Between 1969 and 1972, twelve humans walked on another world. After the most awesome technological and psychological achievement of the human species, they left, never to return. Why? Was it a useless waste of human ingenuity on an Olympian folly? What caused humanity to abandon it’s first toehold on another world? More importantly, what is the basis to go back? What new forces and motivators are at play today that make the story a different one than the Moon 1.0 dead end?

Today there is a rebirth of interest in going back to the Moon among many nations. However, while nations plan and strategize how to navigate the political mine fields and conflicting national priorities that justify the value of the Moon to the everyday tax payer, there are some new kids on the block not so constrained. They are the privateers; visionaries too; their driving metric for going to the Moon is sustainable business and commerce. The announcement of the $30 million Google Lunar X PRIZE on September 13th, 2007, has energized their imaginations and catalyzed a new race to the moon—Moon 2.0.

Bob Richards is Founder and CEO of Odyssey Moon Limited, the first official contender for the $30M Google Lunar X PRIZE. Odyssey Moon missions involve a unique robotic lander, designed in collaboration with NASA, to deliver payloads to the Moon in support of science, exploration and commerce.

In this talk Bob Richards will outline how a carefully planned private Moon mission could set in motion the technological, political, legal and regulatory precedents that will allow humanity, rationally and peacefully, to embrace and develop the Moon as the world’s eighth continent.

Bob studied aerospace and industrial engineering at Ryerson University, physics and astronomy at the University of Toronto, and space science at Cornell University, where he became special assistant to Carl Sagan. In 1987, Bob co-founded the International Space University with Peter Diamandis and Todd Hawley; today ISU is a global institution with a central campus in Strasbourg, France. While a student in the 1980’s Bob also co-founded the Space Generation Foundation and Students for the Exploration and Development of Space (SEDS).

In 2008, Bob joined Peter Diamandis, Ray Kurzweil and other leading thinkers in the founding of Singularity University, an institution dedicated to preparing humanity for accelerating technological change, based at the NASA Research Park in Silicon Valley.

Bob is an evangelist of the NewSpace movement and has been a catalyst for a number of commercial space ventures. He is the recipient of the K.E. Tsiolkovski Medal (Russia, 1995), the Space Frontier Vision to Reality Award (USA, 1994), the Arthur C. Clarke Commendation (Sri Lanka, 1990) and Aviation & Space Technology Laurel (USA, 1988). He is a contributing author of Blueprint for Space (Smithsonian Institution 1992); Return to the Moon (Apogee Books 2005) and The Farthest Shore (ISU Press 2009).

As Director of the Optech Space Division from 2002-2009, Bob led the company’s technology into orbit in 2004 and to the surface of Mars in 2008 aboard the NASA Phoenix Lander, making the first discovery of falling Martian snow.

**NOTICE:** Our March talk is a replacement for that previously scheduled; thanks to Dr. Richards for stepping in!
ON THE TRAIL OF THE WILEY WEASEL

San Francisco

It takes great skill to condense thirty-five years of study into a fascinating, slide-studded, after-dinner presentation, which is just what professor, wildlife biologist and Explorers Club member, Reg Barrett, succeeded in doing at our February 26 dinner meeting.

In 1975, on the recommendation of one of his professors, he embarked on a quest that has become his entire career. Little did he suspect how passionate he would become about tracking and studying the threatened Pacific Fisher (Martes pennanti), a small carnivorous member of the weasel family. The remaining fishers now exist almost entirely in the southern Sierra National Forest and in the very northwest part of the state, where once they were found along the entire north and western part of California.

Like with many other species, a conflict rages between wildlife and, in the case of the fisher, the California timber industry, with the Forest Service all too often taking an ostrich approach to the issue. As a result, the fisher’s habitat has been shrinking and its population has been in decline.

The fisher’s habitat requirements place it on a collision course with the timber industry since it favors dense old-growth forest, won’t cross open country and thrives in a limited altitude range of 3000 to 7000 feet. The total biomass of trees is important to the fisher and, between aggressive timber harvesting in the 50’s plus a permitted cut that was tripled during the Bush years, there are only 32 known fishers in the southern Sierra Nevada, all of which have been radio-collared (GPS). They are tracked by aerial radiotelemetry to conduct in-depth studies of behavior. Their activities and range are captured by numerous cameras as well.

