

Jan. 18, 2007: Flew UA 924 from LAX to Washington, DC

Jan. 19, 2007: Flew UA 221 Washington, DC to LAX

Feb.22, 2007: Flew United 940 and 1242 from LAX to Providence via Chicago. Dinner with Barbara in Guilford, CT.

Feb.23, 2007: Flew US 1822 from Providence to Philadelphia.

My mother, Muriel M. Brennen, died in Magherafelt, Northern Ireland, on Feb.23, 2007, perhaps while I was on my way from Providence to Philadelphia. That day, Dana, helped me to find the additional clothing I would need in order to look respectable at her funeral. The following day I drove to Newark and flew to Belfast - hired a car and drove to Magherafelt.

Feb.24, 2007: Flew Continental 94 from Newark to Belfast for my mother's funeral in Magherafelt

Feb.27? I gave the following speech at my mother's funeral in the First Presbyterian Church in Magherafelt. The following day I travelled back to Philadelphia via Newark.

Feb. 28, 2007: Flew BE961 from Belfast to Gatwick

Feb.28, 2007: Flew Continental 29 from Gatwick to Newark.

Mar.1, 2007: Flew UA 7144 and 207 from Philadelphia to LAX via Washington



## MURIEL M. BRENNEN

My mother died on Feb.23, almost exactly 20 years after my father was laid to rest here. She died after a good and enobling life. Today we celebrate that life and, in particular, recognize the great joy and kindness she brought to so many people in so many walks of life. She was one of the most loved people I have ever known, not least by her family of four children, eight grandchildren and eight great-grandchildren. She was born Muriel Maud Earls on March 8, 1914, the youngest daughter of John and Mary Earls. The family had Islandmagee origins but my mother was born in Belfast. She attended Victoria College where she excelled in sports, particularly hockey – indeed she played for the First Eleven for an astounding seven consecutive years, a record which still stands today. All her life she loved sports, reveled in its competition. She excelled at tennis and later golf. She was a fierce competitor – I still remember the humbling defeat she administered to me on the Portstewart Golf Links at the age of 80, her guile, accuracy and determination more than a match for my brawn.

Though she had an enjoyable childhood growing up on the Ravenhill Road, my mother had the misfortune to lose both of her parents to illness when she was just a teenager, an experience which I think gave her a special insight into the unfortunate. Subsequently she was cared for by her aunt Anne Earls and by her much loved sister Irene who became a lifelong companion and friend and, I might add, one of my childhood role models. In 1931 at Queens University, she met Wilfred Brennen whom she had earlier seen performing as Cassius in an RBAI school theatrical production that she attended with her father. They were married in Belfast on Dec.20, 1939, as the war clouds loomed.

My brother Michael and I were born in Belfast though my mother and I had to be briefly evacuated to the Ards Peninsula because of the German bombing. Then, in 1944, the framework of our lives was substantially altered in the winter of 1944 when the leaders of the town of Magherafelt persuaded my parents to move here so that my father could create a modern hospital, the Mid-Ulster hospital, from the remains of an old workhouse. My brother Colin and my sister Paula were born in that hospital.

Today is another watershed moment in the history of our family for it marks the end of nearly 63 years of contributions to this community. After the move, my father and mother, Wilfred and Muriel Brennen, gave the rest of their lives to this community and the world beyond. It is my father's great legacy to this community that the Mid-Ulster Hospital has served this town with "light and human kindness" ever since that day 63 years ago. During those years my mother also created her own legacy for she was the driving force in creating a whole new attitude toward the mentally handicapped. It was her conviction and commitment that brought facilities to this community that would provide care for these less fortunate and allow them to contribute to the community instead of being hidden

away in the backrooms. She was in large measure responsible for a revolution in the way the community exercised its responsibility toward the less able.

But as I reflect on those 63 years what I remember first are not my father's accomplishments, not even my mothers. What I remember is what a marvelous place this was to grow up – and later to be from. To this date I proudly tell people halfway around the world that I am "from MARAFELT". I remember the kindness of the people – people like Nan Stewart to whom my family and I owe a great deal – truly a special person. And I remember the great education at the Rainey that opened up such marvelous opportunities for so many of us.

And so most of all I don't want to drive away from Magherafelt today without saying how deeply grateful my family is to the Magherafelt community. Thank you for caring and appreciating my mother and father. Thank you for being a great place to come from. Thank you for continuing to build a community despite the sectarian strife. And thank you allowing my family to enjoy your hospitality for 63 years.

Almost exactly 20 years ago I stood here on the occasion of my father's funeral service and read from a chapter of the New Testament that my mother had requested. Some years later she asked me to read it again at her funeral. It is chapter 13 from the first letter of St. Paul to the Corinthians:

1. Though I speak with the tongues of men and of angels, and have not charity, I am become as sounding brass, or a tinkling cymbal.
2. And though I have the gift of prophesy, and understand all mysteries, and all knowledge; and though I have all faith, so that I could remove mountains, and have not charity, I am nothing.
3. And though I bestow all my goods to feed the poor, and though I give my body to be burned, and have not charity, it profiteth me nothing.
4. Charity suffereth long, and is kind; charity envieth not; charity vaunteth not itself, is not puffed up,
5. Doth not behaveth itself unseemly, seeketh not her own, is not easily provoked, thinketh no evil;
6. Rejoiceth not in iniquity, but rejoiceth in the truth;
7. Beareth all things, believeth all things, hopeth all things, endureth all things,

8. Charity never faileth: but whether there be prophecies, they shall fail; whether there be tongues, they shall cease; whether there be knowledge, it shall vanish away.

9. For we know in part, and we prophesy in part.

10. But when that which is perfect is come, then that which is in part shall be done away.

11. When I was a child, I spake as a child, I understood as a child, I thought as a child: but when I became a man, I put away childish things.

12. For now we see through a glass darkly; but then face to face: now I know in part; but then shall I know even also as I am known.

13. And now abideth faith, hope, charity, these three; but the greatest of these is charity.

I would like to end with two other quotations. The first is my mothers favorite poem – “the Garden of Prosperine” by Swinburne that seems most appropriate today:

“From too much love of living,  
From fear and hope set free,  
We thank with brief thanksgiving,  
Whatever gods may be  
That no life lives forever,  
That dead men rise up never,  
That even the weariest river,  
Winds somewhere safe to sea.”

And finally with liberty from William Shakespeare, a quotation that seems to me to sum up my mother and her life:

“Her life was gentle and the elements so mixed in her that Nature might stand up and say to all the world “This was a woman”.”

**Rough Notes (in her own hand) by Muriel M. Brennen (1914-2007) on raising her mentally-handicapped daughter Paula (1949-2010) and creating help for such children in the Magherafelt area. The beginnings of Kilronan School.**

My husband (he to start the Mid-Ulster Hospital) + I came to Magherafelt in 1945  
Colin was born in 1946 + Paula in 1949  
- + Christopher + Michael having been  
born in Belfast. I will not go into  
detail about the shock + trauma of  
finding that dear Paula was 'Downer  
Syndrome' - suffice is to say that she  
was very lethargic + one feeding time  
just ran into the other. However  
with the help of my wonderful daily help  
we managed through the v. early days  
She was Mrs Maisie Brown + her  
daughter now works for me.

Being so  
busy with my husband + the three boys  
I began to get very worried about P's  
education - She had been certified as  
'very low grade' which was terribly  
depressing but I did my best to  
work with simple toys + counting frames  
etc but she got very tired + cross  
easily.

Isn't it impossible to  
believe that there was nothing for  
Mentally Handicapped children in the  
whole area. ? After some years I  
was introduced to Dr. <sup>a very fine</sup> Weir - Medical  
Superintendent at Muchamore Abbey +  
I arranged to take Paula ~~the~~ to the  
School there each day in the car -  
the double journeys being over 80  
miles <sup>per day</sup> - however as the winters  
were very snowy + icy I had to give  
that up and again became very  
worried and exhausted.

Now I come to the very worst days of  
my life - my friends had been  
keeping at me about how much I had  
to do + my tiring health + much against  
my better judgment - I agreed with them  
to let Paula be resident at  
M. A. When I tell you that five  
days later (they had asked me not to  
visit at first) I got an S.O.S. for



Dr. Wein to come for P. My husband & I  
rushed there immediately & discovered  
P, very ill & dehydrated with bad  
weals on her wrists & ankles where  
she had obviously been tied into bed.  
It transpired that there was a very bad  
Matron who was dismissed right  
away. Fortunately our good friend  
D. McConnell Senior physician Hosp.  
- drip fed etc etc.

Recover. slowly at least 2 years

Not leave us & slept very badly

Also it had v. bad effect

on me - terrible feelings of guilt at

letting her leave a better home where she

had always been so well looked after



About 1954 the I.H.S.S had  
touch <sup>Vey Rwy</sup> James Veydsh  
Church Hall no facilities

Committee Mr. McGinnick  
J. O'Byrne

Friends E. Wilson A. Clann

Phyllis Walsh - Mrs D. Flack etc  
later on help of J O'Byrne <sup>who etc</sup> etc  
moved to St John's Hall but there  
were still no facilities of any kind  
though by that time Mrs Jean Clarke  
(now head - - - was head &  
made the very best of what there was.

At the same time as well as all  
the Parents meetings I attended  
endless meetings at Buntys Hall  
with Mr. Mac C. & Mrs C & eventually  
after much persuasion

we got the school &

we moved into the premises at  
Hosp. Road which was mostly  
the school

As more & more

clients were disc. by S. Services we  
were always very overcrowded

In 'due to much work by Mrs  
Clarke the marvellous big premises  
- Killarney School was built  
+ 1st 12. Rd. became the Adult

Centre where Mrs Sally Boyle took  
over + made many improvements  
but as pupils came from Killarney  
there was always over crowding  
Sadly Mrs S. B. had to retire  
owing to ill health but a young active  
~~Head~~ with Head; greatly helped  
by Link worker Martina R.

**Postscript: I, Christopher Brennen, tell  
Paula's story in my own words at**

**<http://dankat.com/autobiography/autopaula.htm>**

March 30, 31. 100th Anniversary of the founding of the Mechanical Engineering program at Caltech. Organized a one day program of lectures and celebration on Mar.31.



# Caltech fetes engineering department

BY ELISE KLEEMAN  
STAFF WRITER

**PASADENA** — Caltech is bringing out the birthday candles this week for the hundred-year anniversary of its mechanical engineering department.

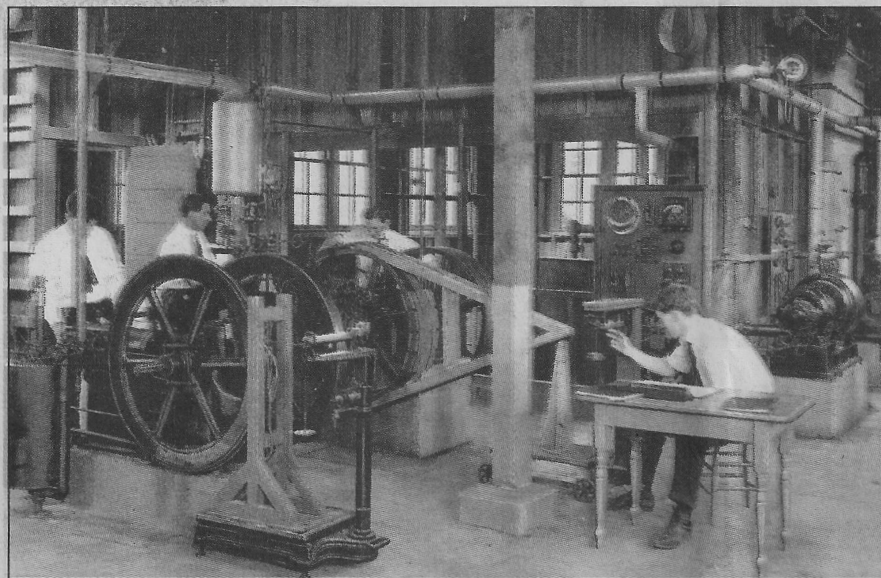
The two-day festivities will feature not only the work of its students and faculty in the department today, but also its generations of alumni.

