

Water & Life

by Christopher R. Juten

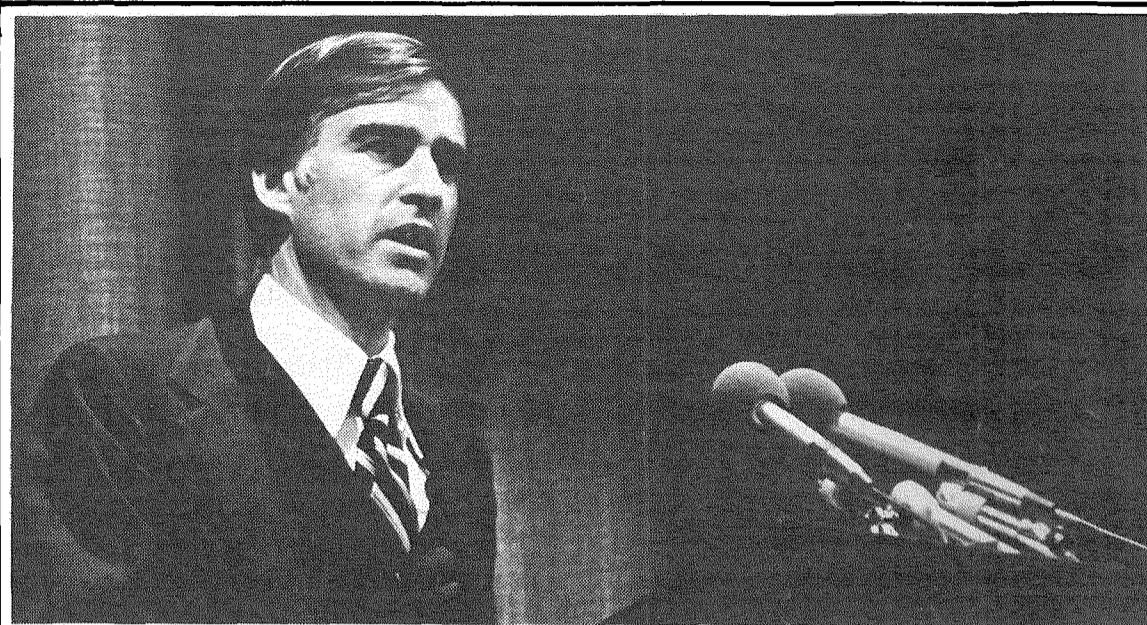
Is terrestrial life limited by a certain lower limit of water abundance below which life cannot exist? Dr. Norman Horowitz approached this question at last week's Caltech Y Update.

Dr. Horowitz, head of the Caltech Department of Biology, first explained that water is the most abundant constituent of living cells except when they are in certain dormant stages like spores. For many organisms, water requirements are high. The presence of sufficient water tends to be a limiting factor for many

such organisms.

The primary measurement of the relative presence of water in biological systems is the water activity (aw), which equals the partial pressure of water in a solution divided by the solution's total pressure. Water activity also approximately equals the relative humidity or the mole fraction of H₂O for dilute solutions. (For example, the aw of water is 1, of blood plasma is .994, .98 for

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Jerry Brown spoke on water and energy last night in Beckman Auditorium

Photo by Joe DiGiorgio

Fleming Sews Up IH?

by Bill de la Torre

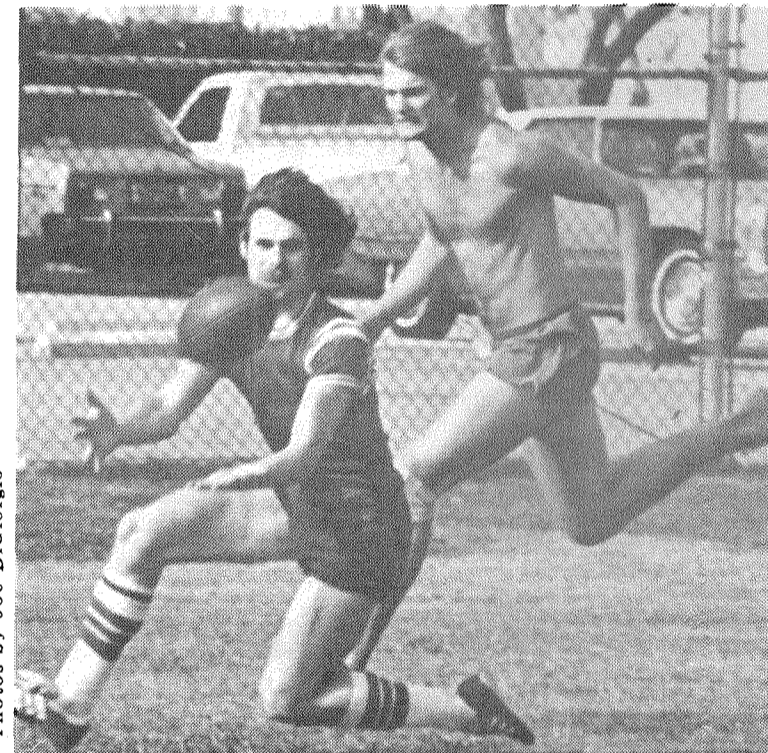
Pete Kezios sailed the opening kick-off high through the Fleming end-zone at the start of Wednesday's Page-Fleming

Interhouse football contest. The Page defense then stalled Fleming's first offensive action and gained possession of the ball. But a good defensive effort and some fine connections between

quarterback Terry Thomason and receivers Jeff Record and Bob Winchell put Fleming on the scoreboard first with a 6-0 lead.

