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ASLA COLORADO LUNCH & LEARN SERIES

Next Lunch & Learn: Government Affairs
Monday, November 15, 2012 – Free to Members

Representatives of the Colorado State Board of Landscape Architects (Dean Pearson and Jamie Ramos) and staff from the Colorado Department of Regulatory Agencies (Christy Thomas) will join the members of the ASLA Colorado Executive Board and Government Affairs Committee to highlight current legislative, regulatory, licensure, and educational issues. There will be time for Q&A. If you have questions about the way the state licensure program works this is your opportunity to meet the decision-makers. Pre-registration for this event will be available soon.

**Location:** Gates Conference Room, 5th Floor, Denver Public Library (10 W. 14th Avenue Parkway, Denver, CO)

**Time:** 11:30am – 1:00pm
- Bring your own lunch and a beverage.
- Advance Registration Preferred.
- Walk-ins will be seated if space is available
- Online registration deadline is the Tuesday before the event.

If you are interested in presenting a program for the 2012 Lunch and Learn Series, please contact Ian Anderson at landerson@designstudioswest.com for a request form.

2012 AWARDS EVENT
CALL FOR ENTRIES

**DUE DATE: NOVEMBER 1, 2012**
(Oct 18 for early bird discount)


The entry deadline for early-bird submittals is October 18th (save 10%). The cutoff for entries is November 1st.

The Awards Event is on December 11th at the Four Seasons Hotel in Denver.

For more information about awards submittals contact Chris Silewski at chris.silewski@davispartnership.com.
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exposures is published four times a year by the Colorado Chapter of the American Society of Landscape Architects (ASLA Colorado). Subscriptions and Advertising Please contact us at 303-830-6616. General Inquiries Please write to us at ASLA Colorado, PO Box 200822, Denver, Colorado 80220. Opt-out To be removed from the mailing list, contact us at info@aslacolorado.org. Articles, Letters to the Editor and Firm News Please email all general exposures inquiries to news@aslacolorado.org.
It has been an honor to serve as president once again for ASLA Colorado after Brian Koenigberg moved to China in early July. I am amazed at how much we as a chapter and you as members are able to do for the profession here in Colorado. As I talk to many of our members they seem to be staying busy and a number of firms have even begun to start hiring. The general consensus seems to be one of cautious optimism.

We just hosted the end of summer social at the Denver Botanic Gardens on September 19. It was a huge success with over 120 people in attendance. This event was the first of many we will have in the future in conjunction with the botanic gardens. This past spring ASLA Colorado began a strategic partnership with the Denver Botanic Gardens. Look for more event and educational opportunities to learn and present programs at gardens.

The annual awards call for entries is currently out and will close on November 1. Consider submitting one of your projects. The awards banquet will be on December 11 at the Four Seasons.

On October 1st Abe Medina will take over as president. The chapter will soon begin working to prepare for the ASLA National meeting in November of 2014 when it comes to Denver.

Sincerely,

Kurt J. Munding, PLA, CID, CLIA, ASLA
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Executive Committee & Counsel of Directors

The Executive Board is the governing body of ASLA Colorado and is chaired by Kurt Munding, Chapter President. The board meets monthly. The Council of Directors meets quarterly to support the executive board by providing direction on issues related to the association programs. The following is a highlight of ASLA Colorado Executive Board, Council of Directors and general chapter activities and events since the last issue of Exposures.

Executive Board meetings typically occur on the first Wednesday of each month beginning at 5:00 pm and are held at member offices along the Front Range. Attendees typically include those on the Executive Board and Council of Directors although all chapter members are welcome to attend or to participate by teleconference. To be included in meeting email announcements please notify the president.

May: In May of 2012 Brian Koenigberg stepped down as president of ASLA Colorado because of a pending move overseas. Kurt Munding, as past president, was called on to fill the remainder of Koenigberg’s term and Abe Medina was elected by the Executive Board (per the bylaws) as president-elect and will assume that position in the fall. Chris Silewski agreed to take over as the coordinator of the Annual Awards Event following the resignation of long-time event coordinator Robb Williamson. The first Lunch and Learn of the year was scheduled for June. A new Lunch and Learn event coordinator was sought from the membership following the resignation of Ian Anderson who is completing his graduate studies.

June: In June of 2012 the call for nominees for the Executive Board and Council of Directors 2012-13 term was issued. A special Lunch and Learn was held on June 25th featuring Barbara Deutsch, Executive Director of the Landscape Architecture foundation. Her presentation was on the concept of landscape performance and why it is critical to achieving sustainability and reaching key decision makers. Landtech held an open house for ASLA Colorado members celebrating 25 years in business.

July: In July of 2012 the annual ASLA Colorado Awards Event was scheduled to be held at the Four Seasons Hotel on December 11, 2012. Dean J. R. Pearson was named to the ASLA Council of Fellows. The ASLA Colorado Membership Rewards program which provides a $25.00 electronic gift certificate to any member who recruits a new member was launched. The 18th Annual Pheasant Hunt was scheduled for a date in September to be decided later. A notice and invitation to members interested in sponsoring or attending the Governor’s Colorado Spaces Garden Party and Design Show on August 23, 2012 was sent to all members. Ryan Sand took over as Secretary following the resignation of Scott Baker.

August: In July of 2012 the End of Summer Social at the Denver Botanic Gardens was scheduled for September 19, 2012. This is a free event for members and an opportunity to recognize and honor ASLA Colorado’s sponsors. The Call for Entries for the 2012 Annual Awards Event was issued. Input from members was requested on the Landscape Architecture Accreditation Board accreditation of certificate-granting programs. Ryan Sand took over as Secretary following the resignation of Scott Baker.

Government Affairs

A case was recently brought before the State Board of Landscape Architects, involving an architect for practicing landscape architecture on a small commercial project. The complaint was dismissed based on the professional exemption for architects in the Landscape Architects Professional Licensing Act.

