



OUR TOWN

THE OFFICIAL NEWSLETTER OF THE TOWN OF LOS ALTOS HILLS

JUNE 2014



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WATER NEEDED

Landscape decisions determine the amount of supplemental water. Listed below are inches of water needed during the month of July when evaporation rates are greatest.

TURF WITH SPRAY IRRIGATION

9.9

UNCOVERED POOL

7.4

VINEYARD WITH DRIP IRRIGATION

6.3

NATIVE MEADOW

2.4

ESTABLISHED NATIVE PLANTS

<1



When Water Runs Dry

California is facing an unprecedented drought. Calendar year 2013 marked the lowest precipitation on record for the state, and this past winter was the warmest. Governor Brown called for an immediate 20% reduction in water use. The Sierra Nevada snowpack, by far the largest water source for Los Altos Hills, is just 12% of normal. There is not enough stored water to continue past water use practices. California's economy and environment depend on wise use of this precious resource. [CONTINUED ON PAGE 2]



“People need to live within their hydrologic reality.”

Barbara Vlamis of AquAlliance



Highest Users

Of all the communities served by San Francisco Public Utility Commission's Hetch Hetchy water supply source, Los Altos Hills ranks highest in per capita consumption. The average Los Altos Hills resident uses over 70% of water for irrigation and another 10% is estimated lost to leaks. Results vary substantially by home and landscape. The majority of water is used to irrigate plants that are not suitable for our climate. The most egregious offender is turf.

Leaks are easy to detect but the source can be hard to find. Recording the water meter level over a span of hours while the house is unoccupied can determine if a leak exists. The most likely sources of leaks are toilets. The rubber seal between the tank and the bowl can degrade and leak within five years of installation. Another common leak mechanism is the natural settling of hillsides which can cause water main breaks.

Climate Suitable Landscapes

The amount of water needed for landscapes depends on three decisions: soil management, plant choice, and irrigation method. Water conservation starts with soil health. Deep roots and biologically active soil provide greater moisture retention and thus allow longer duration between irrigation. Biannual soil amendment with compost and mulch is recommended. Deep-rooted native plants can withstand fairly long dry periods but do benefit from occasional summer irrigation. Turf, with shallow roots and frequent

Long, native grasses require a fraction of water compared to turf and annual cutting

cutting, requires considerable irrigation — four to 10 times more than longer, uncut native grasses. Beautiful palettes of climate suitable plants are available for replacing lawns. There are multiple benefits of native plants compared with the monoculture of turf: less water, less maintenance, less creek-polluting fertilizer and pesticides, greater scenic variation and biodiversity, and greater sustainability for all.

In terms of irrigation methods, spray water irrigation is typically only 60% efficient, while drip or subsurface irrigation is 95% efficient.

Water Reuse

Greywater systems repurpose water from laundry, sinks or showers to other non-potable uses such as irrigation or water

to flush toilets. Simple laundry-to-landscape systems do not require permits and can qualify for a \$100 rebate from Santa Clara Valley Water District (SCVWD). Rainwater harvest systems are increasingly available in various sizes for above-ground or below-ground storage tanks. Irrigation is the primary use for rain catchments but with appropriate permits, rainwater can also be used for toilets or laundry.

River On Tap

Los Altos Hills is serviced by two water retailers, Purissima Hills Water District (PHWD) and California Water Service (CWS). The Tuolumne River is the primary source of water for PHWD and is stored in Hetch Hetchy Reservoir and locally in Calaveras and Crystal Springs reservoirs. California Water Service purchases water from the Santa Clara Valley Water District (SCVWD). SCVWD sources 55% of its water supply from the Delta, via pumps and canals fed by the Sacramento and San Joaquin rivers and their many tributaries. Local surface runoff and groundwater typically account for 40% of supply and recycled water is 5%. The drought has reduced imported water supplies, forcing SCVWD to reduce treated water supplies and to require CWS to rely more heavily on mineral-rich groundwater.

San Francisco Public Utilities Commission (SFPUC) is the wholesaler to PHWD and presently has requested a 10% voluntary cut back in water use. SCVWD has cut water allotments to

Residential Per Capita Consumption

FY2011-2012
(in gallons per capita per day)



municipalities and water companies by 20%. Expect continued guidance from water retailers as the year progresses.

Fish Out of Water

Since California became a state, water management decisions regarding agriculture and urban water demands have harmed riparian and freshwater ecosystems. Nearly every river and stream in California has been dammed, cemented, or diverted, pushing many aquatic species toward extinction. Seventy-eight percent of California's native freshwater fish are either extinct or in peril of extinction. For example, endangered steelhead trout that once filled many of Santa Clara Valley's creeks are a mere fraction of their populations in the 1950s. Gary Stern of NOAA-Fisheries cautioned SCVWD to manage the remaining steelhead streams (Stevens, Coyote, Guadalupe) with care and urgency before "remnant populations wink out."



