

Don't Waste Our Future
RECYCLE



Recycling Update
The recycling industry is facing a new era of competition...

Don't Waste Our Future
RECYCLE

Recycling Update

The recycling industry is facing a new era of competition... The recycling industry is facing a new era of competition...

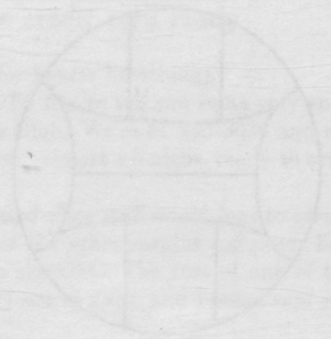
Don't Waste Our Future
RECYCLE

BOOK AHEAD

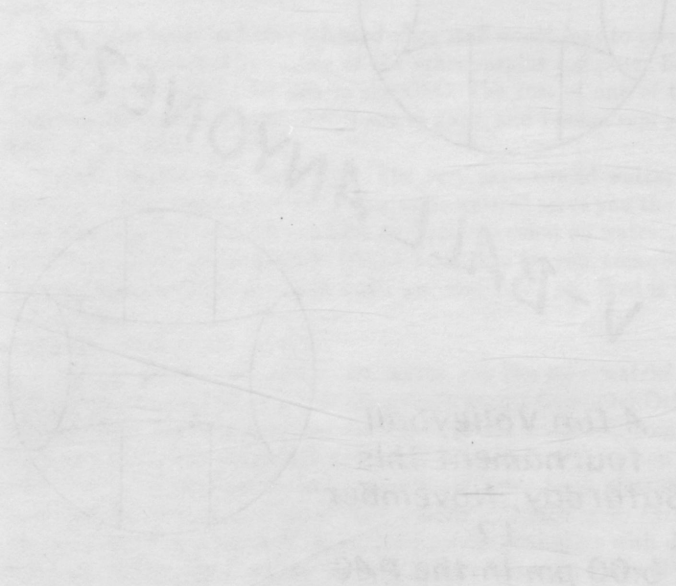
Author	Title	Price
...
...
...

Mathsoc Re-election

Mathsoc is looking for new members... We are looking for new members...



THE UNIVERSITY OF...
WARRINGTON



56 6 Number Volume
Friday 16 1990 November

Rook **AHEAD**

<i>mathNEWS</i>	
Nov 26	Issue #7 production
Nov 30	Last issue release!
MathSoc	
Mondays	MathSoc meetings 1630 in MC4067
Nov 26	MGC-get-to-know-your-class end-of-term pub at Don Cherry's
Cinema Gratis	
Nov 20	Easy Rider

Prez Say

I hate this job.

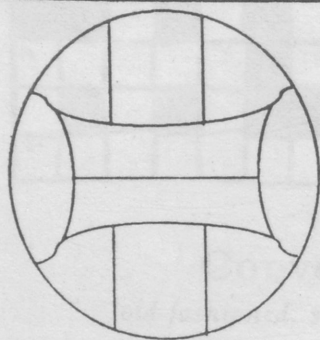
Tom Vandeloos, MathSoc President



The "social" animal...

MathSoc Re-election

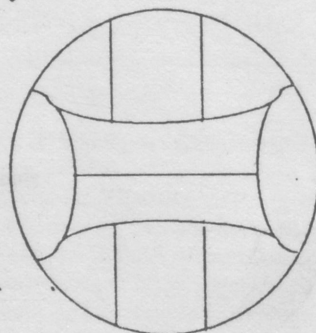
Due to some irregularities in the MathSoc elections, the vote is being held again yesterday and today. *mathNEWS* has been asked not to go into detail on the subject, and we have complied (for this issue).



The Math Society presents.....

V-BALL ANYONE??

A fun Volleyball tournament this Saturday, November 17
6:00 pm in the PAC



Sign up in the Math Society Office **TODAY!!**

0705 0410 SNIS

mathNEWS a bi-weekly publication which the Mathematics Society the University Waterloo of at by to, otherwise independent of but is funded responsible and, is normally. Content the responsibility the *mathNEWS* editor of is, however, any opinions herein expressed those the authors of not necessarily those MathSoc *mathNEWS* or of and are. Your correspondence: *mathNEWS*, MC3041, University Waterloo of, 200 University Ave. W., Waterloo, Ontario, Canada, N2L 3G1, userid mathnews@watserv1 USENET on to or to send.

Volleyball anyone??? Get rid of those post-midterm frustrations and sign up NOW in the Math Society office for the volleyball tournament tomorrow at 6:00 pm in the PAC main gym [Holy prepositional phrases, Batman — typist]. Fabulous prizes available to be won!!! See you there!

Has your card turned up??? Come to the Euchre tournament on Thursday, November 22nd, at 8:00 pm in the Grad House and find out. Registration, as always, is in the MathSoc office and requires a \$2 refundable deposit per team. So start practising because there are big prizes at stake!!!

Until next issue... Keep on Partying!!!

Social Director

**DON'T WASTE OUR FUTURE
RECYCLE** 

Recycling Update

Good work everyone! On Oct. 18th, 314 kg of cans and bottles were taken to the Waterloo Recycling Depot and on Nov. 5th another 310 kg were taken. This is an impressive amount. Even though we have changed procedures, it's still a lot of work. By not sorting, we keep the air cleaner on the third floor, but vile odours can be prevented by depositing only empty cans and bottles. Crushing cans before dropping them would allow more to be placed there.

Please keep up the effort but more conscientious thought would prevent destruction and regular disposal of recycling material. If you see ordinary refuse in the recycling bins (which are black with pink labels) please remove it before adding more legitimate recycling material. Black bins are located near regular garbage cans, so this is not too much work.

Due to transportation availability, the regular recycling day will be changed from Wednesday to Thursday. The run to the Waterloo Recycling Depot will begin at 9:00 am, but if you have time before 9:00 or after 9:30 please get in touch with Karen Smith at the Math Society Office; I need your help!!!!

Thank you for your effort; keep it up!

Karen Smith

**DON'T WASTE OUR FUTURE
RECYCLE** 

Prof Quotes

Well, we don't have the same volume of submissions as last time, but they're still good nonetheless. Remember, submit your profquotes to the BLACK BOX or under the mathNEWS door. Enjoy ...

"I didn't bring my V2 rocket in to demonstrate."

Eastman, PHYS 121

"There are three cases to this solution, enough for a great party."

Scoins, MATH 137

"Not all examples work this well. I cooked this one."

Springer, MATH 137

"The difference between pure math and applied math is that pure mathematicians hide their computations."