For reference, CRS 12-45-118(1) states “The following shall be exempt from the provisions of this article: (a) The practice of architecture by licensed architects pursuant to part 3 of article 25 of this title;”

There are similar exemptions for the professions of professional engineering and land surveying. The professional exemption is rather vaguely worded, and ASLA Colorado has some concerns related to how this exemption is interpreted by the State Board. Through discussions with the State Board, we have been told that the dismissal of this case was due to this being a small commercial project with very little landscape architecture involved. The work done was considered to be incidental to the practice of architecture by a licensed architect. As we understand it, this was a specific ruling based on a specific case. It is not entirely clear how the State Board would rule in a case involving a more significant level of landscape architecture, but we hope these issues will be considered on a case by case basis. It is important to note that the concept of incidental practice works both ways, giving landscape architects some latitude as well.

It is clear that there are areas of overlap between the different design professions. Architects, civil engineers and landscape architects all do site design, for instance, as part of their normal scope of services. Licensed members of each profession have proven minimum competence at site design through state licensure requirements. In other areas of practice there is very little overlap. Planting design, for instance, is obviously a skill that licensed landscape architects have demonstrated minimum competence at. A license in architecture, engineering or land surveying, on the other hand, does not prove minimum competence in planting design. The definition of their respective practices in the Colorado Statute...
doesn’t include planting design. Therefore, if the State were to allow architects, or other professionals to provide professional landscape design services, it would be holding these professionals to a lower standard than is applied to landscape architects or anyone else who provides landscape design services.

The ASLA Colorado is actively promoting compliance by municipal and county government agencies with the "Landscape Architects Professional Licensing Act", passed by the State in 2007. We are seeing a positive trend towards compliance with the state law. The recently passed Longmont Landscape Open Space Regulations states: "In accordance with current State Statutes all landscape plans must be designed by a licensed professional landscape architect except for the following: 1. Residential Landscape Design, consisting of landscape design services for single- and multi-family residential properties of four or fewer units not including common areas." Both the City of Golden and the Town of Castle Rock have code changes pending that will eliminate inconsistencies with the state law. In a memorandum to the City Council attached to ordinance 1916, the Director of Planning and Development states "This item relates to a condition brought to staff’s attention in 2011, and Council’s decision whether to remove an inconsistency between the Municipal Code and state statutes. Staff is informed that in 2007 the Colorado Legislature enacted the "Landscape Architects Professional Licensing Act". This statement demonstrates that the message is getting through, and by pointing out inconsistencies with state law we can help local government agencies understand the need to update their codes.

Are your city and county government agencies in compliance with the state law? If not let them know. Let’s help them understand and implement the State Licensing Act. ASLA Colorado has created an advocacy package to educate local government agencies about the Licensing Act and to help persuade them to update their codes and procedures to be in alignment with provisions of the State Law. The advocacy documents can now be downloaded from the advocacy page of our website, under the heading "Licensure Compliance Materials". If you would like hard copies of the advocacy package to promote compliance in your community, please let us know.

ASLA Colorado meets regularly with the GreenCo Legislative Committee (and their lobbyists) to keep apprised of ongoing and upcoming issues of legislative and regulatory importance. When an urgent issue of importance arises it is conveyed to the membership as an advisory in the bi-monthly E-News Bulletin. ASLA Colorado is represented in the legislature and before state agencies by the Colorado Council of Landscape Architects. Gregory Williams of Redpoint Resources LLC, and Scott Meiklejohn of Meiklejohn Consulting LLC are under contract from December-May to monitor state legislative activity and regulatory developments. They also represent ASLA Colorado at meetings involving other allied organizations on new and ongoing issues of mutual concern. Neil McLane is Vice President of Government Affairs and chair of the ASLA Colorado Government Affairs committee. This committee also oversees the activities of the Colorado Council of Landscape Architects. Neil can be reached at neil@mclaneassoc.com.
The “Good” Neighbor: Designing Space for Local Health and Potential

By Ryan Sand

It’s the 1960s and heart attacks are one of the leading causes of death for men under the age of 65. By now, physician Stewart Wolf has begun research on immigrants in a small town of Rosetto, named and modeled after the original hometown. “Virtually no one under fifty-five had died of a heart attack or showed any signs of heart disease…the death rate from all causes in Roseto, in fact was 30 to 35 percent lower than expected.” (1) It is ironic that the residents of this small town, who may hold the key to a longer life, smoked heavily and struggled with obesity. Wolf was soon to find that it was not giving into one’s vices, genetics, or regional location, but good neighbor relationships that nurtured people’s health. No one can force someone to be a “good” neighbor, but the surrounding environment, designed and spontaneous, has a strong effect on the enablement and stimulation of civic engagement and is one step closer to a healthy population.

Outdoor exposure

Connecting and consolidating activities (shops, bakery, hospitality, sacred space) and applying urban agriculture, Rosetto’s urban fabric was purposefully laid for the benefit and well-being of the people. Even back in the early twentieth century, Rosetto exhibited the importance of pedestrian emphasized streets and accessible amenities. These elements now touted by New Urbanism, Transit Oriented Design and Pedestrian Orientated Design, have become standards of the urban design vernacular. [For further reading on the application of pedestrian oriented environment within a Colorado context, see the Exposures 2012 Planning Issue- “Sterling Ranch.”] The emphasis on accessibility encourages residents to go out and explore their community.

Attempts to improve safety and accessibility are intrinsically paralleled in re-uniting the now separated living, working and everyday spaces we inhabit. With local disconnect produced by ongoing development patterns, people have vastly increased reliance on motor vehicles, leading to reduced physical activity, numerous physical health problems, and a loss of spontaneous interaction between destinations. (2) As community design focuses to resolve issues such as sprawl, health concerns and crime, part of the responsibility falls on landscape architecture/urban design to enable opportunities for civic engagement, neighbor connections and alleviate concerns, reducing the need to go outside the community for resources available internally.
**Civic Engagement**

If the town of Rosetto was the stage, then the locals were considered the actors. Without engagement, the support of community with the individual would cease. Stopping neighborhood walks to talk with others, sharing/cooking meals together, and engaging each other through 22 distinct civic organizations (in a population under 2,000), the Rosettans were outside their houses, within their community. While empirical facts cannot be found, testimony gives speculation that as neighbors knew each other, they removed the sense of danger from the unknown, within their environments. “Fear of crime has been an important factor in the flight from the cities and the resulting proliferation of sprawl. At the same time, the residential patterns that have mushroomed across the country in the last half century have reduced the sense of community, leading to social isolation, to ‘disconnection and fragmentation.”” (3) Does this mean that simply meeting ones neighbor may diminish the effects of sprawl?

