Volume 3 Issue 6 July 2014



# The UCLS Newsletter





The UCLS Newsletter is published monthly by the

# Utah Council of Land Surveyors

PO Box 1032 Salt Lake City, UT 84110

# Phone / Fax:

801-964-6192

#### Website:

www.ucls.org

## IN THIS ISSUE:

Page 2......Board & Chapter Officers

Page 3......OPUS Training

Page 4......Our Members

Page 5......Interesting Stuff

Page 6......Chaining Tally-Tag

Page 7......North Arrows

Page 8-9...Perils of Skin Cancer

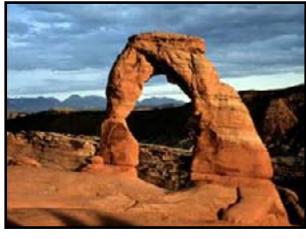
Page 10.....Apps for Surveyors

#### The Beech

-Robert Frost

Where my imaginary line
Bends square in woods an iron spine
And pile of real rocks have been founded.
And off this corner in the wild,
Where these are driven in and piled,
One tree, by being deeply wounded,
Has been impressed as Witness Tree
And made commit to memory
My proof of being not unbounded.
Thus Truth's established and borne out,
Though circumstanced with dark and
doubt-

Though by a world of doubt surrounded.



## Where is it?

This picturesque picture is seen on Utah license plates, official stationary of the state, and numerous tourist publications. We all recognize it, however do you know the name of this famous arch and where it is located? Be the first to cor rectly name this monument tal arch and its location to be eligible for a free luncheon at your next chapter

meeting.

Answers may be emailed to Susan at srmerrill@ucls.org. The earliest received date and its time of response will determine the winner.

#### In This Issue:

We invite you to participate in OPUS training, FIG Young Surveyors, and NSPS National Surveyor's Week. Additionally, we get to know two more of our outstanding members and provide several internet links of interesting surveying stuff.

Jeff Stromberg has asked for your assistance and feedback regarding the current testing requires for licensure. We also have a firsthand view of the perils of skin cancer and provide information on how you should protect yourself.

The July newsletter features two new additions that we hope to continue in the future; guessing the North Arrows used by the various companies of our members and an introduction to apps that are applicable to surveying.

We invite you to share charismatic photos of yourself and/or a coworker, panoramic images of Utah's scenic wonders, or pictures of survey related tools and equipment. Additionally, we need interesting and unique descriptions or survey related stories to share with our membership. Remember, if you do not participate you have no right to complain. Please let us know your thoughts, recommendations, suggestions, or complaints.

The UCLS Newsletter is published monthly by the Utah Council of Land Surveyors (UCLS), as a service to the Land Surveying profession of the state of Utah. The publication is provided to UCLS members and similar organizations on a complimentary basis. The Newsletter is not copyright protected, therefore articles, except where specifically copyright noted, may be reprinted with proper credit given. Articles appearing in the Newsletter publication do not necessarily reflect the viewpoint or endorsement of UCLS, its officers, Board of Directors, or the editor.

Contributions are encouraged. Articles, Advertisements, Pictures, and Comments may be submitted to UCLS at ucls@ucls.org or uclsforesights@ucls.org

# **Utah Council of Land Surveyors Executive Board and Committees**

#### **UCLS Executive Board 2014**

**State Chair** 

Kenneth Hamblin (CC) 59 N. 2120 East Circle St. George, UT 84790 Business: (435) 673-3075 khamblin@infowest.com

#### **State Chair Elect**

Scott Woolsey
43 S. 100 E. Suite 100
St. George, UT 84770
Business: (435) 628-6500
Fax: (435) 628-6553

scottwoolsey@alphaengineering.com

#### Past State Chair

Ernest Rowley (GS) 3648 W. 6050 S. Roy, UT 84067 Business: (801) 399-8353 Fax: (801) 399-8316 erowley@co.weber.ut.us

#### NSPS Governor

Steven Keisel (SL) 604 S. Blossom Circle Fruit Heights, UT 84037 Business: (801) 468-2043 Fax: (801) 468-2045 skeisel@slco.org

#### **West Fed Representative**

Michael W. Nadeau (SL) 5226 W. Ashland Rose Dr. Herriman, UT 84065 Business: (801) 569-1315 Fax: (801) 569-1319 mikenadeau.ucls@gmail.com