McLenaghan, PM 365

"Reality. How do I prove that?"

Hoffman, MATH 240A

"I've been deliberately varying my voice from low monotonous to high monotonous."

Cornell, PSYCH 203

"... and then we have Buffon and his vestigial organs. ..."

Kovacs, BIO 250

"The difference between \$9995 and \$10000 is about the same as the difference between damn and swearing."

McCutcheon, BUS 121

"Now you will observe that at no time did my fingers leave my hands."

Davis, MATH 324

"If you don't have a right hand, raise it."

Eastman, PHYS 121

"Has everyone got one of those long white ones?"

Brillinger, MATH 111A

"It's very easy to fake your way through this material if you want."

Siegel, MATH 237

"What do I mean when I say, 'Let's make zip into zap?'"

Cormack, CS 442

"... a klukity klan particle slamming into a zingalingdong particle. ..."

Eastman, PHYS 121

"We don't trust the user—he's a crook. And if he's not a crook, he's incompetent."

Cormack, CS 442

"What else does a car have? Shock absorbers. But of course, the girls won't know that."

Ponzo, AM 250

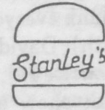
"I can prove that the volume of a cube is $\frac{4}{3}\pi r^3$... did I say cube?! I can recommend some really good cold tablets. They're legal and all ..."

Shadwick, MATH 237

"You guys are too wimpy to turn stuff into mathNEWS."

Cormack, CS 442

The Stanley Burger Philosophy



At Stanley's we believe that each customer deserves a great tasting, wholesome meal. Every item on our menu is prepared the old-fashioned way using only fresh, nutritious ingredients. Our burgers are made with 100% pure beef, all-natural spices, no added preservatives and are served on bakery fresh buns. We take pride in putting only the best into everything we make.

Experience the Difference of a Fresh Home Made Burger

210 King St. N. Waterloo

(Across from WLU)
(Limit one coupon per purchase)

**STANLEY
COMBO**

Stanley Burger
Fries
Pop

Only \$3.⁴⁹



Expires Nov. 29, 1990

1-976-CSC-FLASH

Please have your credit card ready

\heavybreathe (L^AT_EX macro for hoarse breathing)

Hi ... , my name is Calum, and I'd like to tell you some very special facts about the Computer Science Club. We're at MC 3036 and we're open almost any time of the day, and almost *all* night, ready to service you.

Any of our lovely and very talented office staff would *love* to give you a BYTE or a manual or ... one of the other surplus computer books and magazines waiting for you in the CSC. The cost of one of these items is absolutely minimal, and, if you're good, and I mean *real* good, you can get it free.

Do you like to ... interface? The very experienced watcsc will soon be moving aside to let the young, agile watfred serve you the way you expect to be served. If you have an *active* account on watcsc, and you would like to see what tricks BSD 4.3 can turn for you, come on in, whisper your secret password in fred's ear, and ... log on. Fred is fully functional.

\HEAVYbreathe

I bet you like to play games. Or maybe you like to ... watch? On November 17th the CSC will host the seventh annual Computer Othello Tournament. Exciting programs from around the world will compete back and forth. The scores will go up and down, first with one on top, and then the other, and the lucky players will input move after move, and read the output, and input, and output. Oooh, I'm so excited! \pant Steamy, hot tea, and sweet, luscious doughnaughts with deep, soft holes will be there, waiting for *you*. I don't know yet who will win, but I assure you, the prize will go to the *very* best.

I can't wait much longer. Would you like to party with me? The CSC and the other MathSoc clubs are arranging an exciting event to provide oral gratification and social opportunities to all math students and faculty *members*. It's the kind of Christmas present that you've been *hoping* for, and it doesn't fit under the bush. ... I mean, tree. Coming soon. ... wait for further details.

\HEAVYbreathe!!! And then, \pant as the climax of the term's activities, on December 3rd, \moan as many CSC members as can make it will get together to satisfy one of the most fundamental human urges — the need for food — at McGinnis Landing. I *really* hope you can come.

Oooh, I'm having a hot flash. \pant That was really good for me. I hope it was good for you.

Calum "Hot Stuff" Dalek

mastHEAD

A splendid time all by was had

Well, we an issue have. The entire evening chaos has been, we finally done are but. I this legible is hope. I to thank everyone who out helped would like, including (why they here are with); David Gibbs (free pizza), Robkn Stewart (Wade me told CSC Flash write to), Lance Sibley (The editor me threatened death with, I didn't show up if), Joe Varnell (Where here be?), Kivi Shapiro (why not?), Betty-Jo Hill (tradition, like nine games the Naismith of this weekend watching), Dave Weil (I something this evening to do need I studying avoid while), Mark Brockington (television crummy Mondays on is), Dale Wick (I to write articles like), Scammer (tradition), Julia Harrold (I just some friends to visit stopped by), Marcel Goudeseune (less time studying spend !?) Curtis Desjardins (I know don't. The hell why here *AM* I?) and .

Special thanks Graphic Services (do you this understand, Marion?) to, the folks Gino's Pizza at to and go. Next week until, this your editor signing off is.

Trevor "The Luctant-Re Editor" Green

MGC

The Fun Has Just Begun!

The time flies then you're having fun; I can't believe the term is almost over. We're down to our last 2 weeks of classes and then exams. Everything has gone great this term, thanks to all the help. The important info...

To all the accounting students who won't be with us next term, enjoy but don't forget all of us slaves here at school next term. Before you go, there are a couple of items for all the accounting students to remember. If you haven't already, submit a Grad Directory Form, blank ones are available in the MGC Office. Second, DON'T FORGET THE MATH GRAD BALL (MGB). MGC will be sending you an invitation to the MGB in the winter; look for it and return it to us ASAP so we can send you your tickets.

About the MGB...

The Math Grad Ball (MGB) is the biggest bash of your university career—all for you—to celebrate graduating! The MGB is a huge black-tie dinner and dance held for all the 1991 graduating math students in honour of graduating from this esteemed university. The ball will be held this year on March 16, 1991 at Bingeman Park ballroom. Guest speakers will be at the dance—we're even inviting Brian and Bob (do you think they'll show up??). The cost of the tickets is undetermined but will be set in January. Since this ball is OUR bash, start thinking about ideas, Paul will need lots of help next term organising everything. Paul Trudell, the MGB Director, is looking for suggestions for a theme for the MGB, if you have any suggestions, put them in the envelope on the MGB Bulletin Board. If you have any questions about the MGB, just ask Paul.

Thanks again to everybody who help get the 42 yearbook pages done and submitted. Remember, we'll still take any pictures to be put in the yearbook.