To fight back anonymity Jane Jacobs described, the more successfully a city mingles everyday diversity of users and uses in its everyday streets, the more successfully, casually (and economically) its people thereby enliven and support well-located spaces that can thus give back grace and delight to their neighborhoods instead of vacuity. (4) The empowerment of invitation is basic yet essential in the environment. As one becomes more exposed to their surrounding environments, a better understanding and bond within the community develops. “Researchers scored 700 residents of three communities in New Hampshire on measures of “social capital” such as socializing with friends, civic engagement and trust in their community. “They found those in neighborhoods with higher walk score ratings reported being happier and healthier and more apt to volunteer, work on community projects or simply entertain friends at home.” (5)

**Democratic Landscape**

With proper space, People are out and moving in their new environment, safely engaged in healthy activities and creating new social ties. One activity will stimulate a patron and create curiosity and maybe even attract outside passersby. Triangulation is this almost subconscious effect of the gathering of crowds. If successful, neighbors begin to collide and a relationship is formed. This effect defined by William Whyte implies art, food and performance will make strangers act as though they are not, creating a dialogue or interaction based on reaction. What the “performer”does best is creating a connection between them. (6) In such places, one does not have to be a customer to participate. Spaces are created where community voice can be freely exchanged, as people become more accustomed to see and be seen.

This leaves the designer opportunity to step into the role of “party planner”, projecting future opportunities within the proverbial “multi-purpose” space. As designers meet with locals to distinguish what amenities the residents desire/need, there is need to involve the entrepreneurial and civic groups. Denver's local live/work development known as Taxi has been the venue for a wide variety of events. Scores of food trucks (the justice league of food), music and art exhibitions, to various public events and movies have brought a wide range of users to the site beyond the tenants. This simple adaptable space has gained more definition through its activated civic engagement, than the designed amenities themselves.

**Guerilla Neighbors**

If underutilized space is found in already developed areas, hopefully, strong neighborhood bonds exist. Not waiting for conventional process, scores of neighbors are revitalizing their own underutilized space. Urban agriculture has become a key method to activate spaces while creating space for neighbors, schools and civic organizations to utilize resources of food, education, exercise and community gathering. [See exposures 2011 Design Issue-“Eating Your Designs”]

Recently, Gosia Kung Architect and founder of Walk Denver collaborated with other civic groups toward a “Better Block” project in the Jefferson Park Neighborhood. The “Better Block” project is a demonstration tool that acts as a living charrette so that communities can actively engage in the build out process and provide feedback through real experience. (7)

Before and during the “Better Block Project”. (Photos courtesy of Gosia Kung of Walk Denver)

The effect on the community was a revelation. By testing public space, activity and business within a vacant block, entrepreneurs and residential developments have established residence in a community that was overlooked no more than 10 months ago. According to Randolph Hester Jr., people seeking to design sociable neighborhoods must identify the residents’ “own” spaces, and determine how to delineate those spaces. The word “own” refers to a collective, symbolic community ownership. (8) By the action of various bold neighbors, temporary landscape models test scale and function as well as enable others to recognize identity that once was lost.
The First Step

As seen in Rosetto, the landscape is a major player to stimulate the community and enable the residents to gather together and “own” their own environment. Designed Space no longer focuses on solely living and working spaces, but on the opportunities found in between destinations, for spontaneous collisions to unite the neighbors. As familiarity grows and value grows within the space, people begin to break out and invest, developing a connected and healthy neighborhood. To the professionals and non, the only part remaining is for you to start the process. To begin to explore, experience and participate in your neighborhood at a scale of human interaction, and knock on your neighbor’s door and introduce yourself.

References


Ryan Sand is a landscape designer/illustrator and the current secretary of ASLA Colorado. Through local and international opportunities (ex. EMI, AFH, D&CD, CCAC), he has had the honor to educate, collaborate and enable civil engagement at the neighbor scale...while throwing the occasional block party.
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RESponsible Approaches to Pest and Weed Management

Green Industries of Colorado

The Green Industries of Colorado (GreenCO), an alliance of eight trade associations representing professionals in the horticulture and landscape industries, prepared this paper for policy makers, legislators, homeowner’s association boards, developers, specifiers, homeowners and others charged with making decisions about the use of pesticides in the care and maintenance of Colorado landscapes. GreenCO wants to ensure that factual information is available to encourage informed decision making.

For clarification purposes, “pesticide” can refer to any substance that is made to control or prevent any pest, including weeds, insects, fungus, rodents and more. (Herbicides, insecticides, fungicides and rodenticides are all pesticides.) This includes man-made, or synthetic, products as well as products derived from naturally occurring chemicals in plants or other organisms.
The Benefits of Healthy Landscapes

As outdoor enthusiasts, Coloradoans have created environments that foster an outdoor lifestyle. We actively use our yards, parks and playing fields for gardening, recreation, sports and just spending time outside. Consequently, the health and appearance of the plants and trees in our residential yards, parks, school grounds, common areas, businesses and town centers are important to us.

We also value outdoor spaces for aesthetic, environmental and economic reasons. Well-maintained, attractive and thriving landscapes not only enhance the quality of our personal lives, but they serve the ecosystem and add to the economic value of our properties.

