

OPUNTIA

62.3

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OPUNTIA is published by Dale Speirs, Box 6830, Calgary, Alberta, Canada, T2P 2E7. It is available for \$3 cash for a one-time sample copy, trade for your zine, or letter of comment. Americans: please don't send cheques for small amounts to Canada as the bank fee to cash them is usually more than the amount. US\$ banknotes are acceptable in Canada at par value; what we gain on the exchange rate we lose on the higher postage rate to USA. Do not send mint USA stamps as they are not valid for postage outside USA and I don't collect them.

Whole-numbered OPUNTIAs are sercon, x.1 issues are reviewzines, x.2 issues are indexes, x.3 issues are apazines, and x.5 issues are perzines.

WHAT IS FAPA?

This issue is for the Fantasy Amateur Press Association. (Details from Robert Lichtman, 11037 Broadway Terrace, Oakland, California 994611-1948) For those of you receiving this issue who do not know what an apa is, please read on.

Modern zine publishing as we know it today began in the middle 1800s as cheap, home-use printing presses became available to the general public. Zinesters developed a distro method called the amateur press association (apa) where members sent x number of copies of their zine to a central mailer (also known as the official editor). The zines are collated into bundles, and each member gets back one bundle of everyone's zines. There is an annual fee to cover postage. Apas have a minimum level of activity required, such as publishing 8 pages a year. It must be emphasized that apas are not for passive subscribers; you must commit to the minimum activity level or you will be booted out. FAPA has been going for more than 65 years; the oldest apa is the National A.P.A., founded 1876.

x.3 OPUNTIAs are for FAPA. In addition to articles, there will be mailing comments on other apazines in the last FAPA bundle. I usually quote the remark I am commenting on, so hopefully an outsider can still read the comments with interest.

CUMULATIVE FAPA CLEARCUT AWARD

compiled by Dale Speirs

Given for the most number of pages in a mailing. I borrowed the idea from the now-moribund apa Point of Divergence.

			Bundle #	Winner	Pages
			251	Robert Sabella	44
			252	Robert Sabella	40
			253	Arnie Katz	89
Bundle #	Winner	Pages	254	Arnie Katz	56
214	A. Langley Searles	75	255	Robert Sabella	34
237	Joe Siclari and Edie Stern	52	256	Tim Marion	58
238	Joe Siclari and Edie Stern	46	257	Robert Sabella	55
239	Dave Rike	56	258	Tim Marion	50
			259	A. Langley Searles	135
240	A. Langley Searles	79			
241	Robert Sabella	41	260	Tim Marion	75
242	Robert Sabella	32	261	Tim Marion	82
243	A. Langley Searles	78	262	Robert Sabella	46
244	Robert Sabella	39	263	(tie) Tim Marion and Robert Sabella	38
245	R. Graeme Cameron	38			
246	Robert Sabella	44	264	A. Langley Searles	165
247	A. Langley Searles	76	265	Tim Marion	87
248	Robert Sabella	44	266	Michael Waite	78
249	Robert Sabella	44	267	Tim Marion	51
250	Robert Sabella	51	268	Robert Sabella	99
			269	A. Langley Searles	174

Bundle #	Winner	Pages
270	Robert Sabella	31
271	Dale Speirs	32
272	Robert Sabella	52
273	Steve and Vicki Ogden	38
274	Robert Sabella	46
275	Robert Sabella	32
276	Robert Sabella	44

most of what they refer to as indexes are actually checklists or bibliographies. My Canadian zine index is a subject index, because I actually use it to locate articles by topic, and don't care who published it. At one time I started a checklist of all my zines, but this collapsed due to overwork. I have way too many projects on the go already. In any event, I have discontinued my zine index because I doubt anyone else is seriously interested. The anime and Farscape generation simply don't give a damn.]