About upcoming fundraising events: the last pizza day of the term will be held on Nov. 21 so come out and help, or at least buy pizza; the remaining bingo days are set for Dec. 3, 5, 13 and we need some more help—sign-up on the MGC Bulletin Board (outside MGC).

GET-TO-KNOW-YOUR-CLASS-END-OF-TERM PUB is happening this Monday, November 26, 8:00pm at Don Cherry's. This pub is going to be great; there'll be lots of door prizes to give away and some other freebies too! This bash is a great chance to come out and meet your class and celebrate your second last (or last) term at Waterloo. No ticket required, just show up!

The Chair
Peter von Schilling

The Left-to-Right Method

This conspiracy revolves around our favourite student staple. Yes, that's right, Kraft Dinner. If you are like myself and regularly devour KD, then you have probably noticed the \$10 000 instant win contest they had on their boxes a while back. Well, if you happened to win any money I hope you answered the skill testing question (im)properly. The skill testing question was " $632 + 565 - 921 \times 72 + 4 =$ ". Chances are the numbers are large enough that the average consumer will rely on their calculator which will yield the answer of -65119 . According to Kraft's Director of Promotions, the only correct way to answer this question is using the "left-to-right" method which would yield the answer 19876.

Is our education system failing us? I don't know about you, but I never learned the "left-to-right" method, in high school or university. So how come Kraft is more knowledgeable than us on this matter? Well, according to them, their skill testing questions are created by U of T's Dept. of Mathematics. UW's Math Dept. is neglecting us! A short distance away from us, in the thriving metropolis of Toronto, there is a university that knows about mathematical methods that we've never been taught. A mathematical method that is in everyday use (i.e. Kraft Dinner contests) nonetheless. So there you have it. If you're not using the "left-to-right" method in your math classes, you've gone to the wrong university.

The Reporter

Coming Home... To The Twilight Zone?

Homecoming '90 attendees were shaken last weekend when they realised that their classmates were disappearing, one by one. At first, the prevalent theory was that the universe was shrinking. However, it was quickly pointed out that the memories of the attendees were still intact, and the offending alumnus was duly told to get a life.

"A search party was quickly organised," said Class of '85 grad Will U. Everletmeoutthere. "Once we had finished partying, we set out looking for our friends." The search, co-ordinated by Sgt. Ted Onarrival of the UW Police, started with the opening of the beer kegs and the dredging of the contents. When this attempt failed to turn up the missing grads, Onarrival widened the scope of the search to take in the entire campus, including the Villages and the Married Students Apartments.

When it was pointed out to Onarrival that this technique had failed to discover the bomb that destroyed the "Student Life Building - NO" Committee almost two weeks ago, the UW Police officers became confused and began to mill around until Onarrival pointed out that the search was justified on the grounds that the missing alumni were probably bombed, anyway.

As the weekend progressed, alumni began to panic as they realised that more and more of their classmates had vanished. Said Everletmeoutthere: "The campus cops were too busy towing cars from the front of Needles Hall to notice that there were only twenty of us left."

At this point, several Homecoming organisers arrived and began to dismantle the tent. Sgt. Onarrival approached the remaining alumni and was overheard attempting to convince them that Homecoming had ended and that they should all go home. Everletmeoutthere loudly demanded that Onarrival continue the search for the missing grads, but Onarrival quietly insisted that all that had disappeared were accounted for, and had merely left the event earlier in the weekend.

Everletmeoutthere was last seen trudging through the snow, head down, mumbling to himself about the poor quality of Carling-O'Keefe products.

Four Bee Prime

OSAP Policies Cause Problems

The following is strictly the opinion of the author and should in no way be construed as an official statement by anyone connected with mathNEWS, except the author.

I realize that I am about to commit absolute blasphemy by submitting a serious article to mathNEWS and I apologize for infringing on your customary Friday Frivolity, but the following issue is one which I feel must be spoken about.

This summer I came out to my parents as gay. This, as any gay person will tell you, is an emotionally confusing time. You are not sure of your identity, sexuality, friends, or anything. You are beginning to discover yourself for the first time and the process is painful. When I told my parents their reaction was typical of many parents reactions: anger, disbelief, denial, hurt. . . Suddenly, the whole nature of our relationship changed. I was no longer the "son" they had raised and nurtured. Suddenly, I was a complete stranger who had several new ground rules to live by. I could not see anyone socially, not date or begin any relationships and most definitely never tell anyone that I was gay! My home became a prison and my coming out was to be for nothing. My closet door was being slammed in my face. I decided that I wasn't going to let them deny me my rights to be proud. So, I summoned my courage and moved out!

My timing could not have been worse! I suddenly found myself alone, without money, family, a job or a place to stay. I was dependent on the charity of friends and life became a daily struggle to survive. I tried to find a job, but the slumping economy made this difficult and the lack of a degree severely limited my employment potential. Looking at this as a future and knowing what I did about the statistical chances of returning to school after working for an interval, I decided to try and complete the final year of my B.A. To do this I was dependent on two sources: part-time employment and OSAP.

The necessary forms were filled out and the usual waiting period ensued. Finally, the letter from OSAP arrived telling me that I was to receive nothing, because my parents' income was too high. Frustrated, I launched an appeal and when I explained my situation I was informed that the issue of sexual orientation is not recognized by OSAP as a valid reason for separation from parents. They (OSAP) consider this a private issue and therefore do not acknowledge cases such as mine as legitimate.

What does constitute a legitimate case? I don't know. Currently, I am investigating OSAP policies and procedures to find out why this issue is not covered by the Ministry guidelines. If this policy remains in place there will be little choice for gay/lesbian students, except to live in the closet or to come out and live in an atmosphere full of repression and discrimination in order to ensure their rights to education.

I am not passing judgement on the government, nor am I condemning anyone. I simply wanted to make people aware of the issue and to inform students that this sort of thing is going on. In the next few days, I will be finding out more about the actual policies involved and seeing what steps are necessary to have them changed. Sexual orientation is not a matter of choice and to expect it to be suppressed is discrimination. This is the crime of my parents. The only crime that OSAP has proved itself guilty of so far is not listening.

Leon Amore

ISSN 0705-0410

mathNEWS is normally a bi-weekly publication funded by and responsible to, but otherwise independent of, the Mathematics Society at the University of Waterloo. Content is the responsibility of the mathNEWS editor; however, any opinions expressed herein are those of the authors and not necessarily those of MathSoc or mathNEWS. Send your correspondence to: mathNEWS, MC3041, University of Waterloo, 200 University Ave. W., Waterloo, Ontario, Canada, N2L 3G1, or to usrid mathnews@uwaterloo.ca or USNET.