TOP TIPS FOR SAVING WATER

- Monitor water meter for leaks (you can also check toilets with dye tablets)
- Replace lawn with low water plants native to California central coast
- Amend soil with compost and mulch semiannually
- Replace inefficient spray irrigation with drip or stream spray such as MP Rotators
- Irrigate only at night or early morning
- Install a weather or soil moisture-based irrigation controller
- Use broom not hose to clean hardscape
- Capture rainwater or reuse greywater
- Not sure how to save? Free home water audits are available to all residents through Santa Clara Valley Water District's Water Wise House Call program for leak detection, personalized advice, and rebate information: www.valleywater.org/programs/waterconservation.aspx.



Average Water Usage in Los Altos Hills 2013

- 74% Irrigation
- 10% Leaks
- 4% Laundry
- 4% Showers
- 4% Sinks
- 4% Toilets

Timber

The drought conditions mean the state has experienced three times the typical number of wildfires so far this year. Large and thirsty trees such as Redwoods and Eucalyptus that are showing signs of stress from the drought may also pose fire and falling risks.

Energy-Water Nexus

Water and energy are reciprocally and inextricably connected. Each is needed to produce the other. Over 30% of the state's energy is used to move and treat water. Conserving water conserves energy and reduces greenhouse gas emissions.

Water Waste Restrictions

Water waste is prohibited regardless of drought status. The Urban Water Management Plan for the Santa Clara Valley Water District provides guidelines to minimize water waste.

- Irrigate only between 5:00 pm and 9:00 am
- No water flow or runoff on to streets or walkways
- Washing hard surfaces and vehicles with a self-closing water shut-off device only
- Obligation to fix leaks within 7 days
- Fountains must use re-circulating water

If drought conditions persist or worsen, restrictions on outdoor water use will tighten. At the highest drought emergency level, irrigation is prohibited. Violators face strict water allocation or flow restrictors. "We will continue to work with our customers, cities, towns, and other stakeholders on ways to use water efficiently. This includes working

with individual cities or towns if they opt to implement water use ordinances or additional conservation programs," said Christopher Wilson, Customer Service Manager, California Water Service. In addition, Santa Clara Valley Water District has developed a mobile application, Access Valley Water, for faster communication of concerns of water misuse, creek inquiries, and other questions.

The drought of 1975-77 spurred water saving innovations such as low-flow toilets and drip irrigation. As populations continue to increase and fresh water supplies diminish, behavioral change is the least expensive and most rational response to drought. "We're facing a tough water supply challenge this year. Reducing outdoor irrigation by one or two days a week can go a long way to meeting our goal. Customers have responded well when we've called for reductions in the past, and we're expecting the same positive response this time. We've got to stretch our Hetch Hetchy supply as far as possible," cautioned Steve Ritchie, Assistant General Manager, Water Enterprise of San Francisco Public Utilities Commission. "A crisis can be a catalyst for change," urged Brian Schmidt, Vice Chair SCVWD Board of Directors.

Kit Gordon is a retired engineer working on water conservation and creek restoration.



TO LEARN MORE:

Visit the following helpful websites: valleywater.org/drought2014/; purissimawater.org; calwater.com; saveourh2o.org; cnps.org; bayfriendly-coalition.org; DroughtLAH@gmail.com.



iddle school (grades six to eight) is an important time to expose students to many opportunities because they are still open-minded and proceed without fear. STEM (science, technology, engineering, math) projects provide risk-taking in a safe environment where students can get meaningful feedback and build confidence. Plus, these projects encourage students to work in teams. If some student is less interested, they can participate by working with friends.

“STEM projects and electives are important to junior high students because these experiences help the students develop critical thinking and problem solving skills. The ‘Wow!’ moments teach students that obstacles and challenges can be overcome with perseverance,” said Peter Swenson, Robotics Instructor at Egan Junior High School. “Technology electives can provide an environment that encourages a student who might have had a negative experience in mathematics or science in the past to have a change of heart and develop an interest in STEM



STEM

INSPIRING THE NEXT GENERATION

subjects. Every student can benefit from critical thinking challenges and group projects.”

Tamara Juarez, Science Instructional Supervisor at Terman Middle School says that all students learn the scientific method and to apply what they learn to projects of their choosing in the school STEM program.

Terman Science Fair

The Terman Science Fair has been going strong since 2001. This year, the fair was supported by over 80 teachers, parents, and community volunteers; and, though participation is optional, 256 of the school’s 750 students entered this year, the majority in eighth grade.

To foster teamwork and encourage risk taking, the Terman fair does not choose winners. For science fair ideas, please visit sciencebuddies.org.

Synopsis Science Fair

The Synopsis Science Fair, open to grades 6-12, offers a competitive opportunity with teacher sponsorship and meaningful judging. “The students learn it is OK to be loudly wrong,” said Dr. Mallika Srinivasan and a judge for the Synopsis Science Fair at the high school level. “Science projects allow students to ask questions boldly and subsequently explain the success or failure of their experiments to interested adults. Those who go on to enter the Synopsis competition in high school have the confidence to approach problems and the ability to solve them.” A total of 31 students from local schools – Blach, Gardner Bullis, Los Altos HS, Gunn HS, Jordan, Palo Alto HS, JLS, Terman – came home with awards from Synopsis held on April 12-13. Eight of those students with first place awards – Gardner Bullis, Gunn HS, JLS, Terman – are eligible to compete in the California State Science Fair on April 28-29. For a full listing of awards, please visit science-fair.org.