FROM: Lloyd Penney
1706 - 24 Eva Road
Etobicoke, Ontario M9C 2B2
2006-07-27

LETTERS TO THE EDITOR

[Editor's remarks in square brackets]

FROM: Murray Moore
1065 Henley Road
Mississauga, Ontario L4Y 1C8
2006-07-30

I am indexing my fanzines in a manner which I expect you will approve: index cards. I am halfway through the letter H. I am using editor names, not zine titles. Index cards seemed to be the fastest way to make a database. I might do an online version later.

[Historically, SF fans have confused the meaning of "index", and

There's a lot more info now about the World Horror Convention in Toronto, and as a result, Ad Astra has moved for that year only three weeks earlier than its usual weekend. There will be some overlap between the two, but given that the WHC is so much more expensive and is the annual big convention for that genre, I expect that if there's enough interest, some will go to both. In a city of 3 million, Ad Astra gets about 700 people a year. This convention used to coat the city and rest of province in flyers and get close to 1,000 members. You'd think a city this size would get more, but I guess you can be choosier about what interests you have and what conventions you go to. As examples, Toronto Trek gets about 3,000 each year, Anime North got 12,000

this year, and the big SFX media convention will get close to 45,000.

[I suspect this is the Bowling Alone syndrome, whereby the passive generation prefers to sit back and let the commercial SF media outlets do all the work (for a fee, of course), and where volunteerism is defined as setting up a Web site, not helping shift display tables about.]

FROM: Brant Kresovich
Box 404
Getzville, New York 14068

2006-07-25

It's funny that I read lots of books and a handful of zines every month. I rarely read magazines of any kind since now they are so expensive that I can't spring \$5 a pop for them. I've not developed your habit of going to the library either. I think library browsing is good because one can stumble over interesting stuff by chance.

[I am fortunate that the University of Calgary Library has an open stacks policy to the general public and I can use their computer databases and peer-reviewed on-line journals gratis. I like to jot down random discoveries made while searching for something else, which discoveries often lead to a new line of research. There

are a million by-ways in history and science that have never been properly researched. The Internet will not, during our lifetimes, have every obscure magazine and book from the ages past on-line, notwithstanding Amazon and Google. Indexing is irrelevant if you don't have a specific goal in sight.]

FROM: Chester Cuthbert
Winnipeg, Manitoba

2006-07-13

I am always amazed at the variety of topics which you consider worthy of spending time to research. Unless you consider research as your favourite source of amusement, does it leave you any time for anything more frivolous?

[I have in fact been cutting back on my activities because I had too many projects on the go, even though I am semi-retired and don't have a television set to waste time with. However, I intend to keep doing my research projects. I find it enjoyable to sift through the University of Calgary Library resources and come up with histories that no one ever did before (ex. chain mail, begging letters, mail bombs) or consolidate information for an essay on topics to help me (and my readers) understand them (ex. petroleum, the Permian crisis, the origin of life).]

FROM: Gianni Simone 2006-03-??
3-3-23 Nagatsuta Midori-ka, Yokohama-shi
226-0627 Kanagawa-ken, Japan

Do you think it would be possible to contact one of the FAPA members to get only his zine?

[Anyone in FAPA who wants to trade, send to his address as above. His zine is in English.]

I Also Heard From: Ficus, Franz Zrilich, Alan Stewart, Langley Searles, Bridget Bradshaw

FAPA CLEARCUT AWARD (for most pages published in a mailing) goes to Robert Sabella for 44 pages in FAPA #276.

MAILING COMMENTS ON FAPA #276

FAPA #276 received in Calgary on September 5.

For Fapa Re: it takes six months to a year for a flood to reach

central Australia. My immediate thought on reading that was that probably the George Bush administration would still not be able to respond adequately in such circumstances.

“ ... *secondhand books have essentially no resale value at all.*” That is certainly true if you are trying to sell to local bookstores, who can't afford to carry dead inventory for a book that no local reader might ever ask for. Thanks to Abebooks and eBay, there is now an international market for those willing to do the work. I recently bought a paperback novel via Abebooks from a secondhand bookstore in small-town Florida.