Editor: Trevor "What, me reluctant?" Green

A mathNEWS Exclusive

The Tainting Of The Shrew

There is an ugly rumour buzzing around UW. . . Someone is producing Shakespeare's Taming of the Shrew. This is completely untrue! There is, however, a production going on that is claiming to represent a modified version of the Bard's cute little tale. The major characters have the same names, the settings are similar and the language definitely smacks of Elizabethan English. This is where the similarity ends. . . The powers that be have decided to use cross-casting, their reasons for doing so remain unclear. The result is going to be like watching Victor/Victoria in iambic pentameter.

In defence of the production, the performances witnessed by this reviewer were strong and genuinely enjoyable. The comic nature of much of the show is maintained, however. . . extra bits have been added. This seems to indicate a fundamental lack of faith in the creative talents of the Bard. Obviously what has worked for 400 years simply isn't funny enough. The added buffoonery has turned high comedy into high farce, which will be enjoyable but not what was intended when Shakespeare wrote the play.

My congratulations to all involved in the production. The Taming of The Shrew runs from Nov. 20 to the 27. To the cast: Break a leg. To the audience: Bear with them and forgive them. They know not what they do!

Leon Amore

If you're interested in developing your business and personal skills, consider Mutual Life of Canada. We're looking for talented, energetic individuals who are willing to learn and be a part of Mutual's success while contributing to their own.

People with almost every conceivable business skill, make up Mutual. Information systems professionals, actuaries, accountants, group benefit specialists, investment managers, marketing and sales experts . . . to name a few.

Mutual Life of Canada is the lead company of The Mutual Group, one of the most diversified financial services organizations around.

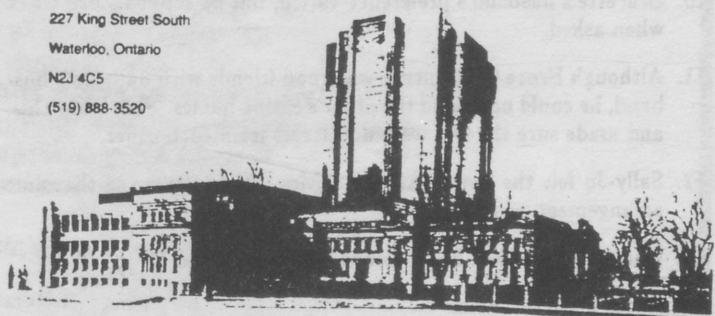
To find out what opportunities are available, come see us or give us a call. It could be your first step up in the world of business!


Employment Services
Mutual Life of Canada
227 King Street South
Waterloo, Ontario
N2J 4C5
(519) 888-3520

In motion with Mutual

Check us out

- Actuarial Opportunities
- Information Systems Professionals
- Sales Opportunities



 The Mutual Group
Facing Tomorrow
Together

Last Logic Puzzle This Term, eh?

Congrats on your responses everyone. I received seven solutions this time, five of which were correct (the others were close). The five perfectionists are Rhiannon-Sue T'Srewat-Jones, Fish in Hell, The Demented Slinky of Frobozz, Death by Calculus II, and "GRAND THRILL D, DJ. PJK and the COMP ENG POSSE in full effect," the last of which was declared winner by random selection. Come down to the Math Society Office, you hoopy 2A froods, and get your boffo mondo wizard prize.

Rhiannon-Sue has been complaining about the number of assumptions necessary to solve these babies. For her sake, and because it is my utter masterpiece, I present the following utterly beautiful logic puzzle: enjoy, all, and answers in everyone's favourite list format please.

Clues

By now it was Thursday, and time for another one of those interminable dinner parties people in logic puzzles are always going to. After their disaster last week (undocumented, unfortunately) in trying to appease the weird tastes of five strange foreigners, Sam and Janet Evening chose to invite their good friends from the UW Security team and their wives. The couples invited were Bruce and Mortadella, Bruce and Sally-Jo, and Bruce and Brucette. Their last names, in no particular order, were Trail, Goose, and O'Furniture. And their favourite cereals, again in no particular order: Froot Loops, Corn Chex, Shreddies, granola, Wheat Flakes, Cheerios, oatmeal, and puffed corn. As is usual at such gatherings, men and women alternated at the table and no woman sat beside her husband. Also the table was round, and the chairs even spaced.

1. Brucette, whose last name is not O'Furniture, sat on Sam's direct left.
2. Sam didn't like Bruce O'Furniture's eating habits much, so sat him to one side, beside Janet.
3. The lady who preferred puffed corn sat beside Mr. Trail.
4. UW Security Guards always tell the truth when asked.
5. Sam loves Shreddies best.
6. Besides Janet and Mortadella, every one of the women preferred a cereal with the same number of letters as her first name. (Note that there are 26 letters in the English Alphabet.)
7. To avoid causing a bad pun, the man who likes granola best has vowed not to name his son Paddy.
8. There is no clue 8.
9. Clues 15 and 9 have different truth values.
10. Brucette's husband's preference varied, but he replied Corn Chex when asked.
11. Although Bruce O'Furniture was good friends with Sally-Jo's husband, he could not stand the other's eating habits. Sam knew this, and made sure the two were not across from each other.
12. Sally-Jo felt the same way about Mrs. O'Furniture, so the same arrangement was made.
13. The man who liked Froot Loops best was named Bruce.
14. Bruce loved Granola.
15. There is a false clue other than 15, 5, 9, and 8.
16. Clues 15 and 5 are false.

A Door is Ajar

your brain is a grapefruit

Hi there, boys and girls! We're back with another installment of the adventures of SuperBert (and calvin too!). Just kidding, this is really the PMC update of the week. But we have some surprise news about SB (and calvin too!) hidden somewhere in the column.

First of all, since our last meeting, dear reader, we had Danny Brown give a talk on accessible functions, and some properties he discovered about them in regards to a particular problem. The week after that (last Thursday) prof Gilbert gave a talk on fractals. He discussed the Mandelbrot set, Julia sets, discussed some of their properties, and showed excerpts from a video of computer generated images of these sets. This video, incidentally, he has donated to the pure math club. Any member can borrow it (it's VHS) if they want to see the whole thing. If you want to borrow it and you're not a member, then come by and buy a membership (for a mere one dollar), and then go back and re-parse that last sentence. We also have information on ordering fractal postcards and fractal t-shirts (such as prof Gilbert sported at his talk).