After kicking the ball off to Page, Fleming displayed some tough defense of their own, with a hard rush supplied by Jamie Abbott and Ed Lambert. Page then punted away and managed to stall the Fleming offense deep in its own territory. A shanked punt attempt by Fleming, under heavy defensive pressure, gave Page a first-down on the Fleming 3-yard line. Then, after a couple of foiled attempts, Page scored its first and only TD of the game on a pass from QB Ralph Bacca to John Hattick. The conversion failed, and the scoreboard showed a 6-6 tie.

On the following offensive drive, Fleming benefited from some more excellent quarterbacking by Terry Thomason, a very talented sophomore. First, Thomason reacted calmly to a Page blitz and lobbed a big-gainer to safety



Photos by Joe DiGiorgio

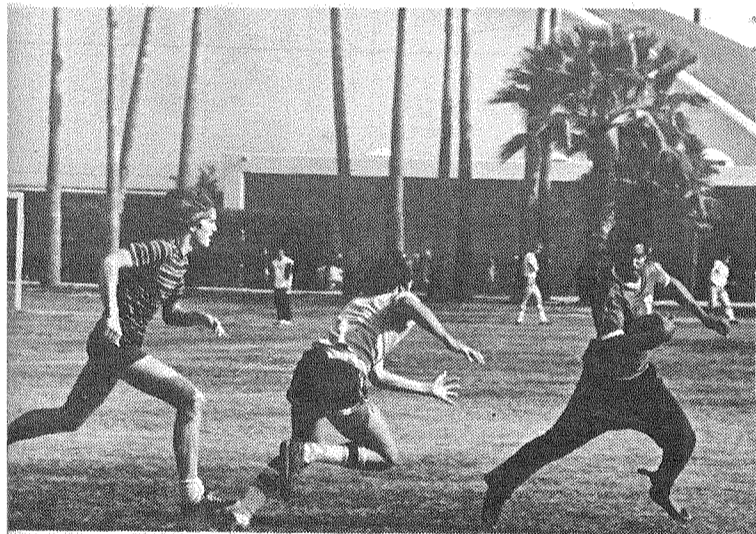
Bob Winchell slips away from Pat McMurty for TD reception.

valve Bryan Sutula. Then, Thomason hit center Jeff Record in the flats for another big gain. Finally, the Fleming QB hit receiver Bob Winchell with another excellent TD pass. The

conversion failed, but Winchell's second TD reception left Fleming on top 12-6.

Just before the close of the

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Quarterback Pete Edwards slides by Page pursuers after making an interception on a play which was later called back.

Committee Appointments Announced

The following undergraduates have been appointed to the following Faculty Standing committees and Institute committees:

Academic Policies: Ray Beausoleil, John Sidorowich, Ari Gray (alt).

Art Advisory: Shevaun Gilley. Athletics & Physical Education: Lynn Hildemann, Sue Uhs (alt).

Computer Advisory: Paul Belvoir.

Convocations: Senior class officers.

Curriculum: Ray Beausoleil, Mark Rosker, Shevaun Gilley (alt).

Foreign Students & Scholars: Perry Chiang.

Freshman Admissions: Glen George, Alan Kamei, Grace Mah, Bob McIntyre, Leslie Rusch.

Grievance: Eric Eichorn, John Sidorowich.

Health: Shevaun Gilley. Institute Programs: Mike Meyer, Mike Nelson, Jon Zingman

Library: Yoram Meroz. Patents: John Goree.

Relations with Industry: Paul Belvoir, Wally Walters, Grace Mah (alt).

Relations with Secondary Schools: John Hopeck.

Scholarships and Financial Aid: Richard Brown, Izzy Lewis, Michael Thien.

Student Housing: Eric Eichorn.

UASH: Eric Eichorn, Izzy Lewis, Ira Simon, Bryan Dunkeld (alt).

Upperclass Admissions: Glen George, Ira Simon, Jon Zingman.

Mazeltov, etc.

-Larry Friedrich, IHC Chairman

Ex-Angola Agent Goes Kiss(of Death)-and-Tell

Another View of the CIA

by Ray Beausoleil
Grand Exalted Poobah

Early this term, the Caltech Y sponsored a visit by Admiral Stansfield Turner, Director of the CIA, who expressed concern about the number of ex-CIA agents operating in print. The most recent of these is John Stockwell, former chief of the CIA Angola Task Force, whose book *In Search of Enemies—A CIA Story* argues that the clandestine services of the CIA should be abolished. In another Caltech Y event this Monday, May 21, at 4:00 in Winnett Lounge, Stockwell will discuss "Waging War Without Purpose: The CIA In Angola". He will also be the guest of Prof. Ned Munger for a PS 141 class discussion at 1:00 pm in the Judy Library.

Stockwell lived in Africa for 10 of the first years of his life; presently he resides in Austin, Texas. He joined the CIA in 1964.