Nice Distinctions #14 Re: “oppositional defiant disorder” Creating such jargon terms for pseudo-dysfunctions is part of the ongoing cult of victimization, whereby no one is responsible for their actions if they have some officially recognized syndrome. Next up: “macroheterophagous subkinesiological syndrome”, for people who are fat because they eat too much and don't get enough exercise. Or “supradecibelic ignoramus disorder” for loudmouths who don't know what they're talking about. Or “vehicular acceleration maladjustment” for drivers who stop in a merging lane (normally I'm opposed to the death penalty but I would favour bringing back the noose for that one). This has the makings of a good party game or a panel topic at an SF convention.

Theatricality And Calamity Re: the British reality television show that was to pick a never-before-published playwright from anyone who entered, and subsequently couldn't find any decent plays among those submitted. This is why I don't own a television set.

"... last year, out of 50 West End plays, only between 10% and 20% managed to recoup their investment, and of those only two were new works." Which leads to the obvious question as to why anyone would put money into plays with such terrible odds. Better to blow the money at a casino, where at least you get a comp room and free drinks served by a scantily-clad waitress.

Claims Department #10 Re: FAPA surviving over the long run but with smaller membership. In one way, FAPA was an anomalous topical apa because it had so many members. Most such apas had much smaller memberships in order to keep the quality up. As more and more bloggers get nailed by their boss or the police for something they put on-line, apas will be seen as a safer place to write. You can't hide from Google on the Internet, but the Papernet by its nature requires prior knowledge and physical interception for authorities to locate actionable material.

I've never been an N3F member but I don't see why it can't serve a useful purpose. The majority of hobbies have some sort of national organization as a central gathering point.

The Beering House

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Re: living in San Jose: *"I get far more flipped out than most over the idea of hurricanes. You pick your regional disaster and earthquakes fit me just fine."* No matter where you live there's always something. It seems to me that anyone living in a hurricane or earthquake zone chose to live there. The poor folk who lived two metres below sea level in New Orleans, no matter how loudly they protest they weren't able to move someplace else, could have done so if they were really motivated. (I'm not talking about the failure to evacuate the Lower 9th when Katrina came by, but rather why they didn't get out years before.) The retired couples who sink their life savings into a beachfront townhouse in Florida should have been removed from the gene pool decades ago, before they had a chance to have children. Mobility is the hallmark of the North American economy.

"I've still not figured out how to pronounce LOFGGEORNOST." Now that you mention it, I'm not certain I have the right pronunciation either. I've been saying it as "lof gurn ost". Over to you, Fred.

Science Fiction Adventure Magazine #1 Welcome to FAPA, Dale! For the benefit of FAPA members, the other Dale's book AMERICAN INDIAN VICTORIES is worth a look in if you are interested in alternative history. For the fun of it, I have filed his alternative ANALOG with my real ANALOGs, just to flummox the

book dealer or librarian who gets my library from my estate and has to catalogue it. Also, other Dale, there is nothing wrong with publishing fiction in FAPA.

Re: SF writers getting collapse of civilization scenarios wrong, such as missing the fact that clean drinking water will be the first priority, not food. Hurricane Katrina has certainly provided some valuable and very practical lessons in this regard.

Re: decline of SF prozines. The only two I read anymore, which are more like semi-prozines, are Canadian periodicals, ON SPEC, and NEO-OPSIS, both of which have newsagent distribution. One thing that needs to be remembered is that there was a great dying off of fiction and general magazines post-WW2, of which SF, romance, and mystery magazines were the only survivors. The latter have been living on borrowed time for fifty years now.

Re: solar cells versus petroleum for energy. After the 1973 oil price shock, tremendous strides in energy conservation were made, going from a society that conserved nothing to one that cut back dramatically. The problem today is that because all the easy conservation gains have been made, we simply can't conserve more energy except by marginal gains, other than taking SUVs off the road. I think the solar cell industry has to adapt the Bill Gates method of producing a product that is not benchmark quality but is acceptable to get by with.

Number One #9 *"I remember room parties with bureau tops covered with whiskey, scotch, vodka, and wine bottles, and the beds and floors covered with reclining fans and pros."* Who, as we know, had their eyes closed so as to better contemplate philosophy and potential SF story plots.