We've got a large collection of books and journals as well, including a current subscription to Crux Mathematicorum, Math Mayhem, American Math Monthly, Mathematics Magazine, and College Math Journal. However, as of this time, these are not available for loan, but members are welcome to come by and read them. For those of you who are interested in joining the newly-forming student chapter of the American Mathematical Association, come by the PMC office so we can put you on the list. We'll be officially joining next week, so come by soon (preferably before wednesday, as you read this).

We are going to have had a talk this coming thursday. It's another mathematical tidbit, meaning student sketches on their favourite piece of math. [This will have happened yesterday. —ed.] The week after that Paul Check will be giving a talk on The Perfect Sneak, a function that is, well, rather bizarre. But don't take my word for it. Come on out and see. There will of course by the usual brandy and french truffles served.

Well, I think it's about time for some SB updates. Dateline, Pukatawagan, Saskatchewan. Says, Jake, a local resident: "nope, nope, dere ain't no supperbert 'round here. don't know what youse is talkin' 'bout." Yes, that's right, dear reader. Nothing interesting happened in Pukatawagan last week. Nothing at all. On to . . . Moscow, Ohio. Local residents said they saw "a strange person, who seemed to be made of felt and stuffing, wandering the streets looking for some kind of summit: they wouldn't say". Our correspondent was unable to confirm this. So yes, dear reader. It's true. I haven't a clue where SB is. So it's up to you. Write a story, news event, doodle, anything, relating the present activities and/or future plans and/or whatever you want about our noble crusader, SuperBert (and calvin too!). Pop your entry under the door of the PMC, marked "for bubba". I will randomly, or otherwise, select a winner. The winner will be . . . named the official PMC columnist for next term! If they're around. And want too. Or maybe something else. If they'd rather. And would prefer it such. Or otherwise. And furthermore.

We'll be having our end-of-term meeting on November 29, likely in MC4063. If you're interested in helping out with the club next term, or the summer term, come on out and we'll laugh at you. No, no just kidding. We'll tell you everything you ever wanted to know about running one of UW's foremost student organizations. Bye for now.

The Mini-Pops (the fabulous frozen pop stars on a stick)

17. Mortadella could never decide whether to buy a name brand or generic cereal, so she enjoyed Wheat Flakes as falling somewhere between the two.

That's it. Remember to read all the clues first, kiddies!

I guess I need a signature now, eh?

Top Ten Best Things About the New Kids

10. If you're into 12 year olds, a newkids concert is the place to be.
9. They're not Canadian.
8. They'll never play UW. [*You never know! -ed.*]
7. They're inferior to arts students.
6. They don't live in Waterloo.
5. They can't fight back.
4. Their music scares ducks away...and squirrels...and wolves...and beluga whales...
3. They make great targets for jokes. Even better than the engineers.
2. They give us someone we can really, *really* hate.
1. **Their music has the same effect as a home lobotomy at a fraction of the cost.**

Bill N Tedd
Professor Parady

P.S. Hey Ford! HAPPY NOW??!

Yes. Very happy. It's *very* relieving to know that at least someone out there has the willpower to say that they detest the new kids. Even though the contest is officially over, because of the quality [ahem.] of the submission, each of you (yes, that's 3 people)(I hope) can come by MathSoc to pick up your prize. As for the rest of you, sorry. It's definitely too late now. For you *and* the new kids, if some of these threats get carried out. *mathNEWS* hereby disclaims any responsibility for the actions of its readership. Have a nice day.

Ford Prefect

Join the WPIRG Board of Directors

Nominations open as of Thur. Nov. 8, 1990
Nominations close as of Thur. Nov. 22, 1990

Discover new people and ideas
Guide policy and finances
Organize film series, workshops
Plan research, future projects

If you're a regular or Co-op student, you're eligible.

- visit WPIRG and pick up a nomination kit
- return completed nomination form by close of nominations

*Are you looking for a graduate programme in APPLIED mathematics?
Then consider*

MASTER'S AND PH.D. PROGRAMMES IN MANAGEMENT SCIENCES

Department of Management Sciences
Faculty of Engineering, U. of Waterloo

Apply your mathematical knowledge in areas such as:

- scheduling of tasks in a factory
- design of management information systems
- design of knowledge-based systems
- planning for new production capacity
- inventory management
- management of product distribution systems
- linear and nonlinear programming models of energy markets
- conflict analysis (applied game theory)
- analysis of decisions under uncertainty

Financial Assistance is Available.

*for further information, contact the
Graduate Secretary, Department of Management Sciences
Faculty of Engineering, CPH 4309, ext. 3670*

Vapid Fire

- Mikhail Gorbachev visited what's left of the Berlin Wall in order to get structural tips for the new wall being built between Germany and the USSR. [Poland's in the way. —ed.]
- United States President George Bush has finally stated, during a press conference, that they would not use force in the Gulf Crisis "unless Saddam blinks first".
- Joe Clark and James Baker are now accepting reservations for their around-the-world cruise of exotic lands. Starting in Bermuda, ports of call include Turkey, Israel and exotic Jordan. The tour will finish off in Tahiti.
- Activist group Energy Probe is claiming that the new "tougher" Federal regulations for nuclear plants are all "smoke and mirrors". Not so, the industry claims—all the reactors are being made into a smoke-free environment, and the bathroom mirrors have all been removed.
- B.C. Premier William "Noah" Vander Zalm is now claiming that he's a minor prophet. God seems to approve—British Columbia has had seven days and seven nights of rain. Vander Zalm's faithful are now building an ark on top of Mt. Robson.
- An additive in Canadian gasoline, MMT, has been linked to violent behaviour. The study involved giving mice injections of Canadian gasoline and seeing how they would react. A large number died rather quickly and the remainder got quite violent. [I've been taking MMT for years. —ed.]

Mr. Death

Mathsoc

presents

Euchre Tournament

Thursday, November 22 8:00pm

At the Grad House

Euchre
partners sign
up in Mathsoc
office with \$2
deposit.



UltraClassifieds

WAM, LVB and JSB: nothing else even comes close

the tomato

"What should be done to give power into the hands of capable and well-meaning persons has so far resisted all efforts."

Albert Einstein

Curtis

When calculus gets you down, just do what I do, and flip on Sesame Street and sing along: "One-two-three-FOUR-five, six-seven-eight-NINE-ten, eleven-twelve, TWELVE!" When life was simple.

The Benign Giant

Ed:

Fee Φ Fo Fum

Is this a region of Type 1?

 $\alpha \beta \gamma \mu$

Is this false or is this true?

Fee $\Phi_2(t)$

Do you hate Calc as much as me?