"The mechanical engineering department has contributed to a wide range of projects through the years, particularly after the Second World War," said Chris Brennen, a longtime mechanical engineering professor.

Though at first the department's emphasis was on teaching, he said, its faculty and students contributed to the war effort with developments in torpedo stabilization and research into the high speed movements of propellers.

Caltech's mechanical engineers also specialized in studying high-speed flow, helping design the pumps necessary to build the aqueduct from the Colorado River to Los Angeles, and for the space shuttle main engine.

These days, Brennen said,



**POPULAR MECHANICS:**  
This photo from 1910 shows the early workings of the Caltech mechanical engineering department. The department is celebrating its 100th anniversary.

PHOTO  
COURTESY  
CALTECH  
ARCHIVES

"things have moved on to an even wider range of different subjects. Modern mechanical engineering is spreading into areas associated with biology, very small things, and very large complex systems."

Caltech projects include developing autonomous rescue vehicles and robots for medical applications.

"Mechanical engineering has always done machines, always done energy and always done mechanics," said Melanie Hunt, the department's current head. "We'll continue to do those

things, but hopefully looking at problems that people don't look at in other universities."

Friday's celebrations featured some of these advances, including a test run of Alice, the vehicle students are assembling to drive city streets autonomously in a military funded competition in November.

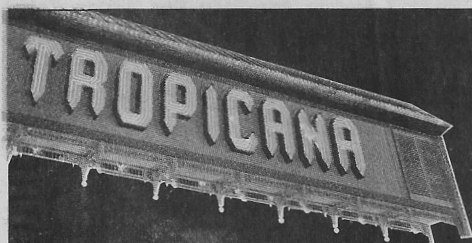
Today will be the alumni's moment in the sun. Former students and faculty, who include two astronauts, a University of Michigan president, a race car designer, and an oil industry executive, will talk about the

wide variety of fields they have applied their mechanical engineering education to.

"Caltech is a remarkable place, one that I feel fortunate that I had the opportunity to have," said Tom Tyson, who got his bachelor's degree in mechanical engineering in 1954 and returned for his Ph.D. in aeronautics 1967.

Though he admits that time has dulled the pain of all the hard work — 60 to 70 hours a week of studying, he said — "it was a great experience."

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## MECHANICAL ENGINEERING CELEBRATES ITS CENTENNIAL

Mechanical Engineering at Caltech turns 100 this year, and a party called "It's All About ME" was held on March 30 and 31. "I was in rather a quandary trying to organize it," laughs Chris Brennen, the Hayman Professor of Mechanical Engineering. "The alumni only like to hear about the past, and the faculty only like to hear about the future. I got complaints from both groups, so I must have done a good job." The hundred or so returning alums got a dose of history, but they were also treated to lectures and posters on current research, and talks by alumni on new directions in the field. There was also live entertainment, as it were, in the form of a restaged ME 72 design competition and a demonstration of Alice, Caltech's self-driving entry in the upcoming DARPA Urban Challenge in which robot vehicles will try to navigate themselves through 60 miles of city streets.

In 1907, the then-Throop Polytechnic Institute was

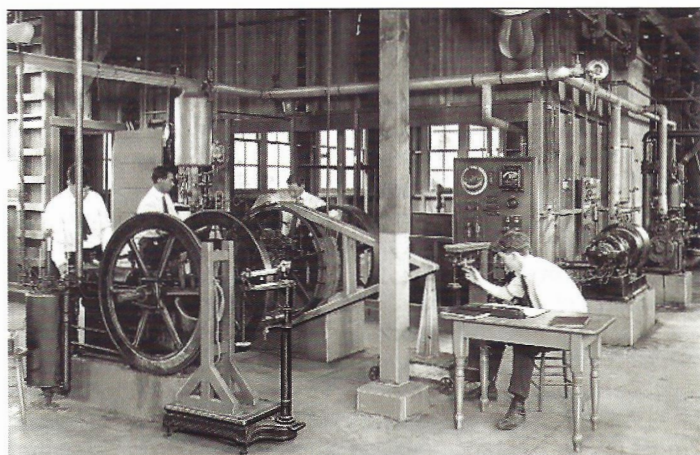
in a cluster of buildings in downtown Pasadena, at the intersection of Fair Oaks Avenue and Chestnut Street. The ME department's start was modest enough—the only degree offered in engineering was electrical, and the sole ME course, Theoretical and Applied Mechanics (lab and lecture), was listed as Math 13. But as the catalog for 1907–1908 stated, "It is also the purpose of the Institute to extend the work along these lines as demand for it arises." Arise it did—the 1910–1911 catalog listed two faculty associates in mechanical engineering and, in the tradition of the low student-to-faculty ratio for which Caltech remains famous, two juniors pursuing mechanical engineering degrees. By the time Throop changed its name to the California Institute of Technology in 1920, the ranks had grown to three professors, an instructor, and 81 students.

But it was Caltech's Pump Lab, founded in the early 1930s by Robert Knapp (PhD '29) and instrumental in de-

veloping the equipment needed to bring water from the Colorado River to a thirsty Los Angeles, that "marked the transition from the department being a technical school that trained engineers to inventing the engineering of the future," says Brennen.

This transition was complete by World War II, when Knapp and colleagues turned their attention to broader issues of hydrodynamics. Chief among these was the noisy cavitation caused by the high-speed propellers on submarines that alerted their prey to their presence, and gave their positions away to the destroyers waiting above. And on the other side of the battle, torpedoes dropped from airplanes tended to take off in any old direction upon hitting the water. The problem was solved by stabilizing fins invented at Caltech and tested first in the lab and then at full scale up at Morris Dam, in the San Gabriel River canyon above nearby Azusa. "The remarkable body of literature generated in those years is

**Throop Polytechnic's Hydraulics and Mechanical Engineering Lab in the early 1910s. From left: Raymond Catland, Charles Wilcox, Harold Black, and Robert Bultman, all BS ME '15.**





Dear Dr. Brennen,

Now that summertime has arrived, I wanted to thank you for all the advice and support you have offered over the last two years. Undoubtedly, your recommendation letter was invaluable in my application to graduate schools and ME19 gave me a good foundation in fluids upon which to build. (ME19 was, without a doubt, my favorite and best instructed class during my 4 years at Caltech.)

However, what I am most thankful for was your

insight and advice on life, in general. Although I am sure that there will be times in the near future where I lose sight of the bigger picture, I will do my very best to heed your advice. I especially enjoyed your company and stories at the Fleming formal dinner. I am sure that I will be hearing plenty about you in the future (perhaps again for your work in canyonering?), and look forward to it. Thank you again for everything.

Best wishes,

Saujdeep

Professor Brennen,

Professor Before I left the institute I wanted to say thank you. Thank you for your class (ME19). I feel very lucky to have had your class before you retired. I also feel very honored to have learned from you.

And I think as well as most of the students that you are one of the best professors @ Caltech, and the institute is very lucky & a better place when you're there.

Thanks. Paul Gommiser

April 7, 2007. Easter at Palm Springs Resort

April 14, 2007. Paragliding at Santa Barbara with Randi.



May 22, 2007. Open House at Payton's school - President George Bush.

May 25, 2007. Student Party in the backyard of the Master's House.

Jun. 3, 2007: Flew UA6470 from LAX to Salt Lake City  
Invited Lecture, Annual Meeting of the Acoustical Society of America, Salt Lake City,  
Jun. 2007.

Jun. 4, 2007: Flew UA6469 from Salt Lake City to LAX

June 24, 2007. Climbed Mount San Antonio with Payton.



**June 24, 2007**

Jun. 28, 2007: Doreen and I flew SW403 and SW1176 from Ontario to Providence via Las Vegas

Jun. 28 & 29, 2007: Hotel in Groton, CT

while I consulted with Electric Boat in Groton. On Jun.30 we drove to Megansett Beach where Dana had rented a beach house.

Stayed in Megansett Beach from Jun.30 until Jul.3. Quinn took the last photograph of Doreen.

Jul. 3, 2007: Doreen and I flew SW624 and SW2872 from Providence to Ontario via Las Vegas



## TRAVELS NOW AND THEN

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### CAPE COD 2007



*Cape Cod*



*Cape Cod*



*Cape Cod*







*Cape Cod*



*Cape Cod*



*Cape Cod*



*Cape Cod*





*Cape Cod*



*Cape Cod*



*Cape Cod*



*Last photograph*

Jul.20, 2007. Trip to San Diego Wild Animal Park with Troy and Payton.

Aug.22, 2007. Katharine Doreen Brennen died of cancer of the Colon.

## EMBROIDERED CLOTHS: Last Act

"I have spread my dreams under your feet;  
Tread softly because you tread on my dreams."

From "He wishes for the cloths of heaven" by William Butler Yeats (1899).

Katharine Doreen Kerr and I lived and loved together for over 47 years, from the day we met on Jul.20, 1960, until her death on Aug.22, 2007. She was a lovely, gentle woman with whom it was a true privilege to share a large fraction of my life. We brought three children into this world and they, all three, enriched our lives immeasurably. We emigrated to California and made a home there in Pasadena where the country and the people showed us great kindness. In the first few years, believing that we were destined to return to the United Kingdom, we travelled widely, striving to see as much of the country as we could. Mostly we could only afford camping trips but our inexpensive 8ft by 8ft Sears tent was raised in almost all of the National Parks, Monuments and Recreation Areas west of the Rockies. Camping was not really Doreen's choice but she endured it since the children enjoyed it so much. As the years rolled on and our immigration became permanent, we were able to enjoy many foreign trips to places as distant as Japan, Australia and Africa though her favorite destinations were England, France, Italy and, of course, Ireland. She missed her family, her parents and her sisters and it was always a joyous trip back to the United Kingdom to see them.

She lived a very private life, devoted to the children and to her animals. She loved to read and our house was filled with books. She also loved her animals, dogs, cats and horse. She had me build a spacious indoor/outdoor cage in our garage for two stray cats that Patrick brought home and who could not fend for themselves out of doors. The horse she bought was her greatest joy; she would spend hours feeding and grooming "Bills Dream Boy", and learning the elements of dressage.

She was very proud of the accomplishments of all three children and enjoyed at least the first few years of our four grandchildren's lives. The tragic and premature death of our son, Patrick truly broke her heart. She was immensely proud of the first male born of her maternal line for five generations. She did all she could to encourage and support him (perhaps even too uncritically) and to shield him from my excessive disapproval. At the age of twenty three he was finally beginning to mature when suddenly and tragically he was taken from us. His death truly broke her heart. She never really recovered a will to live and her health inexorably declined in the years that followed. One of my great failures in life was my inability to halt that decline however hard I tried.