Landscapes Help the Environment

- Plants bring environmental benefits to urban areas. For example, the leaves of trees and other plants remove dust from the air and absorb other air pollutants—such as ozone, carbon monoxide, and sulfur dioxide.
- Trees take in carbon dioxide and produce oxygen. An average tree absorbs 26 lbs. of carbon dioxide from the air each year. Grass provides the same function. One tree or a 2,500-square foot lawn each release enough oxygen each day to supply a family of four.\(^1\)
- Trees in cities mitigate rising temperatures by shading hot pavement and cutting energy consumption in buildings. The front lawns of eight houses have the cooling effect of about 70 tons of air conditioning. As a comparison, the average home has an air conditioner with just a three or four ton capacity.\(^2\)
- Green spaces cleanse our water. When water is allowed to run through landscapes, it typically exits cleaner than when it entered, reduces storm water runoff and keeps pollutants out of ground water. In contrast, impervious surfaces like asphalt and concrete simply move water and the pollutants into the storm water system.

Landscapes Provide Places to Play

- Thriving green spaces that are well-maintained create safer environments for people. Fields free of spiky "goat head" weeds and other hazards create a more enjoyable experience for our youth (and our bike tires). Well-maintained playing fields also reduce chance of injuries compared to bare surfaces.
- Healthy, properly pruned trees tend to break or crack less often in storms, thus reducing the hazard of falling limbs in parks, playgrounds and neighborhoods.
- Mature and healthy landscapes help control wind and water erosion, which in turn eliminate dust and mud problems around schools, homes and businesses.

\(^1\) The Lawn Institute. \(^2\) The Lawn Institute.
Landscapes Increase Property Values

- Attractive landscapes translate into the economic value of property in terms of the curb appeal that draws homebuyers, shoppers and other customers. Businesses with attractive and well-maintained landscapes enjoy more retail traffic, higher occupancy rates and reduced crime.
- According to the Professional Landcare Network, landscaping can add as much as 14 percent to the resale value of a building or home and speed up its sale by as much as 6 weeks.

The Need for Proper Care and Maintenance

Even with native and other well-adapted plants in our landscapes, it is still an ongoing challenge to keep trees and other plants thriving in Colorado. High elevation, intense sunlight, often poor soil conditions and the semi-arid climate with temperatures that can change dramatically all combine to stress plants on a year-round basis.

To keep our plants thriving in spite of these factors requires ongoing and proper care that is driven by scientific research and knowledge.

By studying plant physiology, horticulture, soil science, biology, pest management and entomology, we gain the knowledge that is then applied to caring for plants in ways that are most beneficial to them.

Through this process of research and applied knowledge, we are able to sustain the landscaped environment and protect property values.

For example, trees that are pruned in a certain way are stronger and longer-lived. There are optimum heights for mowing lawns that make them healthier and more drought tolerant. And a healthy lawn that is properly fertilized, mowed and irrigated will typically out-compete most weeds, have fewer insect problems and avoid diseases, according to Thia Walker, Colorado State University Extension Specialist and Pesticide Safety Education.

By developing horticulturally-sound maintenance practices, experts know there is a direct connection between the health of well-maintained plants, trees and grasses and the judicious use of synthetic chemicals that promote plant health and protect them from diseases and pests.

Plants that are stressed through environmental or other factors lack the defenses to keep insects and diseases at bay. When pests take hold and reproduce, they are capable of killing trees and other plants and seriously eroding the quality of our landscapes. The outbreak of

*Mountain pine beetle kill in the high country is a grim reminder of the devastating impact of pests.*

Our landscapes cannot thrive without proper care that sometimes includes treatments for weeds, pests and diseases. But with the heightened public scrutiny about the use of chemicals in our society, what is the real risk of using products that control pests and what is the best approach to using them?
Integrated Pest Management

Alongside industry Best Management Practices, landscape professionals can provide their clients with the option of adopting an Integrated Pest Management (IPM) approach to caring for their landscapes. IPM is a sustainable approach to managing pests by combining a variety of strategies including biological, cultural, physical and chemical tools in a way that minimizes health and environmental risks. IPM also is site and pest specific.

Practicing IPM requires considering the best methods, including nonpesticide methods, to reduce or control pests. Identifying, understanding and monitoring the situation can help professionals identify the best strategy to address the problem. IPM can include modifying a habitat or changing procedures so pest damage is reduced and natural control is enhanced. Biological controls include predators, parasites and diseases that attack pests. Whenever possible, measures are taken to conserve naturally occurring populations.

IPM, however, does not mean that pesticides are not used. Biological control agents can be difficult to manage and are typically slow in controlling pest populations. With certain pests or when gaining control sooner rather than later is imperative, chemical control becomes part of the IPM strategy. And, federal law clearly defines IPM as including the use of pesticides: “Integrated Pest Management is a sustainable approach to maintaining pests by combining biological, cultural, physical and chemical tools in a way that minimizes economic, health and environmental risks.” Excluding pesticides from IPM would deny an essential set of tools for controlling pests to those charged with maintaining and safeguarding our landscapes.

Within IPM, chemical control involves 1) selecting a pesticide effective against the pest with the lowest toxicity to humans and non-target organisms (including biological controls), and 2) using it in such a way as to prevent or minimize undesirable environmental effects. The lowest effective amount of pesticide is applied from carefully calibrated application equipment. Attempts to redefine IPM as a process that prohibits any pesticide use whatsoever – even when pests pose health risks – is not recommended by GreenCO.

Risks of Using Pesticides

The Green Industry acknowledges that there are some people who are very concerned about the use of pesticides. Landscape professionals are equally concerned about protecting the public as well as the workers who come in contact with pesticide products.

Public concern about pesticide use is often well founded. The discovery of impacts from products that have been removed from the market underscore the need to be vigilant about the chemicals sold. Scott Phillips, M.D., F.A.C.P., F.A.C.M.T., who serves as associate clinical professor of medicine in the division of clinical pharmacology and toxicology at the University of Colorado Health Sciences Center and is an attending physician at the Rocky Mountain Poison Control Center, was consulted to provide the following toxicological medical information.