Fluffy the Wonder Bunny

I prefer GFH.

Fang the Asp

$LS'D \rightarrow ((t, m, w, a, p) \cup (\forall x s.t. x \in E^C \setminus \{LS'D\})),$
 Let $U \stackrel{\text{def}}{=} (\{(t, m, w, a, p)\} \cup E^C \setminus \{LS'D\}),$
 where $x \in U \rightarrow \text{from_Hell}(x)$ and $\|U\| = 4.$
 Then $x \in U \rightarrow \mathcal{E}_{lc}(x) + \mathcal{E}_{lc}(LS'D) \in \mathcal{R}.$

gshh= to

Prof Beating Awareness Week

A serious problem has reared its ugly head at UW. It's being called prof beating. Students have been seen grabbing, holding and otherwise torturing their profs for information. The violence in school must stop. So this week if you find yourself tempted to grab, "hug" or commit any other atrocity to your prof, phone the local 24 hour hotline: 555-NVPA (No Violence to Profs Association) for counselling.

Several anonymous students, when interviewed about their actions, said "Well, I needed the information, and couldn't remember your name," and "I was so excited when I got my test back, my bear hug just took over."

Bridge Dale

Reply

"Why?" — That's all I have to say in regards to "Prof Beating Awareness Week." If students have enough guts to attack a prof, well, hell — give them a medal, the key to the city, a winning lotto 6/49 ticket. Wait a minute, better yet, make them a prof!

A Touchy Student

GINO'S 747-9888
PIZZA

160 University Avenue
 Waterloo

*Forget the Rest
 Call the Best*

Free pop with every slice until Nov. 24

FREE DELIVERY

30 MINUTES OR $\frac{1}{2}$ PRICE

\$3.00 Off any pizza over \$9.00

Mondays:

Student Discount

25% Off any order over \$10.00 net
 Pick Up Only

The Official Pizza of mathNEWS

Lisa Says:

And just when you thought your ActSci buds would never emerge from the library ("Oh — you guys have to study?"), they dragged you along to the event of the century! The end of Actuarial exams bash!

The bash — wow. So that's what happens when you deprive a hundred or so otherwise party animals from socializing for a month. (Great party, hope you've recovered enough to read this).

And now that the action has died down, there are still T-shirts to be gotten (\$12 for members, \$15 non), and a general body meeting to bring your body to (and your comments and your ideas for next term and, sorry to mention it, any exam materials you wish to donate, especially solutions you've written for ACTEX old exam problems that only have letter answers).

General meeting Tuesday, November 20, 4:30, MC 4067.

How to Drive Safely in Rough Weather

The winter driving season has started, and here are some safe driving tips for you to consider. First, a general warning: we have all been told to avoid drinking and driving (especially if you spill coffee on your lap), but did you ever think to avoid driving? Take the bus!

Now for the steps to better driving.

The first step is to get your roommate to start your car early, to warm it up. The second step is to buy a 2" diamond (see elsewhere in this issue) to scrape your window — one stroke at eye level should be sufficient for a clear view. The third step is to gather up your passengers, and force them to push you out of your driveway. The fourth step is to floor it, since the less time you're on the road, the safer you'll be. The fifth step is to check your gas level every couple of days, because you'll feel really stupid if you run out of gas in the country side. The sixth (and most important) step, is to pack a winter survival kit (remember to do this before running out of gas).

The survival kit is very important, and it should include:

- 2 bits of wire (I'm not sure why, but it's cheaper than booster cables)
- A pack of matches from Mr. Greenjeans (this is of utmost importance as these are useful for melting snow in front of you, or burning your clothes to keep you warm)
- Some non-perishable food (I personally have a can of stew, though I haven't figured out how to open it if I should want to eat it)
- An old tattered blanket, with bits of mysterious grass and mud on it (this is customary, and descenders are frowned upon)
- And a picked over first aid kit (Including only 6x6" and larger bandages)

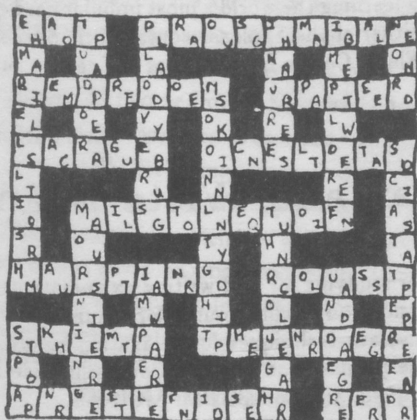
Finally, if the weather is really bad, stay in BED.

Bridge Dale

Quick PickTM Warning

With the Lotto 6/49TM record jackpot occurring just a few weeks ago, I think it's about time people should know the perils of the Quick Pick. Let's say you go to the lottery counter and order a Quick Pick. As you sit in front of the TV watching the balls rolling around, waiting for your number to drop, you're probably well aware that the chances of the balls matching your ticket are about one in 14 million. But what you probably didn't realise was that, since the Quick Pick is also a randomly-generated number, the probability that the number printed on your ticket was chosen by the Quick Pick machine is also about one in 14 million. Since these are independent events, the probability that the machine and the falling balls will yield the same number is one in 14 million squared, or 1 in 1.96×10^{14} . So the chance of a Quick Pick number ever winning is exceedingly slim. However, if you play regular numbers, there is no chance involved in the choice of the number, so you always have just the regular 1 in 14 million chance of winning. Have you ever heard of anyone winning the jackpot with a Quick Pick?

The Reporter
 spot the fallacy!



LC

Ace on Bridge

This week we will talk about yet another gadget, the infamous Roman Key Card Blackwood.

Unlike the Romans of old, RKCB will never fail. It is an effective system that asks not only about the number of aces that the partnership holds, but also the quality of the trump suit. It's like having your cake in eating it too!

When 4NT Blackwood is bid, there are 5 "Key Cards". They are the 4 Aces and the K of trump. The Trump suit is considered to be defined by the following in order:

- First Suit by strong 2C opener
- Strong Jump Shift Suit
- First Suit agreed by both partners
- Last suit naturally bid

The Responses to 4NT are:

- 5C—0 or 3 Key Cards
- 5D—1 or 4 Key Cards
- 5H—2 or 5 Key Cards without the Q of trumps
- 5S—2 or 5 Key Cards with the Q of trump
- 5NT—0 or 2 Key Cards with a 'working void'
- 6 (of a suit below trumps)—1 or 3 with a 'working void' in suit bid
- 6 Trumps - 1 or 3 with a higher-ranking 'working void'

Now you may ask yourself "What if I have only 1 Ace and partner bids 5C, showing 0 or 3?" I would respond "Self, if partner has No Aces opposite my one, then we are off 4 key cards in total...i.e., we are in deep trouble. So I will assume when my partner responds, that we are not off 3 or more Key Cards." Self can be rather intelligent at times.