Then came the worst days of my life. My beautiful wife, my lovely Doreen, was diagnosed with colon cancer. My daughters and I did all we could to explore medical remedies but the faces of the doctors clearly indicated that the cancer had too wide a hold, had spread too far to have left any hope. Better to allow Doreen to take what enjoyment and peace she could from the few days that were left to her. I think she always knew there was little hope. For me there was a jumble of emotions, unbelievable sadness at the prospect of losing the one person to whom I had confessed my whole being, whom I always believed would outlive me. Anger and shame that I had not done more to get her to medical attention much earlier. Panic at what this looming tragedy would mean for my daughters and grandchildren. Helplessness, anguish and a guilt that I should be doing more to enrich her remaining days.

I remember several moments that are seared into my brain. The first moment when she emerged from the doctor's office to tell me she had cancer. I could barely walk to our parked car - yet I cannot imagine what it was like for her. The moment of anger when we realized that our appointment for a CT scan would be delayed due to our own incompetence



in making the right appointment. The terrible moment when we were shown the colonoscopy photos with those huge cancerous growths. And yet there were uplifting moments as well. The minutes in the ambulance that was taking her home to die; in her delight, she joked with the ambulance attendants about her almost weightless body. Her comments to her daughters when they lifted her into a sitting position just a couple of days before her death; "Augh, you naughty children ...". But then, finally, the still, cold and lifeless body that no longer looked like her. The terrible zipping up of the body bag as the mortuary attendants took her out of our beloved Sierra Madre home for the last time. And, for the purpose of final identification, my last glimpse of her on the closed circuit TV screen in the mortuary. It was only a little over a month from the colonoscopy to her final breath. So little time to erase that beautiful life force, that inspirational kindness, those fluorescent blue eyes.

Almost as quietly as she lived her life, she slipped away in the small hours of the morning of Aug.22, 2007. Knowing that the end was near I had spent the night sitting by her bedside. She was beyond speech but, in the hope that she could hear, I spoke to her softly of the good times that we had shared. Finally, about 4.30am when I could no longer keep my eyes open, I asked the hospice nurse to watch her while I got a few minutes sleep in my nearby bed. Fifteen minutes later the nurse woke me to tell me she was gone, gone while I slept. It was almost as if she knew it was time to go.

She wanted no ceremony, but rather a very private farewell and burial beside her son with only myself, her daughters and sisters present. We buried her high on the mountainside of Rose Hills Cemetery in Whittier. Dana, Kathy and I each spoke at her gravesite. I knew then that if we were to survive this second tragedy, we could only do so with each other's assistance for only the three of us could know how we felt. But each of us also needed to make our private efforts, Dana and Kathy for the sake of their children and me for the sake of them. I had no idea where or how I could possibly find the strength.

Jul.20, 2007. Trip to San Diego Wild Animal Park with Troy and Payton.

Aug.26, 2007. Trip to Catalina with Troy and Payton and Kathy.

Sep.1, 2007. Flew LAX to San Juan, Puerto Rico to attend Canyoneering Rendezvous.

# TRAVELS NOW AND THEN

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## COSTA RICA 2007


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### review your flight details

#### Los Angeles to San Jose

**Flight 1**      **Saturday, September 01, 2007**  
**Departure:** 12:30 Los Angeles, USA - Los Angeles International, terminal 2  
**Arrival:** 18:25 San Salvador, El Salvador - Comalapa International  
**Airline:** Taca Intl Airlines TA527 <sup>e</sup>      **Aircraft:** Airbus Industrie A320-100/200  
 Operated by another airline  
**Fare type:** Economy Restricted

Change of plane required. Time between flights = 1:15

**Flight 2**      **Saturday, September 01, 2007**  
**Departure:** 19:40 San Salvador, El Salvador - Comalapa International  
**Arrival:** 20:55 San Jose, Costa Rica - Juan Santamaria  
**Airline:** Taca Intl Airlines TA523 <sup>e</sup>      **Aircraft:** Airbus Industrie A321  
 Operated by another airline  
**Fare type:** Economy Restricted

#### San Jose to Los Angeles

**Flight 1**      **Saturday, September 08, 2007**  
**Departure:** 18:00 San Jose, Costa Rica - Juan Santamaria  
**Arrival:** 00:20 +1 day(s) Los Angeles, USA - Los Angeles International, terminal B  
Note: includes 1 technical stop(s)  
**Airline:** Laca LR640 <sup>e</sup>      **Aircraft:** Airbus Industrie A320-100/200  
**Fare type:** Economy Restricted

**Legend:**    <sup>e</sup> = e-ticket option,    **USD** = U.S. Dollar

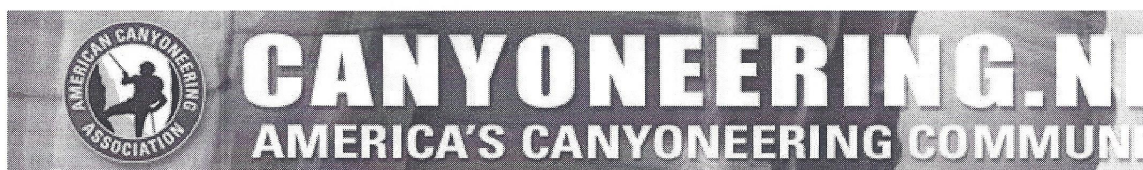
### price

travellers	flights	taxes
1 adult(s) x	(345.00 + 60.42)	= 405.42 USD
<b>total for all travellers</b>		<b>405.42 USD</b>

purchase conditions  
 fare basis information

### flight notes

- This fare is bilaterally agreed between TACA and the selected airline(s).


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 Rendezvous & Conferences  
**Costa Rica '07**

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07-25-2007, 11:03 AM

**rcwild**

Instructor Dude


 Join Date: Mar 2004  
 Posts: 1,452

**Costa Rica '07**

We hope you will join us for some canyoning fun in Costa Rica.

Have fun. Be safe.

**Rich**

*"If you see no reason for giving thanks, the fault lies in yourself."*

**Minquass**

[Quote Post](#)
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[Qu](#)

07-25-2007, 11:22 AM

**rcwild**

Instructor Dude


 Join Date: Mar 2004  
 Posts: 1,452

**Itinerary**

**5-Day Canyoneering FastTrack Course**

Monday, August 27th, to Friday, August 31st

Rancho Margot (near La Fortuna)

Fee: \$275

[Course Registration Form](#)

**Canyon Rendezvous**

Saturday, September 1st, to Sunday, September 9th

Rancho Margot – Turialba – Rio Pacuare – Caribbean

- Saturday; arrival and transportation from San Jose airport to La Fortuna.
- Sunday-Tuesday; canyoning and other activities near La Fortuna.
- Wednesday-Thursday; canyoning and other activities near Turialba.

Sat Sep 1  
 Sun Sep 9

- Friday-Saturday; whitewater rafting on Rio Pacuare.
- Saturday afternoon/evening; hanging out on the Caribbean.
- Sunday; transportation to and departure from San Jose airport

[Rendezvous Registration Form](#)

### **Canyon Leader Exam**

Monday, September 10th, to Tuesday, September 11th

Rancho Margot (near La Fortuna)

Fee: \$100

[Course Registration Form](#)

### **Wilderness First Responder Course**

Wednesday, September 12th, to Wednesday, September 19th

Rancho Margot (near La Fortuna)

Fee: \$450

[Course Registration Form](#)

Have fun. Be safe.

**Rich**

*"If you see no reason for giving thanks, the fault lies in yourself."*

**Minquass I**



[Quote Post](#)

[Multi off](#)

[Qu](#)

07-25-2007, 11:33 AM

**rcwild**

Instructor Dude



Join Date: Mar 2004

Posts: 1,452



### **Transportation**

For the canyon rendezvous I will arrange group transportation from the airport to Rancho Margot on September 1st and back to the airport on September 9th.

If you arrive before the 1st or depart after the 9th, you will need to make arrangements for accommodations in San Jose. Check out the [Kabat Hostel](#). Ask for Mauricio. He'll help you with accommodations and transportation to or from the airport.

If you arrive after the 1st or depart before the 9th, you will need to make arrangements for your own transportation.

We will use group transportation between sites. The cost per person depends on the number of people. I'm estimating between \$40 and \$50 per person for the week.



While in town in La Fortuna and Turrialba, it will be easy to get around on foot. Taxis are also available. Rancho Margot has a bus that runs between their property and La Fortuna.

Have fun. Be safe.

**Rich**



*"If you see no reason for giving thanks, the fault lies in yourself."*  
**Minquass I**


 


[Quote Post](#) [Multi off](#) [Qu](#)

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07-25-2007, 11:45 AM

**rcwild**  
Instructor Dude



Join Date: Mar 2004  
Posts: 1,452  


**Accommodations**

---

**LA FORTUNA**

Rancho Margot is a very nice ranch near La Fortuna, situated between Arenal Volcano and Lake Arenal. They're offering special rates for our students and rendezvous participants.

Rate per night for bunk room and breakfast will be \$20. Rate for bunk and three meals will be \$30. Participants in the Canyoneering FastTrack Course, Canyon Leader Exam and Wilderness First Responder Course want to take advantage of the 3 meal deal. Rendezvous participants prefer to take the breakfast only deal.

I've stayed in the bunk rooms. They're nice, but quite small. Toilets and showers are down the hall. The ranch has several communal areas – porch on the side of the bunk house, restaurant/bar, gazebos. If all you want to do is sleep while you're in your room, save some money and bunk room. If you prefer something larger, contact the ranch directly to make arrangements.

**TURIALBA**

There are several hotels in the area. Expect to pay \$40 to \$60 per night. Less if you share a room.

**RIO PACUARE**

Our overnight whitewater rafting trip on the Pacuare will involve camping at a developed campsite. Site is surrounded by rain forest and overlooks the river. It has tents with cots, dining area, showers, toilets.



**CARIBBEAN**

There are several hotels in the area. Expect to pay \$40 to \$60 per night. Less if you share a room.

Have fun. Be safe.

**Rich**

*"If you see no reason for giving thanks, the fault lies in yourself."*  
**Minquass I**

[Quote Post](#) [Multi off](#) [Qu](#)

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07-25-2007, 11:55 AM

**rcwild**  
Instructor Dude

**The Canyons**

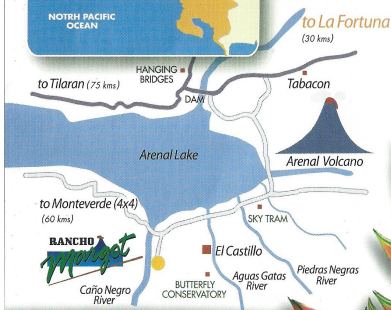
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During our seven activity days, I anticipate we will descend 5 or 6 canyons.