LASD STEM

Los Altos schools – Loyola, Santa Rita, Gardner Bullis – have taken a step to expand on science fairs by holding STEM Expos. Added to the traditional category of scientific inquiry are invention, reverse engineering, robotics, environmental innovation, and Rube Goldberg. “The STEM program has been an amazing experience,” commented Grace Choi, STEM teacher at Loyola School. “There is so much more interest and excitement among the students to get their hands dirty and build – to think outside the box. The STEM Expo provides wonderful learning opportunities in various categories. For example, in the category of reverse engineering students see what’s inside a tiny box and are able to explore the scientific principles behind why things work.”

BCS STEAM

With the new Fabrication Lab (FabLab), Bullis Charter School expanded on its STEAM curriculum (STEAM adds art into STEM). In fifth grade, for example, students first learn about the human muscular system in science. In art class, they apply math skills to build 3-D wire human models to a small, but accurate scale by adding color-coded muscles made from modeling clay. The FabLab combines advanced engineering equipment and hands-on shop-style building. As part of the same unit, students explore how to move a prosthetic hand by constructing a model using parts made with a 3-D printer. Then, using 3-D computer modeling, students design improvements for the prosthetic hands based on anticipated use. For more on FabLab, please visit fablab-school.org.

The Tech Challenge

Offered by The Tech Museum, The Tech Challenge, for grades 5-12, took place on April 12-13 with over 400 teams. The challenges align with the new Common Core Science Standards recently adopted by California. The challenge “reinforces 21st-century skills of creativity, problem solving, design, teamwork, leadership, presentation, risk-taking, perseverance, and learning from failure.” Eight teams from local schools – Blach, Bullis Charter, Egan, Gardner Bullis, Gunn HS, Springer – won awards this year. For a full listing of awards, please visit <http://thetechchallenge.thetech.org>.

Heather Rose is chair of the Los Altos Hills Education Committee.



Above: The Fantastic V team of sixth graders show their device to transfer water by wind at the Gardner Bullis STEM Expo after their win at The Tech Challenge. Right: The Loyola School STEM Expo expands on the traditional science fair with new categories like reverse engineering, robotics, and Rube Goldberg.

Dye Takes the Reins at Westwind

In January of this year, the town council awarded Torie Dye of Victoria Dye Equestrian (VDE) a three-year contract as concessionaire of Westwind Community Barn (Westwind) which has been managed by the town since 2008. Torie expressed to councilmembers her plan to expand the riding program, to increase participation, and raise boarding revenues. In March, soon after the completion of the lower arena renovation, VDE relaunched the Year Round Riding Program. Torie says, "I am really excited to be working and teaching at such a beautiful facility. My clients have been really enjoying the beautiful surrounding and renovated lower arena." VDE will also be offering a Summer Riding Camp (see below).

Dye and her two sisters grew up in Rancho Palos Verdes where she fell in love with horses at an early age. "When I was little," she explains, "my mom read me the Black Stallion books. I became interested in horses and my

school's equestrian team, participating in five to seven shows per year.

Dye attended Cal Poly San Luis Obispo, a perfect fit for someone who loves horses. "As a member of the thoroughbred enterprise program," she said, "I foaled out thoroughbred horses, raised them, and took them to sale as yearlings to sell as race-horses. In the nutrition enterprise program, we studied the effects of new types of feed with a test and control group of horses. In the breeding enterprise program, we learned how to ultrasound mares and track their reproductive cycle to see when they were ready to be bred." That experience was valuable when Dye interned at Pioneer Equine Hospital in Oakdale. During her college years, Dye was also a member of the Cal Poly Dressage team.

After college, Dye worked at Millers Equestrian Center and Sanctuary, which teaches children life lessons through training, riding, and caring for horses. In addition, the organization also rescues horses and finds safe

homes for them. From San Luis Obispo, Dye moved back to the Bay Area, to become Director of School Horse Operation at Fremont Hills Stables. "Fremont Hills Stables was a great opportunity to work with some of the leaders in the Bay Area horse scene," she says. "I learned so much from working with renowned horseman Richard Serrini. It was similar to my role at Millers Equestrian — teaching lessons to children and adults, managing the horse herd health care and training, record-keeping, and maintaining a safe and positive learning environment."

Dye is eager to bring her passion and expertise to Westwind Community Barn and its programs. "Westwind is a wonderful, beautiful place. I feel so lucky to work here and be a part of this community," she adds. "I want my students to be well-rounded horse people with a thorough understanding and respect for the amazing horse. I hope to be here for a long time — with lots of happy horses and riders."



mom took me for my first lesson at Portuguese Bend Pony Club. Although no one else in my family rode, I rode every day." In high school, Dye was a member of the

SUMMER RIDING CAMP AT WESTWIND COMMUNITY BARN

For more information please contact Victoria Dye Equestrian at ridewithVDE@gmail.com.