Over the response to 4NT, the blackwooder can do one of 3 things:

- Set the contract, by bidding it
- Bid 5NT to ask for specific K's (6 of Trumps with None)
- Over 5C/D bid next higher-ranking non-trump suit to ask about the Q of trumps. The responses to this are: 5NT with Q, but no K's on side; 5 Trumps (if possible) - No Q of trumps; 6 Trumps—Q and 2 K's if 5 possible; No Q if 5 trumps not;
- Other suit bids...K of suit bid and Q of trump

Note: 5NT guarantees holding all 5 key cards and The Q of trump and invites 7 if partners hand is suitable. (Read, "If you had your wheaties this morning, feel free to bid 7, otherwise stop in 6)

RKCB has more additions than feathers on a goose to refine it further. The top-notch experts all play RKCB, and would make a good addition to the C&D Standard that is being developed.

If you have any questions or comments, please contact ACE in the comfy lounge, that's where I am most of the time anyways.



ACE

Deuce on Bridges

Bridges are something we all take for granted. How many times do each of us cross a bridge on this campus without thinking about it? Whenever you go to the church colleges, Health and Safety, or East Campus Hall, chances are you have to cross a bridge.

Why are bridges so important? The obvious answer is that they are necessary to keep up from falling into the murky depths of Laurel Creek and never being heard from again. However, there are other, more obscure, uses for these structures. For example, without bridges, what would I, as a fourth year student, sell to the frosh each September? In addition, it cannot be overlooked that should the UW campus ever be attacked by invading foreign armies, our fearless students will need something to *actually* blow up in an effort to defend our beloved school.

A very important use of bridges is quickly becoming apparent. As winter approaches and temperatures drop, freezing students will need something to burn. The wooden bridges linking Health and Safety and the church colleges with the rest of campus are ideal for this purpose, as they were built from Brazilian pepperwood which...uh...burns well, and...uh...produces lots of warmth due to internal energy generation. (As the writer slowly blushes crimson...)

Another form of bridge which is often overlooked is the musical bridge, a (usually) instrumental section between verses, designed as a conspiracy by lead guitarists and Fed Hall DJ's to give them an excuse to "pump up the volume"TM in order to deafen dancers. (Of course, one could argue that the dancers *must* be deaf to withstand Fed Hall music.)

I'm sure that the creative reader can take these suggestions as a jumping-off point and discover many more interesting uses for bridges, and besides, I have a midterm tomorrow morning and shouldn't be wasting my time writing this anyway.

Four Bee Prime

Bridge Club

It's Alive! It's Alive! Yes, coming soon to a CC near you....The University of Waterloo Bridge Club! We are barely alive, and Waterloo is already ranked in the top 6 Colleges and Universities in North America. This is a result of a fine placing by the following students in the recently held North American Collegiate Bridge Championships. The team score of 3067 was good enough for 2nd in the Central region, and a place in the final 6. Waterloo will play off against Harvard, Cal Tech, Rice, Michigan, and Virginia March 15-17 in Atlantic City for the top rung in Collegiate Bridge.

Also, another event will be held this term, likely November 29th in the CC. It will be another competition to choose a team that will represent our school in Regional playoffs in the ACU-I Bridge Challenge.

An accredited Bridge teacher will be teaching lessons next term to any students interested in learning the world's most popular card game.

Anyone interested in either of these, please contact Eric Sutherland c/o Math Building, 3rd Floor, Comfy Lounge, near the centre. or 884-6697

Eric Sutherland

How to Relax and Write Exams

Practical suggestions for studying for and writing examinations will be given by the Reading and Study Skills Counsellor, Laurel Thom.

Instructions for easy-to-learn techniques for relaxation before and during examinations will be given by Ron Walsh of Counselling Services.

Monday, November 19, 1990. 4:30 to 5:30 PM. MC 2065.

All faculties welcome.

Sponsored by the Mathematics Society and the Faculty of Mathematics

It Was Just One of Those Days

I knew when I woke up that it was gonna be 'one of those days'. How? Well, for starters, I had left my window open the night before and now my room was 40 below and filled with at least five feet of snow. If that wasn't bad enough, it was 9:15 am and I had a class in E1 in, you guessed it, fifteen minutes. I shoveled my way to the closet, managed to get dressed and then waded out the door. There was less snow outside!

Counting on a rude awakening, I cut through the red caf. Yep, that did it! Walking very quickly I headed for campus. In my haste I forgot about that trick ice patch out by Ring Road and proceeded to put on a great tumbling act. My left leg went right and my right leg went skyward, with my knapsack landing somewhere to the west. After I managed to get untangled from the pine tree I had fallen in, and pick most of the needles out of my hair, I hiked myself up and proceeded with much more caution.

The rest of the trip around the ring was filled with only minor slips. Well, at least until I hit upon another beauty out in front of the submarine.

By this point I didn't care. So what if there were 20 engineers standing there laughing at me. So what if I was covered from head to toe in mud and pine needles. So what if . . .

Oh hell, it's only an English class. I'm going back to bed!

A Repressed English Major

Waterloo Co-operative Residence Inc.

WCRI is student built, owned, and operated, and is located within a five minute walk to the University. Applications are accepted from all students regardless of whether or not they are enrolled in a university co-op program; the word "Co-operative" here means that the residence is owned and controlled democratically by the members who live here.

WCRI has three co-ed residence divisions: Dag Hammarskjold, at 139 University Ave. W., and Phillip North and Phillip South, at 280 Phillip St. Each residence has a dining room where meals are served daily. Each floor has a lounge and a kitchenette where members can make breakfast and snacks with food supplied by the Co-op.

The apartment divisions have a combined total of 16 one-bedroom, 48 two-bedroom, 58 three-bedroom and 35 four-bedroom apartments. Each apartment is equipped with a fridge and stove.

WCRI's small-community-like atmosphere encourages members to get together for many events such as pubs, movie nights, fitness classes and excursions. Members also have access to piano room, bike room, study carrels, recreation rooms, and laundry facilities.