In addition to logging, other mortality threats include predation, vehicle traffic and disease. Their natural prey of porcupines and snowshoe hares have all but disappeared, though a fun side note is that they love pecans!

A lively question and answer period followed an excellent presentation – and the future? Surprisingly, many new wildlife biology students have no outdoor experience of any kind. Professor Barrett’s plans are to continue tracking and studying these very fast moving, elusive and interesting animals, in an attempt to raise awareness of their plight while rebuilding, expanding and stabilizing their population.

(V. Hurson)
**Marin Women Award Joan Linn Bekins**— Joan Linn Bekins FN86 will be inducted into the Marin Women’s Hall of Fame on March 20 at a festive dinner and program that will honor nine Marin women who have made significant contributions to the county. Joan will be honored for her 42 years of “Community Service” as a volunteer.

Joan Linn was one of thirty-five business people chosen by the San Francisco Chronicle as “Bay Area Leaders Who Made Their Mark in 1963.” She was a successful professional public relations woman representing agricultural industries when she married Don Bekins. With their infant, Linn, in a backpack, and leading toddler, Laurence, by the hand, Joan started walking with Elizabeth Terwilliger in 1967. It changed the course of her life.

Joan became the energetic volunteer “woman behind the woman.” She publicized and nominated Mrs. T for numerous awards to direct public attention to Mrs. T’s important work in nature education. In 1970, Joan launched the Terwilliger Nature Guides who have led tens-of-thousands of children on school field trips. In 1975, Joan founded the non-profit Elizabeth Terwilliger Nature Education Foundation, and in 1984, the Terwilliger Guild.

While education chairwoman of Marin Audubon Society’s board in 1972, Joan conceived the idea of the “Tripping with Terwilliger” film series. To date, seventy million children have met Mrs. T via film in classrooms throughout the U.S.

In 1979, Joan obtained Buck Trust funding to provide volunteers an office and staff for new Terwilliger Nature Guides. Nature Vans filled with taxidermed animals made school presentations in eleven Bay Area counties, often reaching 200 students a day. She has edited and published educational books and record albums.

An advocate for Open Space, Joan chaired an ad hoc committee in 1999 to fund and reinstate the Marin County Open Space naturalist-interpreter position. She continues to educate others about nature through her numerous Bay Area photography exhibitions that benefit non-profits. She also writes a newspaper column, “Wildflower Watch” illustrated by her photographs. Joan’s dedicated commitment to nature education has had a positive effect on the lives of children and adults throughout the lives Marin and the nation.

**The Corner Chair**— The mysteries of the Upper Nile held Becky and me too long so we missed our Explorers meeting; I should miss more often—Vice Chair Anders Jepsen ran the show so well.

Egypt is sanctified by the Dead in temples, tombs, and pyramids all over; the Giza Pyramids confirmed my hypothesis; the Cheops and Chephren Pharaohs from the Old Kingdom built their own in sacred mountains. Building mountains made it too easy for grave robbers and expensive so the Middle Kingdom Pharaohs (the Ramses gang, Sushiput, Tut Ankh Amon, etc) built their impressive underground hidden tombs in a sacred mountain at the Valley of the Kings.

So much of this astounding sacred building has survived the weather and floods in spite of the European graffiti from as early as 1814 (in the middle of a pyramid we hiked into) and the colossal rip-offs from Europe (more antiquities in the British Museum than the Egyptian museum and one Austrian Prince appropriated a whole Middle Kingdom temple).

We traveled the Nile from the Mediterranean at Alexandria to the Sudan border to explore 6000 years of construction, much still standing. Imagine Tut ankh amon, a relatively poor and short lived pharaoh still stuns the world with his whole floor of comparatively second-tier gold objects in the Egyptian Museum (with a small sampling now at our De Young.) All from his smallish short tomb that we climbed into.

Travel in Egypt requires a strong grip on your stomach and wallet—they are masters of the bait and switch—now you see it and now you don’t when you open the package; we were assigned the “best” room on a 5-star boat up the Nile, Room 336, only to find (too late) there was no such room and 5 stars meant 2 stars.