Beginner

Days: Monday - Friday
Beginner Session 1: 6/16 – 6/20
Beginner Session 2: 6/23 – 6/27
Beginner Session 3: 6/30 – 7/4

Intermediate Session 1

Days: Tuesdays -Fridays
Intermediate Session 1:
7/8 - 7/11 and 7/14 - 7/18

Intermediate Session 2

Days: Tuesdays -Fridays
Intermediate Session 2:
7/22 – 7/25 and 7/29 – 8/1

Advanced

Days: Tuesdays -Fridays
Advanced Camp: 8/5 – 8/8* and
8/12 – 8/15
*8/8 Parents will transport kids at
12:30 pm to the Menlo Charity
Horse Show at the Menlo Circus

Time: 8:30 am – 12:30 pm
Ages: 6 and up
Location: Westwind
Community Barn
Beginner 5-Day Camp Fees:
\$350 Residents
\$375 Non-Residents

Intermediate and Advanced

8 Day Camp Fees:
\$550 Residents
\$575 Non-Residents

GOPHER



Gophers and moles are common in Los Altos Hills. Both animals burrow, improve soil quality, and provide food for other wildlife, but while the gopher is an agricultural pest, the mole is a beneficial predator.



OR MOLE?

The Botta's pocket gopher (*Thomomys bottae*) eats roots, bulbs, and plants.

It occurs in both sandy and clay soils.

Its burrows can extend 10 feet deep. The burrow system consists of a large den and connecting tunnels, including up to 200 feet of main tunnel and another 250 feet of lateral tunnels. It has one to four litters of two to 12 young per year and its reproductive season is prolonged in areas that are irrigated. A gopher lives up to five years, and each surviving young sets up its own territory and burrow system.

Conversely, the broad-footed mole (*Scapanus latimanus*) eats insects, larvae, grubs, and earthworms. It prefers untilled soil with low clay content and high moisture. It has one litter a year of four to six young. A mole lives up to five years, and each surviving young sets up its own territory, but may use an existing burrow system.

Habits

The lateral tunnels off of the main gopher burrow are used to dispose of excess dirt, which is the mound we see. The lateral tunnels can extend 18 inches from the main tunnel. The gopher eats up to six ounces daily, but because it seeks roots and soft plant parts, it can destroy many more ounces of garden plants. In addition, gophers fill cheek pouches with food, and hoard food in chambers within the burrow system.

A mole will tunnel near the soil surface in search of insects and create a mound of soil that is the roof of its tunnel. The tunnels



lead to nest chambers that may be as far as two feet below the surface, or may be under buildings or paving so they remain dry. The mole constantly tunnels in search of food, eating up to three ounces daily. Their mounds can ruin the look of the garden while they are busy finding the insects that could also be ruining the garden. Moles have been documented to store earthworms, but they don't have cheek pouches and don't depend on a food cache.

Control

If trapping is used, gopher traps should be set in the main, high-traffic tunnel, not in the lateral tunnel or the pile of dirt. Trapping is more successful in spring and fall when gophers are more active.

Baits are toxic to pets and wildlife and are not recommended. With the exception of carbon monoxide, fumigants are not very effective; the gophers sense the gas and plug the tunnel. Fumigants can also kill non-target wildlife. Juicy Fruit bubblegum is an effective weapon against gophers. A gopher will die after eating the gum, because the gum clogs up its digestive tract.

Natural predators include gopher snakes, skunks, bobcats, coyotes, owls, and hawks.

Natural repellents include castor oil pellets or spurge plants. Activity may increase before it decreases as the animals move away.

Taylor Vanderlip is an environmental consultant specializing in biological issues.

- Moles work in four hour shifts, and tend to stop working when above-ground activities cause vibrations.
- Moles can excavate 12 to 15 feet of tunnel per hour.
- If food is scarce below ground, moles can hunt frogs and mice above ground.
- The gopher can close its mouth behind its front teeth so it can dig without getting dirt into its mouth.
- Gopher burrow systems include side tunnels for latrine, larder, and nest areas.
- Gophers teeth grow continuously and must be kept trim by constant gnawing.
- You can't see into either a gopher or mole burrow without moving a mound of dirt; if you can see into the burrow, it is a different burrowing animal, such as a ground squirrel.

Each year at the Town Picnic, curious residents huddle around a booth that showcases a robot designed and built by the Gunn Robotics Team (GRT). The team was founded in 1995 by Bill Dunbar, an electrical engineer and physics instructor at Gunn High School in Palo Alto. At that time, the Engineering Technology program at the school was struggling, and the robotics class consisted of eight students, all male. Mr. Dunbar founded the team as a way to help struggling students find a reason to be academically engaged. Today, the team has grown to 54 members, ranging from tenth to twelfth graders. Students are representative of the community: five are from Los Altos Hills, 44 from Palo Alto, and five from surrounding cities. The team is about one-quarter girls. Gunn students who are interested in joining the team fill out an application in the spring. The GRT demos robots during school club days to pique interest in the team, as well as participates in an array of community outreach programs for K-12 students to ensure that students entering Gunn know about the team. As competition season draws near, team members dye their hair red, boosting team spirit as well as the team's visibility.