For further information write to or call:

268 Phillip Street, Waterloo, Ontario, N2L 6G9, 519-884-3670

Built, Owned, and Operated by Students.

mathNEWSquiz

Just two submissions last time, maybe I am making the quizzes too hard. Well, I'll try to make this one a little bit easier. Anyway, here are the answers to last issue's quiz: 1. Georgious Panayatiou, 2. Richard Starkey, 3. Gene Klien, 4. William Broad, 5. "Just A Gigolo/Ain't Got Nobody" - David Lee Roth, 6. "Total Eclipse of the Heart" - Bonnie Tyler, 7. "Venus" - Bananarama, 8. "Workin' for a Livin'" - Huey Lewis and the News, 9. Droopalong, 10. Aug. 8, 1945, 11. Lake Erie, 12. 112, 13. Peter Davison, 14. Patrick Stewart, 15. Christopher Lloyd, 16. Scott Bakula. Our winner is: EastAMatt's Rapid-Fire Sex Cannon (6), and runner up: Rhiannon Jones (1.5).

Now for this week's quiz:

Monty Python

1. What was King Arthur's best friend's name?
2. What did the knights who say 'Ni' want?
3. What does the machine that goes 'Binnng' do?
4. What is Stan called?

Bloom County

5. Who did Steve Dallas say should be sued after the vicious beating he took from Sean Penn?
6. According to *Scientific Penguinism*, when and where were penguins created?
7. Name the ship commanded by Captain Cutter John.
8. Who did Milo Bloom constantly harrass as a reporter for the Bloom Beacon?

Lyrics

As usual, I want group/artist and song title.

9. I want to walk in the open wind. / I want to talk like lovers do.
10. I never said you had to offer me a second chance. / I never said I was a victim of circumstance.
11. He's gonna slide in head first, here he comes, he's out! No, wait, safe - safe at second base.
12. They call us irresponsible, write us off the page

Misc

13. Caligula believed himself to be which god?
14. Who created the *Teenage Mutant Ninja Turtles*?
15. Who hosted TV's *Bloopers and Practical Jokes*?
16. Who lost the 1950 world series?

dag
BIG MAK

New style mathNEWS over takes

we RPN like

The classic English grammar an infix notation uses, a number of ambiguities can create which. An effort in this to solve, we mathNEWS at an RPN approach to adopt have decided. The structure a little confusing first at may appear, a while after you get used it to will but. All you to remember have is that all verbs, prepositions, conjunctions and the words they modify after appear. This all parsing problems eliminates, the essential structure English of preserving while.

We your patience appreciate, we you remind you things much clearer will appear you acclimated become when that and. We you thank again once.

Mr. Death

Grid things

just one more after this, folks

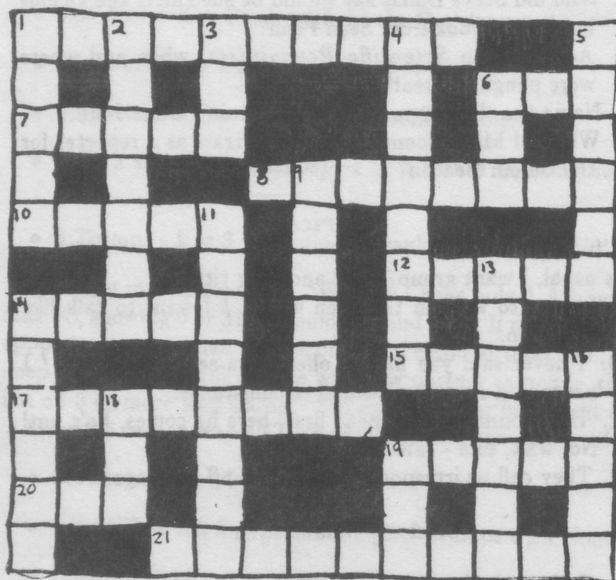
Hey gang, here we are again. There's not much to say this week, so I won't say much. There may or may not be a theme for this grid, that's up to you, whether you decide to look for one or not. Oh, if you really wanted a theme for the last one, it was summer.

Anyway, you all know the ropes by now... Submit your solution to mathNEWS by November 26. Slip it under the door (MC 3041) or in the BLACK BOX across from the comfy lounge. Include the following bits of information:

- Pseudo Nimh
- Comments
- Favourite planet

That is all. This grid will self-destruct in approximately ten years, unless you decide to be environmental and recycle it. The Math Building, on the other hand, will be here until eternity. Enjoy.

the snark



Grid Submitters

is there anybody out there?

Lessee who submitted this week, and what their favourite reasons for living are... The Avalonians (To have experienced CS 360) [ack!], The Demented Slinky of Frobozz (I don't have to take C&O 230), Rhiannon Jones (Love, apathy, fear -in that order), and The Easter Bunny & Lips-you know it!! (To perfect my psychic powers, then teach them to my dog Steve; and the new Bob Mould album).

Winners, picked at random from all solutions, are... Rhiannon Jones and The Easter Bunny & Lips (in reverse order).

These people may come by MathSoc to pick up their prizes. Oh, and the gridmaster's favourite reason for living? Simple, I graduate in five and a half months. Catch ya later, dudes.



Cryptic

but quite ordinary...

Across the bridge

1. Lush area in tundra in for estimated twenty inches of snow (10)
6. Lady or uncle (3)
7. I mean, perhaps, less youthful (5)
8. Branch from destroyed wooden french article (4,4)
10. Drops basins (5)
12. More than normally short, confused scan (5)
14. Musical curiously made up of either monkey (8)
15. Curvy organ carried over shoulder (5)
17. Mangled money cup for foal (8)
19. Horn has cancerous swelling (5)
20. Ship's keel maybe contains tree (3)
21. Very rare thing in all men: Dan, Ger, Edward, even George (10)

Down into the river

1. Destroys remnants (5)
2. Limping entails injury, which entails encroachment (7)
3. Fairly ecstatic, yes? (3)
4. Leia's tresses involve worries (8)
5. Don't be glum, be right glad Canada contains timber (6)
6. Flowers in Leia's necklace (3)
9. Stay aquatic turbulence (6)
11. Halt particle of horse (8)
13. A fix-it tool for every embodied organ (7)
14. Foxy general mainly contains air (6)
16. Raise doe against gravity for material desires (5)
18. Fortify appendage (3)
19. Pester insect (3)

Conventional

but not so ordinary...

Across, Across, my kingdom for a cross...

1. Disappearance
6. Fight
7. Weary
8. Grow attached
10. Fear
12. Coldly
14. Crew
15. Trots
17. Plant trees
19. Seed
20. Munch
21. Kills

Down, Down, down in the mouth

1. Bonus
2. Topics
3. Doze
4. Too much
5. Crusoe's man
6. Tiny
9. Eats
11. Train
13. Plead
14. Scorched
16. ... of time
18. ... Albert
19. ... Wednesday