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Footnote: 3 110 STAT. 1512 PUBLIC LAW 104-107, August 3, 1996
Dr. Phillips cautions that it is important to understand that exposure to a substance does not mean that a person will develop an illness. Substances cause health problems as a function of how much of a substance is in the body, and over what time period the exposure has occurred. For example, consuming a sip of wine on special occasions will not cause an illness, while consuming 10 drinks per day for 10 years is known to cause cirrhosis of the liver. The more one consumes, and the longer the duration of the exposure, the more likely there will be a health effect.

This is a fundamental concept in medicine and toxicology. Simply stated, “the dose makes the poison.” This is known as the biological gradient, or the dose-response relationship. This means that as the dose increases, the severity of signs and symptoms increase in individuals, as does the number of individuals who will become symptomatic.

This example is also true for the application of landscaping products. The proper use of diluted pesticides by trained applicators and casual exposure to the public in parks would not result in an illness. The dose is far too minimal.

Tracking Exposure

Since 1983, the American Association of Poison Control Centers has been monitoring health complaints to a variety of substances including over-the-counter chemicals and prescription medications. They use the Toxic Exposure Surveillance System to track these cases all over the United States. However, a review of the data during several years shows the vast majority of reported pesticide cases are casual “exposures” rather than actual poisonings and are not considered serious by health care officials.

Locally, the Rocky Mountain Poison Control Center collects data on Colorado and other western States. In 2010, the Poison Center recorded 1,371 calls. Of these calls, most calls were regarding individuals who were either less than 5 or greater than 20 years of age. Of the 1,371 calls, 1,139 (83%) were accidental or informational calls. Of those, three people developed critical health concerns. In no cases did any person die from accidental exposure. 1,007 cases experienced only minor or no effects. Twenty-three cases were intentional exposures (attempted suicides).

Natural Versus Synthetic

Decision makers also need to be well informed about “natural” pesticides because health officials believe they are not necessarily safer than synthetic ones. While many plants have developed toxins to protect themselves from pests, a product manufactured from plant-derived toxins can also be toxic to humans, as the toxins are sold in concentrations much higher than found in plants naturally.

According to Michael Goodman, M.D., M.P.H, a pediatrician at the Zachaeus Clinic in Washington, D.C. and managing scientist at Exponent health/epidemiology practice, “Animal studies indicate that about one-half of all naturally occurring compounds may be carcinogenic (cancercausing) at high doses. Unless and until a natural product is actually tested for carcinogenicity, one cannot predict the results based on the fact that it is “natural.” There is no evidence that banning synthetic pesticides will improve public health and help prevent diseases. All chemicals, including natural chemicals, have the potential to cause harm if they are not properly handled. In some cases, natural products are more dangerous or less effective than their synthetic counterparts. Synthetic products approved for sale in the U.S. have been tested, natural counterparts in many cases have not.”
How the Risk of Pesticides is Managed

When applied and used as recommended, health effects from pesticides can be minimized. County, state and federal governments have developed many layers of public protection regarding pesticides. At the federal level, pesticides are strictly regulated by the Environmental Protection Agency (EPA).

- The EPA regulates and enforces pesticide testing and authorizes the use of pesticides under the Federal Insecticide Fungicide Rodenticide Act (FIFRA).
- EPA requires pesticides to pass up to 120 health, safety and environmental tests to ensure product safety.4
- EPA requires testing at 10 times the recommended use level. The tests evaluate the pesticides’ potential to adversely affect humans, fish, wildlife, and endangered species.
- Special investigations are given to pesticides’ human risk, including acute reactions such as poisoning, but also long-term chronic health effects. It is a process that takes an average of nine years to complete.

At the State level, the Colorado Department of Agriculture enforces federal pesticide laws & regulations and in many cases, has additional requirements:

- In Colorado, state law governs who, where, when, how and what pesticides can be applied.
- The Colorado Department of Agriculture oversees The Pesticide Applicator’s Act, which regulates any entity that uses pesticides, including greenhouses, nurseries, farmers, ranchers and other private applicators, landscape companies or other commercial applicators, public entities and homeowners. The goals of the state’s Pesticide Applicator Program are to ensure that private and commercial applicators have the requisite knowledge to handle and apply pesticides, and to ensure that pesticides are applied in a manner that reduces unnecessary associated hazards.
- Employees of these companies must be properly trained to use pesticides either as a licensed applicator or work under the supervision of a licensed applicator. For example, to apply the very same products consumers buy at the hardware store, commercial applicators must complete 36 hours of training for lawn care and 40 hours of training for tree spraying.

State law also requires commercial applicators to post notification signs when making an application. These familiar yellow “flags” alert those around the property that chemicals have been applied.

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Some people fear pesticides because they don’t know why they are needed, what is being used, and how to apply them. In addition to complying with federal and state laws, GreenCO members have created a set of guidelines to care for landscapes in Colorado’s unique climate. In conjunction with horticultural experts at Colorado State University and other agencies, GreenCO’s Best Management Practices (BMPs) guide soil preparation, installation, watering and maintenance. When all of these steps are followed correctly, weeds and pests are minimized and also is the need for fertilizers and pesticides. BMPs for grass care, for example, focus on aeration, fertilization, mowing and irrigation practices that produce the healthiest and highest quality lawn, which in turn has a greater ability to resist insects, weeds and plant diseases. That translates into less pesticide use.

BMPs also guide pesticide and herbicide application for the Colorado green industry with the stated goal to “apply pesticides and herbicides at minimal levels in accordance with the label and targeted to specific pest problems.”

Finally, professionals in the landscape industry have an ongoing and personal investment in the health and safety of themselves and their employees as applicators. They know that the biggest problem with pesticides comes when they are not mixed and/or applied properly according to manufacturer recommendations that appear on the label. Professionals know that “more” of a product is not better and which products are most effective for a particular problem. They also have confidence in knowing that products they apply have come through a screening process via the EPA that is more stringent in its evaluations than any country in the world.

Industry professionals undergo extensive training and licensing to apply a pesticide with the same active ingredient that a consumer can buy at a garden center or grocery store. In addition to following the pesticide label requirements, professionals read and follow the manufacturer’s Material Safety Data Sheets (MSDS) and make that information available to customers. Professionals know and follow safety precautions, including wearing protective clothing, that consumers often do not follow. In short, professionals are better informed of the risks to themselves and to their customers and have a vested interest in protecting the health of everyone involved.