Your comment about the photos in my cattle drive story: *"I liked the photos but wished for a little closer look so I could make out what Dale looks like."* The problem with most of the photos was that Mom always wanted to get the whole herd into one shot, so she would back up about one kilometre to take the picture. I scanned the photos, then cropped and enlarged them, but there is a limit to what computer magic can do.

Stupefying Stories / Target: FAPA Re: your attending a Star Trek convention as a book dealer and being unable to sell any. I'm surprised you have any Trekkies left; they're pretty much extinct in Calgary. Here in Cowtown, the anime and Farscape crowd are dominant. One doesn't see Klingons anymore at the local convention, as they have been replaced by Sailor Moons and browncoats. I think you will have to sell your Star Trek books online.

"I have never seen an explanation of why methane or propane would not be a suitable fuel substitute for petroleum."

Setting aside the fact that methane and propane

are petroleum, the main reason is that they are more valuable for heating than vehicle propulsion. (Methane is natural gas.) One thing that amuses Albertans about the proposed Alaska natural gas line controversy is that few Americans realize that most of the natural gas from Alaska won't make it past the Athabasca Tar Sands because the oilsands companies want it to heat the bitumen to make the light oil. (And before anyone asks, there will still be a net energy gain.)

Solar and wind power cannot generate enough electricity to hydrolyze enough hydrogen for the mass market, even under the most optimistic scenarios. Converting hydrogen to methane or propane results in a negative energy source. Gasoline and oil will still be the dominant vehicle fuel for several more generations but the catch is that it will gradually become more expensive. I'm not worried because I'll be dead by the time things get really serious, but Generation X should be.

Re: Louis Riel: " ... even though his efforts contributed to Dominion status for Canada." Canada had been a Dominion for two years before the first Riel rebellion broke out. What he did was convert the Red River Colony into the Province of Manitoba, about thirty years before it would have otherwise happened. Alberta and Saskatchewan didn't become provinces until 1905, which is probably when Manitoba would have become a province in an alternative timeline where Riel never lived.

Voice Of The Habu V9#3

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"The ACM is one of the professional associations I belong to, the Association for Computing Machinery. The somewhat archaic name dates back to the days when IBM anticipated a total world market of about five computers." But did anyone ever actually say it? I have been searching the literature for a number of years, but finding a primary citation is a quixotic quest. The quote about five computers is most commonly attributed to 1940s IBM executive Thomas Watson or namelessly to someone in the corporation. Science writer Charles Sheffield, in a 2000 book about the cutting edge of science [1], wrote: *"One famous projection, by the management of IBM, estimated that a total of five computers would serve the total needs of the United States."* This was more specifically narrowed down by Peter Coffee in a 1999 article [2] in which he wrote: *"When a speaker needs an example of a famously wrong prediction, a popular choice is the 1943 estimate of IBM's then-chairman Thomas Watson: 'I think there is a world market for maybe five computers.'"*

The learned journal ANNALS OF THE HISTORY OF COMPUTING published a couple of articles on the subject in 1998 and 2004 in which the famous remark was attributed to the pioneer computer scientist Howard Aiken [3, 4]. It appears from these two papers that he made the remark circa 1949, but it was taken out of context. He was speaking only of scientific computers used by the U.S. Census Bureau, not of use by the business community. He

also spoke of the Census Bureau only needing six, not five. I don't know how many supercomputers they use today to crunch the census data, but six is certainly a reasonable number. The Bureau no doubt has thousands of personal computers, but those are not what Aiken was referring to.

Like all folklore, variations evolve from the basic tale or original true fact. In a 1989 Australian book, it was written that: "*The first computers were physically massive and it was estimated that not more than ten would be needed to do all the ballistic calculations and code breaking that would ever be needed.*" This ignores the fact that Bletchley Park (the British WW2 code breakers) had more than five computers already, and the American military made extensive use of them. A British computer magazine had by 1995 inflated the number and changed the names by remarking [6]: "*To top it all, in the '50s the United Kingdom's chief boffin William Penney, who was head of the UK Atomic Energy Authority, estimated that Britain would only ever need 100 computers for all time.*"

References.