THE GUNN ROBOTICS TEAM



By working on robotics, students learn how to define their own objectives and outline the constraints of complex problems. Unlike a typical school assignment, the competition does not come with a rubric. There are many ways to win the competition and many different strategies to pursue.

Students also learn how to balance working in a professional environment with maintaining close friendships. Often students with differing viewpoints work on the same project and learn to compromise. In addition, the robotics team does not live in a vacuum. The GRT works with a plethora of sponsors to secure funding and manufacturing aid, and students are the sole point of contact. They learn how two different organizations can interact even when the liaisons are ephemeral (students graduate).

In 2013, the team won the Utah Regional with a robot that shot frisbees into goals and climbed a metal pyramid. In 2014, the GRT won an award for Engineering Excel-

lence at all three regional competitions the team attended.

The entirety of the team's membership is trained on the machines in the team's machine shop. A small subset hone their skills to an elevated level and work on designing and manufacturing the robot's gearboxes. The controls group, consisting of about six students, wire and program the robot and collaborate with the drive team. The drive team operates the robot, and makes the robot as easy to use as possible. Some students specialize in precision machining utilizing the CNC mill, used for the more complex parts that cannot be made by hand. In addition, a team of students weld the robot once the parts are completed.

A typical robot takes about six weeks to build, roughly 10,000 hours of work between the students. The machine shop is open seven days a week during the fabrication phase. Student Catherine Nguyen elaborates, "The robot that we built this

year cost about \$2,500 in materials, but we spent \$40,000 on tools and other development expenses. The robot is 100% student-made. The only things we purchase are raw materials (metal and plastic stock), fasteners (screws, nuts, rivets), and components like gears and belts."

One of the most difficult challenges that the team faces in building a robot is maintaining communication between the team's subgroups. The robot is made up of many electrical, mechanical, and pneumatic systems, and it is very difficult for the students in charge of these systems to integrate them all into one robot.

Fortunately for the team members, the easiest part of building a robot is staying motivated. Senior Neel Guha says, "The process is so fun and engaging that team members are eager to devote large amounts of time to the robotics team."

To learn more about the team, please contact Soumithri Bala at gunnrobotics192@gmail.com.

INTERVIEW WITH A TEENAGE HAM OPERATOR

Los Altos Hills resident Miles Seiver received his ham license as K16LDU at the age of 16 and joined the Emergency Communications Committee (ECC) the same year, where he has been an active member and earned his CERT certification. He is now a senior at Stanford University.

In a natural disaster, why would a ham operator be so critical?

Communication is the most important resource after a natural disaster. At every level — from family to neighborhood to town to county — individuals need to share messages to check wellbeing and coordinate relief efforts. When the telephone system fails, ham radio operators step in to provide communication. It's especially important for a town like Los Altos Hills, which contracts out its fire and police response, to organize mutual aid and disaster response with these external agencies.

How did you hear about ham radio and the town's committee?

The first time I saw a ham radio, I had to have one. It was at the Town Picnic when I was a sophomore in high school. A huge antenna extending from a booth caught my attention. I walked over to investigate the antenna's base. What I found were some friendly people, members of the town's ECC — sitting near a radio with all sorts of interesting knobs, buttons, and displays. Right away, I wanted to understand each component. The group eagerly answered each of my questions and — best of all — said that I might be able to get a radio of my own if I joined their group. I was sold. I applied the next day.

Was it hard getting the required FCC license?

It was very easy to become licensed — it only took one Saturday. There are "ham cram" sessions that lead you through all the material you need to know and prepare for the short multiple-choice test given at the end of class. The pass rate is about 95% and the test only costs about \$30 and at the end you file your papers to get your license from the FCC.

How did you get practical experience with your new radio/license?

The town committee guided me each step of the way as I learned the ropes of my new radio and license. It was so neat as a teenager to be mentored by folks who had been licensed for twice as long as I had been alive. They were always available to show me new tricks with the radio and to troubleshoot any problems.

Isn't working on a town committee a job for adults?

Not at all. The Emergency Communications Committee is a great committee for younger people to join because there's no age requirement for getting an FCC license. The committee has been very understanding of my school commitments and flexible in terms of participation, so I never had a problem balancing schoolwork and the committee.

Being a teenager on a committee is a tremendous opportunity because you get to see and take part in important decision-making for the town. As a young person, you bring diversity to the committee and offer the important perspective of the town's youth. You also get to learn about the rules and procedures of committees (which is useful in college, where most organizations are run in a similar way).

Is it a misconception that ham operators are only male?

I know many female ham operators, many of whom got started in their teenage years. It's such a great hobby for anyone interested in emergency prepared-

ness and giving back to the town. Any high school student in Los Altos Hills can learn so much from working with the wise men and women on the ECC.

When did you join the ECC and how hard was it to get used to the committee's work?

I joined the ECC when I was in high school. It was not hard to get used to the committee — although there was a lot to learn during my first few months! Each lesson was extremely valuable (whether it be Robert's Rules of Order or the propagation pattern of a dipole antenna) and the sort of thing I would have never learned in class.