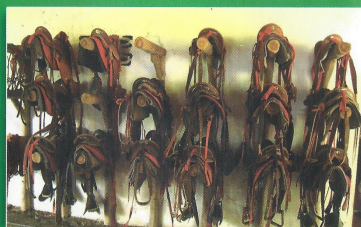


Daily shuttle  
bus service between  
LA FORTUNA &  
RANCHO MARGOT



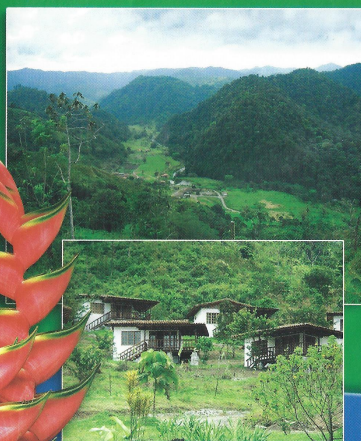
#### Rancho Margot

El Castillo de Peñas Blancas,  
San Ramon Alajuela,  
Mailing address: P.O. Box 124-4417  
La Fortuna, Costa Rica.



email: [info@ranchomargot.org](mailto:info@ranchomargot.org)  
[www.ranchomargot.org](http://www.ranchomargot.org)

Fortuna office Telefon +506 479-7259  
fax: +506 479-7260  
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**RANCHO**  
*Margot*  
An Organic Island in the Rainforest



*Come for the day or an extended  
stay, you won't regret it*



On the shores of Lago Arenal and the valley of the Rio Caño Negro surrounded by the Children's Eternal Forest and the Arenal Volcano Reserve, you will find our little piece of paradise that we call **Rancho Margot**: a sustainable organic ranch and wildlife rescue center.

### Accommodations

Overlooking Lake Arenal and the Caño Negro river, the rainforest birds and animals will lure you to sleep with the river whispers playing gentle background music.

### Bungalows Bunkhouse

### Activities

On our private trails or in the company of the forest rangers in the Children's Eternal Forest you will enjoy a variety of hiking and horseback riding tours of no equal value in the area.

The Volcano, its lake and nearby waterfalls are the area's trademark. **Rancho Margot's** 400+ acres surrounded by 150,000 acres of rain and cloud forest reserves will live up to all your adventure expectations regardless of age or experience.

If sustainable ranch life is what you seek, at **Rancho Margot** you can milk cows; make cheese, yogurt or marmalades; tend chickens, cows, horses or pigs; till in our garden or nursery and agricultural

fields. Learn from our staff of professionals about worm composting, bio-digestors and hydropower; local orchids and medicinal plants; the processes of reforestation and wild animal reintroduction. We also have a top quality restaurant and full-service bar. If all you want to do is relax, that's OK too.

- Horseback riding*
- Mountain bikes*
- Hiking*
- Rappelling*
- Kayaks*
- Yoga*





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Fax: (506) 556-7790      Turrialba, Costa Rica

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P.O. Box 124-4417 La Fortuna, Costa Rica



Juan Larry Sostheim L., Propietario  
Tel. Oficina: 479-7259  
Tel. Móvil: 848-2515  
Tel. Fax: 479-7260  
Skype: +1-352-5058206  
jsostheim@ranchomargot.org  
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Phone +506 479-7259  
Reservation only by email

Google-earth coordinates  
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9:30 11:30 16:30

Km.4 Horas en bus

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## Arenal Hanging Bridges Costa Rica

WELCOME to the most beautiful environmental project in Costa Rica. Located within the corridor followed by birds migrating between North and South America, the trails and bridges of this project will bring you as close as you could ever hope to get to the birds, the flowers and the lush vegetation of the primary rain forest. You will be able to walk right into the forest, thanks to the imposing hanging bridges and the beautiful trails that are fun and easy to walk on.

Visit [www.crmaps.com](http://www.crmaps.com)



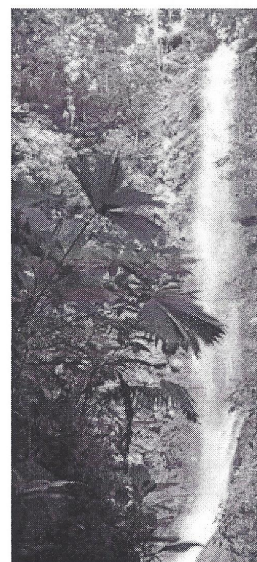
## Pure Trek Canyoning Costa Rica



### Pure Trek Canyoning Costa Rica - the ultimate waterfall rappelling adventure

- 4X4 drive into the Costa Rica rainforest
- Rappel down cascading waterfalls
- Trek through a magical canyon
- See monkeys, sloth's, parrots, and more...
- Lunch served at the base camp
- This tour is for anyone in moderate physical condition.
- Kid friendly, No experience necessary.

[Online Reservations](#)



We trek through the forest on magical trails that lead to some of the most spectacular waterfalls in Costa Rica, a place very

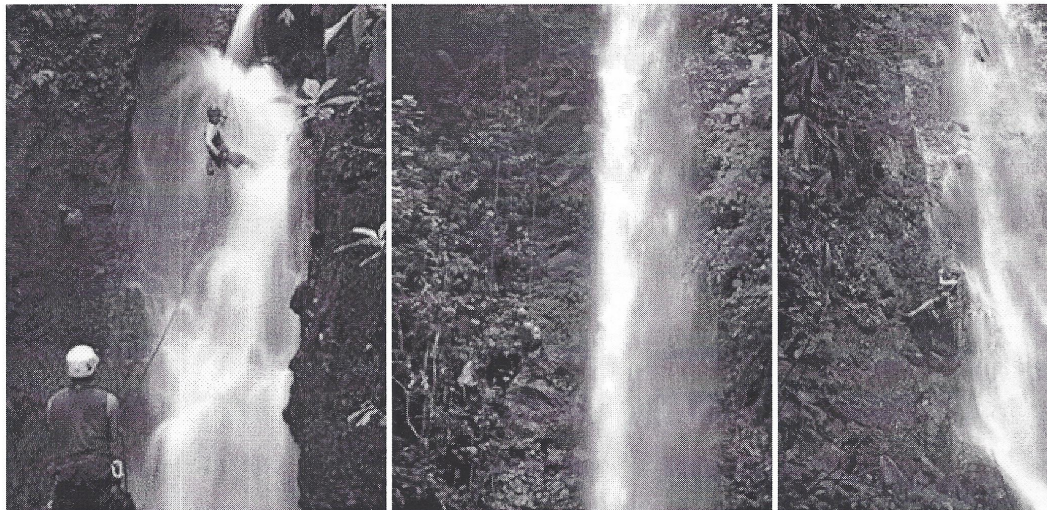


to experience. Along the way we will have the chance to discover the secrets that lie hidden deep within the canyon.

Your trip begins with a 30-minute 4x4 drive into the tropical rainforest outside the town of La Fortuna, in the shadow of the

From the first waterfall we will rappel down from the top into the beautiful and pristine canyon below. The adventure includes three of which are along waterfalls, and one dry rock face. Then just a short trek out of the canyon, jump in the vehicles and the base camp.

We have two tours a day, see [schedules and reservations info](#). Both tours include lunch at our base camp and snacks in the



## Customer Reviews and Feedback for Pure Trek Canyon

*"Great time! Great people! Super fun! I've climbed all over...and this was COOL!"*

**Jim Turk, Anchorage, Alaska, USA**

*"This was the most incredible adventure that our family has ever experienced. Thank you for making our trip to Costa Rica."*

**Michell & Mathew, New Jersey, USA**

*"Better than anything I've experienced. My daughter (8 years old) was even more impressed! Muchas gracias to you all!"*

**Debbie & Greer Campbell, Denver, CO, USA**

### Pure Trek Canyoning Schedules, Rates, and Online Booking Forms

**Pure Trek  
Canyoning**

The Adventure of a lifetime, rappelling in wet and dry canyons in the heart of the Costa Rican rain forest

[Schedules, Rates, & Booking](#)

We use only the best gear used in canyoneering and rock climbing. All our guides have been professionally trained in Wilderness First Aid and CPR. Daily safety inspections are conducted on all





Arenal, Costa Rica

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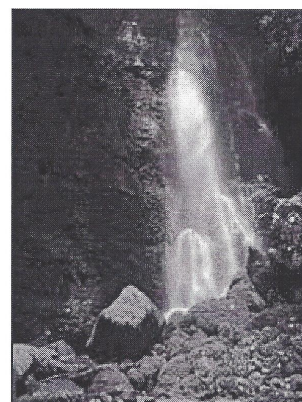
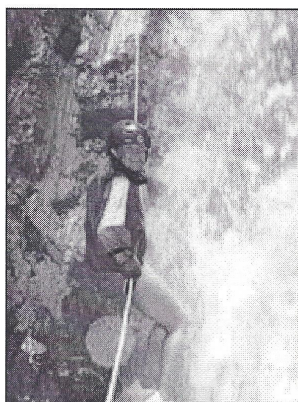
## Canyoneering Tour - Arenal Costa Rica

The Newest Concept in Adventure...

**Book Now**

Prepare to get wet as your experienced guides fit you into your safety harness and assist you as you make your way down a series of 5 amaz rappels! You will be descending a total of 600 meters (almost 2000 feet This adventure is perfect for those looking to combine the thrill of abseil breath taking, hundred foot waterfalls while taking in the beauty of the f

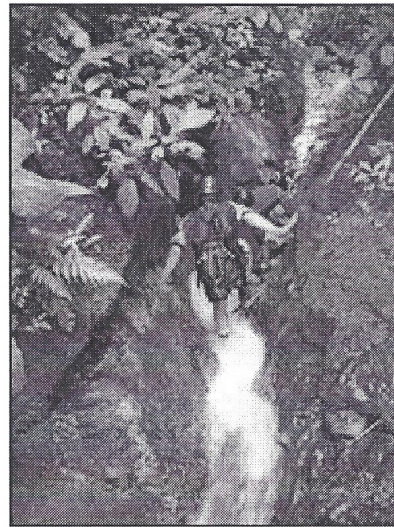
We save the best for last...The grand finale is a huge, 210-ft, 3-stage waterfall!



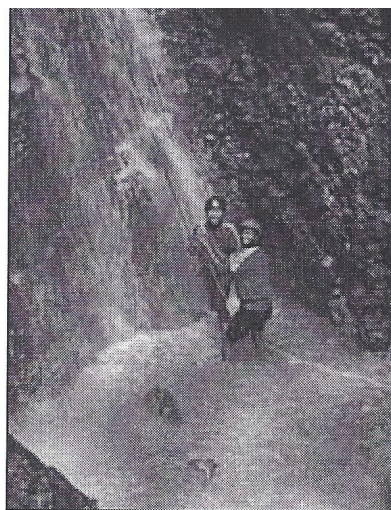




This is a new addition to our repertoire of adventure excursions being offered at the Arenal Volcano, making this adrenaline filled locality ever more exhilarating. Now in addition to canopy tours, white water rafting, horseback treks, we offer this exciting activity - Canyoneering in Arenal Costa Rica.







Imagine yourself in surrounded by lush rainforest atop a magical canyon full of tropical waterfalls with surprises each step of the way. This awesome canyon is located a short distance from the town of La Fortuna, Costa Rica. Desafio provides round trip transportation for most of the hotels in Arenal. A home cooked Costa Rican typical lunch is also included. Our canyon is a spectacular site to explore. The sounds of flowing water, waterfalls, tropical plants and massive trees. A magnificent experience for all the senses.