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- 2] Coffee, Peter (1999-11-01) New Dow Industrial members don't belong. PC WEEK 16(44):46

- 3] Cohen, I.B. (1998) Howard Aiken on the number of computers needed for the nation. ANNALS OF THE HISTORY OF COMPUTING 20(3):27-32
 - 4] Copeland, B.J. (2004) Unfair to Aiken. ANNALS OF THE HISTORY OF COMPUTING 26(4):35-37
 - 5] Seberry, J., and J. Pieprzyk (1989) CRYPTOGRAPHY: AN INTRODUCTION TO COMPUTER SECURITY. Published by Prentice Hall, Australia. Page vii
 - 6] Longhurst, R. (1995 September) The World Wide Web of lies. .NET 10:3
 - 7] Drucker, Peter F. (1970) TECHNOLOGY, MANAGEMENT, AND SOCIETY. Published by Harper & Row, USA. Pages 171 to 172
- " ... someone smeared his opponent with terrible-sounding, innocent statements, such as "at college, he matriculated with co-eds." This reminds me of the old joke about a candidate who denounced his opponent as a known heterosexual.

The Annex #23 Re: two old essays on gothic literature from a century ago. One mentions Mrs. Radcliffe, whose ghoulies and ghosties in her novels always turned out to have a rational explanation. It is thus in our world, but people won't accept them even for most novels, much less UFOs and such. The essay mentions that one generation's serious novel is the next generation's children's story. I wonder if Stephen King will be the same twenty years from now.

The second essay discussed the survival of novels or other literature in terms of natural selection of the best, subject, of course, to the vagaries of war and disaster. With the “long tail” of the Internet, it seems now that eventually everything will survive in databases.

Ride The Lightning “*Who are John Diefenbaker and Louis Riel?*” Every large town or city in western Canada has schools or roads named after these two men.

Diefenbaker was a prairie populist from Saskatchewan, akin to the American William Jennings Bryan, except that Diefenbaker was more successful, having been Prime Minister from 1957 to 1963 and Opposition Leader before and after that. He was considered one of Canada’s greatest orators. (Died 1979)

Louis Riel was the leader of two rebellions in what is now western Canada. The first, in 1869-70, was a success, and resulted in the formation of the province of Manitoba. The second rebellion was in 1885 in what is now north and central Saskatchewan, but was a failure, as a result of which he was hanged as a traitor in November 1885. Strangely, he was originally a martyr for the francophones, but is now the western Canadian equivalent of the Confederate Robert E. Lee. He is today venerated by the aboriginal tribes and the Metis (of which he was one) of western Canada as a liberator.

Lofgeornost #84

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Re: Your review of the life of Joan of Arc, and her being burned at the stake because she claimed to talk directly to God, thus bypassing the Roman Catholic hierarchy. The remark that this made her a premature Protestant startled me as I had never thought of that, yet once considered, it is quite logical and obvious.

“*Readercon is a serious convention* ... “ Calgary’s equivalent was Con-Version, but alas, this year’s event was announced as the last. Con-Version started out as a literary convention, but in the last five years or so was taken over by media fen, the founders having burned out and handed the reins to Generation X. Since the media fans did the work, they got to call the shots, and their decision was to replace Con-Version next year with a new convention series called Nexus. This will be a media convention, with none of those authors nobody ever heard of, like Silverberg or Niven. The book dealers have been replaced by DVD dealers, and the Golden Age is considered to be the original Star Trek series, not Heinlein, Asimov, and Clarke. The star Guest of Honour at this year’s Con-Version was an actor who had played one of Darth Vader’s flunkies in the first Star Wars movie. I’d like to see someone start up a small literary convention with only two tracks of programming, no clutter such as an art show, video room, or masquerade, and, in lieu of the aforementioned clutter, a good hospitality suite where everyone would gather after hours.