#### **Book Cliffs Chapter President**

Ryan Allred P.O. Box 975 Duchesne, UT 84021 Business: (435) 738-5352 Fax: (435) 738-5722 dallred@ubtanet.com

#### **Book Cliffs Chapter Representative**

David Kay 85 S. 200 E. Vernal, UT 84078 Business:(435) 789-1017 Fax: (435)789-1813 dkay@uintahgroup.com

#### **Color Country President**

Todd Jacobsen 2458 Scenic Drive Santa Clara, UT 84765 Business: (435) 627-4124 Fax: (435) 627-4133 tjacobsen@sgcity.org

#### **Color Country Chapter Representative**

Roger Bundy 257 Prickley Pear Drive Washington, UT 84780 Business: (435) 673-2918 Fax: (435) 673-2918 rbsurveying@awinets.com

#### Golden Spike President

David K. Balling 198 E. Shadowbrook Lane Kaysville, UT 84037 Business: (801) 295-7237 dkballing@msn.com

#### Golden Spike Chapter Representative

Val Schultz 2096 W. 5750 S. Roy, UT 84067 Business: (801) 399-8018 Fax: (801) 825-1320 vschultz@co.weber.ut.us

#### Salt Lake Chapter President

Brad Mortensen 3268 S. 930 W. Syracuse, UT 84075 Business: (801) 882-6385 btmort@earthlink.net

#### Salt Lake Chapter Representative

Dale Robinson 12227 S. Business Park Dr., #220 Draper, UT 84020 Business: (801) 523-0100 Fax: (801) 523-0990 drobinson@sunrise-eng.com

#### **Timpanogos President**

Bradly D. Daley 3814 Sage vista Lane Cedar Hills, UT 84062 Business: (801) 566-5599 Fax: (801) 566-5581 bdaley54@msn.com

#### **Timpanogos Chapter Representative**

Jim Kaiserman 1020 Sage Circle Heber City, UT 84032 Business: (435) 657-3222 Fax: (435) 657-3207 jkaiserman@co.wasatch.ut.us

#### **Administrative Secretary**

Susan Merrill PO Box 1032 Salt Lake City, UT 84110 (801) 964-6192 srmerrill@ucls.org

#### **Treasurer**

Brad Mortensen (SL) 3268 S. 930 W. Syracuse, UT 84075 Business: (801) 363-5605 Fax: (801) 363-5604 btmort.earthlink.net

#### **Chapter Vice Presidents:**

Book Cliffs John R. Slaugh
jrs@timberlinels.com
Color Country Bob Hermandson
bobh@bushandgudgell.com

Golden Spike Chris B. Balling chris.balling@guestar.com

Salt Lake Joe D. Richardson rsinc2002@hotmail.com
Timpanogos Kevin Bishop

Kevin Bishop kevin.oakhills@gmail.com

## Chapter Secretary/Treasurer

Book Cliffs Arneldon T. Davis ndavis@sbtnet.com
Color Country Brad Peterson

Color Country Brad Peterson brad@developmentsolutions.co

Golden Spike Travis Gower
gwlsurvey@gmail.com

Salt Lake Darlene Jeffreys ostaja@me.com

Timpanogos Chad Poulsen chad@lei-eng.com

#### **Committees & Committee Chairs**

Legislation Doug Kinsman
dkinsman@co.tooele.ut.us
Education Dan Perry

perrydl@uvu.edu
Publication Steve Keisel
svkeisel@gmail.com

#### Standards & Ethics

Steve Dale
Steve.Dale@wvc-ut.gov
Tim Prestwich
tprestwich@rivertoncity.com
Membership
David Balling

dkballing@msn.com

Public Relations Randy Smith
rdsmith@utah.gov

Testing Darryl Fenn dfenn@merid-eng.com

#### Workshop & Convention

Ron Whitehead ron2@washco.state.ut.us

Historical K. Greg Hansen

gregh@haies.net Jerry Allred jallred@ubtanet.com

#### **Construction Survey**

David Mortensen DMortensen@bushandgudgell.com Hi All,

This is to notify you of an <u>OPUS-Projects Training</u> class offered <u>August 13th and 14th 2014</u> at the <u>Weber County Office Building</u> in <u>Room 312</u>. Bill Stone NGS Southwest Region Geodetic Advisor will be the training instructor.