How did you manage the drills with the town's CERT organization and your school work?

CERT is a great group to be a part of as a high school student because the commitment is what you make of it. Once you're trained, you can attend every drill or only a few. The important thing is that you now have a set of unique skills (like first aid and search and rescue), which will be critical in response to a disaster. I offer the bonus of being a ham radio operator and can get status updates from zones to the CERT incident command center at Foothill College.

What have you done on the ECC?

I've done drills with CERTs, county ham drills, acting as the ECC secretary, and running some of the town's Monday night check-ins, where area hams call in to check equipment and brush up on their skills.

Do you recommend that other junior high and high school students consider becoming hams and working with the ECC?

Yes! Beyond the great feeling of helping out, being a ham and a member of a town committee are unique extracurricular activities. Not too many high school students can say they've worked with elected officials, firefighters, police officers, and the Red Cross to coordinate emergency communications for an entire town.

For more information about getting your ham license and/or getting involved with the ECC, please contact Duncan MacMillan K16VMY, dmcmlan@pacbell.net.



APP ALERTS CPR-TRAINED BYSTANDERS

A potentially life-saving technology now available throughout Santa Clara County can alert residents of Los Altos Hills when a person near them is experiencing sudden cardiac arrest.

Integrated with the 911 system, the PulsePoint mobile phone application notifies CPR-trained citizens of the critical need for cardiopulmonary resuscitation (CPR) at a public location nearby. Notification happens simultaneously with the dispatch of emergency service personnel. Effective bystander CPR provided immediately after sudden cardiac arrest and until paramedics arrive can double or triple a victim's chance of survival.

The app also directs citizen rescuers to the exact location of the closest publicly-accessible automated external defibrillator.

"Every day, we treat patients in our emergency rooms that have sudden cardiac arrest. We know that quick action

to restore heart function is essential to full recovery," said Tomi Ryba, president and chief executive officer of El Camino Hospital.

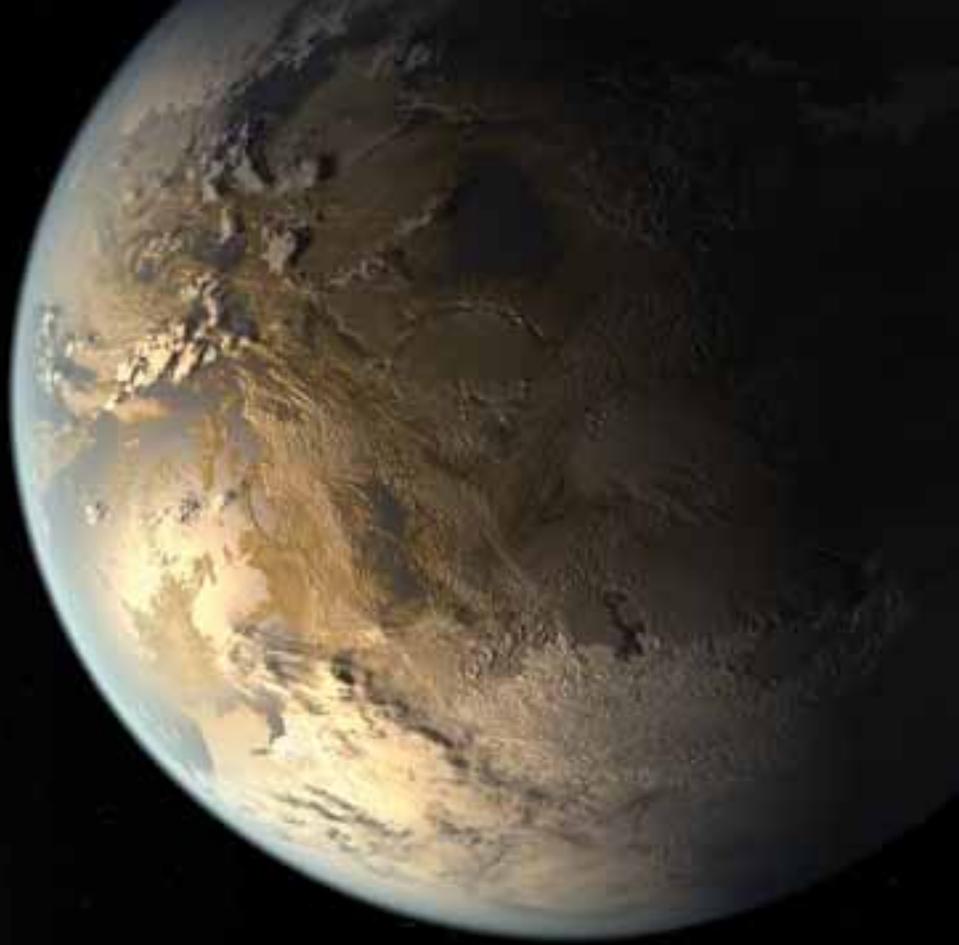
Sudden cardiac arrest is a leading cause of death in the United States, accounting for an estimated 360,000 deaths each year or 1,000 deaths per day.