Calgary passed the million mark population earlier this year and is adding 25,000 immigrants per year from eastern Canada (mostly Ontario and the Maritimes). One would think that a city this size could support both a small literary convention and a media convention.

Why is it that the success of a convention is considered to be determined by how many people showed up? If only 1,000 people showed up for a modern American Worldcon, there would be breast-beating and ululating, while Dragon Con is envied because they get 25,000 attending. It has been pointed out many times that big conventions must have ten tracks of programming and all the sideshows in order to attract sufficient people to pay for all those facilities that are needed in order to attract sufficient people to make a big convention in the first instance. A small convention with small facilities wouldn't need hotel ballrooms, and would create greater intimacy because everyone is together in a common setting with a common experience, instead of wandering about trying to find their friends in a convention centre.

Feline Mewsings #25 Re: the Westercon 59 panel on climate change where a fight almost broke out and people were still arguing in the hallways after the panel was over. That is the hallmark of a successful panel! The only time I have seen similar action at a Calgary convention was a few years ago when there was a conspiracy theory panel. Fortunately that was the last panel

of the day in that room, so everyone stayed on for another hour or so of fistfight ..., er, I mean, lively discussion.

The Road Warrior Re: Superman movie: "*Lex Luthor is out of jail, because Superman wasn't around to testify that he stole and used two nuclear warheads.*" This is the weak point of superhero and action adventure movies, that of getting an actual conviction in court with admissible evidence. Since everyone has the right to know the name of their accuser, the superheroes would be required to divulge their real-life identities. The investigations and actions of superheroes would produce inadmissible evidence since they didn't have proper search warrants or read the villain his Miranda rights. This is why the heroes are usually content to kill the villain and blow up his secret laboratory. There is also the possibility of the villain's executor suing for wrongful death on behalf of the estate and heirs.

"Brian Keene says he wished he had used a pseudonym, a P.O. box, and/or an unlisted phone number when he started writing, because he has been harassed by over-enthusiastic fans." At Con-Version 22 this year in Calgary, military SF author David Weber mentioned that a fan had posted on the Internet Weber's phone number and street address, plus a photo of the entrance to Weber's residence. He said the thing that got him angriest about this was that he had young daughters and now feared for their safety.

Revelations From The Secret Mythos #2 Re: your seeing references to non-apa or outsider zines. These are far more abundant than SF fanzines. Most cover rock music or politics, some are topical-based, and some are put out just to satisfy the urge to publish on paper. ZINE WORLD (US\$4 cash only from Box 330156, Murfreesboro, Tennessee 37133-0156) covers a lot of these underground zines.

All other zines Read but no comments.

SEEN IN THE LITERATURE

noticed by Dale Speirs

Zhang, D.D., et al (2006) **Climatic change, wars, and dynastic cycles in China over the last millennium.** CLIMATIC CHANGE 76:459-477

This paper showed a correlation between long-term climate changes and wars in China. Allowing for a lag effect, when the climate cooled, wars and dynastic changes were more frequent because the cooler climate reduced agricultural production and therefore the size of the human population that could be supported. The three major regions of China had different cycles

because of their geographical situations. During warm years, the population built up and there was more food to go around, so the number of wars declined.

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Alter, A.L., and D.M. Oppenheimer (2006) **Predicting short-term stock fluctuations by using processing fluency.** PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES USA 103:9369-9372

“Three studies investigated the impact of the psychological principle of fluency (that people tend to prefer easily processed information) on short-term share price movements. In both a laboratory study and two analyses of naturalistic real-world stock market data, fluently named stocks robustly outperformed stocks with disfluent names in the short term. For example, in one study, an initial investment of \$1,000 yielded a profit of \$112 more after 1 day of trading for a basket of fluently named shares than for a basket of disfluently named shares. These results imply that simple, cognitive approaches to modeling human behavior sometimes outperform more typical, complex alternatives.”

Speirs: There is a general rule in accounting that when a company starts playing fancy tricks with its books that you can't understand, then it is time to sell.