Pesticide Sensitive Registry

The Colorado Department of Agriculture maintains a registry for people with physician-documented cases of sensitivity to pesticides. The registry requires commercial applicators to notify people on the registry 24 hours before applying pesticides to an abutting property.

Some people fear pesticides because they don’t know why they are needed, which ones are being used and how they should be applied. Enhanced communications would be one way to provide information to people so they have control over their exposure. Commercial applicators often voluntarily notify customers and if requested, neighbors, in advance of

If you have a pest problem, consult with a professional:

Landscape and tree professionals are knowledgeable about the best approaches to eliminate pests and weeds. “What” is applied and “how” it is applied are the most important factors in a safe application. That is why a professional evaluation of the problem should be the starting point.

When hiring a professional, consider these steps:

- Ask for proof of licensure, safety training, insurance coverage and if the company is a member of a professional industry trade association or organization.
- Ask the professional to help you determine whether a problem is critical to ongoing plant health and to what extent the problem is tolerable without treatment.
- Discuss the full range of treatment options based on that assessment.
applications so people are well informed about the chemicals and can avoid treated areas. Customers with these concerns are encouraged to request these enhanced communications.

**Risk of Not Using Pesticides**

Pesticides should seldom be considered the first and only means to control pests. But they are frequently an essential – and sometimes the only – means to reduce the threat of pests. The decision over whether to use pesticides must weigh the risks of using pesticides against the risks of not using them.

**Typical Plant Pests**

In Colorado, common insects that require pest management include mites, aphids and beetles. Fungus problems also threaten trees and grass. Common invasive weeds include leafy spurge, Canada and musk thistle, diffuse and spotted knapweed, field bindweed, hoary cress, yellow and Dalmatian toadflax.

**Impacts to People**

Some insects can spread serious and sometimes fatal diseases, contaminate food, cause asthma and allergies, and can be deadly with their bites and stings. Mosquitos, wasps, ticks, chiggers, black widow spiders and brown recluse spiders are all threats to human health and it is an essential public health priority that they are adequately controlled. Controls of weeds and pests also have health benefits for members of our communities. Effective control of ragweed and other unwanted allergens can prevent or reduce allergy symptoms in children and adults. Control of insects is beneficial to community health. Mosquitos carry viruses, such as the West Nile Virus, and others in different parts of the United States. Bees and wasps can inflict stings that may cause serious or life threatening reactions. Cockroach allergies are a common cause of asthma.

From a quality of life standpoint, unkempt landscapes diminish property values and detract from our enjoyment of our homes, schools and shared outdoor spaces. Dead trees, for example, are expensive to remove and replace.

**Impacts to Trees/Plants**

Certain insects and diseases which are capable of killing our trees and shrubs can only be prevented effectively through the use of appropriate pesticides applied at specific times. Very few people would tolerate the devastation we have seen in the high country from Mountain pine beetle in our urban environments.

There are numerous examples of tree populations that have been wiped out or seriously damaged in Colorado due to untreated insect-related problems: Dutch elm disease, a fungus carried by the elm bark beetle, has destroyed thousands of American elm trees in the Denver area.
Thistle

Bindweed

Thousand cankers disease, another fungus carried by the twig beetle, has killed virtually all the black walnut trees in Colorado Springs and Boulder, and is impacting trees in Denver and throughout the state; and Ips beetles, known as the engraver beetles, develop under the bark and tunnel through a tree, damaging pine and spruce trees. Unfortunately Blue Spruce trees as old as 100 years are succumbing due to lack of treatment of Ips, because treatment must occur prior to the pest attack. And finally, infestations of Japanese beetle are affecting the south metro Denver area, in trees and also in perennials on both public and private property.

**Impacts to the Environment**

When invasive/noxious weeds move into our environments and landscapes, they displace native plants at an alarming rate and reduce biodiversity. When native plants that wildlife and beneficial insects use for food, shelter and nesting are gone, wildlife leaves the area. Invasive/noxious weeds also make it more difficult and resource intensive to grow beneficial or desired plants. Colorado state law requires eradication of noxious weeds, of which there is an extensive list.

**Reducing Exposure**

Most pesticides used by the green industry to control pests contain the same active ingredients found in products available at the local hardware store or garden center, no different from those used by millions of Americans in and around their homes. The majority of chemicals used for plants and trees create an exposure risk only while wet and most of them dry within 30 minutes. That’s why Colorado law requires communication signs be posted on treated areas to notify people that an application has occurred and to allow them to avoid exposure.

Prompted by concerns to reduce human and environmental exposure to chemicals, both pesticide manufacturers and green industry professionals are pushing for ways to reduce exposure to workers and the public. These efforts include:

- Developing newer products that are designed to break down in the environment even faster.
- Using new techniques to reduce spray applications.
- Using BMPs that recommend selective, spot treatments. Blanket applications of pesticides are not common in Colorado.
- Using newer products that can be injected directly into a tree trunk or even the soil, and that thereby virtually eliminate human exposure.

Other techniques to reduce or eliminate the need to spray include the destruction of pest nesting areas; the use of “beneficials” (insects that eat unwanted pests); and stationing pheromones, or “mating perfumes,” which disrupt insect
reproductive cycles. Many of these techniques are being introduced for clients who are interested in and willing to pay for an IPM approach to landscape maintenance.

Additionally, most GreenCO contractors offer natural programs. The best success with non-chemical landscape care products is with lawn fertilizers. While natural programs are being offered, they can be more expensive than synthetic programs and may not achieve the same outcome.

A Balanced Approach: Valuing Our Environments, Valuing Our Health

As avid outdoor enthusiasts, Coloradans want to play, exercise and picnic outdoors nearly 300 days a year. We have come to expect environments free of rats and mice, fire ants and wasps, mosquitoes and bed bugs. Likewise, we expect diverse, well cared for trees and shrubs in healthy landscapes.