"With the aging of our county's population we can expect that more people will experience sudden cardiac arrest, so we welcome innovative approaches like PulsePoint to improve our collective ability to save lives," said Chief Ken Kehmna, Santa Clara County Fire District.

The PulsePoint app is free and can be downloaded from the iTunes Store™ and Google Play™. For more information about the PulsePoint app and to link to CPR classes throughout the county, please visit: www.elcaminohospital.org/CPRHelpNow.



FINDING PLANETS AROUND OTHER STARS



Besides the Earth, seven other planets and many smaller objects orbit our star, the Sun. We can see the planets because they reflect the light of the Sun and are relatively close to us. But other stars are so far away that the reflected light of any planets they might have is very hard to see. And, to make things worse, each faint planet orbits a much brighter star. Like a firefly among the bright lights of an outdoor concert, the planet would simply be lost in the star's glare.

Nevertheless, starting in 1995, astronomers have been discovering planets around our neighbor stars in increasing numbers. Currently, some 1,800 planets are known, distributed among roughly 1,100 stars.

The first observations used the gravity of the planet – and not its light – to show it was there. Suppose we have a substantial planet (such as Jupiter) that orbits a nearby star. We can't see the planet, but we can see the star just fine. As the planet moves in orbit, from one side of the star to the other, its gravity will pull on the star. The effect is subtle, because the star is big and the planet is much smaller. Still, the planet's gravity slightly changes the position and movement of the star. If we monitor the star from Earth with very sensitive equipment, we can pick up the “wiggling” (shifting back and forth) of the star's motion in the sky.

The other way to identify a planet around another star is to watch a planet cross the face of its star. Since starlight is blocked by the planet, the star's light output drops by a tiny fraction as seen from Earth. Called a transit, such a mini-eclipse can not only tell us that the planet exists, but even allows us to measure the planet's size. Using a telescope in

The artist's concept depicts Kepler-186f, the first validated Earth-size planet to orbit a distant star in the habitable zone.

space, called Kepler (shown below), astronomers have been able to discover planets as small as Earth with this method.

Our ultimate aim is to find “Earth 2.0” – a planet the same size as Earth and orbiting in its star's “habitable zone” (the region where conditions are not too hot and not too cold to support life, and water can be in liquid form.) In the last few years, astronomers found a number of planets that were

earth-sized, but they were too close or too far from their stars. They also found planets that were at the right distance from their stars, but were too big (and thus might not have a solid surface – just as Jupiter is made mostly of gas and liquid.)

But this April came the first announcement of a planet that had *both* characteristics. The planet orbits a nondescript star with no name (only the catalog number Kepler 186) about 500 lightyears away. The star is a “red dwarf” – smaller and cooler than the Sun, so a planet has to be closer to it to have the right temperature. But this is our first “Earth cousin” planet, just the right type and at just the right distance to resemble us. Astronomers are confident this is only the first of many other Earth-like worlds ready to be discovered by future projects.



Andrew Fraknoi is the Chair of the Astronomy Department at Foothill College and was the California Professor of the Year in 2007. His blog of astronomical news can be found at: <http://fraknoi.blogspot.com>



Italian sculptor and all-around artistic genius, Michelangelo, who gave the world the stunning David and

Pietà, famously remarked, “Every block of stone has a statue inside it and it is the task of the sculpture to discover it.” Since the classical period, artists have been chiseling, carving, and casting a wide range of materials to bring forth their discoveries. Now, thanks to the work of the Art in Public Places Committee (APPC), sculptures are making their appearance all around town.

A Committee is Formed

In March of 2013, a resident inquired about donating a sculpture in honor of his late wife. He wanted to commission a sculpture that evoked the empowerment of women. Eventually, he chose to write a book about his wife’s accomplishments rather than commission a sculpture, but the request was the catalyst for the establishment of the APPC. The APPC was formally created on August 15, 2013 by the town council. Committee members have art, interior design, and business backgrounds. The committee, consisting of Sherry Scott, Pat Kreager, Gail Solomon, Maryam Dickey, and Roger Burnell, is led by chairperson Karen Druker, Los Altos Hills Art Curator.

The APPC was tasked with bringing sculpture to Town Hall and surrounding grounds, to Edith Park, and to Westwind Community Barn. Initially the sculptures will be donated to the town by private donors. Karen Druker states, “The committee will strive to obtain a balance of realistic and abstract work, and will take great care to assure that the pieces chosen are appropriate for the town and of the highest quality, as well as spaced correctly to allow maximum impact for each piece.” Druker hopes that each sculpture will be interesting

and thought-provoking.

The APPC has accepted several sculptures so far. “Urban Meets the Suburbs” by Rob Matthews, was donated by Maryam and Jonathan Dickey. “Urban” is installed in the lobby of Town Hall. The second sculpture, “Blue,” is a large painted steel abstract piece by Los Altos Hills sculptor Jean McCandless. The sculpture, to be installed this year, was donated by the McCandless family. “Star Gazers,” a realistic bronze rendition of a deer family by Miles



SCULPTURE IN PUBLIC PLACES

Metzger, was donated anonymously; it will be installed this year. “Chocolate” by Bret Price is a sensual form whose texture evokes the rich taste of chocolate. “Chocolate” was donated by Karen Mueller and was accepted by the town council on April 17. “Tribute to Our Ohlone Roots” by Selina Rodriguez is a colorful, enameled metal wall piece donated by Carol Dabb. It is currently installed in the heritage courtyard at Town Hall.

