12,808.55. Cash on hand balance is at \$19,538.59.

**Administrator's Report**

Birgit reports that we have a total of 154 members and 93% of members have renewed. She gave us a figure of 67 full members. Birgit reports that the new paradigm for sending our membership renewals by email has been well received and has not caused undue confusion. Birgit will provide a breakdown of membership in terms of Full/Associate/Sustaining and Life members.

Planning for the Fall conference is well under way. It was reported that Gary Kent will present for the entire first day and half of the second day. There will also be an exhibitor round robin and a presenter from Alfred State University. The rate for full members was \$340.00 for both days. It was discussed and agreed to that there would be a roughly 20% raise from last year for booth venues. We talked about the venue, catering, hotel rooms for speakers and Birgit, which brings the cost of the two-day conference up to around \$22,000.00. It is certain that prices are higher everywhere.

It was reported that we had 81 members pay for and attend the VLSL spring 2024 seminar, which earned the Society \$7,986.00. People approved of and would like to continue on with the lower priced venues.

**Other Business**

Becky ran into Brad Holden in Underhill. He informed Becky that he has documentation for the original VLSL but he will not give the documents up unless it goes to a "safe" spot. He did not consider the storage locker to be that spot. We are hoping that Brad will attend our next meeting in July to discuss this issue.

There being no other business, the meeting was adjourned at 6:32 P.M.

Respectfully submitted,  
Lisa Ginnett, VLSL Secretary

\*NOTE: These are draft minutes, to be approved at the next Executive Committee meeting.



# 2024 Fall Conference

Thursday and Friday, September 12-13, 2024  
 Fireside Inn · Lebanon, New Hampshire

## CONFERENCE SCHEDULE

### Thursday, September 12

- 7:30 AM Registration Opens / Breakfast
- 8:00 AM The Art of Retracement – Following in the Footsteps (part one), Gary Kent (4 PDH)
- Noon Buffet Luncheon
- 1:00 PM The Art of Retracement – Following in the Footsteps (part two), Gary Kent (4 PDH)
- 5:00 PM Daily Wrap-Up
- 5:10 PM Member/Sponsor Mixer  
 Join us for light appetizers and your first drink FREE

### Friday, September 13

- 7:30 AM Registration Opens / Breakfast
- 8:00 AM The Surveyor in Jeopardy, Gary Kent (4 PDH)
- Noon Buffet Luncheon and Business Meeting
- 1:30 PM Education in Surveying and the Surveying Program at SUNY Alfred State College of Technology, Richard Carlson (1 PDH)
- 2:30 PM Tech Time Exhibitor Presentations (3 PDH)  
 ■ with Maine Technical Source, Topcon Solutions, TopoDOT, Waypoint Technology Group, and Cadnet Services
- 5:00 PM Final Announcements



## HOTEL INFORMATION

Fireside Inn, 25 Airport Road  
 West Lebanon, New Hampshire  
 603-298-5900

Room Rate: \$120/night + tax

**Register by Aug. 12 and mention VSLs to guarantee your rate**

### 16 PDH

This event has been approved for 16 professional development hours by the Vermont Board of Land Surveyors.



### QUESTIONS?

[birgit@vsls.org](mailto:birgit@vsls.org)  
 802-777-6507

## REGISTRATION FEES\*

	Full Conference	Thursday Only	Friday Only
Member in good standing of VSLs or kindred association	\$340.00	\$240.00	\$240.00
Life Member	\$255.00	\$180.00	\$180.00
Associate Member	\$272.00	\$192.00	\$192.00
Non-member technical staff attending with member	\$289.00	\$204.00	\$204.00
Three attendees from same firm (one must be a member)	\$289.00	\$204.00	\$204.00
Non-member	\$440.00	\$300.00	\$300.00

\*ADD \$25 LATE FEE AFTER SEPTEMBER 2

## CONFERENCE SEMINARS

### The Art of Retracement – Following in the Footsteps

PRESENTER: GARY KENT, L.S., SCHNEIDER GEOMATICS

Every professional surveyor across the United States knows the phrase “Follow in the Footsteps” as it relates to conducting a boundary retracement survey. But what does it really mean and what is the basis for following the footsteps? And exactly whose footsteps are we talking about? Surveyors also know the effect of the statute of frauds is that what is written in the conveyancing document is considered by the courts to be the highest and best expression of the parties’ intentions. But what happens when the evidence of the footsteps on the ground conflicts with the written title? What if there are seemingly no footsteps to follow?