### **Book Now!**

**Departure Times:** 8:00 am, 10:00 am, 12:00 pm and 1:30 pm.

**Duration:** approx. 3 hours.

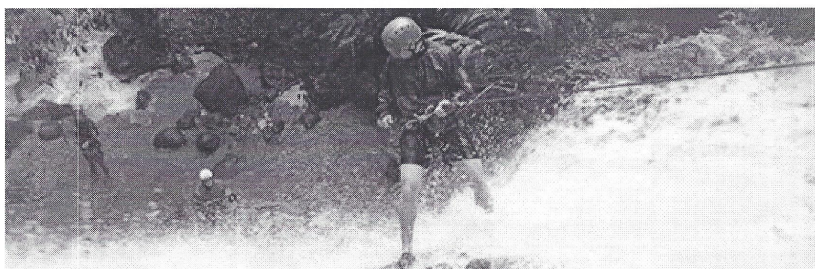
**Price per Person:** \$85.

**Includes:** Lunch, Transportation, Qualified Guides and all Equipment, Rappelling and Hiking.

**What to Bring:** Secure shoes, clothes to get wet in and a change of clothes for after the tour, a sense of adventure.

Recommended for ages 12 to 55. Certified by The Costa Rican Tourist Bureau.

**Important Note:** Adventure tours such as whitewater rafting, canyoneering, kayaking and hiking require physical effort. Clients should be in good physical condition. For client safety and enjoyment, Desafio Adventure Company reserves the right to offer a substitution, postpone, change or cancel any tour due to unfavorable conditions. Full refund is given if (on



You are here: [Home](#) » [Tours](#) » **Canyoning**

## Canyoning



Canyoning has become very popular with extreme sport fans all over the world. This sport has been practiced in Europe for many years and recently has extended to the Americas. Canyoning is specifically practiced in the natural geographic setting of canyons.

This activity involves rappelling and descending cliffs and waterfalls within the canyon. The equipment for this activity - ropes, harnesses and carabiners - are the same tools that are used in rock-climbing.

The canyon that we explore in our Canyoning tour is located in the Puente Vigas Canyon. Our course guarantees you a memorable, safe, and thrilling day of Canyoning as we rappel down waterfalls, zip-line through the treetops, and enjoy the unique, natural beauty of this country.

Our Canyoning site is located in Calle Chirracá, a small, modest, yet lush place near the town of Turrialba, which is an hour and a half east of San Jose. We begin the Canyoning tour with an introduction of our guides and the equipment to help familiarize you with the different uses of the equipment. We start the tour at the first waterfall where a guide will give a speech on safety. The guide will explain the course and the equipment making sure you know the necessary mechanisms and procedures for canyoning, ensuring you a safe and fun experience. After this, you are off...rappelling down four waterfalls, zip lining down four canopy cables, descending down two tall trees and walking across a 132 foot hanging bridge - all giving you an unforgettable adrenaline rush!

This tour takes approximately 3 to 4 hours. We provide our canyoningers with specialized equipment and a splash jacket for this tour. It is important to bring extra clothes and shoes to change into at the end of the trip.

### What to bring?

- T-shirt, shorts or pants (no jeans), swimsuit, tennis or hiking shoes, and insect repellent.
- Extra clothes and towel will be needed at the end of the tour.



**This tour is available for adults and children over 8 years old.**

**No previous experience is necessary.**

## Pricing

We run all of our Day Tours from both San Jose and Turrialba. The prices for each of these tours vary depending upon where you are coming from. The prices from Turrialba include pick-up and drop-off at your hotel, lunch, guide(s), and all equipment that is needed. The prices from San Jose include pick-up and drop-off at your hotel, breakfast, lunch, guide(s), and all equipment that is needed.

From Turrialba	From San Jose
\$60	\$90
<b>Included:</b>	<b>Included:</b>
<ul style="list-style-type: none"> <li>• Pick-up and Drop-off in your hotel</li> <li>• Lunch</li> <li>• Your Adventure Tour</li> <li>• All equipment needed for the tour</li> <li>• Bi-lingual Guide(s)</li> </ul>	<ul style="list-style-type: none"> <li>• Pick-up and Drop-off in your hotel</li> <li>• Breakfast and Lunch</li> <li>• Your Adventure Tour</li> <li>• All equipment needed for the tour</li> <li>• Bi-lingual Guide(s)</li> </ul>
<b>Not Included:</b>	<b>Not Included:</b>
<ul style="list-style-type: none"> <li>• Alcoholic Beverages</li> <li>• Guide Gratuities</li> </ul>	<ul style="list-style-type: none"> <li>• Alcoholic Beverages</li> <li>• Guide Gratuities</li> </ul>

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**Sun. Mar.23**

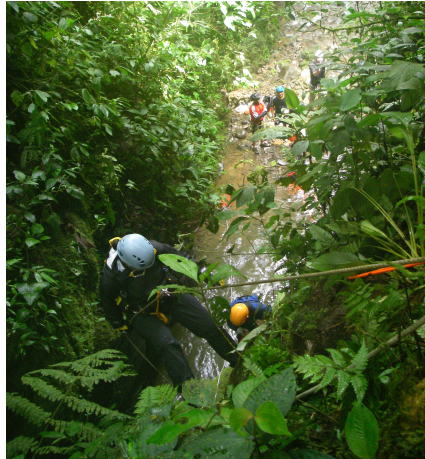
Fly to ???

A number of months before the cataclysmic diagnosis of Doreen's cancer, I had learned that the American Canyoneering Association and its founder, Rich Carlson, were planning a trip to the canyons of Costa Rica. My tentative plan to attend this "rendezvous" with several of my fellow, southern California canyoneers had been abandoned in the maelstrom of the tragedy and I had not given it a second thought. But about a month after Doreen's death when I had just started to function at some elementary level, two of those friends hatched a scheme to persuade me to go on this trip. Randi Poer called Scott Smith and encouraged him to take me to Costa Rica. They knew I would not go unless one of them was to ask me to accompany them. Scott is such a kind and gentle man that perhaps only he, of all my friends, could have persuaded me to go. I knew he would let me be alone with myself, that he would shield me from unwanted attention, unwelcome sympathy.



*Descending Lost Canyon**Descending Lost Canyon**Big rappel in Lost Canyon*

So it was that on Sep.1, 2007, with little preparation, I found myself boarding a plane at LAX on my way to San Jose, Costa Rica. Scott had persuaded me that a physical challenge in an unfamiliar but spectacular place would help me find a little distraction even if it could not ease the pain. And that country in Central America is nothing if not spectacular. Costa Rica has a spine of steep mountains and volcanoes covered in dense tropical forest. The rivers and canyons that run through these mountains are magnificent and present very different flora and fauna, a very different visual experience than any in the USA or Europe. Many small companies run guided adventures in this wilderness and we were joining a canyoneering group that had planned a selection of these adventures. We would base our activities in two different locales, spending a few days near La Fortuna in the Arenal Volcano area northwest of San Jose and a few days more in Turrialba southeast of San Jose. In each of these locations, the group had signed up for help from guide services, Pure Trek Canyoning and Desafio in La Fortuna and Explornatura in Turrialba.

*Treking to Nonequito Canyon**In Nonequito Canyon**In Nonequito Canyon*

All of these companies had developed "commercial canyons" in which they had established anchors and other facilities to aid the inexperienced canyoneer. The defect with these commercial canyons is that they have usually been significantly altered to ease the passage for the guides and their clients. These alterations often include the installation not only of extensive fixed anchors but also of wooden platforms from which to enter the rappels. Some even have steps cut in the canyon bottom rock to ease downclimbs while in other canyons trails conduct the clients from one rappel to the next. Despite these alterations the canyons are spectacularly beautiful with luxurious multi-level canopies of tropical forest and exotic flora and fauna. It is a unique experience for a howler monkey to let loose with its terrifying howl just as you are about to enter a 150ft free rappel!

We spent the first four days at a ranch outside of La Fortuna, in the shadow of the towering Arenal Volcano. At night a continuous stream of red-hot rock could be seen tumbling down the side of this volcanic cone and lighting up the night sky. During the day the tropical heat and humidity matched by the surrounding jungle to create an otherworldly stage to draw my attention away from my grief. With this ranch as base we first descended two nearby commercial canyons, namely Piedra Canyon (translated as Stone Canyon but also known as Lost Canyon) run by the Desafio adventure company and Piedrita Canyon (translated as Little Stone Canyon) overseen by Pure Trek Canyoning. The first featured several big rappels (two from overhung wooden platforms) and some downclimbing in a glorious tropical canyon with just a modest water flow. The second involved several big rappels from overhung wooden platforms and descents through quite vigorous waterfalls. On the fourth day, the guides from the Explornatura Adventure Company agreed to show us a more remote, non-commercial canyon in order to exchange skills with the experts in our group. Thus we made our way through thick jungle to the upper reaches of the undeveloped Nonequito Canyon (translates to something like "no take away") and spent the day descending a wild and natural tropical canyon with a beautiful series of rappels and vigorous whitewater. All of these adventures were enjoyable and comfortably distracting though not technically challenging.

The action then shifted to the town of Turrialba, the home base of the Explornatura Adventure Company. There we began with a descent of Puente Vigas Canyon (translated as Rope Bridge Canyon) just above Explornatura's warehouse on the outskirts of Turrialba. This commercial canyon had been set up with a series of rappels interwoven with three long and exciting zip-line transits through the jungle canopy. Two of these ended high in trees and necessitated a rappel to reach the ground. These zip-line excitements were new to me and certainly entertaining but also well supervised and controlled. The adrenaline flowed but the soul was unstirred.

Scott had to return home and so I was left on my own before the last adventure; but I figured I should try to stand on my own feet. He had shown a special friendship and I was not going to impose on him beyond the marvellous kindness he had already shown me. This last adventure was to be a two-day descent of the wild Pacuare River, a white water rafting trip through some of the most spectacular and untouched wilderness in Costa Rica. The Pacuare has its source in the Cordillera de Talamanca and flows 108km to the Caribbean. It leaves the mountains just before the town of Siquierres and downstream of this is of lesser interest. The mountain traverse is a popular venue for white water rafting, kayaking and riverboarding; National Geographic named it one of the top 10 river trips in the world, as much for the untouched wilderness around it as for the whitewater adventure.





*The Pacuare River*

The rainforests that surround the river are indeed breathtaking, home to exotic species such as panthers, jaguars, ocelots and monkeys. In 1986 a rare black panther was seen about 2km from the river and jaguars have been spotted near the Haucas River Gorge. Anteaters are common as well as raccoons, river otters, iguanas, Capuchin monkeys, and sloths. Howler monkeys are found on the lower sections after the Dos Montanas canyon. Five species of snakes live in the forest; the poisonous ones include the Coral snake, the Bush Master and the Fer-de-Lance. The Laura and the Sopy Lota (a long black snake that eats poisonous snakes) are also common. The jungle frequently flashes with the bright blue color of the Blue Morpho butterfly, chestnut-mandibled toucans are common and parakeets can sometimes be seen after the Dos Montanas canyon. Other bird inhabitants include herons, hawks, ospreys and vultures.

Most of the river corridor through this wilderness is first generation rain forest that has never been touched. It is the traditional home of several groups of indigenous people. The Cabecar Indians live in the forest along the east side of the river. They are small scale subsistence farmers and ranchers, growing bananas and plantains. Although they are known to practice "black magic" they are peaceful and friendly. At one time another tribe, the Burucas Indians, lived on the other, Pacific side of the river.