In 1974, following 10 years' experience in the CIA's clandestine services, he was a case officer in Tay Ninh province in Vietnam. Here the CIA was embarrassingly ineffective, but Stockwell so impressed his superiors that he was chosen to lead the CIA task force that would covertly attempt to affect the outcome of the war in Angola.

By this time, however, Stockwell had been shocked by the CIA's grisly behavior in Vietnam, and suspected that the CIA was using the Angola war merely as a mechanism to regain some of its lost prestige. After a

year in this position, he became convinced that the CIA and administration were lying to the American people, and that lives and money were being wasted in a war that was neither vital to our interests nor likely to be won. For several reasons, Stockwell feels that he cannot be bound by the oath of office he took when joining the CIA in 1964. First of all, he claims that his oath was illegally and fraudulently obtained. As they swore him in, his CIA recruiters insisted that the CIA functioned mainly as a gatherer of intelligence information, and did not kill or damage people's lives. Citing several examples in his book, Stockwell claims that this was not their true policy in

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Draft Opposition Should Get Back to Basics

Attempts are being made in the United States Congress to reinstate the draft in some form, resulting in opposition from many citizens, and especially those of draft age. The proponents claim that the all-volunteer Army is not sufficient to protect the nation in case of war. They feel that the increased pay and fringe benefits used to attract recruits is already too costly, and yet there are still not enough volunteers. It is also claimed that the quality of the volunteers is too low, since being a soldier tends to be a job of last resort.

Opponents argue that enough qualified volunteers could be found if pay were raised even more (to minimum wage, for example). They point out that the draft is applied inequitably, with all of the burden falling on a few of the people. The proponents counter that the latter problem can be solved simply by drafting *everyone*, and using the excess in some sort of civilian public service.

They are *all* missing the point.

Compulsory service of any kind, be it military or civilian, no matter how well compensated, is patently unconstitutional and has been since 1865. The Thirteenth Amend-

ment to the Constitution of the United States of America is clear and succinct. We quote:

Section 1. *Neither slavery nor involuntary servitude, except as a punishment for crime whereof the party shall have been duly convicted, shall exist within the United States, or any place subject to their jurisdiction.*

We find it hard to interpret this in more than one way. It prohibits any form of involuntary servitude, not just slavery, and it makes no exceptions for the government.

This constitutional prohibition of involuntary servitude has been conveniently overlooked by the military, by Congress, and by courts. This has been made easier in the past by the presence of some sort of war, which tends to distract people from the basic civil liberties issues. Now that an attempt to resurrect the draft is being made in peacetime, we hope that it can be laid to rest once and for all.

—Eric H. Eichorn

—David C. Younge

News from H & SS

In the fall of 1979, H 131: History Through Film: Radicalism and Revolution, will examine the European and American tradition of modern radicalism and revolution as depicted in full-length, fictional motion pictures made in Italy, France, Sweden, England and the United States. Included will be such works as Eisenstein's *Ten Days That Shook the World*, Pontecorvo's *Battle of Algiers*,

Wideberg's *Joe Hill*, Resnais' *La Guerre est Fini*, and Godard's *Weekend*, plus *Viva Zapata!*, *Strawberry Statement*, *The Organizer*, *The Molly Maguires*, and *Morgan*. Readings in radical history will complement the films. NOTE: Films will be shown on Tuesday nights and the class will meet Wednesdays from 2-4 pm for lectures and discussion. This is a change from the days listed on the pre-registration sheet.

Letters

The RIVET Aren't Coming !?!

To the Editor:

As women students at a predominantly male institution, we feel we are subject to certain attitudes on the part of the men here which are unfair to us. Male Caltech students tend to see women as role-types, not as people. They see us as mothers, girlfriends, and sex-objects, and judge us accordingly. Fortunately on an individual basis this doesn't exist to a very great extent. A man here who knows a woman, lives in the same house with her, attends classes & does homework with her treats her as the individual she is. But as a group, women are perceived by the majority of the men here as having the primary function of a sexual object. The incident in which Fleming guys paraded around the outside the Annex chanting "we want a lay" is a good example of this.

Student houses often resemble male fraternities: sexual jokes are

told at dinner, and porno flicks shown as a house social function. Women are viewed as commodities and told they have a social obligation to the Caltech community. We feel these types of incidents are discourteous to women and exemplify the lack of consideration for us which exists here.

We think that the "Hot Throbbing Rivet" centerfold is the epitomy [sic] of the sexist attitudes at Caltech. It seems that if things are going to change, which they must since women are an actual entity here, of growing significance, the obvious place to begin is the weekly student publication. Therefore, we ask that the Rivet Centerfold be discontinued.

Thank you.

—Sara Stage,
Linda McAllister

[See "Sexist" editorial, next page. —Eds.]

The Caltech Y..... fly by

Saturday, May 19, TRIP to the RENAISSANCE PLEASURE FAIR in Agoura. We leave from Winnett at 9:00 am. The \$3.00 price covers the cost of tickets and transportation. We should return to campus by late afternoon.

Monday, May 21, An afternoon discussion with JOHN STOCKWELL, former Chief CIA Angola Task Force, speaking on WAGING WAR WITHOUT PURPOSE: THE CIA IN ANGOLA. At 4:00 pm in Winnett lounge.

Thursday, May 24, SLIDE SHOW on the BACKPACKING AND MOUNTAINEERING IN THE HIGH SIERRAS an informal presentation by students. At 7:30 pm in Winnett lounge.