To see more information and/or to register for the training click here

http://www.ngs.noaa.gov/corbin/class\_description/ OPUS\_Projects\_UT\_0814.shtml

which will take you to the NGS web site or call or email me or Brad Mortensen and we will be happy to help you.

Thanks, Val

#### Val H. Schultz PLS

Weber County Survey 801-399-8018 vschultz@co.weber.ut.us

Member Utah Council of Land Surveyors Weber County Surveyors Office 2380 Washington Blvd., suite 370 Ogden, Utah 84401

(801) 399-8020 (801) 399-8316

Cinco de Mayo Sink of Mayo





# **National Surveyors Week**

Well it is almost that time of year again to get ready for National Surveyors Week, and we need your help.

NSPS would like each state to put forward the name of an individual from your state to work with us to prepare for National Surveyors Week.

We are looking for people who are interested in geodetic surveying who can help spread the word in your state to help improve the current geoid model.

This year we saw some great participation and inno-

This year we saw some great participation and innovation form a number of states and we would like to help share these innovations across the country.

Please reply to me with the name of an individual from your state who would be interested in working on a National Surveyors Week committee.

Thank you and regards,

Frank Lenik, PLS Registered in DE, NJ, NC and PA Delaware Valley Representative

Lecia Geosystems, Inc. -Division of Hexagon AG 48 North Main Street Woodstown, NJ 08098 United States

Phone: (856) 275-3210

E-mail: frank.lenik@leicaus.com

Please let a member of the UCLS Executive Board know if you are interested in participating in this worthwhile endeavor.

#### **GETTING TO KNOW OUR MEMBERS**

Name: **Dennis P. Carlisle** Residing in: **Genola, Utah** 

My spouse is **Darlene** (daughter of a Surveyor) and we are the proud parents of 4 terrific married children (two daughters and two sons) and grandparents of 7 awesome grand-children who can do no wrong.

My hobbies and/or interests include: hobby farming (raising miniature beef cattle and 1 ornery goat, chickens, pigeons, etc.), camping, spending time with grandkids, ATV riding, doing anything with a worm-drive saw and a nail gun, travel.

When I retire, I want to serve a mission for the LDS Church and do all of the above times more often.

I have been a member of the Utah Council of Land Surveyors since approximately 1990 and wish they would hold one of our yearly Conferences in San Diego! I admire those members who devote so much of their time to protecting-promoting our profession.

My current employer is Focus Engineering and Surveying, LLC in Sandy, Utah. I am one of two Senior Land Surveyors. I am responsible for coordinating the Boundary/ALTA/Subdivision projects. Our other PLS coordinates and directs all of the construction staking associated with our projects.

I have been employed by this company since 2012 but have been surveying since 1980 and have been licensed in Utah since 1991. I am also licensed in Arizona, Colorado, and Wyoming. I became a surveyor because my father-in-law told me that I would travel less (in the early '80's I was working construction and out of town a lot) as a Surveyor. I took him for his word and spent the next few years---out of town. But I fell in love with using math in the great outdoors. Using cool instruments and seeing new country was exciting, too.

During the past 30+ years, technology seems to have had the greatest impact on the surveying profession. However, during the next 10-20 years, when many of us will retire, I believe technology may become one of our downfalls as our young replacement Surveyors forget about the 'art' of Surveying while focusing only on the 'math' or 'science' of the profession. I see way too many up and coming Surveyors who can run a GPS and draw lines in C3D, but do not understand the basics.

In my opinion, the future of surveying is brights if we, who are in the profession now, commit to protecting & promoting Surveying while properly training-mentoring our replacements.

Name: John Carroll

Residing at: Elisnore, UT

My spouse is **Joan** and I am a parent of **0** children.

My hobbies and/or interests include hunting, fishing and traveling to visit the National Parks.

When I retire, I want to hunt, fish, and travel.

I have been a member of the Utah Council of Land Surveyors since **approximately 1999** and wish they would **put more emphasis on research pertaining to the PLSS.** 

My current employer is N/A - retired

My position or title was **Cadastral Surveyor** and I was **responsible for cadastral surveys in CA & UT.** 

I was employed from 1984-2008 but have been involved in the surveying profession since 1978.

I became a surveyor because I loved to work outdoors.

During the past 20 years, GPS has had the greatest impact on the surveying profession.



# Dear Colleagues,

# **Young Surveyors**

For those of you who don't know me my name is Frank Lenik and I am a licensed land surveyor from New Jersey.