The Nile is smaller than the Mississippi; yet, even now, it’s more inspiring, especially when it meets the Nubian Desert far south. Why did it spawn so much more early human progress: religion, civilization, agriculture, arts? Grand as it looks, don’t swim in it: parasites, crocodiles, turds, Heiniken beer cans, sugar cane, pesticides.

Death is a science in this Land of the Dead overseen by Egyptologists. Temples, pyramids, tombs, mummies, infelids, separate but unequal Muslim and Christian cemeteries, and home of Osiris (God of the Underworld, whose wife Isis saved him from his brother Seth who buried him in a tree and cut him into 42 pieces—a nasty and love story at the same time).

For me a high point was our journey into the Western Desert near Nubia with Lula and Lala, great companions, for camels. Souvenirs and security are big in Egypt. Soldiers, Tourist Police, local and national police. I don’t know how their war on terror is going, but they certainly keep we tourists in our channels.

Must sees in Cairo: The Egyptian Museum, the new opera house (we heard Beethoven!), the Christian Orthodox complex, three grottoes claim to be where Jesus and Mary hid out from Herod. (Its scary nowadays for the 10% Coptic Christian minority.) Don’t spend too much time in town without a smog mask.

Egypt is a very rich poor country—sugar and cotton, oil and gas, gold and minerals, manufacturing and tourism; yet for foreign aid purposes it’s “developmentally disadvantaged.” Why? “Because,” according to many Egyptians, “the government, like the rich, want to keep the labor cheap and people poor.”

It turns out the Pharaohs were lovers. By the New Kingdom their wife’s statues embrace the Pharaoh and are almost as tall; Ramses II built an extraordinary temple for his favorite wife Nefertiti, carved from a mountain at Abu Simble (saved from drowning in the Aswan dam lake by building a new man-made mountain.)

Don’t miss Egypt—there’s much to learn from the Dead:

“The dead teach patience
The dead teach emptiness
Time is relative
Time is finite
Time is precious
Death is infinite”

Chief Priest for Pharaoh RAMSES III at Karnath, Luxor Temple to Horus

—Alan Nichols (FN84)
March 2010

Preparation for Moon 2.0
26 March — University Club, San Francisco

Northern California Calendar of Events
(venues will be identified as soon as known)

Our next Meetings
March 26 (Friday) — Bob Richards
Odyssey Moon — University Club

Future Events
April 30 — Seth Shostak
Are We Alone in Space? — University Club
May 8 — SeaShore Field Trip
Point Lobos, Monterey Peninsula
May 21 — planning
June TBD — Angel Island Picnic
July 1 — Joint Meet with Dendrology Society
Marcel Robinson — University Club

Earlier Meetings (2009-10)
April 24 — Christopher Whittier
Stories of Gorilla Country, GGYC
May 9 — Paul Freitas, MD
Medical Emergency Field Expedition, Mt. Diablo
May 15 — Doug Findley
Sailing the NW Passage, GGYC
June 6 — Angel Island Picnic
June 13 — Mt. Shasta Climb
September 25 — Jim Sano
Retracing Shackleton, GGYC
October 30 — Diana Pickworth
Yemen Archaeology, GGYC
November 20 — Nathaniel J Dominy
Tsavo Lions of yore, Dana home, Tiburon
December 5 — Fofos Gonzales
Cave Field Expedition
December 12 — Alan & Becky Nichols
Chair’s Member Reception, Nichols home, Tiburon
January 29, 2010 — several
Story Night
February 26, 2010 — Reginald Barrett
The Elusive Fisher — University Club

We have established a PayPal account.
For those of you who have these accounts, you can sign up and remit dinner costs to the NorCA Chapter by transferring money to: explorersnorca@gmail.com

There is also a PAYPAL BUTTON on our website (www.explorersnorca.org); easy to use!

We will have Valet Parking for $20; the Brocklebank Garage on Sacramento is only $10! Other nearby garages are expensive. Some street parking. Muni (cable cars OR Sacramento #1) is very near; BART connections are easy; CalTrans a good option. Car pool! The University Club is wheelchair accessible.