Friday, May 25, NOON CONCERT with the DAVE POSEY AND KEITH SANDERS QUINTET. On the Quad at noon. Bring your lunch.

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EDITORIALS

The California Tech

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Friday, May 18, 1979
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Good Teaching at Caltech

Last Saturday was Caltech's Seminar day. President Goldberger was there to address the Alumni. He gave a very good talk about Caltech's problems and how he planned to deal with them. He talked in particular about improving teaching quality and increasing the number of faculty women. Well I've heard a lot of complaints about teaching quality or the lack of it and I'm hopeful that President Goldberger is sincerely interested in doing something about it. However I would like to say something about one of the positive aspects of Caltech undergraduate education. I would like to say something good about Caltech for once. That has probably never been done before in a *California Tech* editorial. This is about one of the faculty here at Caltech.

She is an incredible lecturer. The best lecturer I've ever heard. I cannot say about any other class (that I wasn't taking a test in) that I wished it would go on a bit longer. Since she teaches Lit, which is not my option, many of the devoted scientists here would say that I was wasting my time. Since Lit classes would probably never make me a better scientist, I suppose they are right. I think that Lit teaches us something about life and while it is possible to be a good scientist without the benefit of this experience, it is my misfortune to not admire this way. Still, though admiration fails, I envy this easier road.

Her courses might have been more work than other humanities courses, but I always enjoyed them too much to notice. I'm wondering if this isn't the way education is supposed to work. I really would like to know.

Her energy as a lecturer extends well beyond the classroom and she always took an interest in student problems. She is as good a person to talk to as to listen to. There are many people I admire at Caltech, and she is certainly one of the foremost.

Recently I heard that she had come up for tenure a few months ago, and it had been denied. The reason is that she never produced a book-length publication, and was denied tenure on this requirement. While it isn't really fair to bring up the issues of teaching quality and the lack of women faculty members, I still feel that we have made a mistake. It is a real shame to let such an amazing woman slip away from us. Maybe it is possible to consider this case from a different guideline, but it won't be done. It seems like nothing here ever changes, no matter how much you pound on them, and I've just been wasting my time again, but I'm getting used to that. So I'd just like to say goodbye.

Goodbye Dr. Penn.

—Alan Lob



Some people just never get the word, Ditch Day is NOT tomorrow!

What-me-Sexist??

On the facing page is a letter from Sara Stage and Linda McAllister, which condemns the centerfold of *The Hot Throbbing Rivet* as "the epitome [We're spelling it correctly. —Eds.] of the sexist attitudes at Caltech."

We are deeply disturbed that Ms. Stage and Ms. McAllister are misinterpreting our intentions in publishing the centerfold, and we take issue with several of the points they have raised.

The fact that we publish a picture of a nude female does not mean that we see females as "sex-objects," it merely means that we recognize that the "individual she is" happens to possess a body that a large part (possibly a majority) of our readership finds attractive to look at. We do not feel that the possession of an attractive body detracts from the intellect or personality of the individual; we think that it complements them.

We can't accept responsibility for the actions of the "Fleming guys" who visited the annex, and we find the extrapolation from this incident to the conclusion that "the majority of men here" perceive that women have the primary function of sexual objects to be rather weak.

The fact that sexual jokes are told at dinner indicates that the males telling them consider the surrounding females to be equals, and not "sex-objects." As for "porno flicks," we have noticed an approximately equal number of actors in them as actresses.

We realize, as much as anyone, that "women are an actual entity here." We do not feel that this realization requires the elimination of the centerfold. We feel that a better response to it is the inclusion of someone for the women to look at. See this year's *Rivet*.

—Eric H. Eichorn

—David C. Younge

—Alan Lob

Didja See the Flyers for This?

by CJ

This Monday night at 7:30 pm in Winnett Lounge will be the Caltech Drama Workshop's one and only performance of "Comedy Times Six", which you may have seen billed as "a 2nd evening of fantasy." You say you've never heard of either of those plays before? Well, have you ever heard of "King Henry IV, Part II" by William Shakespeare? "The Way of the World" by William Congreve? "The Tavern" by George M. Cohan? "Our Town" by Thornton Wilder? "Bus Stop" by William Inge? "The Party" by ...? Well 5 out of 6 ain't bad.

The players in the show are all very hyperactive. They have to be because they're doing a scene from each of those six shows mentioned earlier with mere moments in between. That's right, you will travel from a bawdy house of Shakespeare's time to a turn-of-the-century ice-cream parlor with quite a bit in between and after. All this within the space of not much more than an hour.

So come on over. Bring your roommate, your friends, family.... everyone! That's 7:30 this Monday night, May 21st, in Winnett Lounge. See you there!



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CIT Golf Wraps Up Season

by Marie Trujillo

The Caltech golf team closed its season last Monday at beautiful Soboba Springs Country Club in San Jacinto. The event was the 36-hole NAIA District III Golf Classic and featured such golfing powers as UC San Diego, Cal State Dominguez Hills, USIU, and, of course, Caltech.

Leading the way for the Beavers in the first round was sophomore Terry Thomason who possessed a red-hot putter. Taking only 28 putts, he trailed the first round leaders by only a few strokes. Senior Charles Curatalo also remained in striking distance, but freshman Doug MacKenzie met frequent disaster and shot an incredible 98.