I am currently the Area 2 Director for the National Society of Professional Surveyors.

At our spring meeting I was charged with helping the FIG Young Surveyors become more involved with our national organization.

The FIG Young Surveyors is a growing movement of surveyors under the ago of thirty five, many still enrolled in college programs.

Toward that end I am writing to all of you to ask for your assistance and participation.

Those of you to whom this email is addressed are listed on your state society's web page as the current president of your society.

Those who have been Cced are either state executives or NSPS Governor/Directors.

We are current leaders of our profession and it is incumbent upon us to protect and promote the future of our profession.

NSPS would like each of you to consider how the inclusion of young surveyors will help our profession and what we can do to nurture this group.

We would like each state to put forward the name of an individual from your state to work with us and the FIG Young Surveyors.

Please reply to me, so we may form a working group or committee representing each of the states, for the good of our profession.

Thank you and regards,
Frank Lenik, PLS
Registered in DE, NJ, NC and PA
Delaware Valley Representative

Lecia Geosystems, Inc. -Divison of Hexagon AG 48 North Main Street Woodstown, NJ 08098 United States

DI (05.6) 255.2

Phone: (856) 275-3210

E-mail: frank.lenik@leicaus.com

UCLS encourages its membership to become involved in local and national activities and organizations. Please let a member of the UCLS Executive Board know if you would like to work with the FIG young surveyors organization

Want a cheaper survey in Maricopa County Arizona? http://link.brightcove.com/services/player/bcpid1851878 743001?bckey=AQ%7E%2CAAAABvZFMzE%7E%2CIXj x0MpOF0gEGoJHIc9eCWxv1yx9NX42&bclid=18521034 02001&bctid=3601089349001 **Interesting Stuff** 

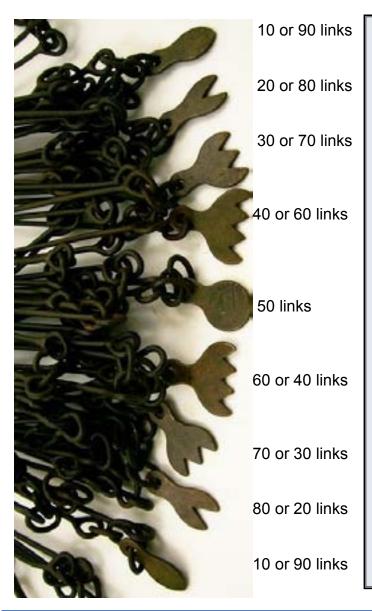
How to find your property markers in the City of Blaine, MN. <a href="http://www.ci.blaine.mn.us/index.cfm?id=901915#">http://www.ci.blaine.mn.us/index.cfm?id=901915#</a>.
U6XYmEA1NHY

Court orders the removal of a 1.8M home built on state park property. An innocent survey mistake?

http://www.ksl.com/?nid=711&sid=30345392#1B8UwBsSRWeJEgH8.03

#### June What is It?

# **CHAINING TALLY-TAG**



The engineer's chain is 100 feet long and is divided into one hundred links of one foot each, the outside of which is the zero point, or end, of the chain.

In these chains, every tenth link - counting from either end - is marked by a brass tag having one, two, three, or four points corresponding to the number of tens, which it marks. The middle of the chain is marked by a round tag. the 10-ft. and 90-ft. points, the 20-ft. and 80-ft points, etc., are marked alike; hence it is necessary to observe on which side of the 50-ft. point a measurement falls in order to read the distance correctly.

Jim McConnell was the first UCLS member that correctly identify last month's "What is it" contest.

The Gunter chain attachments denoted 10 links each of 6.6 feet and used to determine intermediate distance points on the chain.