The first known recreational river descent of the Pacuare was completed by Michael Cane in 1975. Three years later Cane started Costa Rica Expeditions to run commercial trips on the river and in subsequent years other commercial enterprises followed including the Explornatura Adventure Company of Turrialba with whom we were to travel. The heart pounding whitewater of the Pacuare along with its remote jungle location and warm water (65 degrees Fahrenheit) have made it a very popular destination with adventure seekers. The mountain traverse is commonly divided into three parts, the Upper Upper, the Upper and the Lower Sections of which the more technical are the last two. The Upper section ends at Finca La Cruz and consists of about ten miles of class IV and V rapids as well as waterfalls. Our goal was the Lower Section consisting of 18 miles between the put-in at Tres Equis and the town of Siquirres. Over this distance the river drops a total of 1200ft through numerous rapids of class III and IV whitewater. It starts with a series of class III rapids but the action heats up as the Pacuare enters the Huacas River Gorge where, in addition to many class III, there are two class IV rapids called the Upper and Lower Huacas. Downstream the excitement continues with at least one more class IV called Cimerones. The Lower Section is sometimes descended in one long day but it is more comfortably completed over two days. For these overnight trips, three campsites with lodges and canteens have been established about halfway through the Lower Section. The river is rain fed so it typically runs highest from May to January, the lowest water occurring in March and April. Though the river can be rafted all year round, the hurricane season in late summer can produce enough rain in 8 to 10 hours for the river to reach flood stage; it is then unsafe to attempt to run it.

We left Scott at the hotel in Turrialba; it was sad that he had to head home but I knew I needed to become accustomed to fending for myself. The rest of the group and I travelled by bus along a rough dirt road that dropped down to the Pacuare River at a place called Tres Equis, a name that signifies no more than a beach at which to instruct the rafters and pack supplies into the inflatable rafts. I was looking forward to my second significant whitewater expedition despite my misadventures on the River Kern in California (see "Cataracts of the Kern"). I hoped that this time I would be able to stay in the boat. There were five rafts each with five or six passengers plus one guide who sat in the back, steered and instructed. My fellow passengers were Jesus "Chewy" Guerrero who had guided us on Mexican canyoneering trips; he was accompanied by his wife. Also, sitting in front of me was Costa Rican Mauricio Odio who was a trained adventure guide. Fellow Californian Lauren Jefferis who sat behind me was a long time acquaintance with whom I had descended many canyons. It promised to be a fantastic adventure among some good friends. Though the river was somewhat swollen by recent rains, the guides had deemed it runnable though a little more exciting than usual.

The sun was shining as we set off from Tres Equis and readily negotiated the first few Class III rapids, appropriately called Bienvenidos (Welcome) and then Pelya Oho (Open Your Eyes). Other class III rapids followed in quick succession as we plunged deeper and deeper into the wilderness. I began to feel some competence and some confidence that I could stay in the boat even though I was somewhat reluctant to stick my feet as deeply as I should into the foothold pockets sown in the floor of the boat for precisely this purpose. My anxiety was caused by the possibility that an involuntary movement would torque and therefore reinjure one of my oft-damaged knees. But the day was beautiful, the company was delightful and there were moments when I could allow myself to smile. We stopped for lunch at a rocky beach where a magnificent waterfall tumbles down through the jungle into the Pacuare. Like the other meals this was a feast served on the makeshift table formed by turning one of the rafts upside down. After lunch some of us donned our rappelling gear and climbed up into the canyon above the waterfall. There we found a staircase of waterfalls and devised a canyoneering descent that dropped through some of the whitewater, though we avoided several of the most vigorous hydraulics. After this pleasant diversion we resumed our voyage down the Pacuare, through the Rodeo or Donde rapid and numerous others. Some where along this stretch, I had a momentary lapse of concentration while descending a fairly innocent Class III rapid. The boat unexpectedly beached on a midstream rock while I had my back to it and I fell backwards out of the boat into a pool by the side of the river. Though I was quickly hauled back

into the boat by my alert fellow crew, it was another reminder of my vulnerability to such accidents. However, there was little shock involved and I reclaimed my place with only a slightly damaged ego. The rest of the day was uneventful; we landed near our campsite in mid-afternoon and made our way up the jungle trail to our overnight campsite. This rustic facility consisted of an array of tents mounted on individual wooden platforms (designed to hold you above the ant-infested jungle floor) and a central canteen and dining area perched on the ridge overlooking a bend in the river. It was a spectacular setting and we all enjoyed an evening of good food prepared by the guides and spiced with lively conversation. The night passed pleasantly with many strange jungle sounds. However, alone in the tent without the need to pay constant attention to the swirling river, I wept quietly for my lost love.

The second day dawned with another fine meal. Soon the rafts were reloaded and we resumed our whitewater descent. Almost immediately, we passed Double Drop waterfall on the right side of the river, a signal that we were entering the Huacas River Gorge with a whole series of Class III rapids and two notorious Class IV, the Upper and Lower Huacas. I braced myself for what was to come. Several times we seemed to fly through the air only to plunge down underwater and then be jerked back to the surface. We crashed through Upper Huacas, raising our paddles into the air to celebrate that successful passage. Downstream our still-water passage passed beneath the towering Huacas waterfall that drops vertically over 100ft down a cliff on the right. Then into the roaring whitewater yet again as we surged through the Class IV Lower Huacas rapid, perhaps the most difficult of the Class IVs because of a tight move against an undercut cliff face. Soon we stopped again for lunch and I began to feel that I could complete the Pacuare adventure without any further mishap. After lunch we entered a lovely quiet section where the river meanders quietly between 100ft cliffs. An old suspension footbridge overhead reminded us of our imminent return to civilisation though even that seemed to lack many of its rungs. Most of us slipped into the river to drift along with the rafts in the lovely jungle sunshine. We also took advantage of this quiet section to take lots of photographs, perhaps to remind us of the combination of simplicity and beauty that marked this adventure. Our descent of the Pacuare was almost complete. I felt invigorated and somewhat cleansed.

*Cimarones Frame 1**Cimarones Frame 2**Cimarones Frame 3**Cimarones Frame 4*



*Cimarones Frame 5**Cimarones Frame 6*

Downstream of the narrow, graceful gorge the rapids resumed. Upper then Lower Pinball came next with technical moves between numerous rocks. These were followed by Guatemala Rapid as the violence of the whitewater increased. Ahead lay the last big challenge, the last Class IV, the notorious Cimarones rapid with its huge hydraulics and a great black monolith in center stream that had claimed one life in the year that had just passed. Ahead we could see other rafts fly into the air and then plunge out of sight. All seemed to make it, skirting the black monolith through the awesome chute to its right. Then it was our turn. Once we rose into the air and plunged deep into the whitewater. Up we flew again. And yet again as we raced toward the monolith. Then, just before the chute, another deep dive, unfortunately not centered on the hole. With the sidewise drop that ensued, I fell backwards as we crashed into the bottom of the hole. My momentum carried me out of the boat into the thundering maelstrom. The whole misadventure was captured by a series of still photos one of which shows what might have been my last moment, a single leg sticking up out of the water beside the crashing boat. What happened next I simply do not know. Except that somehow I hung onto the lifeline that is strung along the side of the boat and, somersaulting over this, managed to haul myself back to the side of the boat as we shot down the chute, missing the black monolith by a matter of inches. I do remember not knowing what way was up and struggling to find air. Riding along the side of the boat as my friends hung onto me, we somehow made it through the rest of the rapid. This time I was badly shaken. Yet through all that struggle, I remember thinking that it was not my time, that I needed to survive for many people some of whom had already suffered too much. It was a genuine epiphany, moment that would always separate my past from my future. Not that I recognized this at the time for shock held my perspective to a very brief window of the future. If I were a religious man, I might believe that Doreen was telling me something important. If so the message was clear.

There is not much left to tell. Through the mists of my shock I dimly recall the last few Class III rapids: Indian Rapid with its undercut features and many channels on the right hand side but which we snuck by on the left; Dos Montanas, an "s" curved rapid that feeds right into the steep and narrow canyon by the same name that was at one time going to be the site of a hydropower dam and then the final rapid known as "Graduation" or "Boats to the Wall". We landed at Siquirres and began the long trip home, benumbed by what had happened and yet excited about the future. Though a piece of me died several months before and a piece had been exorcised in Cimarones, there was much left to live with and hopefully much left to enjoy.





## Day Tours

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### Duckies (Inflatable Kayaks)

Get wet and wild in our 2-person inflatable kayaks on this beautiful class II and III rapid river near Turrialba.



### Turrialba Volcano Tour

Come and explore one of the few active craters in the world that you can actually hike down into and be amazed by the panoramic views from its summit of 10,955 feet.



### Guayabo Archeological Site

Learn more about the mysterious, ancient civilization of Costa Rica as you explore on foot the ancient ruins, carvings, and structures of the only archeological site in Costa Rica.



## 2 Day Tours

### Pacuare River Rafting (2 days)

If one day of white water adventure isn't enough, then spread it out over two days and get the chance to explore the pristine, primary forest that surrounds the Rio Pacuare.



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[www.exploraturaCR.com](http://www.exploraturaCR.com)

**About Us** - In 1999 a group of adventure sport enthusiasts realized their dream as they combined their years of work and experience to create Explornatura. Their goal was to make their passion, adventure sports, accessible to everyone. Explornatura continues to operate with this goal in mind - to offer a safe and exhilarating way to experience the tropical paradise of Costa Rica.

COSTA RICA  
Design Expeditions  
by **explornatura**



RIVER RAFTING



CANYONING



ADVENTURE



# BEST SELLERS



## Canyoning Tour

If you want to add a little spice to your Costa Rican vacation then spend the morning descending down rushing waterfalls, zooming through lush canopies, crossing hanging bridges, and doing a whole host of other surprises that your friends won't believe until they see the pictures! Canyoning is the perfect opportunity to completely immerse yourself in the jungle of Costa Rica and with our highly specialized, certified guides, you will have an adventure of a lifetime!

This tour takes approximately 3 to 4 hours and is open to anyone over the age of 8 and absolutely no previous experience is necessary.

### What to bring for Canyoning and Rafting?

- T-shirt
- Shorts or pants (no jeans)
- Swimsuit
- Tennis shoes, hiking boots, or strap-on sandals (no flip-flops)
- Sunscreen and insect repellent

Extra clothes, shoes, and a towel will be needed at the end of the tour.

## Pacuare River Rafting (One Day)

Live up your vacation with a day on the thrilling rapids of the Pacuare River as you venture down the class III and IV rapids of one of the top five rivers in the world to white water raft!

This tour takes about 4 hours (on the river) plus a break to have lunch on the riverbanks. Our Pacuare Rafting trip is limited to children and adults over 12 years old and no prior experience is necessary.