Wine, Cheese And Books?

The newly formed Friends of the Caltech Library are holding a Wine and Cheese Party on Tuesday, May 22nd on the lawn north of Millikan from 7 to 9 pm. It is open only to Friends who have paid their \$20 regular membership or more. However, students are more than welcome to become members at the special rate of \$10. Harold Jurgenson, of grocery fame, has contributed two cases of an excellent French white wine.

Books for the regular Millikan Sale starting the 23rd will be available at higher prices during the pre-sale. A limit of ten books per person or couple has been set. There will be a silent auction on books of particular value, some of which have been contributed by authors and publishers.

At Seminar Day last Saturday, alumni contributed almost 400 books for the sale. Don McNamee of Millikan, who is pricing the books very reasonably, says this is the largest and best collection of books for sale.

Confronted by a vigorous wind in the afternoon, the golfers found the second round a difficult experience. Thomason had all hopes of glory swept away by a catastrophic pentabogie nine on the par 4 fifth hole, while Curatalo was hampered by some unfortunate water trouble. MacKenzie, however, made a temporary comeback with a string of pars and a splendid eagle three on the par 5 seventh hole, but a quadruple bogie eight on the par 4 tenth hole closed the door on the freshman for good.

In the end, the Techers

We Need You (Eyes If You Can't Act)

Auditions for *The Romancers*, a comedy by Edmond Rostand, will take place in Baxter Lecture Hall on Sunday, May 20 from 2-5 pm. Students, faculty, and staff are invited to try out.

The play, to be directed by Shirley Marneus, will be presented in Dabney Gardens on the last two weekends in July. For those of you unfamiliar with the show, it may help you to know that the musical *The Fantastics* was based on it.

There are six speaking parts in the show, five men and one woman, and ten other people will be needed as "chorus." People are also needed for crew, set-building, publicity, working on costumes, ushers, etc.

If you have any questions, please call Flora at x2157.

First United Methodist Church of Pasadena

500 E. Colorado Blvd.
invites you to worship with us during the week on Wednesdays from 12:15 to 12:40

finished well behind the leaders, but, nevertheless, had a great time participating in the event.

At the golf banquet Tuesday evening, Curatalo was awarded the J.B. Earl Award as the team's outstanding golfer. This ends the four-year letterman's fine career, but the returning team for next year should be quite competitive. In addition to Thomason and MacKenzie, long-hitting Alan Boyar and sand expert J. J. Sydorovich are returning. A league crown will certainly be their goal.

Thespians Unite!

There will be a general meeting of the Drama Club at 7:30 pm Tuesday, May 22, in Winnett Clubroom 2. Items on the agenda include finding a more original name for the organization. [Historian's note: the name Drama Club goes back far into the past, back into the days when men were men and giants walked the earth. This old and hallowed name seems to have been derived from the much longer and difficult to pronounce "Institute Dramatic Club", the change taking place sometime during the Great Depression. Just thought you might like to know.]

IH from page one first half, Fleming again stalled the Page offense, this time deep in Page territory. Then, as the half came to a close, Thomason once again connected with Record, this time in the Page end-zone. Halftime score: 18-6.

At the start of the second half, Page received the opening kick-off, but very shortly Fleming again had possession and Thomason began picking apart the Page defense. Successive completions to Record, Klapproth, Record, and Winchell (in the end zone) gave Fleming a 24-6 lead. An excellent conversion pass from Thomason to Sutula made the score 25-6.

During the next possession, the Page offense marched up the field behind receptions by Pat

McMurtry and John Hattick. But the Fleming pass defense stiffened at its own goal line. Cornerbacks Pete Edwards and Vince Caterina displayed their previous toughness against Bacca's passes, and safety Willy Newsome came up with a clutch interception. This was Newsome's sixth of seven interceptions in only three games, and it put the ice on Page's offense and the game. The final score, one quarter later, was Fleming 38 and Page 6.

In other Interhouse football action on Wednesday, Ricketts topped Dabney 24-6, but the Blue vs. Red game proved much more significant. Fleming now needs only two victories in its three remaining games (Lloyd, Blacker, and Ricketts) in order to capture the Interhouse Crown.



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CIA Goings-on

from page one

etnam or Angola. In addition, believes that the CIA opaganized the American blic (assuring them that the ause" was "just", and that we ould be victorious), and then d to congressional committees en justifying their actions. In et, in 1977 former Director ichard Helms was convicted of rjury after lying to a senate ommittee about clandestine tivities in Chile.

As further reason to ignore his th, Stockwell notes in his book

that "The CIA's oaths and honor codes must never take precedence over allegiance to our country," and feels that his loyalty to the constitution was far more important than his loyalty to the CIA.

Stockwell firmly maintains that clandestine services are not important to our national security, and thus he is speaking out: "I concluded that only an informed American public can bring effective pressure to bear on the CIA."