In this program we will explore the concept of retracement, how it relates to and is dependent on the document of conveyance, and what controls when conflicts are inevitably encountered. When armed with a full understanding of the concept of retracement, surveyors will be much better equipped to help steer their clients (and their affected neighbors) away from the pain and cost of litigation, and towards an amicable solution based on well-placed confidence and understanding of their respective roles and responsibilities.

### The Surveyor in Jeopardy

PRESENTER: GARY KENT, L.S., SCHNEIDER GEOMATICS

The Jeopardy-like format of this program has the presenter offering answers for which the audience - assembled into teams - must provide the relevant question. The program will include several hundred questions/answers covering the following topic areas: Boundaries, ALTA/NSPS Land Title Surveys, Safety, Expert Witness, Risk Management, Easements and Rights of Way, and Vermont Statutes and Rules. Answers and questions will be discussed as appropriate or necessary to be sure all participants understand the context and correct answers. This is a very audience-centric program; it is far more than a simple trivia contest!

### Education in Surveying and the Surveying Program at the SUNY Alfred State College of Technology

PRESENTER: RICHARD CARLSON, L.S., C.P., ASST. PROFESSOR

Education and experience are both requirements and an important part of one’s path to licensure as a land surveyor. This discussion will broadly review education requirements for licensure throughout different states. More specifically an approach to surveying education will be presented regarding the Surveying Program at Alfred State College. Alfred State offers the only ABET accredited BS Degree in NYS and is one of only two schools in NYS to offer an ABET accredited AAS Degree. Starting this fall, Alfred State will offer the final two years of the BS Degree online to students who have already completed an AAS Degree in Surveying.

### Tech Time Exhibitor Presentations

Join Maine Technical Solutions, TopoDOT, Waypoint, and more of our sponsors for 20-30 minute presentations. Attendees will be assigned to groups to circulate through our sponsor booths.

## SPECIAL THANKS TO OUR SPONSORS

KEYSTONE  
PRECISION SOLUTIONS

TOPCON  
Solutions Store

Waypoint  
TECHNOLOGY GROUP

MTS  
MAINE TECHNICAL SOURCE  
50 years of supplying solutions

NOAA

TopoDOT®  
Point Cloud Processing Software

CADNET  
SERVICES

## REGISTRATION | Please mail this form or register online at [www.vsls.org/fall-conference-2024](http://www.vsls.org/fall-conference-2024)

Name \_\_\_\_\_

Address \_\_\_\_\_

Email (required) \_\_\_\_\_

Dietary restrictions: \_\_\_\_\_

Please return your form with payment to:  
VSLs, P.O. Box 99, East Montpelier, VT 05601

I would like to register for the following:

Full Conference    Thursday only    Friday only

Payment amount: \_\_\_\_\_

If you’re attending on Thursday, do you plan to stay for the Member Mixer after the seminars?    Yes    No

Check enclosed, payable to VSLs.

Credit card payment:    VISA    MC    AMEX    DISC

Card Number \_\_\_\_\_

Exp. Date \_\_\_\_\_ Security Code \_\_\_\_\_



# The Cornerpost

P.O. Box 99  
East Montpelier VT  
05651



## Get Ready for the Auction!

### Fall Conference Sept. 12-13

We'll be auctioning off quality donations from members and exhibitors alike. If you'd like to make a donation, email [birgit@vsls.org](mailto:birgit@vsls.org).



Burlington lease  
land disks, donated  
by Scott Taylor



Transit instrument with  
wooden box, donated  
by Allan Hopkins