GreenCO believes that pesticides play a crucial role in integrated pest management. When regulations are followed, pesticides are a key part of a broader toolkit used by professionals to care for our landscapes in a manner that enhances health, environment and quality of life. While the pesticide industry is constantly improving its tools to provide even less human exposure, GreenCO believes that banning or restricting pesticides could compromise public health, have negative environmental consequences and place our landscapes at risk.

Photos courtesy:
ALCC Excellence in Landscape Awards Program
Colorado State University Extension
William Fountain, University of Kentucky, Bugwood.org
Whitney Cranshaw, Colorado State University, Bugwood.org
By Kevin Lyles, ASLA, PLA

Sustainable design and ecological restoration are growing fields within the practice of landscape architecture in Colorado. One very rewarding and effective way to brush up on your skills in restoration design, while gaining valuable on-the-ground experience with natural resource professionals, is serving as a volunteer Technical Advisor for Wildlands Restoration Volunteers.

Wildlands Restoration Volunteers (WRV) is a non-profit organization based in Boulder, Colorado that engages thousands of volunteers each year in ecological restoration projects across the state. Given the shrinking budgets for public land management agencies, there is a continuing need for stewardship of local, state, and federal lands that volunteers can help address. The types of projects WRV undertakes are varied, but all of them are focused on some aspect of restoration: stream restoration, riparian and wetland enhancement, road closures, invasive species control, wildlife habitat improvement, trail reroutes and closures, and native seed collections for propagation. These are projects relevant to many landscape architects in Colorado.

Each WRV project has a volunteer leadership team, typically consisting of Project Lead, Technical Advisor, Lead Cook, and Tool Manager. These volunteers collaborate with a WRV staff person and one or more public agency staff persons to ensure project success. The Technical Advisor (TA) fulfills a critical role on every project, acting as a technical bridge between WRV and the land management agency. The TA translates the...
The agency’s desired work plan into a scope and format that works for a group of volunteers, and effectively communicates the technical needs of the project to the volunteer crew leaders. Depending upon the type of project, the TA may possess technical expertise in particular areas of ecological restoration or trail design, or may be able to succeed as a lay person with interest and knowledge in the relevant areas.

WRV partnered with Denver Mountain Parks to restore closed social trails at Red Rocks Park. (Photo courtesy of Linard Cimermanis)

I have served as a WRV volunteer Project Leader and Technical Advisor for six years, on projects as diverse as a boardwalk at the Arapaho National Wildlife Refuge near Walden, CO; closure of mining roads and social trails at Mud Lake Open Space near Nederland, CO (a CCASLA Merit Award winner for Environmental Restoration and Reclamation); and riparian restoration projects in Boulder, Fort Collins, and Longmont. It has been a wonderful and rewarding experience – I get to work with positive, energetic, can-do people that want to make a difference in their communities. I get to be creative in applying my knowledge and skills to healing the land, while learning new techniques in the process. Most rewarding, I see the amazing difference a group of dedicated citizens can make in restoring and caring for our cherished landscapes. These are experiences that I think many landscape architects will appreciate.

If you would like to learn more about the technical advisor role with WRV, please e-mail me at kevin@confluent-design.net. Or you can contact Ed Self, Executive Director of WRV, at (303) 543-1411 or edself@wrv.org.
ASSOCIATION HAPPENINGS

Ten Years Ago In Landscape Architecture

In 2002 the newsletter of the Colorado Chapter of the American Society of Landscape Architects (CCLA as we were known) was called Rocky Mountain Exposures. It was published six times a year and mailed in hard copy. It was a black and white newsletter and all of the upcoming calendar events were printed in the newsletter.

Our president was Janet Meisel-Burns and the past president was Tim Seibert. The lead article in the November/December issue was about the licensure effort lead by Craig Coronato. A series of roundtable discussions about licensure had recently been conducted. Coronato noted that “We have heard that well over 90% support licensure; however, there are a few strong voices that do not believe that licensure is necessary or appropriate”. The licensure committee was busy organizing legislative workshops throughout the state and holding discussions with Governor Owens.

The CCLA Awards Banquet was scheduled to be held in conjunction with the ProGreen Expo in January of 2003 at the Colorado History Museum on 1300 Broadway. The cost was $55.00 per person. The featured speaker was Laurie Olin. Awards Sponsorships were available for $500 for Gold, $250 for Silver, and $150 for Bronze levels.


FIRM NEWS

Mundus Bishop Hires New Landscape Architect

Denver, Colorado – MUNDUS BISHOP is pleased to announce the addition of Kimberly Douglas-Naughtin, RLA, ASLA, as an Associate to their staff. Kimberly is a licensed landscape architect with over 14 years experience in the public and private sectors. Kim’s expertise is focused in the areas of urban streetscape design, campus planning and development, and park and recreation oriented projects.

New ASLA Colorado Members

Welcome New Members

Stephen A. Sellenriek, ASLA – SETH Design Group LLC
Bonny Hershberger, ASLA – Hershberger Design
Charles A. Colvin, ASLA – Extension Design Build, Inc.
Samuel A. Baucum, ASLA – Bluegreen
Craig Kisling, ASLA – City of Fort Collins:
- Park Planning and Development
Steve Ransweiler, ASLA – City of Longmont
Kim Round, ASLA – National Park Service
Jesse Young, ASLA – Landwise, LLC
Michael B. McBride, ASLA – BHA Design
Evan W. Brady, Associate ASLA – Bookcliff Gardens, LLC

Design Concepts chosen to design landscapes for nine schools funded by the Colorado Department of Education’s BEST Program

Lafayette, Colorado – Design Concepts, an award-winning community and landscape architecture firm in Lafayette, Colorado, is pleased to be the landscape architect and planning partner for nine high-profile school projects funded by the Colorado Department of Education (CDE)’s BEST Program for capital school construction.

The Building Excellent Schools Today (BEST) Program is a competitive grant program available to public school districts and other educational institutions in Colorado. Administered by CDE’s Division of Public School Capital Construction Assistance, the BEST Program aims to alleviate school health and safety concerns and provide first-class, high-performing, 21st-Century facilities.