Water & Life

from page one

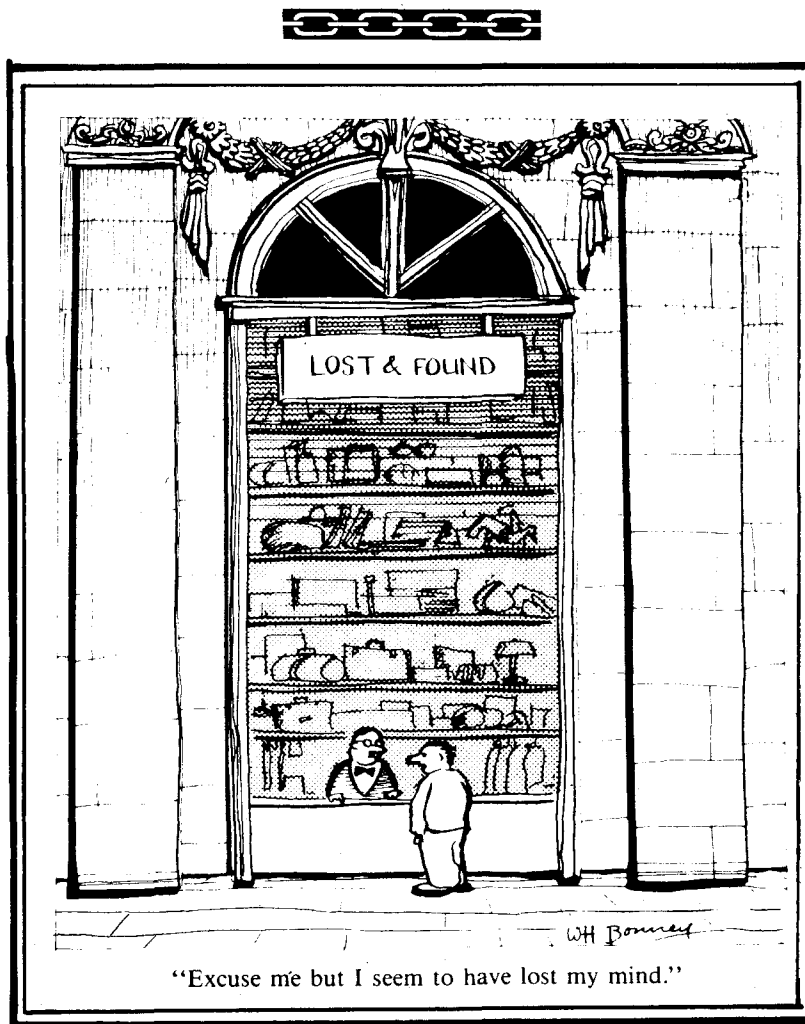
ewater, and .75 for a saturated aCl solution.

Generally speaking, an aw of ss than .92 inhibits germination most organisms. There are me notable exceptions: desert imals can obtain water by idizing the food they eat. The ngaroo rat, for example, never nks water and can live definitely in 24% humidity. his is survival with less moisture an the driest plant—some ngi—require: 62%. The fference is that the rat is in quilibrium with its own blood, hile the fungi is in equilibrium ith its environment.

A major investigation of the rshest area on earth to etermine whether other rganisms have adapted to very w aw conditions has been in ogress since 1965. This area is e Dry Valley System in antarctica. The area is extremely y because the transantarctic ountains combined with very y winds prevents ice from rming. Geological evidence ggests that the area has gotten er over the past 100,000 ars.

However, small lakes form in the summer due to runoff water from the mountains. Blue-green and green algae, molds, and yeasts are formed in these lakes. Soil samples from the area a few meters from the lake did not show the presence of these organisms. The final model suggested was that the micro-organisms were introduced to the area by the winds and were unable to survive unless they landed in the lake area. The fact that no organism was able to adapt to this niche suggests that a lower aw limit does exist below which terrestrial life is not possible.

The important question which remained was whether or not this conclusion was valid since it was based on the example of a planet which has had a limited exposure to low water abundance. A good planet to use as a comparison is the very dry Mars. The highest possible aw imaginable for Mars is 0.02. The fact that the Mariner probes did not find any evidence of life indicates that this lower limit is probably valid.



"Excuse me but I seem to have lost my mind."

Do you find Techers to be the most fascinating and wonderful people imaginable? Well then, don't pass up this opportunity to spend five glorious days in the Sierras with lots of other Techers. I'm referring to the pre-college back packing trip. It really is nice to spend your last few days of freedom among lofty peaks and blue skies before starting another year at Tech. The trip will be in King's Canyon. There will be four or five groups of seven to ten people each: peak climbers, fast hikers, moderate hikers, slower hikers, and fishermen and slowest hikers. There are sign up sheets in the graduate and undergraduate houses, and if you can't find a sign up sheet you can talk to anyone at the Caltech Y, or Ari Fuad, Sara Stage, Ralph Weeks, Jim Mueller, or Camilla Van Vorhees. The trip costs \$45.00. We will leave from Caltech on the 13th of September and return on the 18th in time for frosh camp. There will also be a mandatory meeting and pack check at 7:30 pm September 12th. Checks made out to the Caltech Y will be accepted no later than Auhst 10th, and further information will be mailed shortly thereafter.

Blood on the Tracks

by Eric H. Eichorn

The era of the two-track system of lower division Physics is coming to an end. An examination of next year's course schedule reveals only one Physics 1, rather than the traditional Track A and Track B. While there are two tracks scheduled for Physics 2, that will last only through next year, for the benefit of those currently taking tracked Physics 1.