Rabin, L.A., et al (2006) **The effects of wind turbines on antipredator behavior in California ground squirrels (*Spermophilus beecheyi*).** BIOLOGICAL CONSERVATION 131:410-420

*"Electricity-generating wind turbines are an attractive energy source because they are renewable and produce no emissions. However, they have at least two potentially damaging ecological effects. Their rotating blades are hazardous to raptors which occasionally fly into them. And wind turbines are very noisy when active, a feature that may interfere with the lives of animals beneath them. We studied California ground squirrels (*Spermophilus beecheyi*) in the Altamont Pass Wind Resource Area of Northern California. These squirrels emit vocalizations that alert others to the presence of a predator, and so may be forced to compensate for turbine noise by modifying antipredator behavior. We compared the antipredator behavior of squirrels at two sites, one close to and the other far from turbines, and under two conditions, during baseline and playback of conspecific alarm calls. Animals at the turbine site exhibited elevated levels of vigilance and showed increased caution demonstrated in part, by returning to the area near their burrows during alarm calling. We conclude that this site difference is probably caused by the disparity in turbine noise, since predator abundance, group size, and vegetation type and density were similar for the two sites."*

Speirs: In other words, the gophers are nervous near the turbines because they can't hear their predators coming.

Allen, A.P., et al (2006) **Kinetic effects of temperature on rates of genetic divergence and speciation.** PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES USA 103:9130-9135

"We derive a model that quantifies the role of kinetic energy in generating biodiversity. The model predicts that rates of genetic divergence and speciation are both governed by metabolic rate and therefore show the same exponential temperature dependence. Predictions are supported by global datasets from planktonic foraminifera for rates of DNA evolution and speciation spanning 30 million years. As predicted by the model, rates of speciation increase toward the tropics even after controlling for the greater ocean coverage at tropical latitudes. Our model and results indicate that individual metabolic rate is a primary determinant of evolutionary rates: 10^{13} J of energy flux per gram of tissue generates one substitution per nucleotide in the nuclear genome, and 10^{23} J of energy flux per population generates a new species of foraminifera."

Speirs: The bad news is that global warming will kill off many species. The good news is that the survivors will evolve faster.

Rubenstein, D.R., et al (2006) **Pleistocene Park: Does re-wilding North America represent sound conservation for the 21st century?** BIOLOGICAL CONSERVATION 132:232-238

"A group of conservation biologists recently proposed to populate western North America with African and Asian megafauna, including lions, elephants, cheetahs, and camels, to create a facsimile of a species assemblage that disappeared from the continent some 13,000 years ago. The goals of this program, known as "Pleistocene re-wilding" are to restore some of the evolutionary and ecological potential that was lost from North America during the Pleistocene extinctions, and help prevent the extinction of selected African and Asian mammals. Pleistocene re-wilders justify this conservation strategy on ethical and aesthetic grounds, arguing that humans have a moral responsibility to make amends for overexploitation by our ancestors. They believe that the flora of many North American terrestrial ecosystems has gone basically unchanged since the end of the Pleistocene, so re-wilding would help restore evolutionary and ecological potential and improve ecosystem functioning. This paper discusses some of the pros and cons of this proposal, including the ethical, aesthetic, ecological, and evolutionary issues, assesses its potential economic and political impacts on other conservation practices, both in North America and elsewhere, and reviews the realities of large mammal re-

introductions. It is concluded that Pleistocene re-wilding with exotic species will not restore the evolutionary or ecological potential of native North American species nor extinct Pleistocene megafauna and their ancient ecosystems, but may instead jeopardize indigenous species and North American ecosystems. Resources would be better spent on preserving threatened organisms in their native habitats and reintroducing them to places in their historical ranges from which they were only recently extirpated."