Since it was enacted in 2008, the BEST Program has funded 147 projects in 94 Colorado school districts, with $674 million in grants awarded for construction needs, including new and renovated schools and campuses. Most grants are for rural schools built in the 1950s through 1970s with problems such as substandard construction, deferred maintenance, asbestos, and wasteful energy systems. Many of the schools...
span preschool or kindergarten through grade 12, reflecting a trend toward consolidation of schools to achieve more efficient uses of resources.

The BEST Program “is such a huge benefit for rural districts that could not have afforded new schools and site improvements any other way,” says Carol Henry, Design Concepts principal in charge of planning the landscapes for five projects. “The BEST schools give a new and distinct character to the schools and community.” The K-12 schools also often double as a community center and provide the community’s only safe playgrounds and parks, she says.

**Design Concepts has partnered with architecture firms for nine BEST Program projects:**

- Sangre de Cristo PK-12 School in Mosca, with klipp.gkkworks in Denver, open August 2011
- Center K-12 School in Center, with klipp.gkkworks in Denver, August 2012 opening
- Holly PK-12 School in Holly, with RTA Architects in Colorado Springs, 2013 opening
- Fairplay K-12 School in Fairplay, with Larson Incitti Architects in Denver, 2013 opening
- Idalia K-12 School in Idalia, with Wold Architects and Engineers in Denver, 2013 opening
- Big Sandy PK-12 School in Simla, with SLATER PAULL Architects in Denver, 2013 opening
- Prairie PK-12 School near New Raymer, with klipp.gkkworks in Denver, 2013 opening
- Eagle County K-8 Charter Academy in Eagle, with Larson Incitti Architects in Denver, 2013 opening
- Colorado’s Finest Alternative High School in Englewood, with SLATERPAULL Architects in Denver, 2014 opening

The Holly PK-12 School in Holly, a farming town located nine miles from the Colorado-Kansas border, is a new school located on the existing campus. The site design was based on the form of crop circles as seen from satellite images. Geographic themes include Holly’s location and agricultural contributions to the state, U.S., and world. The campus includes two playgrounds and outdoor classrooms next to the kindergarten and art rooms. It also will be used by the
community as a park, with a trail system including a memorial walk.

“Design Concepts did a great job of balancing the rural esthetic with the school district’s design requirements,” says Doug Abernethy, RTA Architects’ project principal. “They designed appropriate outdoor learning environments for all the age groups in the school.”

The Idalia K-12 School in Idalia, also nine miles from the Colorado-Kansas border, north of Holly, involved building a new K-12 school and renovating the existing gym. Working with a team led by Wold Architects and Engineers in Denver, Design Concepts is planning a new prekindergarten playground with play equipment, a sand play pit, and a courtyard appropriate for community events.

“Design Concepts has a good understanding of rural schools and working within a fixed budget,” says Aimee LaLone, project manager for Wold Architects and Engineers in Denver.

“Working with the rural communities is such a rewarding experience because they are all very excited and motivated by getting a new school that serves their needs and those of the surrounding community,” says Shanen Weber, Design Concepts principal in charge of the Holly and Idalia projects.

The Big Sandy K-12 School in Simla is located on a new site on the western edge of town. The 33-acre campus includes high-quality play equipment moved from the previous school site.

Colorado’s Finest Alternative High School in Englewood is an existing alternative high school currently located in a school that is overcrowded and not suited for high school use. A new school and campus on the existing site will feature a larger building that is better suited to 21st-Century education, as well as an improved site plan, parking, and proximity to public transportation.

“We’ve appreciated Design Concepts’ partnership in creating safe and healthy environments for kids,” says Adele Willson, principal at SLATERPAULL Architects, the lead firm for the Big Sand and Englewood projects.

All BEST schools must meet standards related to sustainable and healthy environments established for national certification at the Gold level in the LEED (Leadership in Energy and Environmental Design) program or Verified Leader level in the Colorado Collaborative for High Performance Schools (CO-CHPS) program. The landscapes, like the building architecture, are designed to use energy and water efficiently. “Water conservation is so important because these locations often have such limited rainfall and plant palettes,” says Henry. All of the projects have automated irrigation systems with appropriate plantings for the region, such as ornamental grasses and other native and xeric plants that require minimal irrigation.

**Design Concepts Welcomes Two New Landscape Architect/Designers**

*Lafayette, Colorado –* Design Concepts, an award-winning landscape architecture firm in Lafayette, Colorado, that specializes in planning and design for parks, schools, and communities, is pleased to announce the addition of two landscape architect/designers:

**Robyn Bartling, PLA, ASLA**, Landscape Architect and Project Manager, joined Design Concepts in June and is working on municipal parks and recreation projects, including Raffety Park in Granby, Colorado, and playground design projects in Colorado and Bellevue, Washington. Bartling previously worked for Mundus Bishop Design in Denver on projects including Denver’s Civic Center and Babi Yar Park, Aurora’s Springhill Community Park, the Mordecai Children’s Garden at the Denver Botanic Gardens, and the Cultural Landscape Report for Wawona Hotel Complex, Yosemite, California. She earned a Bachelor’s degree in Landscape Architecture from Colorado State University. She is a registered landscape architect in Colorado and is a nationally certified playground safety inspector.

**Carter Marshall, ASLA**, Landscape Designer, joined Design Concepts in May and is working on municipal park projects in Colorado, including the redesign of Wulf Park in Evergreen and a recreation area master plan for Nederland. He also is working on school landscape projects, including the historic Mapleton School in Boulder. Marshall earned a Bachelor’s degree in Anthropology at the University of Colorado-Boulder and a dual Masters degree in Landscape Architecture and Urban Design from the University of Colorado-Denver. Marshall previously was principal/landscape designer at Siteline Design in Boulder, and worked for Belt Collins West in Boulder as a park planner for federal agencies including the National Park Service, the Bureau of Land Management, and the U.S. Forest Service.
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