The change is being made to better allocate the teaching resources. Under the current system, two professors are being

used to lecture each track, leaving very few to teach recitation sections, which get relegated to graduate students. The department feels that it is valuable to the students to have professors in charge of the recitations, where there is easy access to them. With only one set of lectures being given, this will be possible. The plan is for four professors to teach two sections each.

While the elimination of a second track might seem to narrow the emphasis of the course, the department sees the opposite result. Each professor

will be emphasizing different aspects of the material covered in lecture, and assigning different homework.

The year after next the second track of Physics 2 is slated to disappear, assuming that next year's Physics 1 doesn't turn out to be a fiasco. Physics 2 will be taught for the masses of non-physicists, and additional courses will be taught for physics majors. Tentatively numbered Physics 8 and Physics 9, these courses will be more specialized, and will satisfy the sophomore physics requirement.

INTER-VIEWERS WANTED

Interviewers are needed to help conduct a public opinion poll. Pay ranges from \$3.00 to \$5.00 per hour. Workers are needed between 6 pm and 9 pm, Monday, May 21, 1979 thru Thursday, May 24, 1979. The poll, which will be conducted by telephone, will survey the entire Los Angeles Smog Basin to determine attitudes concerning air pollution and government priorities. If you would like to work on this survey, please come to an instruction session Sunday (May 20, 1979) at 7:30 pm, or contact Charles Slater, 578-9557

Random Numbers

Well, I wasn't going to write anything this week, but, as always, the *Tech* is desperate for copy and I guess I really shouldn't refuse to write. It is a nice thought, though.

A friend of mine said something to me today that has really stuck in my mind. She said that being part of Caltech was like being part of a great big family. The atmosphere is relaxed and everyone is always so helpful that it is easy to feel comfortable here. When you think about it, the Caltech community is like a family. We all share a common commitment to the search for knowledge and while we may seek it in different areas, our eventual goal is the same. The Honor System creates a very special atmosphere here that isn't really found anywhere

else. It is nice to be able to put my books down somewhere and be pretty sure that they will be there when I come back. We spend a lot of time griping about the problems here and it really is refreshing to hear someone say something nice about Caltech.

I suppose that I could make this a whole lot longer. I could make it longer that is, if anything had happened this week. However, Benny Hill is on the tube right now and British humour does have some redeeming features. If nothing else, it provides an opportunity to see things that one doesn't see too often while at Caltech.

I hope a lot more of you are going to join the Drama Club. You don't have to be an actor or an actress, as long as you have an

interest in furthering drama at Caltech, you are more than welcome to join. The people backstage are just as important as the onstage people are and we will always welcome anyone who wants to give a little of their time or energy. So, if you want to meet a really fantastic group of people and have the chance to see your name in print sometime, come to the next Drama Club meeting [Tuesday, May 22, 7:30pm, Clubroom II—the eds.] and "get-involved."

I realize that this isn't that funny but nothing terrifically amusing has happened this week. All I can say is that I wish the seniors would have Ditch Day soon. I'm tired of listening to the sounds of drilling and hammering at 3am.

—Duncan G. Mahoney

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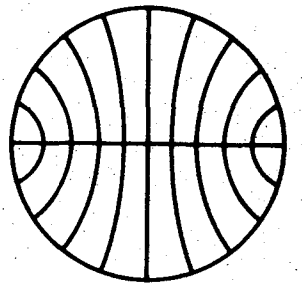
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News from the Movie Clone

Well, this week I can't give you a link from the ASCIT movie myself, so I'll just tell you about "Oh, God!", starring George Burns and John Denver. It's about God deciding to visit Earth by meeting with a grocery store clerk instead of a rabbi, or a representative of some other faith. The clerk is John Denver, and God personified by George Burns. Don't worry, it's non-denominational and pretty funny, since of course no one believes John Denver, and in fact doesn't believe George Burns for a while. The shows are at 8:00 and 10:00 like usual.

Please note, next week the shows are not at the usual time. We're showing a double feature, *Barbarella* and *Doc Savage*. I'll be writing about the films next week, but remember, *Barbarella* will show at 7:00 and 10:30, and *Doc Savage* at 8:45. I'll repeat

those times next week.

The Cinematech movies this week are pretty well known, two of the best war movies around. One of them is *The Bridge on the River Kwai*, and the other is *All Quiet on the Western Front*. *The Bridge on the River Kwai* is an epic about Allied prisoners of war forced to build a strategically important bridge for the Japanese during World War II. It won seven academy awards and stars William Holden and Alec Guinness. *All Quiet on the Western Front* also won a number of Academy Awards including best picture. It is based on the novel of the same name written by Eric Marie Remarque. The movie follows the adventures of seven young boys entering the German Imperial Army in 1914. It makes a powerful anti-war statement and should not be missed.

-Jon Zingman

To Whom It May Concern:

Sometime last week, my tool box was stolen from inside my car in the Holliston parking lot. It is light blue with copper (yeck!) paint inside, and has a lift-out tray. As I am still trying to rebuild my car, I want it back! And since I made it myself, I will recognise it if I see it—even with a new paint job. If it doesn't show up back in my car (remember the red TR-4A?) I don't recommend that anyone let me catch them carrying it around. If anyone sees it (blue and runny copper) please let me know at x2634.