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Speirs: Perhaps I've been with the Calgary Parks Dept. too long but I immediately thought of this proposal only in terms of the trouble calls we would be getting about someone's dog being trampled by an elephant in the park, or camels wandering into back yards from an adjacent natural area and eating the vegetable garden. There are few empty niches, if any, still in existence from the Pleistocene. The cheetah is going to compete with the coyote and the wolf, and will lose because it is a solitary animal going up against pack hunters. More seriously, as someone with university botanical training, I dispute the idea that the flora of western North America is anywhere near what it was 8,000 years ago when the ice sheets melted away. North Americans have driven numerous plant species into extinction and introduced dozens of weed species that have altered the balance of local ecosystems permanently. Eden is gone forever, you re-wilders. Live with it.

Park, Y., et al (2006) **Sequestering carbon dioxide into complex structures of naturally occurring gas hydrates.** PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES USA 103:12690-12694

“Large amounts of CH₄ in the form of solid hydrates are stored on continental margins and in permafrost regions. If these CH₄ hydrates could be converted into CO₂ hydrates, they would serve double duty as CH₄ sources and CO₂ storage sites. We explore here the swapping phenomenon occurring in structure I (sI) and structure II (sII) CH₄ hydrate deposits through spectroscopic analyses and its potential application to CO₂ sequestration at the preliminary phase. The present 85% CH₄ recovery rate in sI CH₄ hydrate achieved by the direct use of binary N₂ + CO₂ guests is surprising when compared with the rate of 64% for a pure CO₂ guest attained in the previous approach. The direct use of a mixture of N₂ + CO₂ eliminates the requirement of a CO₂ separation/purification process. In addition, the simultaneously occurring dual mechanism of CO₂ sequestration and CH₄ recovery is expected to provide the physicochemical background required for developing a promising large-scale approach with economic feasibility. In the case of sII CH₄ hydrates, we observe a spontaneous structure transition of sII to sI during the replacement and a cage-specific distribution of guest molecules. A significant change of the lattice dimension caused by structure transformation induces a relative number of small cage sites to

reduce, resulting in the considerable increase of CH₄ recovery rate. The mutually interactive pattern of targeted guest–cage conjugates possesses important implications for the diverse hydrate-based inclusion phenomena as illustrated in the swapping process between CO₂ stream and complex CH₄ hydrate structure.”

Speirs: In other words, killing two birds with one stone, by pumping in carbon dioxide and getting back natural gas.

Lasser, K.E., et al (2006) **Access to care, health status, and health disparities in the United States and Canada: Results of a cross-national population-based survey.** AMERICAN JOURNAL OF PUBLIC HEALTH 96:1300-1307

“We compared health status, access to care, and utilization of medical services in the United States and Canada and compared disparities according to race, income, and immigrant status. We analyzed population-based data on 3505 Canadian and 5183 US adults from the Joint Canada/US Survey of Health. Controlling for gender, age, income, race, and immigrant status, we used logistic regression to analyze country as a predictor of access to care, quality of care, and satisfaction with care and as a predictor of disparities in these measures. In multivariate analyses, US respondents (compared with Canadians)

were less likely to have a regular doctor, more likely to have unmet health needs, and more likely to forgo needed medicines. Disparities on the basis of race, income, and immigrant status were present in both countries but were more extreme in the United States. United States residents are less able to access care than are Canadians. Universal coverage appears to reduce most disparities in access to care."

Universal Postal Union (downloaded 2006-10-15) **Postal Statistics.** UPU Database, sections 3.1, 8.2, 8.3, 9.1, 9.2

The Universal Postal Union is the international organization of all national post offices. Its main purpose is to standardize the exchange of mail between countries, but it also collects statistics. Because of the time lag in getting member countries to cough up the data, the 2004 data have only just now been released.

Total number of permanent post offices worldwide was 672,279 in 2000, declining to 663,045 in 2004.

445 billion letters were mailed in 2000, but only 431 billion in 2004. In the package business, 4.8 billion parcels were mailed in 2000, increasing to 5.4 billion parcels in 2004.

PUT ON A HAPPY STAMP.

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In a previous issue of OPUNTIA, I showed my personalized stamp from Canada Post. Peter Netmail, of Minden, Deutschland, sent me one of his, issued by Hungary, shown here. Does anyone else have one?