**You will:**

- Be immersed in some of the most breathtaking scenery in all of Costa Rica
- Have fun with our experienced, specialized river guides
- Enjoy a day of fun and excitement on the white waters of the Rio Pacuare



*"Add Explornatura to your must-do list in Costa Rica. Their combination canyoning-canopy tour is a blast! Led by professional guides who put equal emphasis on safety and non-stop fun." - Rich Carlson  
Instructor, American Canyoneering Association*

EXPLORNATURA IS AN AMERICAN CANYONEERING ASSOCIATION (ACA) ACCREDITED GUIDE SERVICE



Passionate rafters from around the world agree the Pacuare River offers some of the most scenic class III-IV white-water rapids anywhere. The Pacuare River and the Pacuare Protected Zone are located between the coastal lowlands and the country's highest mountain range. This pristine jungle region, considered one of the most



important protected areas in Central America, is still inhabited by the Cabecar Indians. The palm-thatched dwellings of the Cabecar people are spaced far apart over large distances, rather than being clustered together as was true of many indigenous tribes.

Advantageously situated inside this protected wilderness is our very special jungle getaway, the **Pacuare Lodge**, accessible to travelers through our overnight white-water rafting tours on the Pacuare River. The river provides an adventurous ride filled with stunning natural beauty and exciting rapids, while the lodge offers a chance to explore the surrounding forest and then relax in complete comfort.



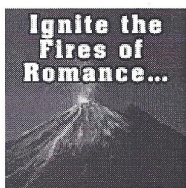
#### Day 1

This exciting outdoor adventure begins when you are picked up at your San José

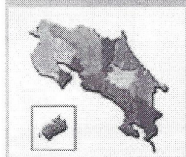




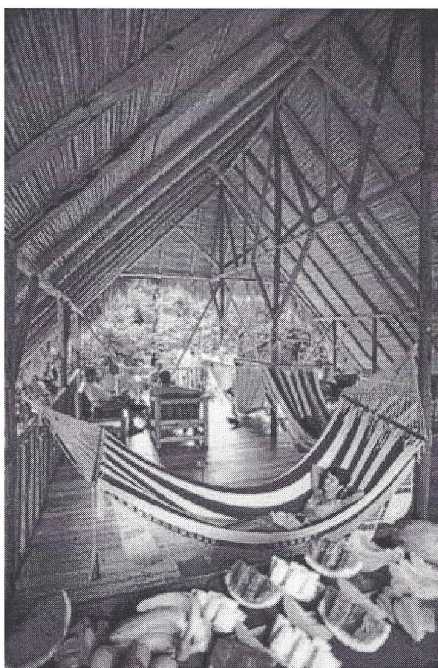
10. deep jungle trek ▾

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hotel in a comfortable minibus and transported through the old capital city of Cartago and the lush green farmlands blanketing the slopes of the Irazú and Turrialba volcanoes. Before arriving at the banks of the Pacuare River, you'll stop to enjoy an authentic Costa Rican breakfast. When you arrive at the river, our expert guides will provide you with the rafting gear and explain safety precautions before the rafting adventure begins. Once in the water, you'll experience sheer exhilaration as you face the challenge of each huge wave, battling surging waters down miles of raging rapids. The river passes through scenic canyons where crystal clear waterfalls plummet down into the rapidly coursing river below. Tall trees and dense green vegetation come right down to the water's edge. The thick undergrowth of this protected area provides shelter for a variety tropical animals and birds, including some endangered species.



The first day on the river is an exciting journey that takes just over an hour and a half. When you arrive at the Pacuare Lodge, you'll find a unique jungle oasis nestled in a most remarkable setting. Huge trees and flowering shrubs dot the perfectly manicured rolling green lawns on the banks of the river. Modern wooden bungalows with thatched palm roofs are spaced out beneath the trees, providing both privacy and serenity. The two-story main lodge has breezy dining facilities on the first floor, and relaxing chairs and hammocks in the open-air second floor lounge. After a hearty lunch, you can try the **Pacuare Canopy Adventure**, take a guided hike to a waterfall in the forest, play dominoes or cards, or just relax. Shortly after, you'll be served a gourmet dinner by candlelight. Whenever you feel ready, you can head to the comfortable bungalow that awaits you, complete with private bathroom, comfortable beds and clean linen. The special **Honeymoon Suite** is a spacious bungalow tucked up on a wooded knoll away from the rest of the camp. It features a large tiled bathroom with solar-heated water and giant picture windows that frame the jungle view, as well as a unique hanging bridge that leads from the balcony across to a private platform in a giant tree.



#### Day 2

In the morning, you'll awaken to a harmonious melody created by the sound of the river rushing by and the sweet songs of the tropical birds from the thick of the forest. After a delicious buffet breakfast, we'll launch the rafts again for the second day of our river expedition. Rafting becomes even more thrilling as you begin to use the skills and experience gained the day before. You may stop to explore side streams that lead to striking waterfalls and pools with a natural waterslide that tempts you to jump right in. Later on, a tasty midday meal of sandwiches, fruits and dessert will be served on an overturned raft along the water's edge. The day ends with the triumph of having conquered one of the wildest and most scenic rivers in the world. At the river take-out, you can change into dry clothes at our private facilities before boarding the comfortable microbus for the return to San José.

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*Last updated 7/30/99.  
Christopher E. Brennan*



Sep.20,22,24 Airline tickets ONT-PHL-PVD-ONT\*

Sep.20 Flew ONT to PHL. I think I stayed in Philadelphia hotel (?)

Sep.21 I think I spent the day with Duncan Dallas and stayed in Philadelphia.

Sep.22 Flew PHL to Providence. Hotel in Groton

Sep.23 Consulting at Electric Boat. Dinner with Barbara.

Sep.24. Flew Providence to Ontario.

Oct.6-7, 2007, trip to Zion National Park with Garrett Reisman, Scott Smith and Ira Lewis.

# TRAVELS NOW AND THEN

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## ZION 2007

Oct.6-7, 2007, trip to Zion National Park with Garrett Reisman, Scott Smith and Ira Lewis.



*Zion National Park*



*Zion National Park*





*Zion National Park*



*Zion National Park*

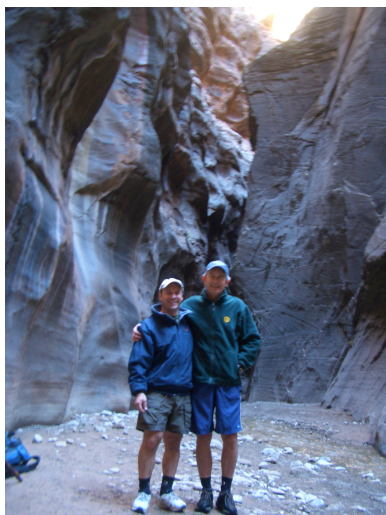


*Zion National Park*





*Zion National Park*

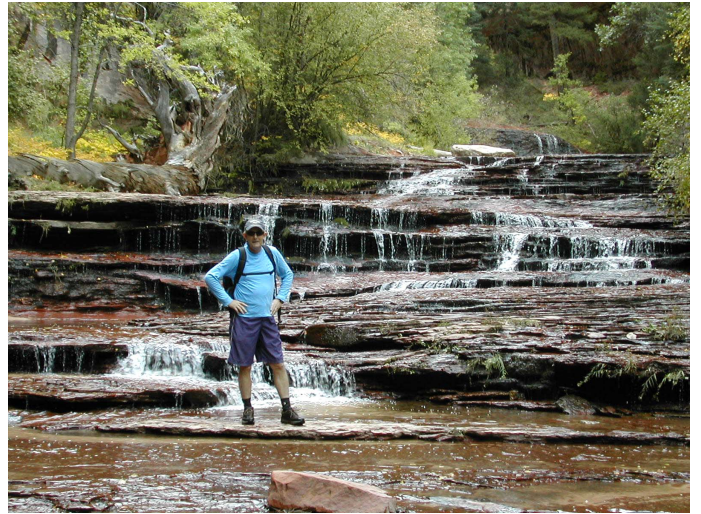


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*Zion National Park*



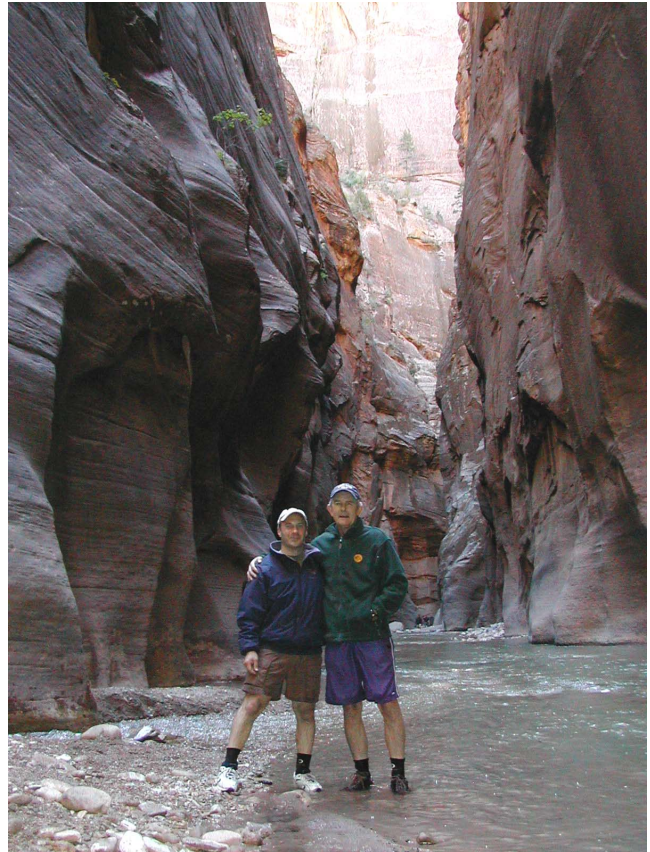
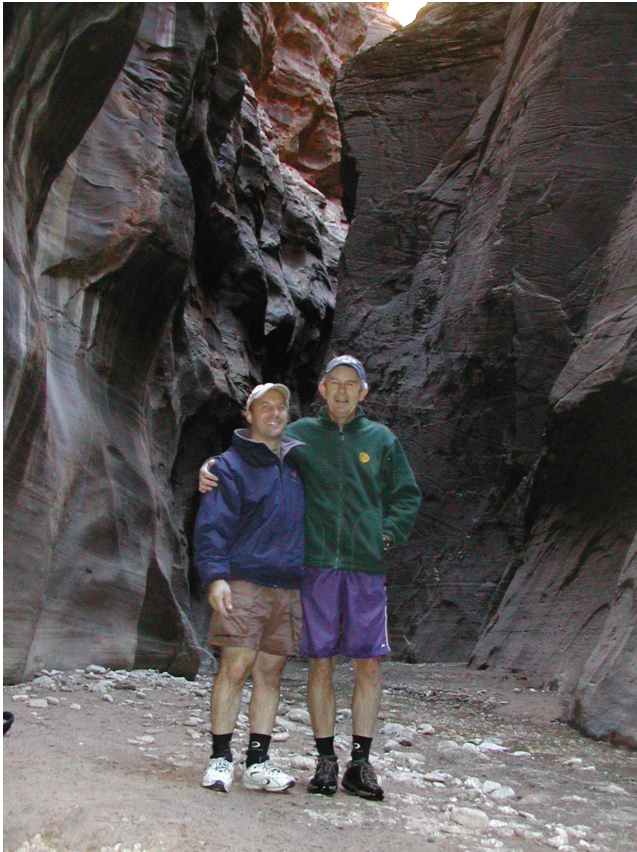


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*Zion National Park*





*Zion National Park*

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*Last updated 7/30/99.  
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Nov.13, 2007 Consultation with Jon Ganz of Southern California Water District  
Nov.16      Teleconference with Jon Ganz  
Nov.28      Visit to White's Point  
Nov.30      Preliminary report preparation

Nov. 17, 2007: Flew DE4063 from Ontario to Salt Lake City  
60th Meeting, Fluid Dynamics Division, Amer. Phys. Soc., Salt Lake City, Nov. 2007 (two presentations).