-Bruce Prickett

For those of you who couldn't deduce it from the ears

* Today *
is *
* Drop *
* Day *

Qualifying Meet Marred by Heat

by Vic Manzella

Not a single sea-breeze was blowing at UCLA's Drake Stadium on Sunday as a stifling heat wave engulfed the greater Los Angeles area. The thermometer registered a scorching 98 degrees (Fahrenheit), and few runners ventured outside shaded areas or to their respective events. As it was that the 1979 AAU National Qualifying meet produced more blisters than word times.

For Caltech there were three runners present, each of them giving a bid for the NCAA

Division III Nationals. At 11:00 am, senior Rob Bourret began a battle with the mid-day heat which left him nearly 9 seconds off his personal best in the 1500m run. Bourret needed a 3:54.1 to qualify in the event, but the oppressive heat wiped out his chance to attain this mark on Drake's newly resurfaced track.

Shortly later, at 2:00 pm, Whitman transfer Jim Quilliam tried once more to qualify for nationals in the 400m dash. His time of 48.76 seconds (electronic timing) was his best showing this year but was still not quite

enough to give him a spot in the National Meet. Later in the afternoon, freshman Lewis Collins ran his best 800m of the season in a time of 1:56.3. Again the heat may have been the winner in this grueling event.

This Saturday, one Caltech runner, Jim Quilliam, will compete in a meet to be held at Cal State Long Beach. Quilliam will be making his final bid for nationals (and the school record) in the 400m dash, and for anyone interested, this should be yet another fine meet to see. Quilliam will be running his event at 1:45 pm.

Kountdown to Kelrof Continues

by Bill Gould

The "shot heard round the world" will be fired by Jim Clark at 9 am tomorrow to start the 3rd Annual KELROF Hour Relay. Seventy runners will pit their flesh, blood, and courage against the sun, heat, fog, gloom of night, fog, exhaustion, rain, blizzards, leeches, mosquitoes, and earthquakes in an attempt to run a total of 1400 miles. More than fifty people will work 4-hour shifts on an all night and day shift to keep times, dispense aid, and tend to the wounded. The runners are optimistic. Director Rob Bourret notes that the Relay's motto is "That which does not kill me makes me stronger". The teams start with KELROF, which will shoot for 100 miles (5:26 average) in an attempt to break last year's record. Another team of runners, named at press-time, is going for 200 miles.

By far the most experienced member is the Caltech Cripples without Crutches III, five of whose members will run for the

3rd consecutive year, and four others will be completing their 2nd Relay. In contrast to the experience of the Cripples is the greenness of the frosh/permafrosh team from Page, with Shawn Larsen in charge.

Rounding out the lineup are three different house teams. If anyone thought the Moles were apathetic, they are wrong—the Blacker House team was the first to get its lineup completed, thanks to Larry Doolittle. The Lloydies are lead by acting house president Charlie O'Neil, and Ruddock House has fielded a team with Dave Wheeler commanding. Last, and by far the least in good sense, Eugene Loh will try to run a one-man relay.

With so many participants, this human drama is an event of no small significance in the school. The Alumni Association, the Executive Social Committee, and private contributors have graciously donated money to support the Relay. Timers should not forget that they have a

meeting in the gym classroom today at 5 pm. Spectators are encouraged to drop by the track this weekend and see how things are going.

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Take the Money and Run

by Grace Mah

Well, all, this is the beginning of a (hopefully) weekly report from your friendly investment committee. We will give the current status of our funds and try to provide some educational information as to what all the silly numbers mean. For instance, our present state of affairs as of Wednesday, May 16, is as follows: \$22,250 in stocks (H&R Block) and \$33,887.50 in cash, totalling \$56,137.50. We officially started business last Thursday, May 10, with \$56,250 in stock (H&R Block) and \$850 in cash, totalling \$57,100. Now, is this good or bad? A good gauge for our progress is the Standard and Poors 500 (S&P 500) Composite. S&P provides a daily statistical number (Don't ask me where it came from. I'm learning, too.) which is figured according to sales, volume, and other things in the stock market. The S&P 500 figure for last Thursday was 98.52 and for Wednesday, it was 98.0. To figure out performance, we divide numbers as follows:

S&P 500 (98/98.52) x 100%
≅ 99.5%

Us: (56,137.50/57,100) x 100%
≅ 98.3%

Now, S&P 500 is supposed to be good in its "performance". No one is supposed to be able to beat them. As you can see, we have not done too badly compared to them, so far.

As for future actions, we have now liquidated almost all of our holdings in H&R Block to prevent the market risk of having everything in one stock. We plan on putting part of the money into treasury bills, money market funds, and stocks. Losses are expected due to the gas shortage and the rise of inflation. Transaction costs incurred in liquidation will be quickly made up through future investments.

Well, as you all know, all of the board of directors are happily, cheerfully anticipating some input from you students as to suggestions for the investment of this money. Meetings are open to all, etc.

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Tute Tute!

The list of Biology tutorials (Bi 23) to be offered next term is now available outside the Biology Office, 156 Church, and outside Rm. 12, Beckman Labs. The tutorials are staffed by Biology faculty, postdocs and grad students. They provide an opportunity for learning through personal contact in a small group situation and cover a broad range of subjects. Bi 23 may be taken for up to 6 units; grading is pass/fail. For details, see Ron Konopka, Rm. 12, Beckman Labs.

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