Urban Meets the Suburbs

Artist Rob Matthews (pictured below), who created “Urban Meets the Suburbs,”



explains how he created his work. “Although I work primarily with cast concrete,” he explained, “I also incorporate other materials in my work, like glass. Once the design process is complete, the

next step is to build a mold (a two-week process). Once that is complete, the glass is cut and adhered to the mold, face down. Because there are over 500 pieces of glass in this piece, this step took a considerable amount of time. The casting process is comprised of several tedious steps. First, a thin layer of a fine grout is gently applied to the entire mold, encapsulating all the glass. Behind that is a mix of glass fiber reinforced concrete.” Matthews then fills the form with a dense styrofoam/concrete material. The piece cures for several days and then the finishing process begins. He cleans the glass and fills in any voids. Then the sculpture is sealed three times with each coat applied two days apart. After five coats of wax, the sculpture is finally finished.”

Interacting with Sculpture

Matthews elaborates on how sculpture differs from other art: “Due to its three-dimensional

nature, sculpture invites interaction — both physical and intellectual. I think that people, once drawn in by a sculpture, will often spend more time with it than a two-dimensional piece. They want to touch it, to see it from various angles, to know what it’s made of. This physical exploration opens them to the work in a way. It creates a space for contemplation and often a striving to understand the meaning of the piece, particularly if the sculpture evokes an emotional response from the viewer.

What is the Meaning of Sculpture?

Upon viewing “Urban” every resident may have his or her own interpretation. For the artist, the sculpture symbolizes success. “To many, a corner office on a high floor is the pinnacle of success,” says Matthews, “so I placed the piece on a pyramid of many stairs to denote a sense of struggle. There is also a black and white tile outdoor area high up on the piece that represents a space for play, but there is no railing. I spent about a decade working in a corporate environment and work-hard, play-hard was certainly the norm, so I know all about that and the need to be a success at both. You have to get as close to the edge as possible, just don’t go too far.”



Matthews, like most sculptors, believes discussion of art is healthy: “Anything that opens minds is good for society as a whole. No one likes every piece of public art they see. But engaging with it, trying to understand what the artist was attempting to convey, and finally being able to understand *why* you like or don’t like it is a valuable and enriching experience.”

Seeking Donations

Two sculpture resource books with photos of site-specific sculptures the committee feels are appropriate for town venues are available for review at the Town Hall reception desk.

The committee hopes that residents will consider donating a sculpture in memory of, in appreciation of or in honor of any important life event. For information, contact committee chairperson Karen Druker, at 650-941-8073.



The sculptures (clockwise from top left): “Star Gazers”; “Tribute to Our Ohlone Roots”; “Urban Meets the Suburbs”; and “Chocolate.”



TOWN OF LOS ALTOS HILLS
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Town Newsletter Statement of Purpose

This is the official town newsletter to communicate current issues, services, and activities in Los Altos Hills to the residents of the town — to facilitate, encourage, and improve interaction between the residents and the town government. The newsletter is published quarterly. **Deadline for the next issue is July 1, 2014.**

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Our Town

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Los Altos Hills City Council

John Radford, Mayor
 Courtenay Corrigan, Vice Mayor
 John Harpootlian
 Rich Larsen
 Gary Waldeck

City Manager

Carl Cahill

CALENDAR



June

1

Sunday, 1:00 – 4:30 pm
17th Annual Town Picnic

Open to all Los Altos Hills residents. Reservations are required. Join your neighbors for an afternoon at Purissima Park. For more information contact 650-947-2518.

4

Wed., 7:00 – 9:00 pm
Greywater Seminar for Homeowners and

Design Professionals

Los Altos Library Save water and money, and get a rebate by reusing water in your home. Three greywater professionals — Deva Luna, Forrest Linebarger, and Paul Kephart — will share their experience and knowledge on every aspect, from plumbing modifications to plant selection and irrigation decisions. Sign up for hands-on workshops at the end of the seminar. To learn more, contact Kit Gordon, water@greentownlosaltos.org.

July

4

Friday, 9:30 – 11:00 am
Fourth of July Parade

Gather at the Town Hall wearing your red, white, and blue and march to Gardner Bullis for watermelon, coffee, and ice-cold lemonade. This is the perfect time to dust off that vintage red wagon, bike or skateboard and decorate them with patriotic bunting, flags, and balloons. For safety reasons, fossil-fueled vehicles and horses are not allowed.



Sept

6

Sat., 3:00 – 8:00 pm
Hoedown

Free, fun-filled day of old fashioned games, crafts, and horse show held at Westwind Community Barn. Bring cash or check for snacks, dinner, and wine. For more information contact 650-947-2518.

Calendar events are also posted on town's website: www.losaltoshills.ca.gov