Nov. 20, 2007: Flew US1584 and US1194 from Salt Lake to Philadelphia via Phoenix  
Visit with Dana in Philadelphia

Nov. 26, 2007: Flew SW1236 from Philadelphia to Providence  
Visit with Barbara

Nov. 28, 2007: Flew SW3061 and SW2369 from Providence to Ontario via Phoenix

Dec. 15, 2007: Flew UA1106 and UA866 from LAX to Bradley, Hartford via Chicago  
Dec. 15-17.    Dinner with Barbara. McKenzie's Party

Dec. 18, 2007: Flew UA197 and UA209 from Hartford to LAX via Washington

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## SANTA FE CHRISTMAS 2007



*Santa Fe Christmas, 2007*



*Santa Fe Christmas, 2007*





*Santa Fe Christmas, 2007*



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*Santa Fe Christmas, 2007*



*Santa Fe Christmas, 2007*







*Santa Fe Christmas, 2007*

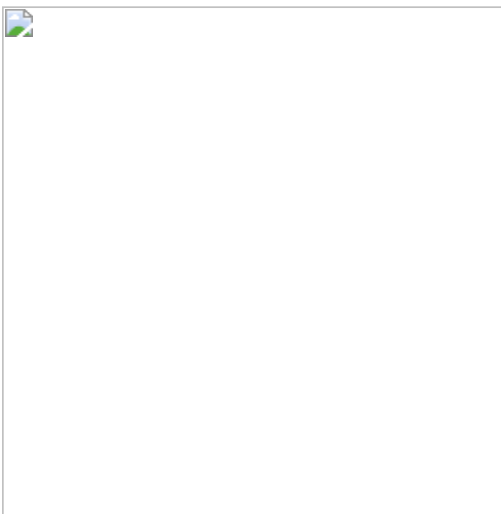


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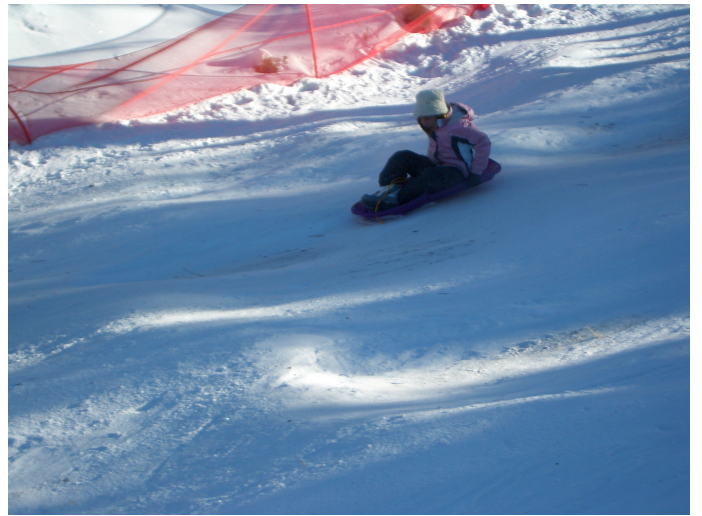


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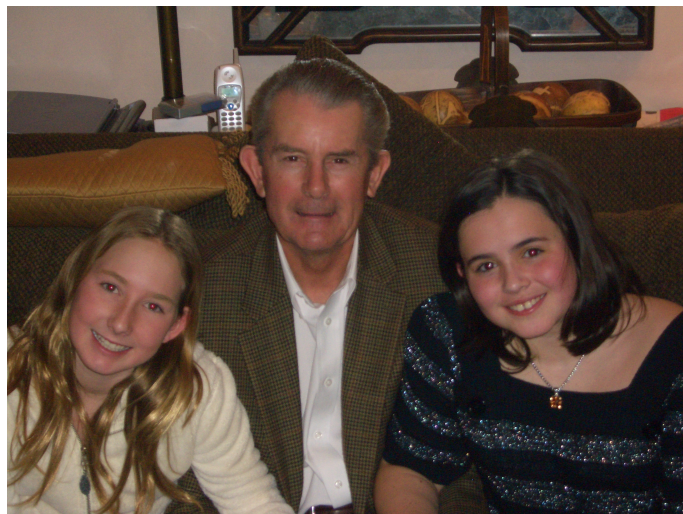


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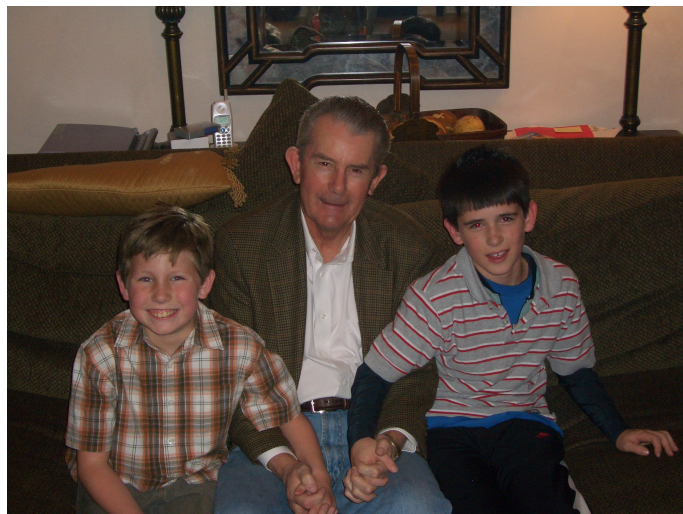
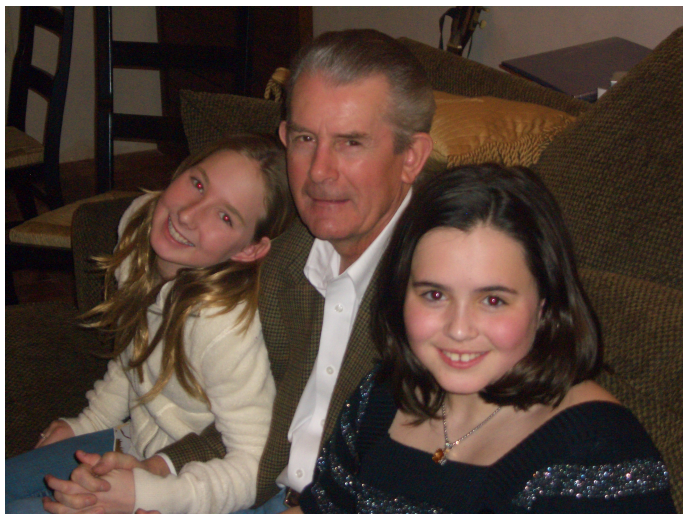




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*Santa Fe Christmas, 2007*



*Santa Fe Christmas, 2007*

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*Last updated 7/30/99.  
Christopher E. Brennan*



Translation

## Master of Academia

Prof. Yoichiro Matsumoto

August 9<sup>th</sup>, 2007 in Nihon Keizai Shimbun (The Nikkei)

Translated by Keita Ando

In 2003 the University of Tokyo was on the way to reforms. I was asking my friends in academia for their advice. One of them is my senior in fluid engineering, Prof. Christopher Brennen who was Vice-President for Student Affairs at California Institute of Technology at that time.

He told me that it is essential to form a strong office so that professors can concentrate on research and education. Moreover, I was well impressed with his words that you could headhunt a competent officer from other institutes.

His advice helped me get rid of a taboo I unconsciously put on myself, and gave me a hint to tackle with university administration with flexible ideas.

He has been my mountain-climbing friend since we climbed Tanzawa. We have climbed other mountains in Kitadake, Hodakadake and California. His single-hearted attitude toward climbing is exactly that toward academics. His words have a sophisticated brilliance, and he can behave like a first-rate performer. His speech at conferences always fascinates audiences.

He is a man of great attraction as a "university man". He is my friend, and I respect him as my senior.



## SOUND THEORIES

# Translating tunes of the dunes

**'It's a really remarkable and weird phenomenon.'**

**Christopher Brennen, Caltech mechanical engineer**

**BY ELISE KLEEMAN**  
STAFF WRITER

**PASADENA** — In about 30 of the world's deserts, the shifting sands create a booming noise that has baffled scientists for decades.

Early explorers imagined the strange rumbling sounds — roughly an octave and a half below middle C — as the cries of a buried horseman, or the bells of an underground convent.

Others have described it as the sound of musical instruments, or the drone of an airplane. Exactly how it happens, though, has long been a mystery.

"It's a really remarkable and weird phenomenon," said Christopher Brennen, a Caltech mechanical engineer. "When sand squeaks, we call that chirping: for example, when you walk along dry sand at the beach. But the booming of these dunes is different."

With ground-penetrating technology, cobbled-together sampling tools and some help from the seat of their pants, Brennen and his colleagues believe they have found the key to the sand's deep voice.

Please turn to DUNES / Page 13

**DESERT DUTY:** Caltech mechanical engineer Christopher Brennen and his colleagues are working to understand the booming sound of the Eureka Dunes near Eureka, Calif.



## DUNES Unlocking sound mystery

Continued from page 1

They have been studying the rare singing sands at two nearby dune fields: Kelso Dunes in Mojave National Preserve, and Dumont Dunes 30 miles north of Baker.

One requirement for their music, the researchers have long known, is for the sand to be on the move.

This can happen naturally as winds pile sand up one face of the dune until it avalanches down the other.

But to make the desert boom on command, the researchers have adopted a decidedly unprofessional-looking technique: climbing to the dune peak hundreds of feet above the desert floor and scooting down on their behinds.

If conditions are right, the result is the same.

"You can feel it vibrate through your fingers and your toes when you stand," Brennen said. "The whole dune vibrates."

French scientists had theorized that the booming was caused by scores of similarly sized sand grains rubbing together as they rolled. The bigger the sand grains, they believed, the lower the sound.

But samples that the Caltech team collected showed that that hypothesis "didn't really make sense," said mechanical engineer Melany Hunt.

"That's not what we think happens on the sand dune," she said. "The frequency that we hear ... really is determined by the characteristics of the dune itself, not just by the grain sizes."

Hunt compared the dunes to her daughter's cello.

"In the cello, you're strumming the string but it's the whole instrument that's vibrating," she said. "We think it's similar in the dune."

The breakthrough for the Caltech team came when they used ground-penetrating radar and other imaging techniques to spy on what was happening beneath the desert surface.

They found that although sound travels slowly through the top layer of sand in the dune, "when you go down to a depth of six feet, you find there is kind of a hard layer that has a much higher speed sound," Brennen said.

That layer works to reflect sound waves back toward the surface, he said.

As the noise of the tumbling sand grains bounces around within the top-most layer of sand, Brennen said, certain low frequencies appear to become amplified, creating the mysterious boom.

This speaker effect can only happen, Hunt said, if the dunes are enormous and bone-dry.

The deserts therefore boom their best in the scorchingly hot summer months, making the research hot, sweaty work — perhaps the one drawback to sliding down sand dunes in the name of science.

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