Corbin VanNest, Arthur Lebaron, Jason Felt, and Charles Heaton followed Jim's response

# Requirements for licensure as a Professional Surveyor

Jeff Stromberg, PLS, a Geomatics student at Utah Valley University is conducting a study. He asks NSPS News & Views readers to please take a moment to answer a short (10 minutes or less) poll which is intended to find out the opinions of Professional Land Surveyors across the country regarding what should be required to obtain a professional license in land surveying. Jeff says, "I know your time is valuable, and I thank you in advance for taking this survey.

https://docs.google.com/forms/d/1fkIhiW9DEs5OxJ5qUDQY7w1R93423x1hqLLRolqk2F4/viewform

# Which North Arrow belongs to which company?

	Α	В	С	D	E	
1 Jerry Timmons Surveying	1			N		1 =
Ensign Engineering	7 7 7	SCATE 1 20.		j[( j (		2 =
3 Alta Surveying						3 =
<b>4</b> Allen Consulting	₩-H\ <b>J</b> -&				HORTH	4 =
5 Hamblin & Associates		,	NORTH	n		5 = <u> </u>

Answers on page 10

#### The Perils of Skin Cancer - A Personal Account

By Carl C. de Baca

# At the Dermatologist's office - Fall - 2012

"Okay, the procedure we are going to do today is a simple biopsy. We are going to numb up the area around this sore and take a slice off. We will send it to the lab for analysis and in three or four days we will let you know the results. From the looks of it, I'd suggest it might be a basal cell carcinoma. How long did you say you have had this?" "Wow, that's a long time, why did you wait five years to seek treatment?"

"Well, let me first say that if this is skin cancer, and I suspect it is, then this type, the basal cell carcinoma is the kind to have. It does not spread to other areas and the cure rate for this type of cancer is 98 to 99 percent with little likelihood of recurrence."

"So we have taken a bit of material and that's left a kind of open wound. You should keep a bandage on this for the next few days."

#### Three days later

"So what's that band aid there are on your nose? Skin cancer huh? check this out ... I had one here, and one there and another one on my cheek and..."

"Looks like skin cancer. Yeah, - I had spots removed on one ear and both arms. I have one here below my eye I need to get removed."

"What's with the band aid? Skin cancer you say? Well it's kind of an occupational hazard for us, isn't it? I've got a spot on the back of my neck I need to watch and the tops of my ears have been scraped a couple times."

# Four days later - at the Doctor's office (a Tuesday)

"Well the results confirmed that you have a basal cell carcinoma. We are going to perform Mohs surgery today. It's and outpatient thing. We numb you up with some local anesthetic and remove the tumor slice by slice. This can take a few hours because we need to look at each slice under the microscope and then do another round until we have a sample that is clean and clear. Any questions

"No, you shouldn't need another surgery for reconstruction later. We should be able to cut the area out, repair you and send you on your way, with just a post-op visit in about a week."

# Four plus hours later

"Well that last slice was clear, no signs of the carcinoma but we did have to take more than we anticipated."

"No, we are not going to be able to do the repair today, the damage was too extensive. The procedure will be more than we can do here in this office. I am going to have you meet Dr. Johnson, a plastic surgeon. We have called ahead and he will see you as soon as you can get over there. We'll defer all post-op care including prescriptions for antibiotics and pain meds, to him."

"No, you won't need to have a follow up visit here, except it would be a good idea to get annual checks from now on to make sure there are no other incidences of cancer."

#### Late that afternoon

"Well, let's take a look and see what we have to work with. I'm going to need to take pictures of this and then we can discuss options."

"No, we won't be doing the surgery here. The excision was too extreme for such repairs to be done with just local anesthetic. This will have to be done under general anesthesia, which means it must be done in a hospital and I am booked up until Thursday. Let's schedule you for Thursday morning. Now let me explain what we are going to have to do."

"You haven't seen what they took out? Let's get you a mirror. You see this area here - they took so much of your nose that it has collapsed. We'll need to find some cartilage to rebuild the nostril; we'll probably take it from your ear. Then we will need to do a pretty sizeable skin graft to repair your nose and fill in the hole in your cheek. The problem is, a skin graft this size of ten has difficulty taking. The repair will need to have good blood flow during the healing process. What we will do is called a 'forehead flap'. We make an incision above the eye, towards the top of your head and here, behind the hairline we spread out and cut a patch. Then we pull down the patch, still

# The Perils of Skin Cancer Continued...

attached to your forehead, and stitch it in place over your nose. This allows the graft to have blood flow during the healing process. In three weeks, we cut off the strip connecting the nose and forehead and move on to the next phase.

"Yes, you will have a strip of flesh in front of your eye for this time. The success rate for this procedure is very high. After the strip is severed, we'll have to do one or two minor procedures for cosmetic purposes but I think when it's all done you'll be as good as new."

#### Three months later

"Well, you look pretty good. There is nothing there that catches my eye. The scar on your forehead is receding nicely and the color and shape of the graft are very good. The scar below you nose is almost invisible. Let's see you back on last time in three months."

"No, the graft area is going to be basically numb for a while. As nerve connections are made, some feeling will come back and in a couple of years you will have some feeling. And the tissue should soften up and feel less hard and lumpy over the next few months."

#### Conclusion

There are three major types of skin cancer: melanoma, basal cell carcinoma, and squamous cell carcinoma. Surveyors, due to their long years in the sun are prone to all three types. The most dangerous form of skin cancer is melanoma. If not caught early, it has a high probability of metastasizing and in many cases is deadly.

However, according to the Skin Cancer Foundation website, the other two aforementioned skin cancers can have serious consequences as well. Though basal cell and squamous cell carcinomas are not often fatal, they can be extremely destructive if not detected and treated early.

Recent research from the Hospital of the University of Pennsylvania, in Philadelphia, indicates some basal cell and squamous cell carcinomas can be especially dangerous, growing, and spreading quickly. Called "aggressive non-melanoma cancers," or ANMSCs, they can recur more of ten and lead to death more often than other types of basal cell carcinoma and squamous cell carcinoma. They mostly occur on the head, face, and neck and can be difficult to treat, since they tend to grow to 2- centimeter diameters or more. Removal of such a large cancer in the head, or neck tends to be quite disfiguring. Unfortunately, many patients often settle for less aggressive surgery for cosmetic reasons. Because ANMSCs penetrate more deeply than other non-melanoma skin cancers, the malignancy may recur, often in more virulent form.

The purpose of this article is to encourage you to practice sound preventative methods. Use sunscreen liberally and consistently. Pay attention to your ears, nose, and the back of your neck. Wear long sleeves whenever possible and see a dermatologist if you have any new freckles or moles, especially any with irregular shape or with an upraised nose and someday I might be able to feel it again. Surveying in the cold northern Nevada winter is now more miserable than ever, and yet somehow I feel lucky.







# **APPS FOR SURVEYORS**

# Description



Autodesk® AutoCAD 360—formerly AutoCAD WS—is the official AutoCAD® mobile app.

AutoCAD 360 is a free\*, easy-to-use drawing and drafting mobile app that allows you to view, edit, and share AutoCAD drawings—anytime, anywhere. Simplify site visits and fieldwork with powerful design review and markup tools—available online and offline. Seamlessly share drawings with others across desktop, web, and mobile devices. Easily access drawings from web browsers using the free companion AutoCAD 360 web app. AutoCAD 360 Pro subscription plans further expand the functionality of the app, bringing additional capabilities to the field.

#### View

- •Open 2D and 3D DWG drawings uploaded to your free\* AutoCAD 360 online account
- •Work offline, then easily upload changes when you are back online
- •Upload and open files directly from email on your device
- •See all aspects of your DWG file, including external references, layers, and image underlays
- •Use multi-touch zoom and pan to easily navigate large drawings
- Use your device's GPS to orient yourself within a drawing

#### Edit

- •Draw and edit shapes with accuracy using Snap
- ·Select, move, rotate, and scale objects
- •Add and edit text annotations directly on your drawing; no need for paper mark-ups
- •Validate distance measurements in the drawing while you are onsite
- Save edits to your AutoCAD 360 online workspace, so your drawings stay up to date

#### Share

- •Share your designs with others directly from the mobile app
- •Add comments and images and invite responses using the Design Feed
- •Print remotely from your mobile device using HP's ePrint & Share service
- •Plot your designs to PDF or DWF and share them via email

AutoCAD 360 is free\* to download and use.

Answers to North Arrow Question 1=C; 2=E; 3=A, 4=D, 5=B

#### I don't think I've ever heard the concept explained any better than this.



Well you see, Norm, it's like this . . A herd of buffalo can only move as fast as the slowest buffalo. And when the heard is hunted, it is the slowest and weakest ones at the back that are killed first. This natural selection is good for the herd as a whole, because the general speed and health of the whole group keeps improving by the regular killing of the weakest members. In much the same way, the human brain can only operate as fast as the slowest brain cells. Now, as we know, excessive intake of alcohol kills brain cells. But naturally, it attacks the slowest and weakest brain cells first. In this way, regular consumption of beer eliminates the weaker brain cells, making the brain a faster and more efficient machine. And that, Norm, is why you always feel smarter after a few beers.'